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Zehou Li

A New Approach to Kant

A Confucian-Marxist's Viewpoint

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A Confucian-Marxist's Viewpoint

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Preface to the English Edition

This book was written during 1972–1976 (during China’s Cultural Revolution) and published in 1979. Although it has been reprinted many times, I have been unable to revise the parts devoted to the discussion of Kant’s philosophy as much as I would have liked, since I have moved on to other things. *A New Approach to Kant* was the original title I chose for this book, and after having considered the particular circumstances of the time, I have decided to keep it. The Chinese title has always been *A Critique of the Critical Philosophy: An Introduction to Kant*.

What, then, is the “new approach” in *A New Approach to Kant*? I wish to tentatively propose a new anthropo-historical ontology for introducing, describing, interpreting, and criticizing Kant’s philosophy. This approach is based on materialism, the theory of practice, and the theory of sedimentation; and it highlights Kant’s question “What is the human being?” It stresses that the only possible answer to Kant’s question “How is knowledge possible?” (i.e., how are a priori synthetic judgments possible) must also be the answer to the question “How is the human being possible?” The anthropo-historical-ontological approach assumes that Kant’s philosophy, at its very heart, raises and discusses the question of “What is human nature?” I am convinced that human nature is neither an endowment from God nor an outcome of natural evolution; instead, human psychology has arisen historically through the social and collective practice of making and using tools over millions of years. Here, the term “psychology” refers neither to the psychological experience of reality nor to experimental positive science, but to a philosophical perspective that begins with the belief that human beings possess universal, necessary, self-constitutive psychological forms, structures, and frameworks that are not shared by the lower animals. Therefore, while on the surface, this book offers an account of philosophy from Kant to Marx, at a deeper level it is a return from Marx to Kant. In other words, this book argues that the origin and development of seemingly “transcendental” knowledge, morality, and aesthetic psychological forms and structures begins from the basis of human existence that can be found in the practical material activities and social relationships associated with making and using tools—it is thus Kant’s philosophy turned upside down. This point can also be integrated with Chinese Confucian teachings.

Perhaps I should first answer the question of whether or not I am a Marxist, since the subtitle of this book, as well as many of its passages, refers to Marxism.

The answer is “both yes and no.”

Let me first explain the “no.”

There are three reasons for the “no.” First, I believe that, for some modern intellectuals, Marxism is the revolutionary pursuit of a new social reality that makes theoretical assumptions about the future. This type of Marxism does not have a class character, hence it does not represent the worldview of the proletariat (the working class). Second, I do not agree with doctrines such as “class struggle is the impetus for historical advancement” and “revolution is the motor force for social development”; nor do I support the view that class struggle and the dictatorship of the proletariat are the program and central point of Marxism. Third, I use the Transcendental Dialectic of the *Critique of Pure Reason* to argue that Marx’s primary work, *Capital: A Critique of Political Economy*, proceeds from basic concepts such as “abstract labor” and “socially necessary labor time” that are not supported by experience. These are logical constructs based on an abstract communism that does not involve capital, commodity, or a market economy. This is a “transcendental illusion” that is not an objective and realistic possibility. It has neither the possibility nor the necessity of bringing itself into being. Were there to be such a concrete project and measures implemented to realize such an illusory “ideal society,” the result would be catastrophe.

With these three convictions, I am surely not a Marxist.

As to the answer “yes,” I have only one reason, although it is a very fundamental one. In all these years, I have maintained that the collective practical activity of using and making tools is the definitive factor in the origin and development of humankind. In this, I agree with the view of Marx and Engels that the making of tools, technology, productive forces, and the economy have been the fundamental basis of human society and life since time immemorial. I believe that this is the hard core of historical materialism. But I do not accept the rest of the materialist conception of history. Nevertheless, I regard this hard core of the materialist conception of history as the most precious legacy of Marx and Engels. This legacy precisely matches Chinese Confucian teachings in its emphasis on human beings’ material life, worldly existence, and real life.

In addition, I believe that there is a point of commonality between “Communism” and the ideal of Great Unity in the Confucian tradition. The Confucian teaching that “(they accumulated) articles (of value), disliking that they should be thrown away upon the ground, but not wishing to keep them for their own gratification. (They labored) with their strength, disliking that it should not be exerted, but not exerting it (only) with a view to their own advantage” (*Liji Liyun*, trans. James Legge) can be integrated into Communism’s rallying cry “from each according to his ability, to each according to his needs” to constitute a spiritual faith and a “social ideal” that encourages people; brings people together to change the world and the bodies and minds of individuals; and becomes a regulative element and significant continuation of the (political) religious morality of the Chinese

tradition. If this could be used to define what a Marxist is, I would be counted as a Marxist, or even a Confucian-Marxist.

But why do I insist on adding the term “Confucian?”

I believe that Marx and Engels discussed the historical aspects of the material existence of human society, yet failed to place sufficient emphasis on human beings’ inner psychology. Confucianism, on the other hand, has always treated the question of human nature as its central concern. Confucianism emphasizes “inwardly the sage and externally the king.” In philosophy, I propose concepts such as “cultural-psychological formation” and “emotional-rational structure”; in science, I believe that, in the future, brain science, psychology, and pedagogy will become the central disciplines because of their positive and particular study of human nature. These ideas offer quite a new solution to Kant’s fundamental questions “What is the human being?” and “What is human nature?” I have remarked that anthropo-historical ontology is a three-in-one theory of Chinese Confucianism, Kant, and Marx.

It is true that I could not very well have mentioned Confucianism when I was writing this book, since Mao Zedong had at that time launched the Criticize Confucius Campaign. In addition, this book is, after all, about Kant’s philosophy. Therefore, only along with my other works, such as “A Reevaluation of Confucius” (published in 1980), and my thoughts on “proper measure,” “pragmatic reason,” “the culture of optimism,” “the theory of two morals,” and “emotion as substance,” could a “three-in-one” theory be fully visible. Furthermore, this “three-in-one” theory makes up only the principal part of my thought, as I have also absorbed and assimilated other Chinese and foreign theories and ideas.

In spite of my deliberate concealment, this “three-in-one” approach to “what is human nature” nonetheless manifests itself in one way or another in this book. For instance, in the discussion on epistemology, my response to Kant’s famous question about “the unknowable common origin of sensibility and understanding” is that it is not transcendental imagination, but human practice. I maintain that sensibility originates from the sensible experience of an individual’s practice, while understanding arises from psychological forms in the human history of practice. The categories and principles of understanding that Kant sees as transcendental, I believe to be the achievement of the human race’s unique practice of psychological forms and structures over millions of years. This achievement, which has been passed on from generation to generation through language and education, seems “transcendental” to an individual. Nevertheless, I replace universal necessity with objective sociality, with the intention of employing practical reason and the “One-World View” to overturn Kant’s pure reason, which is indeed an unsubstantiated supposition. I emphasize the ever-changing ontology of measurement that human beings grasp, create, and develop in their ongoing actions.

From the perspective of the ontological philosophy of anthropological history, that which is unknowable, and can only be held in awe, is the material thing in itself that accounts for the existence of the universe. I describe this as the essence of the mystery of reason. A wider epistemological vision that “every discovery is an invention” is made possible by these fundamental conceptions: the thing in itself,

which can only be contemplated, but cannot be known; and the coexistence of the universe and human beings. None of these thoughts may find sympathy in the Western reader; nonetheless, they constitute a Chinese intellectual's attempt to integrate Kant's philosophy into Chinese tradition.

Among the three formulations of the categorical imperative in Kant's ethics, "universal law" and "free will" are, in my opinion, also formal structures in the construction of human psychology over millions of years. "The human being as an end" is not a categorical imperative; it is rather an ideality as well as a modern social morality based on universality. Morality is based on reason rather than emotion. The content of reason is made up of those concepts and ideas that change in accordance with different times, societies, and cultures; and the form of reason is the will, which is one of the universal and necessary structures of human moral conduct and psychology, and which has remained unchanged since ancient times.

This is certainly the case with aesthetics, which is more relevant to individual bodies and minds, the blend of sensibility and reason, and so on.

In short, that which seems to be "transcendental" to an individual is actually sedimentation, which has been historically acquired through the collective experience of humankind. This is what a "theory of anthropo-historical ontology" intends by the expression "the empirical turns into the transcendental (a priori); history builds up rationality (reason); psychology grows into substance." This is also the approach of *A New Approach to Kant*. Based on Chinese Confucianism and Marxism, this approach offers a new understanding and interpretation of Kant's philosophy.

Darwin discusses the origin of the human being from the perspective of evolution; while modern sociobiology has argued for a similarity between human beings and animals, based on the belief that animals also have morality, aesthetics, even politics. This book agrees with Darwin, while disputing the doctrines of and the trend toward the latter. I begin where Darwin ends. I believe that these questions: "What is the human being?" "How is humankind possible?" and "How is the human being human?" can no longer be determined or explained by natural evolution. From this book to my most recent works, I begin from the fundamental view of Chinese Confucianism and the distinction between human beings and animals. From there, I have proposed the theory of the cultural-historical sedimentation of human psychology; illuminated the question of "How is the human being possible?" by focusing on the making and use of tools; and maintained that, in order to survive, humankind has been necessarily and fully engaged, over millions of years, in the collective practical activities of making and using tools. These activities have enabled humankind to break through its animal life, which was genetically akin to that of chimpanzees, and this has given rise to reason, emotio-rational structure, and language (mainly the semantic meanings relevant to making and using tools, which are not possessed by the lower animals). These practical activities have not only initiated, produced, and determined the social features of human beings' relations with nature, groups, and the self but have also produced forms of human knowledge (e.g., logic, mathematics, various symbol systems) and conduct and behavior based on ethical norms and moral laws. Moreover, it is the latter (ethics) that sparks off the

former (knowledge). I have paid special attention to their independent development in the long run, which in turn continuously constitutes life and brings reality into being, and enables humankind to possess supra-biological and super-biological appendages, capacities, values, and its unique subjectality and subjectivity. Language, which bears and sediments this historical experience, has become the house of being. With this as its foundation, modern civilization has brought upon itself many disasters and catastrophes. Nevertheless, in the main, civilization has been beneficial rather than detrimental. Moreover, it has enabled human existence to advance a giant step. It is precisely this sort of “brief history of humankind” to which Confucianism today should give its attention and affirmation. This book can only offer a disguised introduction to this topic by means of an exposition of Kant’s philosophy, as the particular circumstances of the time did not allow me to openly talk about it.

After all, this book was written 40 years ago when China was facing adverse circumstances. It would certainly assume quite a different appearance were it to be written today. In spite of my wishes, my very frail constitution prevents me from further writing. I cannot even make emendations to the deficiencies of this book or erase the historical marks of the age when the book was written, nor do I have the strength to go over the translated manuscript. With a conscience-stricken mind, I ask the reader’s allowance for my lack of care for the English edition.

Boulder, Colorado
October 2016

Zehou Li

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Chapter 1

The Sources and Development of Kant's Thought



1.1 Historical Background and Political Inclination

The poet Heinrich Heine said that Kant's personal life did not yield an impressive biography. Kant (b. 1724) was born to a harness-maker of limited means and he led a life of teaching and contemplation, never engaging in public activities of any importance. After graduating from university, he worked as a private tutor to make a living until, at the age of thirty-one, he finally habilitated and began teaching as a lecturer (*Privatdozent*) at the University of Königsberg.¹ He was popular among the students and established quite a reputation, but because of upper-class contempt for his humble origins, he did not acquire a full professorship until the age of forty-six. Kant taught many courses in philosophy and the natural sciences, including mathematics, theoretical physics, geology, geography, and mineralogy.² He also published many treatises on topics in the natural sciences. But he had a weak constitution that caused frequent concerns about his health, remained single throughout his life, did not like change, and rarely set foot outside of his hometown. Because of this disposition, he frequently turned down invitations for positions from the Prussian Minister of Education and universities in other towns. In his later years, several of his treatises on religion earned him a reprimand from the king, Friedrich Wilhelm II. While he remained resolute in his convictions, he nevertheless made a promise to the king that he would refrain from lecturing or writing on religious matters. "As your Majesty's most loyal subject," he wrote, "I will hereafter refrain altogether from discoursing publicly, in lectures or in writing, on

¹He offered only private courses and was paid directly by his students at the end of each semester. He received no salary from the government.

²Kant was also familiar with subjects in the humanities and was acquainted with his local conditions and the customs of many countries. For instance, he mentioned the Chinese philosophy of Laozi, and the well-known Chinese shop advertisement: Equally honest with customers old and young.

religion, whether natural or revealed.”³ With the death of Wilhelm II, Kant felt released from his promise, and again began to publish religious treatises. He wrote, “to deny one’s inner conviction is mean, but in such a case as this, silence is the duty of a subject; and though a man must say only what is true, it is not always a duty to say all truth publicly.”⁴ In another place, he said, “although I am absolutely convinced of many things that I shall never have the courage to say, I shall never say anything I do not believe.”⁵ And again, “what I do know is not appropriate for me to say, yet I don’t know what is appropriate for me to say.”⁶ All these words reflected Kant’s discontent with the obscure state of affairs in society, and his powerlessness to resist such circumstances and conditions. It is easy to grasp the anguish of being in such a dire situation, since, at that time in Germany, society had not yet created the sort of atmosphere that had been achieved in France by the French Revolution.

All that a progressive intellectual with a humble position could do was to remain silent and resort to roundabout ways of resistance and struggle. Kant was fond of company, and his conversation was cheerful and humorous. Many of his writings were written in a colloquial and lively style, filled with captivating language, rich source materials, and abundant anecdotes of life experiences, yet not desirous of contention. Nonetheless, his unspectacular life and monotonous daily activities may have given the impression that he himself, like the style of his most prominent works, such as the *Critique of Pure Reason*, was tedious and repetitive, dull and dry.

But if the style of the *Critique of Pure Reason* reflected Kant’s apparent lifestyle, the content of this work reveals the reality of his turbulent age.

It was an age of great progress in modern natural science, and an age when the tempest of French revolution was in the air.

Although Kant spent the whole of his life in lecture rooms and his study, he keenly observed the contemporary political situations and social struggles in the world, and kept a close eye on political trends.⁷ On the eve of the French Revolution, conflict was evident everywhere, and society was surging with clashes among people. An anecdote about Kant even entered the repertoire of the philosophy classroom: it was said that as storms loomed over the academy, Kant, who had never before interrupted his daily routine, gave up his daily walk in order to

³October 12, 1794, Kant’s letter to Fredrich Wilhelm II. Kant and Zweig (1986).

⁴Kant and Abbott (1898).

⁵Letter to Moses Mendelssohn, April 8, 1766. Kant and Zweig (1986).

⁶Kant’s comment in a lecture from 1765–66.

⁷In a letter to Lindner, October 28, 1759, Kant wrote, “For my part I sit daily at the anvil of my lectern and guide the heavy hammer of repetitious lectures, constantly beating out the same rhythm. Now and then I am stirred by some nobler inclination, a desire to extend myself beyond this narrow sphere; but the blustering voice of Need immediately attacks me and, always truthful in its threats, promptly drives me back to hard work” (Kant and Zweig 1986). Kant was not all that content spending 28 h of his life each week in lectures and seminars. But his circumstances left him no alternative but to direct his energies to hard work in the classroom.

continue his study of Rousseau's *Émile*. As was typical of progressive people in Germany, Kant absorbed the insights of the French bourgeois revolution, and these insights, in turn, manifested themselves in his philosophical ideas and constituted a genuinely valuable aspect of his philosophy.

On the other hand, the actual state of affairs in Germany was indeed lagging behind the times. Germany was not a unified country, but consisted of many feudal kingdoms, duchies, and city-states, which were often in a condition of disunity and isolation. Capitalism was underdeveloped and the citizenry—the bourgeois class—which was both economically and politically weak, offered ready obedience to the will of the aristocratic Junkers. Despotic bureaucracy oppressed the people and suppressed progressive culture, while Marx and Engels expounded on the conditions in Germany at that time:

This was the condition in Germany in the years of the last century. It was a heap of rotting and decaying nuisance. No one felt at ease in such conditions. Handicraft, commerce, industry and agriculture in the domestic market were exceedingly destitute. Peasants, craftsmen and business proprietors suffered double blows, that is, bureaucratic rapacious levy and impoverished economy ... everything is rotten, all is shaken.⁸

While a rich and powerful bourgeoisie had been in existence in England since the seventeenth century and in France since the eighteenth century, one can speak of a German bourgeoisie only from the beginning of the nineteenth century.⁹

This was the historical context that gave rise to Kant's philosophy, which reflected the demands, interests, and aspirations that the bourgeois class, not yet fully fledged and still weak, in underdeveloped Germany wished to express; it represented the reaction of the German bourgeois class, in its early stage, to the French Revolution. Marx remarked that Kant's philosophy was the "German theory of the French Revolution."¹⁰ This is a concise and incisive remark. It shows how Kant's philosophy embodied the *Zeitgeist* of the French bourgeois revolution, the spirit of the times, and the underdeveloped condition of the social classes in Germany. Kant's philosophy was the German philosophical sublimation of the French political revolution.

As Engels has pointed out, the relation of "soaring lofty insights," such as those made by religion and philosophy, to the economic base that underlies a society and its material requirements for existence must be connected by means of intermediate links. Politics is one of these. The characteristics of the era and social classes that appeared in Kant's philosophy were distinctive, particularly in his writings on political philosophy. Even when he was still quite young, Kant had taken an interest in political matters. In the 1760s, he studied the works of Rousseau, taking many notes on his readings. In his "critical period" and his later years, he published a series of political treatises in which he deliberated upon questions concerning religion, history, law, the state, and world peace (see Chap. 9). Kantian scholars

⁸Engels (1994a).

⁹Engels (1994b).

¹⁰Marx (1994).

often pass over or avoid these writings, and in particular they tend not to recognize the relationship between the political views he expressed in these writings and his philosophical ideas.¹¹ But as a conscious creator of a philosophical system, Kant made his political views a crucial aspect of his *Weltanschauung* and intimately connected these views to his philosophy (e.g., to ethics). Despite its abstract and obscure style, Kant's philosophy had its origins in real life. The social stance and political perspective that Kant chose to adopt was a decisive factor that shaped the features of his philosophy.

Kant's philosophical *Weltanschauung* took its final shape under the influence of the same ideological trends that stimulated the French Revolution. At that time, "Reason" and "Enlightenment" were the banners raised by the bourgeois class in its battle against feudalism. These ideas were also an essential aspect of Kant's *Weltanschauung*. Kant said: "'Have the courage to use your own understanding' is therefore the motto of the Enlightenment" and "The public use of one's reason must be free at all times."¹² As to his political view, Kant disapproved of feudal hereditary landholding and autocracy and favored the *trias politica* principle in which power is divided into the three branches of the legislature, the executive, and the judiciary, with a parliamentary-republican form of government. This view expressly articulates the aspirations and interests of the bourgeois class.¹³ Kant hailed the American War of Independence and sympathized with the French Revolution, which he considered to "excite a sympathy bordering on enthusiasm" in the hearts of all observers. The selfless sacrifices of many individuals in the Revolution seemed to Kant to testify to the fact that human beings are endowed with a moral predisposition to pursue the ideal, and that human history and morality have shown continual progress. He saw the French Revolution as the external fulfillment of a moral principle and said: "True enthusiasm is always directed exclusively towards the ideal, particularly towards that which is purely moral (such as the concept of right), and it cannot be coupled with selfish interests. No pecuniary rewards could inspire the opponents of the revolutionaries with that zeal and greatness of the soul."¹⁴ He later said: "For such an appearance in human history [as the French Revolution] is not to be forgotten, because it has revealed a tendency and faculty in human nature for improvement such that no politician, affecting

¹¹This is the main tendency that holds sway among Kantian scholars. The other tendency tends to politically caricature Kant's philosophy. For instance, in *Kant's Political Thought*, Hans Saner remarks that, from the beginning, Kant's philosophy as a whole is a political philosophy (Translated by E. B. Ashton, *Kant's Political Thought: Its Origins and Development* (Chicago: University of Chicago Press, 1973)). That is, Kant's political thought is the essence of his metaphysics, and his metaphysics is a preparatory work for his political thought. All of Kant's writings are permeated with political considerations (from the topic of resistance to his discussion about peace). But it is wrong to regard Kant's philosophy as merely an introduction to his political thought. This argument, albeit novel, does not correspond to the facts.

¹²Kant et al. (2006).

¹³See Chap. 9.

¹⁴Kant et al. (1996).

wisdom, might have conjured out of the course of things hitherto existing [...] But even if the end viewed in connection with this event should not now be attained, even if the revolution or reform of a national constitution should finally miscarry ... that philosophical prophecy still would lose nothing of its force.”¹⁵ It is evident from these remarks that the French Revolution made a great impression on Kant.

On the other hand, in theory and in principle, Kant was against revolution. He believed that if the law was an expression of the “general will,” then it would be paradoxical to allow it to be overthrown by violence; and any form of government would be better than a revolution that forced a civilization to regress to a primitive state of anarchism. Kant emphasized that we can only address deficiencies in a system of government through the reforms of legislators themselves, rather than by means of mass revolution.¹⁶ A person can complain and criticize—and “as a scholar, he is completely free as well as obliged to impart to the public all his carefully considered, well-intentioned thoughts on the mistaken aspects of those doctrines”—but he does not have the freedom to rebel.¹⁷ Kant advocated the freedoms of speech and publication, claiming that the “freedom of the pen is the only safeguard of the rights of the people.”¹⁸ Even so, the pen does not have the freedom to incite revolution: “it must not transcend the bounds of respect and devotion towards the existing constitution.”¹⁹ Kant lived through the reign of King Frederick II of Prussia (r. 1740–86), who took pride in being a friend and patron to Voltaire. This made Kant believe that to “rule autocratically and yet to govern in a republican way, that is, in the spirit of republicanism and on an analogy with it—that is what makes a nation satisfied with its constitution.”²⁰ Although he disapproved of absolute monarchy in theory, Kant hoped for an enlightened sovereign who would institute a republican constitution, and he advocated evolution instead of revolution. Therefore, Kant’s political thought was rather contrary to that of the Jacobins, despite his having been mistaken for a radical Jacobin by many people. Like many enlightened men in Germany, Kant felt deep sympathy for the French Revolution in its beginning, but was horrified by the Reign of Terror. He said: “The revolution of a gifted people which we have seen unfolding in our day may succeed or miscarry; it may be filled with misery and atrocities to the point that a sensuous man, were he boldly to hope to execute it successfully the second time, would never resolve to make the experiment at such cost—this revolution, I say, nonetheless finds in the hearts of all spectators (who are not engaged in this game themselves) a wishful participation that borders closely on enthusiasm.”²¹ This passage

¹⁵Ibid., 304.

¹⁶See *The Metaphysics of Morals*, Sect. A, and Chap. 9.

¹⁷Kant and Reiss (1991a, 56).

¹⁸Kant, and Hans Siegbert Reiss, “On the Common Saying,” *Kant: Political Writings*, 32.

¹⁹Ibid., 85.

²⁰Kant, Allen W. Wood, and George Di Giovanni, “Conflict of Faculties,” *Religion and Rational Theology*, 3.

²¹Ibid., 2.

eloquently expresses Kant's conflicted state of mind toward the French Revolution. He sympathized with it while being terrified by it; he was terrified by its atrocities, yet sympathetic to its fundamental demands. On account of this, that is, based on his longing for a republic and his opposition to autocracy, his advocacy of reform and his objection to revolution, one can say that Kant adopted a political stance of democratism and a political line of reformism. Marx and Engels pointed out that Kant embodied "the characteristic form which French liberalism, based on real class interests, assumed in Germany."²²

This political tendency marks the fundamental difference between the German Idealism initiated by Kant and French materialism. Engels remarked, "just as in France in the 18th century, so in Germany in the 19th, a philosophical revolution ushered in the political collapse. But how different the two looked! The French were in open combat against all official science, against the church and often also against the state; their writings were printed across the frontier, in Holland or England, while they themselves were often in jeopardy of imprisonment in the Bastille. On the other hand, the Germans were professors, state-appointed instructors of youth; their writings were recognized textbooks."²³

The works of d'Holbach, La Mettrie, Helvétius, and Rousseau were often printed abroad or published anonymously and many writers were driven into exile. Kant and Hegel, however, still held their state-appointed professorships in the Prussian kingdom. In his writing, Rousseau set down these courageous words: "The popular insurrection that ends in the death or deposition of a Sultan is as lawful an act as those by which he disposed, the day before, of the lives and fortunes of his subjects. As he was maintained by force alone, it is force alone that overthrows him."²⁴ And d'Holbach: "Despotism that built upon force and [the] suffering of the people could never be acknowledged by its oppressed subjects."²⁵ Kant nevertheless held that "they have no right to riot, no right to rebel, and have the least right to punish or execute the sovereign."²⁶ While Hegel claimed that "the madness resulting from freedom in the hand of the masses is decidedly horrifying," and complained of the "formless mass whose movement and activity can consequently only be elemental, irrational, barbarous, and terrifying."²⁷ It is evident from these texts that French and German philosophies walked distinct political lines.

Arguments about religion, in particular, manifested this difference. D'Holbach declared that religion was the sworn enemy of the progressive human being, and denounced the monarch who supported religion for the sake of his own interest. Kant, in the meantime, defended the authority of religion and urged people to have

²²*The German Ideology, A Complete Edition of Marx-Engels*, Marx Engels Internet Archive 1994.

²³*Ludwig Feuerbach and the End of Classical German Philosophy*, Marx Engels Internet Archive 1994.

²⁴Rousseau and Cress (1992).

²⁵D'Holbach (1994).

²⁶Kant and Reiss (1991b, 97).

²⁷Hegel and Sibree (1899).

faith in God. What he called for was some sort of reform. Even his most radical book, *Religion within the Boundaries of Mere Reason*, was merely a pale reflection of the light of the French Revolution, even though it was published at the height of the Revolution and met with opposition from the king's censor. It can be said that Kant's theory and practice of religion are key links and intermediary agents between political thought and philosophy. On the one hand, they addressed the touchy subject of political struggle; on the other hand, they were indispensable to the philosophical thought of that time.

As a consequence of their dissimilar social classes and political lines, French bourgeois materialism as represented by La Mettrie, d'Holbach, and Helvétius was completely different from German classical idealism as represented by Kant and Hegel.²⁸ The former adopted an unequivocal, determined attitude and marched forward without hesitation; the latter was equivocal, abstract, and abstruse. In terms of the paths pursued by the two schools of philosophy, French materialism and German classical idealism were mutually antagonistic.

Although politically, they favored civic rights, parliamentarianism, and the abolition of economic and political privileges such as feudal hereditary rights, and even though their philosophy nevertheless contained many well-grounded insights and achievements that were certainly beyond the reach of French materialism, the classical German philosophers adopted the ideological line of idealism. Because of the cruelty and ferocity of the feudal regime, and the underdeveloped and straitened social conditions, philosophers in Germany could only lose themselves in their study, letting their souls soar freely in the air instead of taking action.

Through profound contemplation (philosophy) and passion (poetry and music), they achieved unprecedented heights that those who were engrossed in everyday life could not reach. However, this fact also caused their philosophy to fall often into sharp contradictions. In Hegel, the conflict lies with the paradoxical position of dialectics in his idealistic system, whereas in Kant it is marked by a manifest dualism. On the one hand, Kant emphasizes the Enlightenment and lays great stress on science, claiming that the existence of God cannot be deduced from theory; on the other hand, he works to preserve a domain for religion, relocating the question of the existence of God to the domain of faith. In Kant's philosophy, the dichotomies between science and religion, theoretical reason and practical reason, "appearance" and "the thing in itself," and empirical evidence and a priori forms exhibit this conflict well.

²⁸This is only a claim about general states of affairs and principal tendencies. It is another matter whether or not the French materialists forthrightly endorsed the violence of the French Revolution, or whether the Revolutionists approved of their theory. For instance, d'Holbach opposed the Revolution. He feared the "tumult" of mass violence. Robespierre, leader of the Jacobins, and the leftist Zola adamantly opposed and refuted atheism and materialism. Robespierre even smashed the statue of Helvétius, a notorious atheistical materialist. This complex situation demands further analysis.

1.2 Sources of Kant's Thought

In addition to reality, Kant's philosophical thought draws from other philosophical ideas as well. Kant says that he was awakened from his Leibniz-Wolffian dogmatic slumber by Hume.²⁹ In the *Critique of Pure Reason*, Kant's major philosophical work, he mentions Locke and Leibniz in several places; while in the second edition of the *Critique*, he again emphasizes the ideas of Berkeley and Descartes. Kant's philosophy carries forward past heritage and opens up future possibilities. He begins from the accumulated knowledge of the past and then reviews, analyzes, and critiques European philosophy of previous generations so as to pose new questions upon this examined ground. His philosophy marks a historical turning point in the history of European philosophy. Engels remarks that "the political revolution of France was accompanied by a philosophical revolution in Germany. Kant began it by overthrowing the old system of Leibnizian metaphysics, which at the end of last century was introduced in all Universities of the Continent."³⁰

I will present a brief review of the schools of modern European philosophy that are relevant to Kant's thoughts, mainly the so-called schools of rationalism and empiricism.

Bacon (1561–1626) and Descartes (1596–1650) are the originators of modern European philosophy. Bacon introduced *The New Organon*, which focuses on experiments and thus becomes the forerunner of British empiricism. While Descartes—with his well-known philosophical proposition "cogito ergo sum," which expresses his view that while the existence of all things can be doubted, we cannot doubt that we are thinking while we are doubting, and from which he concluded that the I who is thinking must necessarily exist—emphasizes reason and deduction, and seeks to deduce all knowledge from the principle of "clarity and distinctness." Descartes thereby becomes the forerunner of continental idealism in Western European countries such as France, Germany, and Holland. He holds that mathematical theorems—e.g., that the three angles of a triangle equal two right angles—are the clear, distinct, and self-evident knowledge of a priori reason.

Idealism seeks knowledge of universally necessary truths, such as "innate ideas," that are attributable to reason. For Spinoza (1632–1677), "that method will be most perfect which affords the standard of the given idea of the most perfect being whereby we may direct our mind."³¹ "It is in the nature of reason to perceive things truly, namely, as they are in themselves—that is, not as contingent, but as necessary."³² Spinoza holds that that which is conceived by perception is perishable and

²⁹Christian Wolff (1679–1754), although he rejected the term "philosophy of Leibniz and Wolff," systemized Leibnizian philosophy and his dogmatic rationalism enjoyed prestige and influence in Germany. Kant usually alludes to Wolff's doctrines whenever he discusses metaphysical dogmatism.

³⁰Engels (1994c).

³¹Benedictus de Spinoza and Elwes (1955).

³²*Ibid.*, 114.

illusory knowledge which can only leave contingent traces on human beings. He intends to deduce all necessary knowledge from “a priori reason” and “self-evident truisms.”

Kant is influenced most by Leibniz (1646–1716), an idealistic rationalist who believed that the universe is composed of independent and isolated monads that are “the sources of internal activities” and “incorporeal automata” and that contain various levels of perception and entelechy. Entelechy, or the soul with motility, can enable us to cognize necessary truth. To Leibniz, animal cognition relies entirely on experience and association, while human cognition relies on innate reason and the attainment of necessary knowledge such as mathematics. Leibniz explains that “only reason can establish reliable rules [...] construct necessary inferences, involving unbreakable links. This last often lets us foresee events without having to experience links between images, as beasts must.”³³ The sensationalists have a well-known principle that there is nothing in the human mind that has not first appeared to the senses. Leibniz agrees with this principle, but with an addition, namely, that there is nothing but intellect. For him, only the mind can provide universal and necessary deductive truths. For instance, concepts such as substance and causality cannot be obtained through sensible experience. Perception can provide only contingent and unreliable instances, or “truths of fact.” Therefore, Leibniz claims that the sources and standards of truth and knowledge are innate ideas and self-evident principles that are in the intellect a priori, while external objects merely awaken the intellect. The law of noncontradiction in formal logic is the principle by which universal and necessary deductive truths are attained, while the law of sufficient reason is the basis of truth for facts. There is a cause for the being of everything, with God as the final cause, or sufficient reason, at the end of an endless series of causes. In short, God, reason, and formal logic become the sanctuary for all truths, and the fundamental approach for seeking truth. Descartes employed psychology to provide an ontological argument for the existence of God, a thesis held by medieval theologians (who deduced the existence of God based on their idea of a perfect being). Leibniz accepted this view as well. His concurrence indicates that although rationalists rejected experience and relied solely on reason, they could not distinguish right from wrong, or science from religion. The universal and necessary knowledge they sought was, in fact, not truth. Some of their so-called knowledge was metaphysical dogma that went against the tide of modern science. At the outset, in an effort to resist the church and throw off the shackles of religion, rationalism placed emphasis on reason. But as science moved forward, rationalism, conversely, fell into the grip of crisis. This reversal made a deep impression on Kant.

Leibniz, in refuting Locke, clearly points out that Locke's emphasis on experience places him near Aristotle, while Leibniz himself is closer to Plato. In contrast with the Platonic Leibniz, Locke (1632–1704) is the representative of materialistic empiricism. He opposes innate ideas and maintains that all knowledge comes from

³³Leibniz et al. (1996).

the senses. Locke says, "let us then suppose the mind to be, as we say, white paper void of all characters, without any ideas. How comes it to be furnished? [...] Whence has it all the materials of reason and knowledge? To this I answer, in one word, from EXPERIENCE. In that all our knowledge is founded; and from that it ultimately derives itself."³⁴ "First, our senses, conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways wherein those objects do affect them. And thus we come by those ideas we have of yellow, white, heat, cold, soft, hard, bitter, sweet, and all those which we call sensible qualities."³⁵ For Locke, the intellect exists merely to store, repeat, compare, and unite these simple ideas; while all complex ideas are simply those that mechanically unite a certain number of simple ideas. Therefore, reason cannot transcend the simple ideas provided by the senses. Because all things are particular beings, abstract ideas are merely their nominal essences; cognition does not make an essential distinction between the stages of sensibility and of reason, nor is it concerned with universal and necessary knowledge. Locke only concerns himself with the empirical qualities of perception. He proceeds from experience of the senses and distinguishes primary qualities (solidity, extension, figure, motion or rest, number, etc.) and secondary qualities (sounds, colors, odors, tastes, etc.). He asserts that the primary qualities belong to the object itself, while secondary qualities are, in truth, nothing in the objects themselves but rather their power to produce various sensations in us through their primary qualities, i.e., through the bulk, figure, texture, and motion of their insensible parts: "Whatever reality we by mistake attribute to them, are in truth nothing in the objects themselves."³⁶ Thus, Locke holds that sounds, colors, odors, and tastes depend on that which is perceived.

Bishop Berkeley mostly follows and expands on Locke's empirical doctrine. Berkeley (1685–1753) contends that since secondary qualities depend on primary qualities, primary and secondary qualities should be inseparably associated. It is unimaginable to have an object with only extension, figure, and motion, but without color or sound. "For my own part, I see evidently that it is not in my power to frame an idea of a body extended and moving, but I must withal give it some colour or other sensible quality [...] Where therefore the other sensible qualities are, there must these be also, to wit, in the mind and nowhere else."³⁷ Berkeley asserts that "all the choir of heaven and furniture of the earth, in a word all those bodies which compose the mighty frame of the world, have not any subsistence without a mind, that their being is to be perceived or known."³⁸ In other words, *esse est percipi*, no material being exists. Berkeley concludes that it is God rather than substance that gives human beings their sensations and ideas.

³⁴Locke (1959).

³⁵Ibid.

³⁶Ibid., 76.

³⁷Berkeley (1990).

³⁸Ibid.

Hume (1711–1776), following this tradition, carries empiricism to utter skepticism and agnosticism. Berkeley has transformed being into a matter of perception; however, perception itself is a mere heap of chaotic and instantaneous impressions, thereby prompting the question of how to connect all these instantaneous impressions so as to constitute knowledge according to some principle. Hume holds that knowledge arises from habits and associations, and that no objective orders and principles exist. Thus, rationalism's conviction that the validity of universality and necessity is derived from rational deduction cannot be established. Hume asserts that "causes and effects are discoverable, not by reason but by experience"; moreover, "after the constant conjunction of two objects—heat and flame, for instance, weight and solidity—we are determined by custom alone to expect the one from the appearance of the other [...] All inferences from experience, therefore, are effects of custom, not of reasoning."³⁹ Therefore, we can only see that flame and heat, snow and cold, the body (motion of the limbs) and the soul (the activities of the will) have always been conjoined, yet their relations of cause and effect are utterly unknowable to us. It is also unknowable what power makes one event follow another, or arouses our ideas. Therefore, apart from the necessary analytic propositions of mathematics, which are unrelated to experience, all scientific knowledge concerning experience is a form of probabilistic reasoning; there is no guarantee of its validity or its universal necessity. There is no universally applicable, objective truth. All truth is merely people's customary experience. We believe that the sun will rise tomorrow simply because we have seen it rising every day.

Hence, we can see that empiricists such as Hume, who attribute the origin of knowledge entirely to sense experience, will reject the existence of God, religious miracles, and spiritual entities. Meanwhile, they reject the existence of a material world and its objective laws independent of human subjective consciousness. More pointedly than any other philosopher, Hume's skepticism lays bare the character of the problem embedded in the system of modern philosophy, which sees sense experience as its starting point. His theory still possesses great influence today.

From Bacon to Hume, empiricism and the inductive method can no longer vouchsafe the validity and universal necessity demanded by science for objective content. That is to say, they cannot prove the truth of knowledge. On the other hand, from Descartes to Leibniz, neither can rationalism and the deductive method offer such a guarantee. Although both rationalism and empiricism have cast off their shackles of medieval theology and oppose feudal ignorance, the one stresses human the understanding, while the other emphasizes our perception; the one asserts that only the understanding can attain truth, while the other holds that only sense experience can provide truth. Both intend to establish a philosophical proof and a basis for the natural science that was flourishing at that time; however, empiricism eventually falls into skepticism, while rationalism ends in downright fideism. The great mathematician Leibniz made an immense effort to prove the existence of God

³⁹Hume (1990).

and religion. The historian Hume, who wrote volumes on British history, rejected the existence and knowability of any objective laws. However, from Galileo to Newton, natural science made a triumphal progression that allowed people to gain knowledge that was, as Galileo puts it, comparable to God's. Now the ground of scientific knowledge in turn becomes a problem. How is true scientific knowledge possible? How is the objective validity and universal necessity of natural science, which at that time had made genuine achievements, possible? These questions pose great difficulties for philosophy. On the one hand, they raise the puzzle of how to tackle questions such as the existence of God. (All these questions are then again associated with social and political problems.) Descartes, Leibniz, Locke, and Berkeley acknowledge or even advocate for the existence of God. Spinoza's God is the totality of nature, while Hume retains a skeptical stance toward God. In short, to these philosophers, epistemology (knowledge of God) is still mingled with ontology (the existence of God), and has yet to be distinguished from it. Can religion, like science, possess objective truth? What are the differences between religion and science? How can the status and significance of science and religion be explained? These puzzles became great difficulties at that time. Empiricism and rationalism were obviously incapable of solving these problems.

French materialism in the eighteenth century pushed empiricism into downright sensualism. The materialists advocated that all knowledge arose from the senses, and they opposed the existence of God. However, the senses and experience to which they referred were mere individual perceptions and passive observations. Their understanding of universal, rational knowledge was quite inadequate and, therefore, they were unable to transcend Locke's standpoint or to solve the problem of the universal necessity of scientific knowledge.

Hence, the problem, historically and logically, lay before Kant, who was conversant with the diverse schools of philosophy and the disciplines of natural science of that time.

We often read in books on the history of philosophy that Kant is a synthesizer of Continental rationalism and British empiricism. While this claim is a prevalent cliché, it nevertheless contains some truth and reveals some of the characteristics of Kantian epistemology. However, if read as an inclusive outline of Kant's philosophy, then it is not quite on point. First, the claim endorses a Hegelian history of philosophy that describes the development of philosophy solely in accordance with the evolution of ideas; it therefore explains and defines Kant from that philosophical perspective, rather than from the actual origins of Kant's philosophy. Second, and more importantly, this claim stresses epistemology and fails to adopt a comprehensive review of Kant's philosophy that includes ethics and aesthetics. Third, rationalism and empiricism each included schools with materialistic and idealistic tendencies; therefore, by simplistically asserting that Kant synthesized rationalism and materialism, the claim would seem to have glossed over the rather entangled situation in philosophy. For instance, the claim is commonly understood as saying that the terminal point for Hume is the starting point for Kant, and that philosophy develops in a direct line from Hume to Kant. In so doing, eighteenth-century French materialism, which is nearly contemporary with Kant, is

written off at one stroke. Kant in fact very much admires Epicurus and Locke, and claims that he disagrees with Berkeley and Descartes. This stance reveals the materialistic origins and inclinations of his philosophy. But the idealism of Plato, Leibniz, and Hume also had great influence on him as well.⁴⁰ A great part of that which he inherits and synthesizes belongs to idealistic rationalism (Leibniz) and idealistic empiricism (Hume). But among the views that he rejects is the reflection theory of eighteenth-century French materialism, which is the main target of his ethics. In this sense, one cannot grasp Kantian philosophy without appreciating French materialism. It is therefore rather simplistic to say that Kant synthesizes rationalism and empiricism.

1.3 The Definitive Influence of Newton and Rousseau

Significantly, however, what conclusively determines Kant's philosophy and affords it a positive content is neither the schools of rationalism and empiricism, nor any philosophers.

Rather, it is the trends of natural science, as represented by Newton (1643–1727), and the French Revolution, as represented by Rousseau (1712–1778). Newton and Rousseau embodied the zeitgeist of the pursuit of science and democracy at the time that the bourgeois class was taking shape. Their influence on Kant is the most significant. Their influence extends not only to suppling Kant with materials for thought, but also to providing for Kant's philosophy a distilled expression of reality. Newton and Rousseau are the pacesetters of that age. It is through them that vast reality casts its profound light and shadow on Kant. As will be shown later, we can see through the developing course of Kant's philosophy that, from early on, Kant studied and believed Galileo and Newton, advocated modern science, was actively involved in the pursuit of natural science, and proposed important discoveries and ideas. On the other hand, he was originally devoted to studies of metaphysics and Weltanschauung, such as religion and theology. On the eve of the French Revolution, Rousseau's works, which were well-known representatives of the ideas of the time, revealed a series of crises in society, politics, religion, and education, thus giving urgent and genuine significance to stale metaphysical questions, which made these questions all the more appealing to Kant. The problems of natural science and contemporary society are the soil that nourishes Kant's philosophy. Science and democracy were the two fundamental problems in Kant's time as well as for many coming generations. This

⁴⁰The extent to which Kant read and grasped the works of the representatives of rationalism and empiricism is still much debated. Many modern Kant scholars assert that Kant did not actually read Berkeley's major works, and that his knowledge of Leibniz's *New Essays on Human Understanding* came fairly late due to the publication date of the book. Hermann J. de Vleeshauer even claims that Kant was not much influenced by Hume.

is also where Kant is most influenced by Newton and Rousseau, and takes in the most advanced thought of his time.

Beginning with the ground of scientific experiments and social reality, and connecting these with the material provided by the history of philosophy, Kant realized that science, which dealt with questions concerning nature, was advancing at a swift speed; while philosophy, which dealt with fundamental questions concerning human beings and the universe (including the fundamental question of the truth of natural science), was completely frustrated under the sway of rationalism and empiricism. For instance, Newton's laws of mechanics, as a major scientific achievement, had dominated the eighteenth century. The rationalists regarded Newton's achievement as the result of Descartes's emphasis on mathematics and deduction, while the empiricists considered it to be an accomplishment of observation and experiment. Despite the fact that Newton was mainly influenced by Bacon's empiricism, and actually had an aversion to Descartes's rationalism, he nevertheless explicitly declared that his method was inductive.

However, the scientific method of the modern natural sciences, from Galileo to Newton, is identical neither with rationalistic geometric deduction, nor with empirical description and induction. This scientific method neither sets great store by the senses, nor relies solely on reason; rather, it combines experiment and mathematics, experience and reason. Experiments are conducted under the guidance of reason, while mathematics is not a form of reason that is void of sensibility. In short, the turning point in the history of science and in epistemology is the employment of the experimental method in modern science.⁴¹

Therefore, according to this standard, science (knowledge) would have to abandon the old rationalistic metaphysics that did not utilize experience. This included the pseudo-sciences, which had attempted to prove the existence of God since the Middle Ages. On the other hand, skeptical empiricism, which denies necessary truth, could hardly stand on sound footing.

Knowledge is for the sake of practice, and science, therefore, is eventually meant to be in the service of human beings, and has a lower status than that of human beings. Then, what is the nature and purpose of human beings? To state the question in the terms prevalent at that time, metaphysical questions are the so-called questions concerning freedom, the soul, and God. Can these questions be transformed into universal necessary scientific knowledge like Newton's laws of mechanics? If they can not, where lies the way out? On the one hand, there is the mechanism of nature (a position in the grip of materialism), and on the other hand, there is teleology with society as its pillar (a tenacious stronghold of idealism); on the one hand, Newton's causal laws, on the other, Rousseau's human freedom. Kant makes a great effort to reconcile and synthesize these two sides.

Therefore, instead of saying that Kant is a synthesizer of continental rationalism and British empiricism, it would be more appropriate to say that he critically synthesizes mechanism and teleology, as well as Newton and Rousseau. In the

⁴¹See Chap. 2.

meantime, the synthesis involves an intricate fusion of the above mentioned rationalism and empiricism, along with a philosophy revolution that overthrows the metaphysics of Leibniz-Wolff.

After having studied diverse works on natural science and sociology, and digested nourishment from various schools, Kant set out to construct his own philosophical system and put forth his singular thoughts. Herder, his former student who later becomes his opponent, recalled:

His lecturing was discourse at its most entertaining. In precisely the spirit with which he examined [the philosophers] Leibniz, Wolff, Baumgarten, Hugo Grotius, and Hume and pursued the natural laws of the physicists Kepler and Newton, he took up those works of Rousseau which were then appearing, *Émile* and *Héloïse*, just as he did every natural discovery known to him, evaluated them and always came back to unprejudiced knowledge of nature and the moral worth of mankind.⁴²

Books on the history of philosophy evaluate Kant with such statements as:

He passed through the school of the Wolffian metaphysics and through an acquaintance with the German popular philosophers; he plunged into Hume's profound statement of problems, and was enthusiastic for Rousseau's gospel of Nature; the mathematical rigour of the Newtonian natural philosophy, the fineness of the psychological analysis of the origin of human ideas and volitions found in English literature, Deism from Toland and Shaftesbury to Voltaire, the honourable spirit of freedom with which the French Enlightenment urged the improvement of political and social conditions, all these had found in the young Kant a true co-worker.⁴³

All these remarks demonstrate that the sources of Kant's philosophy and the road to synthesizing these sources in order to construct his own system are rather complicated. For Kant, the process is long and full of twists and turns. The essence of the problem reveals itself in the process.

1.4 Critical Period

According to Kant himself, the development of his philosophy is generally divided into two stages, the pre-critical period and the critical period, with his major works (the three Critiques, and, in particular, the *Critique of Pure Reason*) as the dividing line. However, the division is not a dramatic turn, but a qualitative change resulting from accumulation of a series of quantitative changes.⁴⁴

Kant was originally a follower of Leibniz-Wolffian idealistic rationalism, which is a school of philosophy that renders obedience to religion and theology. Theology

⁴²Herder, *Letters for the Advancement of Human being*. Letter 79. Kant would use Baumgarten's books, such as his *Metaphysics*, as textbooks for his class. However, this does not imply that Kant agrees with Baumgarten's views.

⁴³Wilhelm (1935). The popular philosophers refer to such thinkers as Moses Mendelssohn.

⁴⁴There is ongoing debate about the development of Kant's philosophy, including the exact date and extent of Hume's influence. I do not intend to go into detail on this topic.

was the dominant discipline in the domain of philosophy at that time, and philosophy classrooms were filled with transcendental theology (philosophical proofs of religion), transcendental psychology (philosophical theology that argues for immortality), and the doctrine of transcendental cosmology (expounding on the idea that the universe is a creation of God, and that time and space have a beginning). Kant was brought up in a pietist household that stressed religious devotion, humility, and literal interpretation of the Bible. He was implanted with strict religious instructions in his early years and might well have become a theologian or a mediocre instructor of Wolffian philosophy. However, his interest and study of Newton's laws of mechanics played a decisive role in the development of his thought. In 1746, Kant published his maiden work (1746, but published in 1749), *Thoughts on the True Estimation of Living Forces*.⁴⁵ In this book, he argues that bodies are not passive objects relying solely on external forces; they internally possess sources of motion, that is, living forces (gravity and repulsion). This position reveals that the young Kant has already formed a clear awareness of the conflicts between Newton and Leibniz, between the new scientific method and the old metaphysics. Leibniz's monadology, with its theory that the universe is composed of isolated monads, contradicts Newton's mechanical conception of the universe in which everything is interrelated. Likewise, Leibniz's emphasis on internal causes of motion and teleological ideas is again contradictory with Newton's mechanism. Various disputes concerning questions about space and the infinite, which were entangled with theology at that time, brought certain fundamental problems in natural science before the altar of philosophy, including questions concerning absolute and relative space, the infinite divisibility of matter, logic and reality, the laws of causality, and the principle sufficient reason. All these debates accentuated the scientific method, and the boundary and purpose of science and its relation to philosophy and theology. Classical mechanics (Newton's) and its difficulties had gone beyond the boundary of natural science, its conflicts with the old metaphysics (Leibniz's) expressed themselves in its divergence in philosophical

⁴⁵This book is of great importance because for the first time some of the characteristics of Kant's thought are displayed. First, there is the spirit of creative inquiry, daring to challenge tradition and authority. In the Preface, Kant points out that due to prejudice and the reign of traditional authorities, anonymous writers who dared to publish their own ideas to improve science were often ridiculed by apparently learned scholars. But "the truth, for which many great men have strived in vain, open first to my mind" (Chaps. 1, 55). Second, this book displays his interest in philosophical meanings and problems in his inquiry into natural science. Kant said that he did not "discuss whether or not active force or motivating force is important in mechanics and physics; but it is important in metaphysics," because it is related to the problems of matter, spirit, substance, the soul, and God. Third, Kant asserts in this book that when two parties of equal intelligence hold different opinions, truth often can be found in their midst; for him this was an assertion "that I have always used as a rule in the investigation of truth" (Chaps. 2, 20) and was, in fact, a means for coming up with a compromise. Last and most important, Kant pays characteristically close attention to conflicts (as well as testing his argument from the opposite side). All these characteristics will turn up time and again in Kant's works.

methodology and epistemology, of which Kant was well aware.⁴⁶ From his early works to his *Opus Postumum*, Kant made many inquiries into pure natural science that should be examined within this context. Kant's philosophical system, in particular, needs to be examined within this context, namely, in the light of the forceful influence of natural science. We can see that Kant investigates specialized disciplines of natural science from a philosophical point of view, and his treatises on natural science have a distinctive philosophical character. Kant often focuses on scientific topics that are fundamental or intimately related to the interests of humankind. Unlike most natural scientists, he insists on examining and dealing with problems from a philosophical point of view, and sets great store on methodology, a systematic view, and universal theorization. It is from such a spirit of scientific inquiry that Kant's philosophical ideas first arise and then flourish.

In the 1850s, Kant published a series of original works on natural science, e.g., on tidal friction and lunar attraction, that were a rejection of a doctrine on the aging of the earth, and on a theory of wind. Meanwhile, he also published philosophical works. In his essay *Meditations on Fire*, Kant says, "I have everywhere carefully guarded against freely indulging, as often happens, in hypothetical and arbitrary proofs, and have followed as diligently as possible the thread of experience and geometry, without which the way out of the labyrinth of nature can hardly be found."⁴⁷ In an essay on earthquakes, Kant refuted the view that regarded the misfortunes brought about by earthquakes as God's punishment being meted out on the afflicted cities, and he urged people to learn to rationally face these calamities. He urged that the natural philosopher's obligation to the public, in the face of such great events that affected the fate of all mankind, is to give an exposition of the insights yielded by observation and investigation (Kant's study on earthquakes is a response to the Lisbon earthquake of 1755).⁴⁸ In his treatise "New Theory on Motion and Statics," Kant maintained that a static object is static relative to another object, an object in motion changes its location relative to another.⁴⁹ This remark is full of scientific and philosophical insight.

Kant's most important work in this period is the *Universal Natural History and Theory of Heaven* (1755), in which he develops a nebular hypothesis. Kant makes use of Newton's laws of mechanics (the law of universal gravitation) as his foundation, and creatively explains the origin of the heavenly bodies and the development of the universe. He breaks free of the rejected possibility of a mechanical doctrine of cosmogony, and of Newton's theology, which sees the origin and order of planetary motion as arranged by God. Kant asserts that it is the struggle, movement, and interaction between the two opposing forces of attraction

⁴⁶As is shown in his essay *The Employment in Natural Philosophy of Metaphysics Combined with Geometry, of Which Sample I Contains the Physical Monadology* (1756).

⁴⁷Kant and Watkins (2012).

⁴⁸"On the Causes of Earthquakes on the Occasion of the Calamity that Befell the Western Countries of Europe towards the End of Last Year" (1756).

⁴⁹*New Theory on Motion and Statics* (1758).

and repulsion that produced the solar system and other heavenly bodies. This process does not rely on divine intervention, nor does it need an initial catalyst through an external force, as Newton emphasized. Kant's natural cosmogony is consistent with his views on natural science, as displayed in a series of works published before and after this book. These works express the materialistic inclination in his views of natural science during this period. This inclination is also inseparable from Kant's study of Greek materialism (mainly Atomism). In the *Universal Natural History and Theory of Heaven*, Kant states that "I will therefore not deny that Lucretius's theory or that of his predecessors Epicurus, Leucippus, and Democritus, has much in common with mine." "The whirlpools that arose out of the perturbed motion of the atoms were a centre piece of the theories of Leucippus and Democritus, and they will also be found in ours."⁵⁰ Kant explains the unity exhibited in the development of nature by means of the cause of pure substance (confirmed by causality in Newton's laws of mechanics). Engels highly praises Kant's achievement, noting that "the first breach in this petrified outlook on nature was made not by a natural scientist but by a philosopher. In 1755 appeared Kant's *Universal Natural History and Theory of the Heavens*. The question of the initial impulse was abolished; the earth and the whole solar system appeared as something that had come into being in the course of time."⁵¹ Engels also remarks that "Kant made the first breach in this conception, which corresponded exactly to the metaphysical mode of thought, and he did it in such a scientific way that most of the proofs furnished by him still hold good today."⁵² "Kant began his career by resolving the stable solar system of Newton and its eternal duration, after the famous initial impulse had once been given, into the result of a historic process."⁵³

In the *Universal Natural History and Theory of the Heavens*, Kant declared, "give me matter and I will build you a world out of it. That is, give me matter and I will show you how a world is to come into being out of it. Because if matter endowed with an essential attractive force is present, then it is not difficult to determine those causes that can have contributed to the arrangement of the world system, viewed on the large scale." We can see that Kant's view of the universe and his conception of nature (apart from organisms) are basically mechanical and materialistic.

However, we should also see that Kant's mechanical and materialistic conception of nature is not his *Weltanschauung*. Mechanical materialism is the *Weltanschauung* of French materialists. They apply mechanism to everything, arguing that both human beings and animals are machines, and even social events can be explained by mechanical causality. Kant rejects this view and holds that mechanical movement can explain the universe, but not a caterpillar, because mechanism can not comprehend and explain phenomena of life. On the one hand,

⁵⁰Kant and Jaki (1981).

⁵¹Engels (1994d).

⁵²Engels (1994e).

⁵³Ibid.

this conviction indicates that Kant sees that organized beings are essentially placed higher in the hierarchy than mechanical movement. On the other hand, it also reveals that Newton's laws of mechanics can neither satisfy Kant's mind, nor solve the philosophical problems with which Kant is most concerned. Newton's laws of mechanics can hardly be used to explain organized beings, not to mention regulating the morality of humankind. Their failure to accomplish the latter task is what Kant cannot possibly countenance. In the field of morality, Leibniz's teleology and traditional theology still have predominant influence over him. In the *Universal Natural History and Theory of the Heavens*, Kant raises his doubt: "Does not this move one to ask: Why did matter have to have precisely such laws as have order and propriety as their purpose? [...] Does this not provide an undeniable proof of their common first origin, which must be an all-sufficient highest mind in which the natures of things were designed in accordance with unified purposes?" Kant believes that "a God exists precisely because nature cannot behave in any way other than in a regular and orderly manner, even in chaos." Kant maintains that the movement of matter can explain the evolution of the universe and the origin of heavenly bodies; but matter and the laws of mechanics cannot explain the cause of the existence of the universe. God, though not the architect, is nevertheless the designer of the universe; God is not the agent of the initial impulse, but is nevertheless the first cause of the universe. Kant argues for the existence of God by means of the natural order, laws, and teleology, and maintains that time does have a beginning, despite its not having an end. God created the world for the sake of humankind, therefore the laws of mechanics cannot go beyond the law of nature, whereas the law of nature in turn can only be explained by teleology. Thus, it is evident that Kant's philosophical *Weltanschauung* is, at that time, intrinsically the same as traditional idealism. In other words, Kant theoretically averred the existence of God and assumed the stance of the old metaphysics and natural theology, both of which he would unrelentingly criticize in the *Critique of Pure Reason*. In spite of the fact that his *Universal Natural History and Theory of the Heavens* is of high philosophical value, it does not express, contrary to the opinions held by many Chinese scholars, a higher level *Weltanschauung* and philosophical thought than Kant had at the time of his writing of the three *Critiques*.

In fact, Kant's thorough inquiry into natural science leaves him with some skepticism about the old metaphysics and theology, such as belief in the existence of God. Just like Newton, Kant had spent many years inquiring into natural science, with the intention of "transcending from natural science to the knowledge of God." Newton saw the existence of God as the first cause, while Kant intended to use teleological proof to demonstrate the existence of a God who has a will. However, his argument cannot be supported by experience or evidence. Kant confessed that he mullered over the question of the existence of God for eight or nine years. It was not until 1763 that he firmly concluded in a treatise that "it is thoroughly necessary that one should be convinced of God's existence; but it is not nearly so necessary

that it be demonstrated.”⁵⁴ Nonetheless, Kant does present an argument for the existence of God in the treatise. On the other hand, he refutes, one by one, well-known conventional arguments such as the ontological argument and the cosmological argument. Kant stresses the investigation of the natural causes of all things and states that one should not always attribute the cause to God, nor is the miracle of God's creation necessary to metaphysical questions. Meanwhile, he laments his misfortune in inquiring into these metaphysical questions, because “the bottomless abyss of metaphysics” is like “a dark and shoreless ocean, marked by no beacons.” Evidently, Kant is, at that time, frustrated and distressed by the difficulties encountered in his investigation.

One of the important achievements Kant made during this time of distressing investigation was to break away from Leibniz-Wolffian rationalistic metaphysics. Kant becomes increasingly aware that the question of whether or not the existence of one thing is caused by the existence of another cannot be determined purely by speculative and formal logic. He stated that “one cannot deduce that it is real just for the reason that I cannot think it is unreal.”⁵⁵ Metaphysical theories about beings, e.g., the rationalistic ontological proof of the existence of God, are precisely grounded in the deductive reasoning of formal logic, hence they cannot be sound. For an argument to be sound, it must survive the test of experience. Kant is quite dissatisfied with rationalists' identification of the logical relations (universal and necessary) of reasoning with the logical relations of objective reality, and deducing the latter from the former.

Kant expresses this stance in the treatise “Attempt to Introduce the Concept of Negative Magnitudes into Philosophy,” published in the same year. In the treatise, Kant criticizes the confusion of the questions concerning being and cognition, actuality and concept, the logic of objective reality and the logic of reasoning. He stresses that formal logic, which is exalted by rationalism, cannot provide the ground for objective reality. We cannot deduce, on the ground of formal logic, rain from the notion of wind. Kant maintains that, for instance, the negative number in mathematics is not based on formal logic, rather it is a negation of reality. In formal logic, affirmation is in opposition to negation, both cannot be true at the same time. Whereas in reality, they can be true at the same time. Formal logic does not allow A as well as not A; however, mathematics allows a given number, A, to be both positive and negative. Negation and opposition in real life are different from conflicts in formal logic. In reality, conflicts and negations do not have mere negative significance. Instead, they have positive aspects as well. Two opposites can co-exist in the evolution of one thing. Kant gives many examples of conflicts from everyday life. This treatise foretells Kant's later viewpoint that **mathematics is related to the experience of the senses** rather than to formal logic. More significantly, the treatise demonstrates that Kant attaches great importance to actual conflicts, that he demands breaking through the law of identity and the law of non-conflict in

⁵⁴Kant and Treash (1979).

⁵⁵The prize essay of 1763. Kant et al. (1992a, 259).

traditional formal logic, and that he is already contemplating some of the important concepts that will constitute a part of his critical system, such as setting great store by synthetic judgments in contrast with analytic judgments, putting forward a priori logic in contrast with formal logic, criticizing Leibniz's confusing the identity of concepts (formal logic) with the identity of sensibility (mathematics), and deriving the latter from the former. These are the philosophical fruits that Kant collected after having investigated natural science for many years. These insights demonstrate that Kant is gradually turning away from investigations of a general science of nature to those of philosophical theory, and that with an increasing purposiveness he concentrates on the fundamental philosophical questions—in particular, from the viewpoint of the relation of being and cognition, concerning how to prove the possibility of universal and necessary scientific truth, and how to prove the impossibility of the old metaphysics that claims the existence of God and immortality to be scientific truth? These are the questions that occupy Kant's thoughts.

Kant introduced a basic concept in mathematics, negative magnitudes, into philosophy.

Meanwhile he stressed that mathematical and philosophical methods are fundamentally different. In the treatise "Inquiry Concerning the Distinctness of the Principles of Natural Theology and Morality," which came in second to Mendelssohn's Prize Essay in the Berlin Royal Academy of Science essay competition in 1767, Kant presents an answer that directly contradicts the position of Mendelssohn. Mendelssohn claims that metaphysics is as certain as geometry, but is more difficult to understand. This is a conventional rationalistic stance. Kant disagrees with this view and argues that philosophical metaphysics is fundamentally different from mathematical geometry. Mathematics arrives at knowledge by constructing its objects from definition.

Philosophy, on the other hand, cannot proceed in this same fashion. Instead, the philosopher must begin with certain abstract concepts, and only in applying these concepts can he acquire their definition. Kant opposes rationalism, seeing it as a pseudo-mathematical philosophy that deduces all knowledge from so-called a priori, self-evident axioms. He calls for the adoption of the method of physics, that is, the Newtonian method, which proceeds from experience. Kant states that "the true method of metaphysics is basically the same as that introduced by Newton into natural science and which has been of such benefit to it."⁵⁶ Metaphysics, for Kant, is nothing but "philosophy about the highest principle of our knowledge."⁵⁷

Theoretically, Kant believes that logic is not identical with reality; methodologically, he holds that philosophy is not identical with mathematics. In short, without experience, speculative reasoning and deduction cannot suffice to enable metaphysics to acquire truth. From logical deduction and speculation about concepts one can deduce neither the existence and causality of objects in reality, nor

⁵⁶Ibid., 259.

⁵⁷Ibid., 135.

knowledge. All one ends up with is delusions. In the "Dreams of a Spirit-Seer," written in the same year, Kant criticizes Swedenborg's soul-vision, which was creating a great stir in Europe. Kant compares it with traditional metaphysics, emphasizing that we can only ground our knowledge of reality in experience, that argument for the existence and causality of things can only be found in experience, and that argument cannot go beyond experience, nor can it proceed from reason. Kant maintains that if soul-vision can be called a dream of the senses, then metaphysics is a dream of reason. We can neither obtain nor do we need perception and concepts about ghosts, spirits, or the soul. We do not possess sufficient experiential data for a philosophical investigation and abstraction concerning questions of what spiritual substance is, or how spirit and matter relate with each other. Therefore, we can neither confirm nor negate these questions. That is to say, there is no relevant cognition. Due to the lack of experiential data, metaphysical questions of life and death are matters beyond the bounds of our reason.⁵⁸ In the 1760s, Kant repeatedly stressed the importance of sense experience to cognition.⁵⁹ This awareness is of utmost significance to the construction of his critical philosophy in the 1780s. For instance, Kant's writings during this period, such as "Observations on the Feeling of the Beautiful and the Sublime," are full of remarks about making use of experience, and about the descriptive and inductive method.⁶⁰ By this time the old rationalistic metaphysics had completely crumbled in Kant's Weltanschauung and his long-term investigation of natural science and his concern for philosophical metaphysics enabled him to perceive the profound conflict between natural science, as represented by Newton, and the old metaphysics. He thus awoke from the slumber of rationalistic ontology. It is because of this that British empiricism at the time had such an influence on Kant and he credited Hume with awakening him from those dogmatic slumbers. In fact, Hume was mainly a catalyst in his awakening.

Besides being devoted to natural science, Kant was also a keen observer of social and political issues and began to teach courses on these topics in the early 1760s. Despite the fact that Kant first takes a skeptical stance and then opposes Leibniz-Wolffian metaphysics, he cannot turn his back on metaphysics and the fundamental questions concerning God, the soul, and freedom. The problem is that these topics often stand in sharp conflict with science, and they require a new resolution. Kant says about metaphysics, "with which it is my fate to be in love,"⁶¹ that he loves it, but metaphysics does not love him reciprocally. To say that he cannot find love from metaphysics is to imply that he cannot find the answer to his questions about it. Since it is not possible, in the manner of proving scientific truth

⁵⁸Kant to Mendelssohn, April 8, 1766, on Swedenborg. Kant and Zweig (1986).

⁵⁹This characteristic is also prominent in his lecture notes. For instance, he notes that "the rule is as following, train students to compare perception to reach an experience judgment rather than to leap into the air to reach a farfetched judgment."

⁶⁰Ernst Cassirer believes that it is due to Rousseau's influence, see *Rousseau, Kant and Goethe*.

⁶¹Kant (1899).

as construed by the rationalists, to prove the existence of God, Newton's laws of mechanics cannot solve ethical problems. Then, is there a way out? In "Dreams of a Spirit-Seer," Kant argues that moral principles can be deduced neither from theology nor from speculative metaphysics. Only moral experience can produce a kind of moral belief that cannot be proved by speculation. Kant also repeatedly maintains in his 1764 prize essay that "it has yet to be determined whether it is merely the faculty of cognition, or whether it is feeling, which decides [morality's] first principles." Knowledge of God, "might only be of a moral nature," and that "the faculty of representing the true is cognition, while the faculty of experiencing the good is feeling, and that the two faculties are, on no account, to be confused with each other."⁶² This indicates that by then Kant wished to make a distinction between natural science and social problems, i.e., between cognition and morality, so as to find a resolution for the conflicts that had vexed him for so many years. It is for this reason that the doctrine of moral sense propounded by Shaftesbury and Hutcheson (they identify an inner sixth sense in addition to the five senses commonly recognized, that is, the moral sense by which we perceive virtue and vice, beauty and ugliness) is highly praised by Kant.⁶³

However, Kant does not stop here. He sees that principles of morality can neither be deduced from rationalistic speculative metaphysics nor be a product of the experience of the senses (this has already been pointed out by Hume). Kant cannot bring himself, as a means to perfunctorily settle the matter, to follow the path of Hume and the advocates of the doctrine of moral sense in their attribution of moral principles to emotions, conscience, and the sixth sense.

Kant still wishes to find a rational solution, and to clarify that the nature of morality does not lie in sensibility and emotion. The moral principles of humankind do not come under the jurisdiction of emotion, sensibility, and the natural faculties (no matter how superior the faculty may be), but fall under the jurisdiction of reason. He asserts that this is the reason why human beings are on a higher level than beasts. Since the old path of rationalism is a dead end (for although rationalism highly praises the rational nature of morality, this nature is merely a covert theology at odds with scientific spirit, and Kant could no longer tolerate this method), then, where lies the way out? It is Rousseau who provided vital inspiration to Kant at this critical moment. The reason why the metaphysics of morality holds such a sublime position in Kant's mind, the reason why this question exacts such intense attention from him and has led to his spending so much time on investigating natural science, the reason why his attention is not weakened by his study of natural science, is neither because Kant was once a pietist, nor because of his natural disposition. It is because of Rousseau's great influence. This influence is, in turn, inseparable from the French Revolution, the great many questions raised in that tumultuous era, and

⁶²1764 prize essay (but written in 1763), "Inquiry Concerning the Distinctness of the Principles of Natural Theology and Morality," *Theoretical Philosophy 1755–1770* (Cambridge: Cambridge University Press, 1992), 272.

⁶³In his 1756–1766 lecture notes, Kant's remarks that "Shaftesbury, Hutcheson, and Hume made the greatest advance in the question of moral principles."

the whole tendency of Europe's historical development. As mentioned above, the French political revolution and the German philosophical revolution are almost concurrent. It is said that Kant's philosophy is the German theory of the French Revolution. This is not to say that Kant's philosophy is a product or reflection of the French Revolution (the *Critique of Pure Reason* was published in 1781, earlier than the outbreak of French Revolution in 1789); rather, his philosophy also expresses critical questions raised in the era of bourgeois revolution. While political revolution broke out under French social conditions, German conditions could only foster a philosophical revolution.

Nevertheless, both revolutions find in Rousseau their fountainhead. Rousseau vigorously advocated natural conscience and moral emotion—which is no longer instinctive emotion or the sensory perception of British empiricism, but has a metaphysical touch—and maintains that faith (religion) is not a matter of reason, but of emotion. He attacks the society, politics, education, religion, and culture (sciences and arts) of corrupted feudalism, and proposes fresh views of life and living (such as his view that the sciences and arts are in sharp contrast with morality, that the human being is born free, and that democratic rights are to be demanded). These views were no doubt very inspirational and stimulating for Kant, who was deeply concerned about these questions and was striving to cast off the old metaphysics, and yet was distressed because he could not find a solution to the problems of ethics. (These questions, in everyday life and in practice at that time, were closely related to the questions of freedom of the will, the existence of God, and immortality.) Kant, as it were, found in Rousseau a powerful guide. Rousseau, who would become the banner of the French bourgeoisie revolution twenty years later, was at that time the man most admired by Kant, and Rousseau's portrait was the only adornment in Kant's study. In 1764, Kant writes:

Rousseau is another Newton. Newton completed the science of external nature, Rousseau that of the internal universe or of man. Just as Newton laid bare the order and regularity of the external world, so Rousseau discovered the hidden nature of man. It was imperative to recover a true conception of the nature of man. Philosophy is nothing but the practical knowledge of man.⁶⁴

I feel the consuming thirst for knowledge, the eager unrest to advance ever further, and the delights of discovery. There was a time when I believed that this is what confers real dignity upon human life, and I despised the common people who know nothing. Rousseau has set me right. This imagined advantage vanishes. I learn to honor men, and should regard myself as of much less use than the common labourer, if I did not believe that my philosophy will restore to all men the common rights of humanity.⁶⁵

Later on, in the *Critique of Pure Reason*, he says:

On account of this superiority which moral philosophy has over all other occupations of reason, the ancients in their use of the term 'philosopher' always meant, more especially, the moralist; and even at the present day we are led by a certain analogy to entitle anyone a

⁶⁴ *Complete Works of Kant*, vol. 20, 58. Quoted by Smith (1923).

⁶⁵ *Ibid.*

philosopher who appears to exhibit self-control under the guidance of reason, however limited his knowledge may be.⁶⁶

For him, philosophy is not scientific knowledge, but moral practice, and higher than knowledge. And this is the noumenon of metaphysics. A human being's dignity lies not in his intellectual reason and knowledge, but in his restraining himself from natural desires to pursue the goal he has set up for himself. Human beings possess democratic rights and moral freedom, and this morality belongs to common people in everyday life. Kant had finally located the key to his puzzles and problems. The key is to distinguish two realms and two worlds: the scientific realm and the moral realm, the sensible world (science) and the rational world (morality). Newton and Rousseau respectively are his supreme guides in the two worlds. Newton inspired him to discover the fundamental error of using super-experience in natural science and traditional metaphysics, because this error had led to the antinomies in reason. Rousseau illuminated for him the idea that human dignity and faith in human rights can constitute a ground for a new metaphysics, without the aid of theology and religion. For Rousseau, the human being is the purpose. These ideas are, of course, anti-feudalistic and democratic. Kant would also take one step forward to place reliance on faith rather than knowledge in order to tackle the question of the existence of God,⁶⁷ using the distinction between noumena (morality) and phenomena (cognition) to resolve the antinomies of reason. In a letter written in 1767, Kant mentions that he has had a series of new thoughts, and believes that he can eventually solve moral problems, implying that he has already set out to work on moral metaphysics.

As was pointed out earlier, it should be noted here as well that it is the realistic conflict between natural science and social problems, rather than speculative discussion about pure philosophy and theology, that precipitates Kant's abandonment of the old metaphysics and his turn to critical philosophy in order to establish a new and future metaphysics. Kant states that "this product of pure reason in its transcendent use is its most remarkable appearance, and it works the most strongly of all to awaken philosophy from its dogmatic slumber, and to prompt it toward the difficult business of the critique of reason itself."⁶⁸ In his later years, Kant again remarked in a letter that "it was not the investigation of the existence of God, immortality, and so on, but rather the antinomy of pure reason—'the world has a beginning; it has no beginning, and so on,' right up the 4th, 'There is freedom in man, versus there is no freedom, only the necessity of nature'—that is what first aroused me from my dogmatic slumber and drove me to the critique of reason itself, in order to resolve the scandal of ostensible conflict of reason with itself."⁶⁹ Evidently, it was not the history of philosophy, but the sharp conflicts between

⁶⁶Kant (1929).

⁶⁷The road from when he begins to feel Rousseau's influence to the development of his critical philosophy is not direct, but rather long and tortuous.

⁶⁸Kant et al. (1992b, 129).

⁶⁹To Garve, September 21, 1798. Kant and Zweig (1986).

empirical natural science (the antitheses of the four antinomies) in everyday life and rationalistic metaphysics (the theses of the four antinomies)⁷⁰ that caused much distress for Kant, and impelled him to relentless research, and finally to his break with the old metaphysics.⁷¹ The differentiation of morality and science helped Kant to resolve the antinomies, to conciliate rationalism with empiricism, and to proceed along the road to critical philosophy. Therefore, the profound sources, taken from reality, from which Kant imbibed nourishment for accomplishing his critical philosophy are the ideas of Newton and Rousseau: vigorous scientific experiment, social struggle, and democratic thought. Hence, it is not coincidental that, in this critical period, Kant also wrote a great many treatises on politics, religion, morality, and history, and that he all the more keenly observed social life and political struggles. Such observations became a prominent feature of Kant's critical period, and indeed served as a means to test and apply his philosophical system.⁷² Meanwhile, the outbreak of the French Revolution was imminent.

Natural science, with Newton as its representative, is certainly not just science, but also an organic part of the Enlightenment, of which the newly emerging European bourgeoisie was in need. Whereas Rousseau exalted the romanticism that greatly influenced the nineteenth century, Kant and his philosophy (ethics included) followed rationalism, the Enlightenment spirit, and optimism.⁷³ Rousseau led Kant to realize that science (knowledge) cannot make a human being good (morality), that morality has its own origin. However, Kant, **unlike Rousseau, is reluctant to attribute the origin of morality to the natural state of the human being** and thereby denying the development of science and history. What Kant does is to completely separate the two realms and to propound a double world. Rousseau's sentimentalism and romanticism, which lay stress on the heart, emotion, and nature, and despise reason, knowledge, and culture, are not what Kant can bring himself to accept. Therefore, Kant critically accepts Rousseau's influence,⁷⁴ just as he is critically receptive to Newton's influence. This critical attitude is an expression of the German sublimation of the quintessential spirit of Europe in that era.

⁷⁰The issue here is, of course, quite complicated. Newton's noumenal concepts of absolute time and space as independent aspects of objective reality lead to the cosmological antinomy Kant analyzes.

⁷¹The debate between Leibniz and Clarke is closely related to Kant's awakening by the antinomies.

⁷²See Chap. 9.

⁷³This is one of the important reasons why Goethe was particularly fond of Kant. He said that he felt every page was imbued with light when he was reading Kant.

⁷⁴For instance, although Kant was captivated by *Émile*, he nevertheless thought that the problem of education for future generations had yet to be solved (see the essay he wrote shortly after having read *Émile*, "Observations on the Feeling of the Beautiful and the Sublime"). Despite their important differences, including Kant's emphasis on reason and his rejection of emotion, Kant's ethics is unmistakable inspired by Rousseau.

1.5 The Synthesis of Diverse, Opposing Schools of Philosophy into a System

All in all, if we see that Kant in the 1750s was still attempting to conciliate Leibniz and Newton, and to infiltrate rationalistic idealism into materialistic natural science, then Kant in the 1760s had taken leave of rationalistic metaphysics and allowed British empiricism to guide his thought. In addition to his inclination toward Newton, he gradually shifted toward Rousseau as he steadily approached his critical period.

In the 1760s, Kant's thought about his critical philosophy was maturing, and was beginning to emerge liberally in his writings.⁷⁵ He says, for example, that "metaphysics is the science of the boundaries of human reason,"⁷⁶ that "metaphysics is useful in that it removes the appearances that can be harmful,"⁷⁷ and that pure philosophy is moral philosophy. Leibniz's *New Essays on Human Understanding*, published in 1765, must have worked fresh influence on Kant.⁷⁸ In this work, Leibniz refutes Locke's view that all concepts arise from experience, and maintains that notions like entity, necessity, and causality cannot be derived from experience.

They arise from the mind's own spontaneity. These thoughts obviously inspired Kant's construction of his epistemology of transcendental understanding. In 1769, Kant said that he suddenly saw a glimpse of light after many years of anguished investigation into the problems of metaphysics. In 1770, on the occasion of his appointment to a professorship, Kant published his inaugural dissertation "On the Form and Principles of the Sensible and the Intelligible World" (referred to below as "Inaugural Dissertation"), in which he systematically expounded on some of the ideas that he had been accumulating in the '60s. His ideas had reached a point of qualitative change. In the essay, Kant formally proposes a division into two worlds, that is, a world of understanding (noumena) and a world of the senses (phenomena). The notions of immortality and of God as the final cause of all things do not belong to the world of the senses, but rather to that of understanding. Metaphysics is the form of knowledge of the intelligible world, while mathematics is the form of knowledge of the sensible world. Kant also put forward for the first time the view that time and space are forms of intuition, thereby ending his years of hesitation between the solutions of Newton and Leibniz.⁷⁹ On the problem of ethics, Kant also took his leave of the doctrine of inner moral sense propounded by Shaftesbury and

⁷⁵In 1764, he endorsed Lambert's view that thought should be constituted with materials from experience and forms from logic.

⁷⁶Kant, *Dreams of a Spirit-seer: Illustrated By Dreams of Metaphysics*, 112.

⁷⁷Kant and Guyer (2005).

⁷⁸Before then, Kant's the understanding of Leibniz was through the twisted version of the Wolffian system.

⁷⁹A collection of correspondence between Leibniz and Clark (who represented Newton's view), which pointedly demonstrated their differences, was published in 1768. This book led Kant to take a stance different from both parties to the dispute.

his colleagues, and laid stress instead on the perfection of pure intellectual forms and the theory of autonomous legislation. All these thoughts are a prelude to the *Critique of Pure Reason*, but not strictly part of the critical philosophy.⁸⁰ Kant, at the time, still held that the categories of the understanding can be applied transcendently, that is, they can be applied to things in themselves, and that the ideas (e.g., the idea of God) thus obtained are knowledge. In other words, the world of noumena is knowable. In 1772, Kant substantially revised these ideas, when he began to argue that the understanding cannot be applied beyond the limits of experience, and that the old metaphysics, such as knowledge of God and the soul, is not properly knowledge at all, and therefore cannot constitute objects of cognition. Kant was, at the time, contemplating the division between theoretical reason and practical reason. After years of contemplation, the essential distinction between things in themselves (moral substances) and phenomena had become increasingly clear to him, and the central concept of synthesis, which is of great importance in Kant's philosophy, was gradually developing.⁸¹ This thought process was long and arduous, and it was not until 1781 that the *Critique of Pure Reason* appeared. In this work, Kant makes an absolute distinction between the terms "transcendental" and "transcendent," and denies that any transcendent application of the understanding can attain knowledge. Kant maintains that only in the domain of sense experience can reason have objective validity and become truth. As to questions about God, immortality, and freedom of the will, none of them are proper objects of scientific pursuit. They are only objects of faith and belong to the postulates of practical reason. Thus, the system of critical philosophy is established, with human cognition and practice united in one system of reason. However, what pure reason is is still unknown. Kant thus synthesizes in one system science and ethics, enlightenment spirit and religious tradition, materialism and idealism, empiricism and rationalism, and diverse and opposing schools of philosophy.

Instead of saying that the *Critique of Pure Reason* is directed at Hume's empiricist skepticism, it would be more accurate to say that it is aimed at Leibniz's rationalistic dogmatism. This school was, at the time, the orthodox philosophy of continental Europe. Therefore, immediately after its publication, the *Critique of Pure Reason* stimulated a great many responses, ardent praise as well as vehement attacks. Young, unmarried women would purchase the *Critique of Pure Reason* as an adornment for their boudoirs, although its content was totally opaque to them; whereas the church and clergy, from the Vatican to the small towns of Germany, were in such a rage over the book that dogs were sometimes named after Kant. Admirers saw Kant as their guardian of freedom and a liberator of the spirit, while opponents regarded him as a heretic and a scourge. Romantics thought that he was overly rational and took no account of emotions. In response, Herder wrote

⁸⁰Vleeschauwer believes that the Inaugural Dissertation proposes views that are actually in opposition to the critical philosophy. However, this interpretation is exaggerated, and the later work is more accurately seen as an advance of the former.

⁸¹See Chap. 2.

Understanding and Reason: A Metacritique of the Critique of Pure Reason (1799), and Jacobi wrote *David Hume on Faith, or Idealism and Realism* (1787). Both books aimed to refute Kant's view, and asserted that emotions are better at grasping reality than reason. Even Mendelssohn, Kant's friend and a prominent philosopher at the time, regarded Kant as an "all destroyer." However, the most vehement criticism was from the Leibniz-Wolffian school, which then held sway over philosophy, and in particular, from Johann August Eberhard who was its representative. He founded a new periodical solely for the purpose of refuting Kant. He asserted that whatever was right in Kant had already been said by Leibniz, therefore Kant did not make any contribution to truth; whatever was new in Kant's system was a transparent error and in opposition to Leibniz's theory; Kant's work was entirely superfluous and worthless; he was merely another Berkeley, and so on. Kant was infuriated by Eberhard's criticism, and wrote an essay to refute him in 1790. Kant was against all mysticism as well as orthodox rationalism. So, while he did not really mind being rebuked for overlooking emotions, he could not endure seeing his theory identified with that of Berkeley. In order that his theory not be mistaken for Berkeleyanism, and to make the *Critique of Pure Reason* more accessible to the reader, in 1783 Kant wrote his "Prolegomena to Any Future Metaphysics That Will Be Able to Come Forward as a Science" (referred to below as "Prolegomena"). In the second edition of the *Critique of Pure Reason*, published in 1787,⁸² he specially added criticism of Berkeley.

Although the *Critique of Pure Reason* mainly discusses epistemology, it also contains basic insights into moral philosophy and teleology. Thereafter, Kant regularly published treatises, lectures, and thoughts on various topics, including education.⁸³ The *Critique of Pure Reason*, Kant's most prominent work, together with the *Groundwork of the Metaphysics of Morals* written in 1785, the *Critique of Practical Reason* written in 1788, and the *Critique of the Power of Judgment* written in 1790 constitute Kant's critical philosophy. In preparation for writing the *Critique of Pure Reason*, Kant had already planned out his division into the three

⁸²There has been heated debate about the differences between the first and second editions. In general, the inclination toward idealism is more prominent in the first edition. Schopenhauer and Heidegger attached greater importance to the first edition.

⁸³Kant was very concerned with the problems of education. He firecely opposed the learning of ancient languages (mainly Latin) by rote, the tradition of focusing solely on textbook learning, the excessively reverance paid to the classics, and encouraging pupils to "blindly following their instruction." He thought that education should not restrain the youth by insisting on the imitation of the ancients, and maintained that "overestimating the ancients would mean for our understanding to regress to its childhood, and to overlook the full use of our capabilities." Kant believed that the youth should acquire useful skills and also take physical exercise. Kant also said that good students do not need to memorize lecture notes, and that those who do memorize notes cannot be good students. All these thoughts display Kant's Enlightenment spirit. Kant's *On Pedagogy* contains very perceptive and wise remarks drawn from his own experience as well as his ethical principles. For instance, his emphasis on children's self-control and independence is insightful. (I personally think that preschool education should focus on attention, self-control, and independence as three basic abilities for children to acquire.).

faculties of understanding, feeling, and will. With these publications, then, the system of critical philosophy was complete.⁸⁴

In short, the course of developing Kant's philosophy was tortuously progressive, rather than retrogressive or full of constant changes. The course was not a dialectic in the sense that Hegel would later make famous.⁸⁵ Kant has become one of the great figures in the history of philosophy, not because he wrote such books as the *Universal Natural History and Theory of the Heavens*, but because of the three *Critiques* (in particular, the first *Critique*). When studying Kant's philosophy, one should mainly focus on his major works, that is, the three *Critiques*, rather than the *Universal Natural History and Theory of the Heavens*, which (incredibly) is said by some scholars today to be Kant's primary work.

In February, 1804, Kant died of illness at the age of eighty. His life was entirely about his books, and his books are his biography. Engels comments that "this shameful political and social age was at the same time the great age of German literature. About 1750 all the master-spirits of Germany were born, the poets Goethe and Schiller, the philosophers Kant and Fichte, and, hardly twenty years later, the last great German metaphysician, Hegel."⁸⁶ Goethe remarked that "Kant never took notice of me, though I followed a similar path as he."⁸⁷ They were both nurtured by the zeitgeist of the French bourgeois revolution, but also reflected the underdeveloped state of Germany. These intellectuals, without exception, either avoided struggles or eventually made compromises in real life, and in turn directed their attention to ideology, making great contributions in that field. Goethe said that the duty of the German nation was to rule the intellectual world, that is to say, in comparison with France's rule of the political world. Schiller also remarked that the Germans, independent of political vicissitudes, found their distinctive value in the

⁸⁴As to Kant's *Opus Postumum*, which collects notes written in his old age and includes the unfinished *Transition from the Metaphysical Foundations of Natural Science to Physics*, some scholars maintain that it plainly breaks from the critical philosophy and exhibits an absolute idealism inclining toward romanticism, while others hold that it is in harmony with the critical philosophy. I am of the latter opinion. However, this question demands more attention, and I return to it in Chap. 7.

⁸⁵That is, from rationalism to empiricism to a higher level of rationalism. This view maintains that Kant passed through a period of empiricism (in the 1760s) then returned to a higher rationalism. This view is far from correct. Kant in fact expressed a pointed aversion to rationalism in his critical period. This popular view is derived from Hegelian ideas, as was shown by E. Caird, *Critical Philosophy of Kant*.

⁸⁶Engels (1994f).

⁸⁷*Conversations of Goethe with Eckermann*, April 11, 1827. Goethe praises Kant highly. "I asked Goethe which of the new philosophers he thought the highest. 'Kant,' said he, 'beyond a doubt'" (April 11, 1827). Goethe said, "Kant did an infinite deal, by writing the 'Critique of Pure Reason'" (February 17, 1829). Although Hegel very much admired Goethe, Goethe did not much like him (as implied in the conversations mentioned above). Goethe and Kant both stress experience and reality, and oppose the view that reason holds sway over everything, as well as attempts to prove the existence of God. They embody more of the classical and Enlightenment spirit. Goethe is hostile to French materialism, and has a low opinion of d'Holbach's *System of Nature*. Goethe and Kant indeed have a lot in common.

ethical greatness of their culture and national character. His thoughts were in the same vein as those of Goethe. Therefore, while political revolution broke out in France, only intellectual revolution was possible in Germany; although both were important revolutions.

Fichte, on the other hand, said that his philosophy matured during the time when he was most devoted to revolutionary work. While Hegel said that philosophers could prove human dignity, and that the people could learn to feel that dignity. They would then not be content that their rights were tramped on, but would demand that these rights be respected. These thoughts again confirm that a philosopher's investigation of ideology is a reflection of real life, and that such an investigation serves real struggles. At that time in Germany, the group of bourgeois thinkers, philosophers, poets, and writers that included Kant, Goethe, Fichte, Hegel, and Schiller all embodied this profound conflict. On the one hand, they all expressed ardent compassion for the French Revolution, held progressive ideals and demands, and hoped to make a difference to their reality; on the other hand, they were unable to escape the underdeveloped state of Germany, with the result that their ideals were expressed in philosophy and limited to the ivory tower, and this embodied their contradictory double personality.

In the meantime, another split among the German bourgeois class deserves further study, as it divided Germany into two aspects: unparalleled glory in the cultural and intellectual domain, with Goethe, Schiller, Beethoven, Kant, and Hegel shining as the brightest intellectual stars in the cultural history of the world; and barbarous, blood-thirsty Prussian militarism and fascism, with its futile attempt to rule the world, which the whole nation from top to bottom followed in ecstasy, even though this eventually brought catastrophe to humankind as well as Germany's everlasting shame in world history. The former was weak in action, yet rich in mind; the latter was politically and militarily ruthless, yet extremely impoverished in mind. How could these two opposites have sprung up in the same soil of this national culture? What kind of relation was there between them? Was this split intrinsic to the German bourgeoisie spirit, or was it that the cruel Junkers forced the intellectuals to confine their activities within the sphere of pure intellect? And what is the complex relationship between the double nature that is embodied by these intellectual giants with their intrinsic rationality and the irrationalism of their national spirit? Do these questions deserve further investigation (see Chap. 9)?

Engels commented about Goethe that "there is a continuing battle within him between the poet of genius who feels revulsion at the wretchedness of his environment and the cautious offspring of the Frankfurt patrician or the Weimar privy-councillor who finds himself compelled to come to terms with and accustom himself to it. Goethe is thus at one moment a towering figure, at the next petty; at one moment an obstinate, mocking genius full of contempt for the world, at the next a circumspect, unexact, narrow philistine."⁸⁸ Of course, this is not a defect in

⁸⁸Engels (1994g).

Goethe's personality; this two-sided nature is also revealed in Kant's philosophy.⁸⁹ Lenin commented that "the principal feature of Kant's philosophy is the reconciliation of materialism with idealism, a compromise between the two, the combination in one system of heterogeneous and contrary philosophical trends. When Kant assumes that something outside us, a thing in itself, corresponds to our ideas, he is a materialist. When he declares the thing in itself to be unknowable, he is an idealist. Recognising sensible experience as the only source of our knowledge, Kant is directing his philosophy towards sensualism, and via sensualism, under certain conditions, towards materialism, while in recognizing the a priority of space, time, and causality, Kant is directing his philosophy towards idealism. Both consistent materialists and consistent idealists (as well as agnostic Humeans) have mercilessly criticized Kant for this inconsistency. The materialists blamed Kant for his idealism, rejecting the idealist features of his system, demonstrating the knowability, the this-sidedness of the thing in itself, the absence of a fundamental difference between the thing in itself and the appearance, the need of deducing causality, and so on, not from a priori laws of thought, but from objective reality. The agnostics and idealists blamed Kant for his assumption of the thing in itself as a concession to materialism, 'realism' or 'naïve realism.' The agnostics rejected not only the thing in itself but apriorism as well, while the idealists demanded the consistent deduction from pure thought not only of the a priori forms of intuition, but of the world as a whole."⁹⁰

When studying Kant's philosophy the crucial thing is to make a thorough analysis of transcendental idealism, because it constitutes the unique character of Kant's philosophy. Even under the pressure of modern natural science and social theory, this contribution still exercises great influence and deserves thorough study.

1.6 A Trend in Modern Thought: Back to Kant

Recalling the past is not done for the purpose of expressing exquisite feelings of longing for it. One should devote attention to the living Kant, namely, his influence on the history of philosophy, and in particular, his influence on modern times; rather than losing oneself in digging up the dead Kant, as in the all-too-many massive scholarly works on Kant's philosophy. There have appeared worldwide an immense number of books of Kantian scholarship, a great part of them bogged down in the inconsequential details of syntactic and semantic analysis and debate, which more often than not unnecessarily complicate genuine philosophical questions while the significance and characteristics of Kant's philosophy are blotted out.

⁸⁹In *Kant's Political Thought*, Hans Saner points out that conflict (the unity of oppositions) is the theme of all Kant's works. He elaborates on many examples of conflict, such as Kant's conflict with his contemporaries, with himself, and so on. Unfortunately, Saner does not mention the profoundly contradictory characteristics of the era and of Kant's social class.

⁹⁰*Materialism and Empirio-Criticism, Selected Works of Lenin*, vol. 2. Marx Engels Internet Archive 1994.

The works of these schools of Kantian scholarship, because of their want of contact with reality and scientific research, cannot embody or represent the concrete function and historical influence Kant's philosophy has in the present day.

The influence and function of Kant's philosophy are largely manifested in the main trends of modern Western philosophy and science. From Kant forward, Fichte, Schelling, and Hegel developed Kant's philosophy into absolute idealism. From Kant to Hegel, German classical idealism reached the climax of modern European thought. Neo-Kantians disapprove of this development, and cry for a return to Kant. They do not acknowledge a transcendent spiritual substance, or absolute spirit, but their way of going back to Kant wipes out the materialistic aspect of things in themselves. Therefore, they are just like the descendents of British empiricism who called for steering clear of Kant⁹¹ and who commonly displayed the general trend toward subjective idealism in contemporary philosophy. Later on, analytic philosophy, that is, the logical positivism of the British and American schools, held sway over philosophy, as phenomenology and existentialism did over continental Europe. Logical positivism assumed the stance of exactitude characteristic of contemporary science, rejecting metaphysical questions.

They in fact went back to Hume, and abandoned metaphysical questions to existentialism. In a certain sense, existentialism, with its subjective preoccupation with the problems of human freedom and its extreme indifference towards objective empirical science, actually revived the rational psychology to which Kant was opposed. Existentialism and logical positivism are indeed two sides of the same coin; they are heterogeneous as well as complementary to each other, reminiscent of the situation between empiricism and rationalism before Kant.⁹² In other words, these two positions, one represented by scientific philosophy and logical positivism, the other by existentialism, are precisely the two sides of Kant's conceptions of phenomena and ontology.

The course of thought in the history of philosophy often recurs in more or less transformed forms. The general line that contemporary capitalism assumed toward Kant, represented by logical positivism, was to draw Kant near to Berkeley and Hume and attempt to employ these British thinkers to explain and define Kant. In

⁹¹These schools violently attacked Kant. For instance, Russell and the logical positivists. One can also quote the pragmatist William James's remark: "The true line of philosophic progress lies, in short, it seems to me, not so much through Kant as round him to the point where now we stand. Philosophy can perfectly well outflank him and build herself up into adequate fulness by prolonging more directly from the older English lines."

⁹²In his essay "Lewis's Kantianism," Lewis White Beck groups contemporary Kant critics into two categories: analytic and realistic critics. The former acknowledge Kant's view that the subject actively constructs phenomenal objects, but denies that there can be knowledge of universal and necessary laws. These critics roughly correspond to the criticism of Kant in logical positivism. The latter group of critics advocate the transcendent use of the understanding, maintaining that there can be objects independent of empirical proof and that cognition does not have to proceed from sense data. "A true judgment is about independent and metaphysically real objects, regardless whether these objects were given by perception." This group of critics can be said to correspond to rationalism.

the meantime, the ontologism in Continental studies of Kant, under the influence of existentialism, drew Kant back to the beaten track of rationalism (**certainly in an extremely narrow sense**) and arguments for the existence of God, immortality, and the essence of the human soul. However, in the past twenty years, due to attacks from both within and without, and in particular, due to the objections raised by Quine and Noam Chomsky, logical positivism, with Hume as its forefather, finds itself falling into a difficult time; whereas existentialism, with its high-flown ideas about the ontology of human existence, is finally spent. Therefore, the trend in returning to Kant passes over into various new alternatives, with new schools of all sorts constantly emerging.

Lewis White Beck, a distinguished American scholar of Kant's philosophy, remarked in the 1960s: "In the past few years there has been a noteworthy increase in the amount and improvement in the quality of studies devoted to Kant in France, England, Italy, and America; there seems to be a heightening of interest in Kant even in Germany, where the number and quality of Kant-studies have always been high. It seems as if a period of thought in which the creative and critical work and spirit of David Hume are dominant (as in America and England) is to be followed by one in which Kantian criticism and reconstruction—perhaps not recognized as such—revive."⁹³ Additional confirming remarks and comments bubble up as well, such as, "in certain degree marked a response to Kant,"⁹⁴ "Kant's view totally adapts to contemporary natural science—from physics to biology."⁹⁵ Karl Popper's cry of "critical rationalism" also echoes the cry of "Back to Kant."

However, what is important is not that for which philosophers cry, but that which is shadowed by Kantianism in the theoretical domain of natural science and in social struggles. This newly calm cry of "Back to Kant" seems to be more influential than last time (the influence of Neo-Kantianism in the nineteenth century), which kicked up a terrific storm for a while, because it has a definite ground in reality.

First, this is because the modern scientific and technological industry—with the theory of relativity, quantum mechanics, high energy physics, control theory, and genetic engineering as its vanguard—demonstrates human cognitive spontaneity in an unprecedentedly distinctive form. Human consciousness innately poses questions for itself concerning subjective spontaneity.

These questions first became noticeable and triggered Kant's philosophy in the age of Galileo and Newton and the first great European advances in science and technology. In the twentieth century, especially during the time when the scientific and technological industry was making great strides after the Second World War, these problems became unprecedentedly prominent. People no longer take inductive experience as it spontaneously comes. Instead, they equip themselves with the

⁹³Beck (1963).

⁹⁴A. J. Ayer, quoted. Translation quoted from a quotation in M. Cornforth's *Marxism and the Linguistic Philosophy*, 204.

⁹⁵Kant and Modern Science (1974).

powerful instruments of mathematics, combined with experiments on a great scale, in order to sort out, organize, and construct the objects of scientific inquiry. Therefore, the significance of various abstract theories, methods, categories, and hypotheses; the emphasis on features and aspects of structures, forms, exactitude, and subjectivity; and the importance of constructing ideal models all render more pronounced the relationship between the subject and the object in epistemology. It is no longer the subject who reflects the object, rather the subject constitutes and constructs the object, and demands that the object meet the requirements of the subject. The division between the subject and the object is thus obscured. Therefore, doctrines such as Kant's Copernican revolution, with its claim that the human being legislates the form of nature, have become increasingly popular. Although one often observes that people avoid reading Kant and even criticize him, they are in fact all Kantians. Unlike those who candidly hold aloft the banner of "Back to Kant," although they do not have a catchy slogan, they nonetheless enjoy a more widespread influence. Just as Beck says, despite "thoroughgoing censures from positivists, pragmatists, conventionalists, language analysts, and sociologists of knowledge, all of [them] join Kant in regarding physical objects as some sort of construction."⁹⁶

As early as the 1920s and 1930s, some representatives of quantum mechanics frequently mentioned Kant in their philosophical discussions. Although some employed Hume to criticize Kant, while others still wavered between Hume and Kant, the general tendency was to regard the subjectivity of cognition as the leading, dominant, and decisive factor. To cognize (construct) objects under subjective regulation and organization can be said to be essentially Kantianism.

Werner Heisenberg's principle of uncertainty and Niels Bohr's principle of complementarity also have this kind of significance in philosophy. In what appears to be the opposite of this tendency, in the 1960s, modern science and technology again inclined toward objectivism, i.e., structuralism, as their general methodology and epistemology. This prevailed in many fields such as linguistics, economics, cultural anthropology, sociology, history, psychology, biology, and mathematics. Some fields even attempted to use this so-called structuralism as a substitute or a complement to Marxism.

Nonetheless, Claude Levi-Strauss, a cultural anthropologist and the principal founder of structuralism, was evidently inclined toward Kantianism in his epistemology. While Jean Piaget, a well-known psychologist, especially in his most active decades of the 1960s and '70s, consciously raised an ancillary structuralism to the height of epistemology. Schools of structuralism are very heterogeneous and have various representatives. I select Piaget, who originally did not belong to this school, because his scientific achievement and philosophical theory are most noteworthy. Piaget opposed logical positivism, which grounds cognition in sense data and considers logic to be a mere linguistic grammar; nor did he agree with Chomsky's view that the origin of logic lies in the inner reason of humankind. He

⁹⁶Beck (1965).

opposed empiricism as well as rationalism, emphasizing that “knowledge is a continuous construction.”⁹⁷ For him, truth was neither a ready-made answer in the objective world, nor in the subjective world, rather it lay in the subject’s actions and operations within the continuous construction of the objective world.⁹⁸ Thus, the “object is seen be a limit, which is an independent existence, but never to be achieved.” In fact, the “object is constructed.”⁹⁹ Piaget points out that what he propounds is not a pure psychology. He says, “our goal essentially is epistemology,”¹⁰⁰ and “structuralism is a method.”¹⁰¹ According to the *Encyclopedia of Philosophy*, “Piaget would say that what he was really doing in this work was re-examining the whole question of the Kantian categories. This re-examination formed for him the basis of a new discipline that he called genetic epistemology.”¹⁰² Piaget stipulated that the whole of knowledge, as a construction, is not identical with the sum of its mechanical parts, nor is it an unanalyzable Gestalt. Instead, it is a system of multiple interacting elements that are scientifically analyzable. The three characteristics (totality, transformation, and self-adjustment) of the structure he prescribed are consistent with the theories of other scholars such as Levi-Strauss. In other words, they all possess a certain quality that transcends any particular society and history.¹⁰³ This is a characteristic of Kant’s transcendental philosophy as well. Although Piaget does not think of himself as a Kantian, and even criticizes Kant for being a transcendentalist, Piaget’s emphasis on diachronism and on constructing a temporal process of genesis differs from more usual versions of structuralism, which emphasize the non-historical and synchronic. Structuralism assumes a scientific objectivism, which may appear dissimilar from Kant. However, when it comes to the constitution of knowledge, the fundamental essence of Piaget’s theory, just as with any other modern scientific thought, is its emphasis on the subject’s operation, thinking, and action on an unknowable and indefinite object. From the point of view of essence, it is Kantian. Piaget maintains that structure is open and in continuous development. This emphasis separates him from

⁹⁷Piaget (1971).

⁹⁸Dewey also makes similar remarks. But he denies that the object can exist divorced from experience, and exaggerates the concepts of action and operation.

⁹⁹*Ibid.*, This view is very close to that of Neo-Kantianism, which stresses that there is no fait accompli. Cognition is an infinite process of continuous creation, and philosophy is basically epistemology and methodology. However, Neo-Kantianism does not have its ground in positivistic theory of natural science.

¹⁰⁰*Ibid.*, preface. Although Piaget maintains that epistemology should be separated from philosophy and established as an independent, positive, empirical science. He calls it experimental philosophy. However, he does not avoid the philosophical questions of the relation between existence and consciousness or object and subject.

¹⁰¹Piaget, *Structuralism*, Chap. 7.

¹⁰²*Encyclopedia of Philosophy* (1972), vol. 6, 306.

¹⁰³This remark concerns human history in general. Piaget devotes much discussion to social and historical problems, including the history of science. Unfortunately, however, he does not relate children’s cognitive development as a whole to general human history so as to study the infiltrating and dominant role of the latter on the former.

other structuralists, who assert that structures are definite and constant. Piaget is wiser than many other structuralists, particularly in his observation of the primary function of action and operation in forming human logical thinking, and because of his fully open cognitive structure.

Thus, Piaget provides an important materialistic foundation for science, and presents a concrete explanation of the origin and development of cognition. The principal defect of his theory lies in his failing to comprehend the essential distinction between human beings and animals. In other words, Piaget fails to study and expound the problem from an anthropological point of view, and is especially deficient in his appreciation of the making and use of tools. Therefore, his theory of cognitive development is, in the end, not historical (anthropological), but biological (the mechanism of self-adjustment). Some of the fundamental ideas and characteristics of Kant's philosophy still affect and influence natural science as well as social struggles. But capitalistic philosophy, including that of Hegel, has yet to truly uncover the secrets of Kant's philosophy. Historically, the task of appeasing the restless wandering ghost of Kant's philosophy has fallen to the Marxists.

Marxist philosophy is the theory of practice, that is, historical materialism. On the one hand, it must inquire into the origin and development of human material civilization, from the objective historical process of the modes of production to the long-term perspective of the future of human beings. It thus certainly includes consideration of the problems of revolution and socialism. However, if one were to conclude from these aspects that Marxist philosophy merely incites or promotes revolution, that it is a mere philosophy of revolution and criticism, such a conclusion would substantially limit and restrain the discussions and the ideals that Marx propounded in his time. In addition to revolution, there is the problem of development after the revolution; and in addition to the development of material civilization, there is the development of spiritual civilization. Only in this comprehensive way is the overall development of the human being possible. The diverse, rich, and comprehensive development of the human being as an individual is precisely the characteristic goal of Communism. Therefore, Marxism not only needs to inquire into revolution, but all the more, must also to inquire into development. In real life, these two aspects (revolution and development) are often interrelated and penetrate into each other (particularly at an early stage). For instance, it would be difficult to establish new notions and ideas if the old conventions were not overcome; however, there is continuity even in destruction, and affirmation even in negation. In a spiritual civilization, the interplay of constructive destruction and affirmative negation is all the more complex. These questions, i.e., how to investigate these problems and how to propose the development of the two civilizations (material and spiritual), constitute a consequential direction and project for the genuine development of Marxism today.

I think that the study of Kant's philosophy displays its significance especially in this respect. If it is said that Hegel's great sense of history about the macroscopic process of human development is the most salient feature of his philosophy, **then Kant's comprehensive inquiry into the human spiritual structure (cognition, ethics, and aesthetics) is the strongest feature of his philosophy.** If it is said that

Hegel demonstrates the objective movement of human subjectivity (albeit in an illusory frame of idealism), then what Kant grasps is the subjective psychological construction of human subjectivity (albeit in a framework of idealistic transcendentalism.) For the sake of the new philosophy, we now need to deliberate cautiously; it becomes an important project to consciously investigate the construction of the human being as a subject. This is what I call the cultural-psychological structure, namely, the question of human nature, or the capacity of human nature.

It is interesting that contemporary scientific disciplines seem to have a tendency toward investigating and proposing problems about our deep-seated psychological structure. Chomsky concludes that our linguistic faculty arises out of a transcendental reason that human beings universally possess, while Levi-Strauss attributes the structural constancies of social custom to a psychological structure common to humankind. Surely there is no need to mention Jung's collective unconscious! It seems to me that there are indeed some family similarities among all of these trends. In other words, notwithstanding their diverse concerns, the center of their game is all about the cultural-psychological structure of the human subject.

Wittgenstein, in his late period, associates language with real life and social interaction (which he calls language games). He maintains that it is impossible to understand language apart from these "games" and argues that the psychological should be explained through the social.¹⁰⁴ On the other hand, Piaget associates logic with operation in a more concrete sense, propounding a theory of internalization. All these theories have significant scientific and philosophical value. I regard it as important to investigate how to recapitulate correctly the questions and doctrines proposed by modern disciplines and to combine them with the study of Kant's philosophy, and to posit the philosophical concepts of human subjectivity and cultural-psychological structure as part of the large-scale study of human history.

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¹⁰⁴David (1981).

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Chapter 2

Epistemology: I. Raising the Question



2.1 Critical Philosophy

Kant's major philosophical work is the *Critique of Pure Reason*, published in 1781, with a second, revised edition in 1787. The book is over four hundred thousand words. Kant himself remarks that it is "the product of nearly twelve years of reflection, I completed it hastily, in perhaps four or five months, with the greatest attentiveness to its content but less care about its style and ease of comprehension."¹ The book is not only written in a difficult and convoluted style, with repetitive and long-winded sentences,² but also employs concepts, arguments, and terminologies

¹Letter to Mendelsohn, August 16, 1783. Kant and Zweig (1986). As to the question of comprehensibility for the common mind, Kant said time and again that "I should like to undertake a popular yet thorough exposition myself (though others will be better at this)" (Letter to Christian Garve, August 7, 1783. 197) and remarks that while "popularity may indeed follow in time, [it] can never be expected at the commencement" (*Prolegomena*, 7).

²One quip about Kant's style is quite well known. Someone complained to Kant that he was wanting of fingers when reading Kant's book. Kant was puzzled and asked why. He replied that he had to use his fingers to nail down the clauses of Kant's terribly complicated sentences, and after having used up all ten fingers the sentence still hadn't concluded.

that are often inconsistent and paradoxical,³ thus posing great difficulty for the understanding of Kant's philosophy. The *Critique of Pure Reason* has become one of the most important as well as most difficult works in the history of European philosophy.⁴

The fundamental cause of the difficulty lies not in Kant's lack of time,⁵ nor in his changing thought in different periods.⁶ The reason is that Kant undertakes to reconcile materialism and idealism, seeking a happy medium in his system for these two contradictory lines of philosophy.

Therefore, his writing repeatedly betrays different inclinations, arguments, and viewpoints, and is often lost in paradoxes. The conflicts of the *Critique of Pure Reason* are profoundly philosophical, they are not superficial discrepancies of phrases, sentences, or arguments. Neither the view that emphasizes the latter (including that of Vaihinger and Kemp Smith) nor that which rejects the former (such as Paton and Grayeff) sees the true problems in Kant's writing style.

The structure of the *Critique of Pure Reason* is arbitrary and sketchy. Kant divides the book into two uneven parts, namely, a "Transcendental Doctrine of Elements" and a "Transcendental Doctrine of Method." The former is in turn divided into two unbalanced parts, a "Transcendental Aesthetic" (on sensibility) and a "Transcendental Logic" that is itself subdivided into a "Transcendental

³There has been much debate as to the relation between the structure and content of the work.

Scholars, for instance, Vaihinger and Kemp Smith, hold that the work is pieced together in haste from notes accumulated over many years. Various layers can be discerned to be written at different times, and for that reason the book contains many conflicts. Specifically the central chapter on the analytic of concepts of the first division, the Transcendental Analytic of Categories, is pieced together from arguments written in different periods, so that it is extremely obscure. Each section in fact has its own opening and ending, forming an independent and isolated unit without much connection to the rest of the text. Therefore, the first part of the book appears to be fragmented and is highly repetitive. Other scholars, for instance, Ward, maintain that the central part is a jeweled pavilion that must not be reorganized. These scholars propose a theory of assembly or multiplicity (A. C. Ewing) to account for the writing style. Some later scholars, such as H. J. Paton, oppose this view and maintain that the work as a whole is fully consistent. What the critics see as repetition and conflict are actually varied arguments with different emphases on the same topic. I think the latter view is closer to the facts. Kant himself once said that these apparent conflicts are easy to remove. He repeatedly emphasized that one should not "hang on words," or quote isolated fragments (*Prolegomena*). On the other hand, some scholars entirely deny contradiction in the work, holding that "every sentence and every argument of the *Critique of Pure Reason* can be satisfactorily fitted into this account" (Felix Grayeff, *Kant's Theoretical Philosophy*). Such a view goes to the other extreme and is partial.

⁴Hegel's works are also known for their obscurity, but in a different sense. While reading Hegel, it would seem that each sentence is hard to grasp, even though it is not difficult to get the gist of the whole paragraph and section; whereas, in reading Kant, each sentence or clause may not be hard to understand, though the gist of a whole paragraph and section can be hard to follow, which makes Kant's books especially difficult reading.

⁵Some scholars, for instance, Paton, believe that apart from lack of time, it is due to the difficulty and novelty of the topic as well.

⁶Kemp Smith holds this view.

Analytic” (on the understanding) and a “Transcendental Dialectic” (on reason). These divisions are summarized in the chart below:

Critique of Pure Reason
 Transcendental Doctrine of Elements
 Transcendental Aesthetic
 Transcendental Logic
 Transcendental Analytic
 Analytic of Concepts
 Analytic of Principles
 Transcendental Dialectic
 Transcendental Doctrine of Method.

Additionally, each section follows a rigid format. The *Critique of Practical Reason* and the *Critique of Judgment*, which were written much later, also follow a similar structure. This is actually a vestige of the formalism that Kant is fond of and adopts as the architectonic for his critical philosophy.⁷ Nevertheless, the discrimination and continuation of the “Aesthetic,” “Analytic,” and “Dialectic” manifest the orderly argument Kant sets forth for cognition, which proceeds from sensibility to the understanding and to reason before passing into the practical realm (ethics). The section on methodology, which is often passed over or downplayed, is in fact a synopsis of the whole book; one should learn to distinguish insignificant structural issues from significant insights. Due to its intricate and compromised conflicts, the *Critique of Pure Reason* has inspired many a fastidious quarrel; however, **the influence and significance of Kant’s philosophy lies not in these details, but in his thought.** I will make an effort to avoid minute details, directing my attention solely to the main ideas. For instance, the concept of things in themselves seems to me to be the center of Kant’s philosophy; the doctrine of the thing in itself has its basis in the transition point from epistemology to ethics. Therefore, I place the discussion of this concept at the end of my sections on epistemology, and before those about ethics. In addition, the “Dialectic” contains criticisms of the rational psychology and rational theology of Kant’s time, and these criticisms reflect Kant’s inquiry into and refutation of the supposed proofs of the existence of God. These ideas were of great importance to philosophy at the time and to the development of

⁷It is said that Wolff had such a habit of systemization and that Kant inherited his practice. The discipline of medieval scholasticism can also be traced to Aristotle’s division of theoretical and practical philosophy. The former is also called metaphysics, with subdivisions for ontology (on the question of being), rational psychology (on the mind or soul), cosmology (on the system of the universe), and rational theology (on the existence and attributes of God). Practical philosophy is divided into ethics, economics, and politics. Wolff formally separated theology from ontology (which became metaphysics, concerning the question of being). The practice of distinguishing principle from method and analytic from dialectic is inherited from the Aristotelian tradition.

Kantian thought; however, they are now somewhat antiquated. Since these criticisms would be quite unfamiliar to a Chinese reader, I have decided to skip over this part.

Kant claims that the *Critique of Pure Reason* does not aim at erecting a system, but rather at critiquing cognition, in order to distinguish itself from philosophy of the past and, in particular, to refute Leibniz-Wolffian dogmatism. In the Preface to the first edition of the *Critique of Pure Reason*, Kant compares dogmatism to despotism, and skepticism to nomads who despise all settled modes of life and wish to break up civil society. Kant maintains that ever since Descartes, who employed the standard of clarity and distinctness, the old rationalistic dogmatism has regarded sensibility as a vague idea, and has asserted that truth lies in pure reason. This doctrine places a priori intellect over everything and deduces all knowledge from it. However, such knowledge surpasses the domain of experience, and the doctrine therefore cannot but fall to pieces. Dogmatism's use of the criterion of clarity and distinctness as the standard for truth gets it nowhere. Moral concepts of reason can indeed be extremely ambiguous; however, theories of geology, since they are empirical, must be very clear and certain. As to the skepticism of the empiricists, they start off from perception, in opposition to universal and necessary objective truth, and thus cut off scientific knowledge at its root. Therefore, their work can only cause harm. Kant states that "the very attempts to bring such a science [of metaphysics] into existence were without doubt the original cause of the skepticism that arose so early, a way of thinking in which reason moves against itself with such violence that it never could have arisen except in complete despair as regards satisfaction of reason's most important aims."⁸ Skepticism, which can prove nothing with certainty, just like dogmatism, is detested by ordinary people. Natural science has been making progress, while philosophy, which was titled the queen of the sciences, still lingers in dispute and darkness. In order to liberate it from the darkness, a philosopher has to start all over again, discussing, considering, analyzing, and examining cognitive faculties, and drawing a boundary that cannot be trespassed. This is the reason why Kant chooses the word "critique" and calls his philosophy "critical philosophy." Kant clarifies that "I do not mean by this a critique of books and systems, but of the faculty of reason in general, in respect of all knowledge after which it may strive independently of all experience."⁹ In the *Critique of Pure Reason*, Kant's first step is to show how all scientific knowledge is possible (mainly mathematics and physics, because other disciplines of science were still in an embryonic stage), in other words, to discuss the conditions under which a science for existing science can be established (see "Transcendental Aesthetic" and "Transcendental Analytic"). The second step is to show how religious and moral entities—the soul, freedom, and God—cannot be objects of scientific cognition because they belong to a transcendent use of reason that passes beyond the limits of experience. These two steps are two sides of the same matter, and this matter concerns the nature, features, and possibility of

⁸*Prolegomena to Any Future Metaphysics that will be able to come forward as a Science.*

⁹Kant (1929).

human cognition. To put it in Kant's terms, does human cognition have a proper domain or limit? Kant believed that rational dogmatism made deductions without comprehending the nature of human cognition, and therefore included the notions of God, the soul, and freedom as objects of cognition, which confused them with empirical science. Having trespassed the limit of human cognition, they reached entirely unsubstantiated conclusions. On the other hand, empirical skepticism also failed to comprehend the nature of cognition, and therefore questioned and denied what science had properly established, fallaciously denying all possibility of scientific knowledge. All these failures were caused by poorly formulated epistemological problems. Kant concentrates his whole philosophy on resolving this problem, which becomes a fulcrum of modern European philosophy. The focus of modern philosophy shifts from ontology to epistemology, and this shift is expressly manifested and realized in Kant's critical philosophy.¹⁰

Although the *Critique of Pure Reason* contains some fundamental ideas concerning practical reason (for instance, the chapter on the Doctrine of Method in part two, and the Canon of Pure Reason and the Preface in the second edition), nevertheless, its thesis is epistemological and concerns theoretical reason.¹¹ Kant maintains that sense experience is the basic datum for human cognition. This differentiates his view from rationalism. Meanwhile, he emphasizes transcendental forms of intuition and categories of the understanding as necessary factors for human cognition, and this differentiates his view from empiricism. Kant believes that all scientific knowledge can only be constituted through sensibility and the understanding (that is, reason in a broad sense), and is a fusion of the materials of sensibility and the forms of the understanding. He states that "through the former, objects are given to us; through the latter, they are thought."¹² "Thoughts without content are empty, intuitions without concepts are blind."¹³ While Kant's

¹⁰From Bacon to Descartes, modern philosophy has always attached great importance to epistemology. Before Kant, however, epistemology and ontology were often entangled and had yet to be separated from each other. The former had generally been ancillary to the latter, but Kant transformed this situation by rejecting the old ontology and declaring independence for epistemology. After Kant, as a matter of fact, ontology was often subordinated to epistemology, and is even deduced from epistemology in Hegel's philosophy. Hegel's logic and epistemology are continuous, and emphasize his idea of the consistency of logic and history, epistemology and ontology.

¹¹Some philosophers, for instance, Heidegger, hold that "the *Critique of Pure Reason* has nothing to do with a 'theory of knowledge,'" and is instead a theory of ontology (*Kant and the Problem of Metaphysics*). G. Martin states that "Kant's final intention ... is directed towards an ontology, a doctrine of being" (*Kant's Metaphysics and Theory of Science*). Heidegger borrowed Kant's theory to express his own philosophical argument, which incited scorn from Neo-Kantians such as Cassirer. Heidegger emphasized a priori imagination, and regarded the *Critique of Pure Reason* as a phenomenology of the subject (human being), thus passing from psychology into metaphysical ontology. Ernst Cassirer emphasized the function of cognition and saw the *Critique of Pure Reason* as a phenomenology of the object, thus inclining to a theory of cultural-historical symbolism. Their emphases are different. Heidegger totally wipes out Kant's epistemology, while Cassirer cancels the materialistic factor in Kant's epistemology.

¹²A15/B29.

¹³A51/B75.

philosophy contains considerable conflicts and discrepancies at different stages, this basic line of thought runs throughout his epistemology. It constitutes the main thesis which he revisits time and again. By emphasizing the fusion of sensibility and the understanding, Kant affirms the possibility of universal and necessary scientific knowledge, and dismisses the possibility of proving God as an object of cognition. In so doing, he refutes Hume's skepticism on the one hand, and opposes Leibniz's rationalism on the other. In the meantime, these two schools are combined and synthesized in his *Critique*. However, because Kant builds his affirmation of scientific knowledge on principles of the understanding and forms of intuition, which he regards as transcendental, he sets up a static transcendental framework to regulate and govern the material of the senses, thus distorting the fundamental nature of science, which lies in practice. Additionally, Kant's denial of God as an object of cognition emphasizes the important role of sense experience in knowledge, and allows a place for God as an object of transcendental belief and as a moral entity. I intend to uncover and investigate these intricate features of Kant's critical philosophy by discussing the main sections of the *Critique of Pure Reason*.

2.2 How Are A Priori Synthetic Judgments Possible?

The Introduction to the *Critique of Pure Reason* presents the question that Kant considers most in need of resolution by philosophers: how are a priori synthetic judgments possible? This question, in the present day, may seem inept and bewildering, but it was the result of Kant's many years of reflection. Kant sets down in the first line of the Introduction to the first edition that "experience is, beyond all doubt, the first product to which our the understanding gives rise, in working up the raw material of sensible impression."¹⁴ The first line of the Introduction to the second edition emphasizes the same point: "There can be no doubt that all our knowledge begins with experience."¹⁵ These two sentences, in the opening of the two editions, express the characteristic form and content of Kant's philosophy. First, the word "experience," from the start, carries two different meanings. In the beginning sentence of the first edition, "experience" refers to the products of the understanding acting on sensibility, and corresponds to the word "knowledge" in the second edition. Second, the word "experience" in the second edition mainly refers to sensible impressions and sensible materials. In the meantime, we should note that the word "experience" (*Erfahrung*) differs from the word *empirisch*. The former is the product of the understanding acting upon the latter (that is, the materials of sensible experience). Kant states: "Although all judgments of experience are empirical, i.e., have their basis in the immediate perception of the senses, nonetheless the reverse is not the case, that all empirical judgments are therefore

¹⁴A1.

¹⁵B1. Goethe's summary is more incisive: "Experience is only half of the experience."

judgments of experience.”¹⁶ However, in terms of content, the opening line, whether of the first or second edition, makes clear Kant’s basic view of cognition, which is that although knowledge cannot arise without the experience of the senses, it cannot be attributed to that experience.¹⁷ Knowledge must be a product of the understanding transforming and acting on the material of the senses. Kant begins his argument with the distinction between analytic judgments and synthetic judgments.

Kant holds that knowledge is expressed through logical judgments (see Chap. 4), which can be divided into two categories, i.e., analytic judgments and synthetic judgments.¹⁸ In a discussion of affirmative judgments,¹⁹ Kant says that an analytic judgment is one whose predicate is contained in its subject. Since such a judgment deduces what is already contained in the subject, the deduction is therefore independent of experience and has universal necessity. If such a judgment is true, then its negation must be false. However, since it adds nothing to our concept of the subject, such judgments cannot lead to new knowledge. As an example of an analytic judgment, Kant gives the following: “All bodies are extended.” In thinking of a body, we cannot help but also think of something extended in space; so this would seem to be just part of what is meant by “body.” Further, if the judgment “All bodies are extended” is true, then “Some bodies are not extended” must be false. The two judgments cannot both be true. This does not hold for synthetic judgments, of which Kant’s example is: “All bodies are heavy.” In this case it is easy to see that the predicate is not contained in the subject. Whether or not a specific body is heavy cannot not be deduced from a mere analysis of the concept of the body, but can only be known through experience. Synthetic judgments extend our knowledge by adding something to the subject that is not analytically contained in it. But such knowledge is not universal and necessary. It does not possess objective validity, because experience is the sole source by means of which we determine its truth; and our experience, being limited and partial, cannot guarantee the universal, necessary, objective validity of such a judgment. That is to say, the truth of a synthetic judgment does not make the opposite judgment impossible.²⁰

¹⁶Kant and Hatfield (1997). Empirical judgment is the judgment of perception. See Chap. 5.

¹⁷I use the word “experience” only in the sense of the second edition, which refers to the material of the senses. I use the word “knowledge” for what Kant refers to as “experience” in the first edition, i.e., as the product 构成物 of the understanding acting on the material of the senses.

¹⁸Lovejoy, who dismisses Kant’s doctrines as hackneyed and devoid of merit, claims that the analytic-synthetic distinction and the doctrine of synthetic judgments a priori were already proposed by Leibniz, and that Kant added nothing new. This view does not correspond to the facts.

¹⁹Some scholars fault Kant for focusing solely on affirmative judgments and brushing aside other forms of judgment. They claim that he makes unfounded generalizations from isolated cases. His use of terms like “contain” and “include” is confusing as well, and such terms can only be seen as unhelpful spatial metaphors. Nonetheless, these criticisms do not hit their target. For instance, the distinction between analytic and synthetic, which is acknowledged by modern logic, is not limited to affirmative judgments.

²⁰This, of course, is put in terms of non-formal logic. We can also see Kant begin to rise above formal logic. This breakthrough would in fact become a harbinger for Hegel and has important philosophical implications.

That the statement “All bodies are heavy” is true does not make the statement “Some bodies are not heavy” necessarily false. The law of contradiction suffices for an analytic judgment,²¹ but synthetic judgments, on the other hand, require other principles. Kant basically equates analytic judgments with the transcendental (which doesn’t rely on experience), and synthetic judgments with experience, linking rationalism to the former and empiricism to the latter.^{22,23} Therefore, rationalism, whose main instrument is deductive logic, the deduction of knowledge from a priori self-evident axioms and innate ideas, is in fact merely one kind of analytic judgment that cannot extend knowledge. If one proceeds from analytic judgments, then all objects that are not perceptible, for instance, God, the soul, and various other transcendent fallacies, become confused with the objects of empirical knowledge. This method, therefore, cannot be the correct way to obtain scientific truth. On the other hand, empiricism, whose main instrument is induction, the production of knowledge from the senses and experience, is a posteriori synthetic judgment. It can produce new knowledge; however, the universal and necessary objective validity of this knowledge cannot be guaranteed. Kant holds that universal, necessary, objective validity, that is, universally applicable truth, is the basic requirement for all scientific truth. Since empirical induction cannot satisfy this requirement, it cannot be the correct way to obtain scientific truth. Therefore, scientific truth cannot be attained by either a priori analytic judgments or empirical synthetic judgments. How then can we explain and guarantee scientific truth?

Kant was conversant with the natural science of his time and entertained no doubt about its objective validity. He believed in the application of Euclidean geometry and the Newtonian laws of mechanics to all objects of experience. In other words, he believed that those laws enjoyed universal, necessary, objective validity. Euclidean geometry and Newton’s laws of mechanics are synthetic judgments and rely on materials provided by sensible experience, but they also possess universal, necessary, objective validity in being applicable to whatever object we consider. So from where does this universal necessity come? Kant maintains that it cannot come from empirical induction, as it has to be a priori. This kind of scientific truth, then, is neither an a priori analytic judgment nor an empirical synthetic judgment, but rather an a priori synthetic judgment. An

²¹There has been much debate as to whether analytic judgments can be prescribed by the logical law of non-contradiction. Modern philosophers tend to discuss analytic propositions using a strict definition of the term. Beck, however, opposes the interpretation of Kant’s analytic judgments as depending on convention and a strict reading of analytic propositions. In fact, what Kant investigates is not a problem of formal logic. As Paton said, “formal logic has nothing to do with the possibility of synthetic judgment” (*Kant’s Metaphysic of Experience*, vol. 1, Chap. 35, Sect. 2).

²²These two equations, however, are not all-inclusive. Some scholars assert that the analytic-synthetic distinction is synonymic, while the transcendental-experiential distinction is epistemological.

²³Leibniz (rationalism) and Hume (empiricism) both maintain that the analytic is transcendental while the synthetic is empirical. The difference is that Leibniz believes the former can lead to true knowledge whereas the latter is contingent. Hume, on the other hand, believes the opposite, holding that only experience leads to empirical knowledge of the world.

important goal of Kant's critical philosophy is to investigate how this kind of judgment is possible. Therefore, this unusual question "How are a priori synthetic judgments possible?" can be rephrased as "How is scientific truth, which possesses universal, necessary, and objective validity, possible?" In asking about the conditions for the establishment of such judgments, the central phrase here is "universal and necessary."²⁴ This is also the reason why Kant stresses the distinction between experience and the a priori, for that which is a priori is universal and necessary. This is not the universal necessity of formal logic (which is analytic); rather it is the universal necessity of actual objectivity in experience, which cannot be induced from experience itself.

It should be noted that what is under investigation is "How is it possible?" rather than "Is it possible?" To Kant, there is no question about whether scientific knowledge of nature is possible, because modern physics has established such knowledge. The question that concerns Kant is *how* is it possible. Thus, in the Introduction to the *Critique of Pure Reason*, he poses questions such as "How is pure mathematics possible?" (and gives a transcendental aesthetic answer), and "How is pure natural science possible?" (and gives a transcendental analytic answer). Kant attempts to explain scientific knowledge through idealistic transcendentalism, and attributes the objective truth of science to a whole set of transcendental forms of cognition.

Kant disapproves of Leibniz's view that mathematics is analytic, and that the law of contradiction in formal logic suffices for its truth. He holds that mathematics is synthetic, yet not synthetic a posteriori. It is rather a non-experiential construction, an a priori synthetic judgment of universal necessity. He argues that even an elementary example in arithmetic, for instance, $7 + 5 = 12$, is synthetic, since the concept of 12 cannot be analyzed from the concepts of 7, 5, and +. He thinks that "the concept of the sum of 7 and 5 contains nothing further than the unification of the two numbers into one, through which by no means is thought what this single number may be that combines the two. [...] One must go beyond these concepts, in making use of the intuition that corresponds to one of the two, such as one's five fingers, or [...] five points [...] One therefore truly amplifies one's concept through this proposition $7 + 5 = 12$ [...] We could never find the sum through the mere analysis of our concepts, without making use of intuition."²⁵ It is even more obvious in the addition of large numbers, such as ten of thousands added to tens of thousands, that the sum is not an analytic but a synthetic judgment. On the other

²⁴On the relation between "universal" and "necessary," see Prichard, *Kant's Theory of Knowledge*, Chap. 2. He points out that universal and necessary are eventually continuous. In a marginal note in his *Philosophical Notebooks*, Lenin quotes a comment Feuerbach made in his commentary on Leibniz: "Kant and Leibniz, necessity inseparable from the universal." The original quotation is thus: "The basic thought, therefore, of the *Nouveaux Essais sur l'Entendement Humain* is already, as in *Der Kritik der reinen Vernunft*, that universality, and the necessity which is inseparable from it, express the essence belonging to the understanding or apperceiving being, and therefore cannot arise from the senses, or from experience, i.e., from outside."

²⁵Kant, and G. Hatfield, *Prolegomena*, 18.

hand, the proposition $7 + 5 = 12$ is applicable on all occasions, for all objects and experiences, and is not dependent on any specific experience, which means that it has universal and necessary validity. Kant uses an example from geometry, “The straight line is the shortest between two points,” to explain that the concept of the shortest (a magnitude) is not analytically contained in the concept of a straight line (a quality).²⁶ He argues: “For my concept of the straight contains nothing of magnitude, but only a quality. The concept of the shortest is therefore wholly an addition and cannot be extracted by any analysis from the concept of the straight line. Intuition must therefore be made use of here, by means of which alone the synthesis is possible.”²⁷ Such a proposition is a synthetic judgment related to experience, yet it still possesses universal, necessary, objective validity, which is not supplied by experience. Therefore, Kant names it an a priori synthetic judgment. He lays great stress on mathematics, and holds that investigations become properly scientific only when they contain mathematics, whose a priori synthetic judgments are the pure element that grounds the objective, universal validity of science. So, for example, he says that if chemistry cannot employ mathematics to calculate and express molecular movement in space, it cannot become a science. This conclusion applies to any would-be natural science, which must contain a priori synthetic judgments as its ground. Kant states: “Natural science (physics) contains a priori synthetic judgments as principles.”²⁸ He gives examples of such basic principles—for instance, “the law of conservation of mass” and “action and reaction must always be equal”—and points out that these principles cannot be induced from experience, nor deduced from concepts.²⁹ Instead, they are a priori synthetic judgments. Kant sees forms of intuition, i.e., time and space, as a priori conditions for mathematical judgments; that is to say, a priori synthetic knowledge of arithmetical and geometrical propositions is mainly supplied by sensible intuition. He sets forth twelve categories as a priori conditions for natural science (mainly physics) to be established as a priori synthetic judgments (see Chap. 4), but attributes the ultimate source of a priori conditions for natural science to what he calls transcendental apperception.

In addition, Kant raises two questions. First, “How is metaphysics as natural disposition possible?” Second, “How is metaphysics as science possible?” The *Critique of Pure Reason* is an answer to these two questions. He maintains that these questions are qualitatively different from the two questions I discussed earlier concerning the possibility of mathematics and natural science. To ask “How is

²⁶Different from analytic judgment, it does not logically exclude the statement that “a straight line is not the shortest line between two points.” Some scholars hold that Kant in fact not only does not exclude but even foresees the coming of non-Euclidean geometry. But it is an overstatement to regard this as foresight on his part.

²⁷Kant, and G. Hatfield, *Prolegomena*, 19.

²⁸Kant, and Kemp Smith, *Critique of Pure Reason*, B17.

²⁹Some scientists and philosophers today still acknowledge and stress this point, which they consider to be wrapped up with the laws of conservation of energy, relativity, and causality. See Chap. 4.

metaphysics possible?” is to ask how the existence of God, immortality, and freewill can be established, just like other scientific truths. Kant thinks that these metaphysical questions arise as a natural disposition of humankind,³⁰ yet are not possible terms of scientific knowledge. The two questions concerning the possibility of mathematics and natural science were the occasion for philosophical arguments explicating effective scientific truths; the second set of questions aims to expose the errors of the old metaphysics, and are an occasion to point out that metaphysical concepts and propositions, such as the immortality of the soul and the existence of God, are transcendental illusions produced by reason’s passing beyond the boundaries of experience. At the same time, Kant thinks that transcendental illusions are a natural demand and inclination of our knowledge. On the one hand, they are not scientific truths, therefore they cannot be proved; on the other hand, they do have function and value for our thought and action. As subjective ideas, their function and value lie in leading and regulating our speculations and actions. Kant stresses that only after having cleared up these questions, and dispensing with the old metaphysics that had passed itself off as a science, can a properly scientific metaphysics be established. His critical philosophy, as a matter of fact, intends to find answers to these questions, or at least to clear the ground for a future metaphysics. His critical philosophy is a propaedeutic,³¹ as it were, to a future metaphysics of science.

Kant called the critical philosophy transcendental philosophy, stating: “That what here constitutes our subject-matter is not the nature of things, which is inexhaustible, but the understanding which passes judgment upon the nature of things; and this the

³⁰“That the human mind would someday entirely give up metaphysical investigations is just as little to be expected, as that we would someday gladly stop all breathing so as never to take in impure air. There will therefore be metaphysics in the world at every time, and what is more, in every human being, and especially the reflective ones; metaphysics that each, in the absence of a public standard of measure, will carve out for themselves in their own manner. Now what has hitherto been called metaphysics can satisfy no inquiring mind, and yet it is also impossible to give up metaphysics completely; therefore, a critique of pure reason itself must finally be attempted, or, if one exists, it must be examined and put to a general test, since there are no other means to relieve this pressing need, which is something more than a mere thirst for knowledge.” (*Prolegomena*, 118).

³¹Kant wrote the *Prolegomena to Any Future Metaphysics That Will Be Able to Present Itself as a Science* (abbreviated *Prolegomena*) as a summary of the *Critique of Pure Reason* for the general public. However, he does not specifically give a description of this future metaphysics, about which there has been much debate among later scholars. Some scholars maintain that Kant presents only a moral metaphysics and does not intend to construct a metaphysics of science or epistemology, while others assert that the critical philosophy is Kant’s metaphysics, “a system of a priori concepts and principles which make objects of experience possible” (Gregor). Kant indeed states that he intends to write on metaphysics and that the *Critique* is only a propaedeutic for the purpose of clearing the ground. But when he was criticized for having merely worked out the introduction and leaving his philosophical system half-done, Kant indignantly replied that a complete pure philosophy is indeed to be found in the *Critique of Pure Reason* (see his “Public Declaration Concerning Fichte’s *Wissenschaftslehre*,” August 7, 1799). One should note that Kant’s use of the word “metaphysics” carries a different emphasis as well.

understanding, again, only in respect of its a priori knowledge.”³² He explains, “I entitle transcendental all knowledge which is occupied not so much with objects as with the mode of our knowledge of objects in so far as this mode of knowledge is to be possible a priori.”³³ He says, “The critique of pure reason therefore will contain all that is essential in transcendental philosophy.”³⁴ Thus, it is evident that Kant’s critical philosophy proposes to investigate all a priori conditions, origins, and modes of the understanding, instead of inquiring into the content of various a priori synthetic judgments. Kant argues that just as geometry extracts the concept of the triangle from particular triangles in experience, to construct an a priori system that is made of all kinds of a priori synthetic judgments, transcendental philosophy extracts forms of intuition, i.e., time and space, and the categories of the understanding from sense experience and scientific knowledge, in order to investigate and construct a system of pure a priori knowledge. Such a priori knowledge refers only to the forms of the understanding, that is, the transcendental forms that make experience and empirical knowledge possible. Kant often uses the terms “a priori,” “pure,” and “form,” as if they are synonyms.³⁵ He states that “the word ‘transcendental’ does not signify something that surpasses all experience, but something that indeed precedes experience (a priori), but that, all the same, is destined to nothing more than solely to make cognition from experience possible.”³⁶ Therefore, the term “transcendental” refers to the conditions of experience, and transcendental philosophy investigates the conditions of cognition (which cannot depart from experience). Kant sees his epistemology as an investigation into the pure system of forms of cognition. This investigation contains the seed for Hegel’s epistemology, that is, the seed of dialectical logic. The difference is that Kant remains in epistemology, while Hegel transforms epistemology into ontology.

2.3 Dualism and Idealism

In his Introduction, Kant unites “a priori” and “synthetic” in one phrase, raising his question about how universal and necessary scientific truth is possible. In so doing, he poignantly raises, in a particular way, the fundamental philosophical question in

³²Kant, and Kemp Smith, *Critique of Pure Reason*, A12-13/B26.

³³*Ibid.*, A11/B25.

³⁴*Ibid.*, A14/B28.

³⁵The term “pure” has two meanings. First, it refers to a kind of a priori knowledge, that is, in contrast to impure a priori knowledge. Second, it is synonymous with a priori. Impure a priori knowledge refers to the situation where the relation of the concepts is a priori, though the concepts themselves are empirical. For instance, in “every change has a cause,” the concept of change is empirical. Pure a priori refers to the situation where not only the relation of the concepts is a priori, but the concepts themselves are also not empirical. However, Kant does not always maintain a vigilant watch over this distinction, and the term “pure” is often confused with “a priori.”

³⁶Kant, and Henry Calderwood, *Prolegomena*, 112.

epistemology, namely, the relation of thought and being. Concerning this question, Kant characteristically exhibits his underlying attitude of wavering between, compromising with, and reconciling materialism and idealism. In the Introduction to the *Critique of Pure Reason*, he scorns the old idealism for doing away with experience:

The light dove, cleaving the air in her free flight, and feeling its resistance, might imagine that its flight would be still easier in empty space. It was thus that Plato left the world of the senses, as setting too narrow limits to the understanding, and ventured out beyond it on the wings of the ideas, in the empty space of the pure understanding.³⁷

In the *Prolegomena*, he puts it in more specific terms:

The thesis of all genuine idealists, from the Eleatic School up to Bishop Berkeley, is contained in this formula: ‘All cognition through the senses and experience is nothing but sheer illusion, and there is truth only in the ideas of pure the understanding and reason.’ The principle that governs and determines my idealism throughout is, on the contrary: ‘All cognition of things out of mere pure understanding or pure reason is nothing but sheer illusion, and there is truth only in experience.’³⁸

However, this is only one side of the coin. On the other side, Kant states:

There are only two ways in which we can account for a necessary agreement of experience with the concepts of its objects: either experience makes these concepts possible or these concepts make experience possible. The former supposition does not hold in respect of the categories (nor of pure sensible intuition) [...] There remains, therefore, only the second supposition [...] that the categories contain, on the side of the understanding, the grounds of the possibility of all experience in general.³⁹

In the *Prolegomena*, he also says: “the understanding does not draw its (a priori) laws from nature, but prescribes them to it;” and “the understanding is the origin of the universal order of nature, in that it comprehends all appearances under its own laws.”⁴⁰ On the one hand, cognition needs experience, and truth does not lie in pure speculation; on the other hand, it is not consciousness that reflects being, rather it is the subject that determines the object. This line of thought that proceeds from Kant’s solution to the problem of the possibility of a priori synthetic judgments constitutes the thesis of his dualism. On the one hand there is the sensible material provided by things in themselves (see Chap. 7), on the other hand there are the forms of cognition supplied by the transcendental self (see Chap. 5). This pair of contrasts runs throughout Kant’s epistemology. It is vital for us to penetrate this conflict, and to discover its reasonable significance, instead of trying to bridge, eliminate, or cover up misunderstandings.

The main difficulty is that the a priori forms (time and space as forms of intuition, and the categories of the understanding) dominate, control, and construct sensible material. Knowledge is mainly attained through the forms acting on the

³⁷Kant, and Kemp Smith, *Critique of Pure Reason*, A5/B9.

³⁸Kant, and Henry Calderwood, *Prolegomena*, 126.

³⁹Kant, and Kemp Smith, *Critique of Pure Reason*, B166-7.

⁴⁰Kant, and Henry Calderwood, *Prolegomena*, 73.

data of the senses; and the universal, necessary, objective validity of scientific truth also comes from the experience of the senses. The transcendental aspect is the main feature of this conflict. Therefore, in spite of Kant's efforts to reconcile and mediate between rationalism and empiricism, and in spite of his years of wavering and compromising, the essential nature and necessary destiny of knowledge can be nothing but idealistic transcendentalism.

Although Kant criticizes both idealistic rationalism and idealistic empiricism, he in fact inherits the ideas of both schools. Idealistic rationalism holds that universal and necessary knowledge can only arise from innate ideas, which are clear and certain self-evident axioms, while sense experience is merely a heap of vague and chaotic impressions. Idealistic empiricism also believes that universal necessity cannot be induced from experience, but is only found in analytic judgment, that is, in logic and mathematics. Both schools agree that experience cannot supply universal and necessary truth, and both admit that logic and mathematics are such universal, necessary truths. Kant's critical philosophy takes over this view, emphasizing that universal necessity cannot arise from experience, but only from the a priori. But critical philosophy diverges from the conception of innate ideas in its denial that any particular, actual knowledge or concepts can be innate or immanent, despite admitting that the forms of knowledge are transcendental.

This difference is of great importance, because innate ideas are merely determinate contents of knowledge, while transcendental forms are indispensable, necessary conditions for all knowledge. Hence, critical philosophy is of more profound significance than idealism with its innate ideas. Although, unlike innate ideas, transcendental forms do not precede experience in time, they precede it transcendently and constitute the universal necessity of all a priori truth. Therefore, although no particular knowledge or empirical concept is a priori, in Kant's philosophy the universal forms of cognition that are necessary for constituting knowledge become immanent or, in a sense, innate.

Hegel takes this conception over from Kant, stressing the universal necessity of forms of reason. Hegel argues: "But if the law does not have its truth in the Notion, it is a contingency, not a necessity, not, in fact, a law."⁴¹ That is to say, universal necessity (the truth of a law) can only lie in concepts, thinking, and reason. To Kant, concepts and thinking are subjective (albeit transcendental) forms of cognition, while to Hegel they are objective absolute spirit which rules the world. Hegel states that there are "three meanings of objectivity."

First, it means what has external existence, in distinction from which the subjective is what is only supposed, dreamed, etc. Secondly, it has the meaning, attached to it by Kant, of the universal and necessary, as distinguished from the particular, subjective, and occasional element which belongs to our sensations. Thirdly, as has been just explained, it means the thought-apprehended essence of the existing thing, in contradistinction from what is merely our thought, and what consequently is still separated from the thing itself, as it exists in independent essence.⁴²

⁴¹Hegel et al. (1977).

⁴²Hegel and Wallace (1874).

The purpose of Kant's raising the question of universal necessity is to pursue and confirm the objectivity of truth and knowledge, and to distinguish objectivity from the subjectivity of sense experience (see Chap. 5). However, only subjective thinking can possess universal, necessary objectivity, therefore it seems that Kant reverses the order of the subjective and the objective, i.e., Hegel's first meaning. To Hegel, however, this reversal is a profound truth. He explains, "the perceptions of sense are the properly dependent and secondary feature, while the thoughts are really independent and primary."⁴³ But Hegel is not satisfied with Kant's objectivity, because it is merely universal and necessary for cognition, whereas he wishes to see the universal necessity of thinking extended to the nature of things.

Feuerbach disagrees with Hegel, emphasizing the universality of sensibility. He argues: "Man is not a particular being like the animal; rather, he is a universal being," and "universal sense is intellect, and universal sensuousness is intellectuality."⁴⁴ However, Feuerbach does not explain where this universality comes from. All he does is phrase his view of human nature in empty words: "The togetherness of man with man is the first principle and the criterion of truth and universality."⁴⁵ What he means when he says that man differs from animals in man's being "a universal being" and possessing "universal sense" actually refers to features of sensuous human nature. Feuerbach basically makes a detour and comes back to the passive sensuousness of the old materialism because he does not appreciate how these features of the senses have evolved in the history of human society. The universal sensuousness Feuerbach expounds does not in fact exist, and it would be futile to prove the universal necessity of scientific knowledge by searching sensible experience. But Feuerbach insists on employing the senses to obtain empirical knowledge; as a result, his epistemology fails to overcome the limitations of the old materialism. As Engels pointed out: "The empiricism of observation alone can never adequately prove necessity [...] It does not follow from the continual rising of the sun in the morning that it will rise again tomorrow."⁴⁶ Epistemologically, it is because the objective truth of knowledge cannot be guaranteed by sense experience alone that the empiricism of the old materialism is eventually replaced by skepticism (Hume) and transcendental idealism (Kant). The old materialism can hardly stand up to Kant's criticism: How is universal and necessary scientific truth possible?

This question is the starting point of Kant's epistemology.

⁴³Ibid.

⁴⁴Feuerbach (1994).

⁴⁵Ibid., §41.

⁴⁶Engels (1994).

2.4 “The View of Life and Practice Should Be the First and Principal View of Epistemology”

Marx says: “All social life is essentially practical.”⁴⁷ Human existence is not merely the sensuous existence of a natural organism; it is not merely, as Feuerbach assumes, an abstract sensuous relationship of the “togetherness of man with man.” The human essence is a product of social practice within historical processes. It is, first of all, a product of the activities of using and making tools. These are the activities that distinguish human beings from things (animal as well other natural beings), and distinguish human practices from animal activities. Before Marxism, the old materialism investigated the problem of knowledge from the perspective of the experience of the senses, and took the perspective that human beings are natural biological entities. Many modern subjective idealistic schools see the perception of the senses, or experience, or observable empirical statements as final facts, and use these as the starting point for cognition. They fail to see the essential distinction between human cognition and that of animals. It is only if one starts from social practice and considers questions of cognition without ignoring human sociality that one can explain the interdependent relationship between knowledge and social practice in its particular historical context and discern that the formation and development of human sense perception are historical products of human practice. To start from the materials of the senses is actually to proceed from individual psychology. But individual psychology is, from the beginning, limited by the level of development of human beings as a whole. The perception of primitive peoples is different from that of moderns.

It is because Kant had the wisdom to proceed from the historical achievements of the whole of human beings (a priori forms of knowledge) that his transcendentalism is superior to empiricism, which starts from the perception and experience of individual psychology (the a posteriori content of cognition). Wittgenstein and other modern philosophers often start from language. But while it is true that language is what distinguishes human beings from animals, and while it is quite wise to adopt language rather than perception and experience as a starting point, is language the final substance, noumenon, or reality of the human being?

Most modern Western philosophical schools answer this question affirmatively. But my answer is negative. In my view, the final substance, noumenon, or reality of the human being is the social, practical activities of material production; and these activities are the ground upon which signs (language is mainly sign-production) arise. The relation between language and practical social activities is certainly extremely complicated. As Wittgenstein has pointed out, language is determined by social life and practical social activities, and individual perception is determined by social language rather than the other way around. All these theories are quite correct. But the problem we are facing now is how to inquire into the relation and

⁴⁷*Theses on Feuerbach*. Marx Engels Internet Archive 1994.

structure of primitive language-sign activities and practical social activities (mainly material production for collective survival) from the perspective of genetics. In this context, genetics is not merely empirical science; it is of ontological and philosophical significance.

From a philosophical point of view, the inquiry into human knowledge neither proceeds from language (as in analytic philosophy), nor from feelings (as in psychology); rather, it proceeds from practice (as in anthropology). **Linguistics and psychology should be grounded upon anthropology**, meaning the whole history of social practice. The true universality of sensibility and language can only be built on the universality of practice. Marx states that “all mysteries which lead theory to mysticism find their rational solution in human practice and in the comprehension of this practice.”⁴⁸ Only after having correctly comprehended the universality of practice can one resolve Kant’s question of how a priori synthetic judgments are possible, and this question inevitably touches also on the universality of reason and language.

There is no absolute universal necessity in nature. Universal necessity is merely a philosophical idea that has become rigid. The universal and necessary scientific knowledge that Kant has in mind is, in fact, relative truth; it is only universal and necessarily, objectively valid for a certain level of human social practice. This validity constantly expands, diminishes, is revised, and changes, because human social practice is in continuous development.⁴⁹ From Euclidean geometry to non-Euclidean geometry, from Newtonian laws of mechanics to Einstein’s theory of relativity and quantum mechanics, all these scientific developments prove that what Kant sees as universal, necessary, unchangeable, and absolutely applicable scientific truth is only applicable in a certain field, under certain conditions, and at a particular time.

Scientific truth is universally necessary only within these limits. It is apparent then that universal necessity is essentially determined by the level, scope, or limit that human social practice achieves in a certain historical period, and is marked, without exception, by the sociality of historical time.

This sociality is objective, a human objectivity, because it arises neither from the association of subjective notions, nor from man-made convention, nor from transcendental norms. Instead, **it arises from the material activities of the objective social practice of human beings**. This does not mean that all laws in objective nature (e.g., those discovered by mechanics and biology) are arbitrary creations of human practice. Although objective natural beings are not dependent on human society and practice, their laws are discovered, comprehended, employed, and learned by means of human beings’ social practice. Therefore these laws have universal, necessary, objective validity, which is supplied and proved by social

⁴⁸*Theses on Feuerbach*. Marx Engels Internet Archive 1994.

⁴⁹S. Körner also holds that there is no a priori synthetic judgments, that they are relative to the development of science (see *Kant*, Chap. 1). Analytic philosophy also stresses, from the perspective of language, that an empirical proposition (e.g., a refuted scientific proposition) can be false.

practice only within the scope of a certain historical time. It is social practice that gradually distinguishes, through technology, the varied and changing appearances of the phenomena of nature (which rarely have universal necessity) from relatively stable laws (which have some universal necessity); it extracts the former from the latter and applies them to vast objects and research fields. Piaget argues, from the perspective of cognitive development, that the universality and objectivity of knowledge are intimately related to social activity. Without the latter, the former is not possible. Universal and necessary logical thinking also needs cooperative action in social life as its condition.

Earlier, I proposed replacing Piaget's microcosmic perspective of cognitive development in psychology with the macrocosmic perspective of human history. However, as the level of social practice advances, the objective validity that is comprehended, learned, and extracted from historical experience acquires universal necessity. Therefore, **this universal necessity must be conditioned by a particular, objective social nature**. Social nature is the theoretical measure for social practice at any particular historical time. Social practice refers, first and most importantly, to socially productive work characterized by the using and making of tools (both material tools, e.g., a primitive axe or a space shuttle; and also energies, for instance fire and nuclear fusion). Second, social practice mainly expresses the pioneering functions of the modern scientific experimental method. We are familiar with the historical facts that: first there was the practice of ancient land surveying, and this was followed by Euclidean geometry; first there were capitalistic factories and their employment of simple machines, then came Newton's mathematical laws of mechanics; first there was modern industry and scientific experimentation on a large scale, then came non-Euclidean geometries, the theory of relativity, quantum mechanics, and the theory of elementary particles. These scientific theories in turn continuously transform into technologies and tools, which change rapidly, and which transform into directly productive forces in society.

The well-known thesis that human beings legislate nature, which appears prominently in Kant's epistemology, is a reflection of these new features of scientific experimentation at his time. Scientists from Galileo on generally initiated experiments in order to pose questions to nature, and demand that nature give an answer. They then testified, revised, and developed their hypotheses and theories, rather than using simple observation, description, and induction. Kant sees this shift clearly, and remarks in the Preface to the second edition of the *Critique of Pure Reason*:

When Galileo caused balls, the weights of which he had himself previously determined, to roll down an inclined plane; when Torricelli made the air carry a weight which he had calculated beforehand to be equal to that of a definite volume of water; or in more recent times, when Stahl changed metal into lime, and lime back into metal, by withdrawing something and then restoring it, a light broke upon all students of nature. They learned that reason has insight only into that which it produces after a plan of its own, and that it must not allow itself to be kept, as it were, in nature's leading-strings, but must itself show the way with principles of judgment based upon fixed laws, constraining nature to give answer to questions of reason's own determining. Accidental observations, made in obedience to no previously thought-out plan, can never be made to yield a necessary law, which alone

reason is concerned to discover. Reason, holding in one hand its principles, according to which alone concordant appearances can be admitted as equivalent to laws, and in the other hand the experiment which it has devised in conformity with these principles, must approach nature in order to be taught by it. It must not, however, do so in the character of a pupil who listens to everything that the teacher chooses to say, but of an appointed judge who compels the witnesses to answer questions which he has himself formulated.⁵⁰

Kant’s conception of the human being as legislating nature could only have originated from the ground of modern scientific experiment and from the subjective spontaneity of human cognition that the methodology of natural science exhibits. This feature, which Kant stresses time and again, has become all the more prominent and important in modern times, and is fundamentally grounded in social practice, e.g., industrial technology and scientific experiment on an unprecedented scale.

It is evident that scientific method itself is restricted by the level of social development. Karl Popper’s empirical falsification of hypotheses and Thomas Kuhn’s paradigm shifts could only emerge under modern scientific conditions, when sufficient knowledge had accumulated and people were ready to cast off ordinary experience, just as Bacon’s inductive method could appear only in an age when rigid medieval dogma had been smashed and science truly began to face the world of experience. That is why Popper stressed falsification, maintaining that scientific theories continuously advance by the process of refuting false doctrines. Kuhn, in contrast, stressed retaining truth and approaching truth in the process of enlarging our knowledge of experience. Kuhn states: “The bulk of scientific knowledge is a product of Europe in the last four centuries.”⁵¹ The remark confirms my point. Therefore, they all emphasize that science does not start from observation-perception; rather, perception, material, and observation are outcomes of selection under the instruction of hypotheses or ideas. The latter are, of course, associated with social life and ideas.

The relation between the universal necessity of science and the objective sociality of human history does not at all negate the internal logic of scientific development. The more specialized the disciplines of science become, the less it is necessary for them to rely on an external impetus, including society. Mathematics and modern theoretical physics prove this point. In this respect, that which I have emphasized is merely seen from **the perspective of their origins**.

⁵⁰Kant, and Kemp Smith, *Critique of Pure Reason*, Bxiii.

⁵¹Kuhn (1962).

2.5 “Synthesis” Is the Object of Transformation

The terms “analytic” and “synthetic” were originally relative to one another and could not be absolutely distinguished or contrasted, as logical positivism tried to do.⁵² Strict analytic propositions are rare in actual thinking. Kant himself distinguished two kinds of analytic judgments, namely, tautologies, when the subject already contains the predicate, and a second case in which the predicate *explains* the subject, which he held to be more valuable to our thinking.⁵³ Engels also remarks that “the fact that identity contains difference within itself is expressed in every sentence, where the predicate is necessarily different from the subject; the lily is a plant, the rose is red, where, either in the subject or in the predicate, there is something that is not covered by the predicate or the subject.”⁵⁴ All these thoughts attest to the fact that tautological analysis is rare in ordinary language.

The analytic-synthetic distinction occupies a prominent place in Kant’s philosophy, where a central theme is that the concept of the synthetic unit differs from the analytic unit, because the synthetic is more fundamental in cognition than is the analytic. All these terms—analytic judgments, analytic unit, analysis, and analyzing—are neither identical nor synonymous (for instance, Kant states that the *analytica methodo* differs from analytic propositions because the former does not ask whether knowledge is analytic or synthetic). However, they do share a commonality, as is also the case with the synthetic. Kant states as early as the 1770s that “the analysis of a substantial composite terminates only in a part which is not a whole, that is, in a simple part, so synthesis terminates only in a whole which is not a part, that is, the world.”⁵⁵ In his later years, Kant remarked again in the *Lectures on Logic* that “propositions whose certainty rests on identity of concepts (of the predicate with the notion of the subject) are called analytic propositions. Propositions whose truth is not grounded on identity of concepts must be called synthetic.”⁵⁶ Again, “analytic principles are not axioms, because they are discursive. And even synthetic principles are axioms only if they are intuitive.”⁵⁷ And also, “to synthesis pertains the making distinct of objects, to analysis the making distinct of concepts.”⁵⁸ Kant makes a strict distinction between “the analysis of concepts, which allows us to render distinct those concepts that are given, and the synthesis of intuition, which allows us to make or fabricate distinct concepts.”⁵⁹ The use of the former is merely to analyze, while the latter describes synthesizing activities related to intuitive

⁵²Some scholars, e.g., W. V. O. Quine, have criticized this strict division. See Quine, “Two Dogmas of Empiricism.”

⁵³See Kant, *Lectures On Logic*, §37.

⁵⁴*Dialectics of Nature*. Marx Engels Internet Archive 1994.

⁵⁵Kant and Eckoff (1970).

⁵⁶Kant and Young (1992).

⁵⁷Ibid.

⁵⁸Ibid. Also see *Prolegomena*, VIII c5.

⁵⁹Ibid.

objects. It is evident that synthetic judgments are identical with synthesizing activities.⁶⁰ Kant describes the “analytic method” as the process of starting from known facts and proceeding by analysis to trace their constituent factors;⁶¹ for instance, to trace and analyze the transcendental conditions from determinate facts of mathematics and physics, which Kant maintains was the method he used to write the *Prolegomena*. By contrast, the “synthetic method” begins from transcendental conditions and proceeds to establish known facts; for instance, starting from time, space, and the categories, and investigating the possibility of mathematics and physics, which was the method Kant used to write the *Critique of Pure Reason*. He lays great stress on cognition and the logical synthetic function in epistemology as well as in methodology. This is one of Kant’s main theses.

Kant spent much time expounding the analytic and synthetic methods; however, he did not succeed in giving a clear explanation. In particular, he failed to explain why synthesis is more fundamental and important than analysis. Many Kantian scholars also fall into this same error, and make one of the central tasks in comprehending Kant’s epistemology an understanding of the concept of synthesis. I believe that the reason why Kant stresses the analytic-synthetic distinction is not because of formal logic or the relation of subject and predicate. In other words, the reason is not the forms of judgment, but the content of judgment; the question is whether or not thought relies on reality, which is a basic philosophical question about the relation between thought and being. Through his division into the two kinds of judgment, Kant is, in fact, summarizing his position from the pre-Critical period that logic is not equal to reality, and is proposing the central concepts of his critical philosophy. Because synthetic judgments can produce new knowledge, the synthetic method is able to continuously develop the particular. The synthetic method is more fundamental than the analytic method because the former reflects the fact that practice transforms and manages objects in actual activities and breaks through old relationships to establish new ones, hence constituting a historical process that evolves from the simple to the complicated. This is how the synthetic method expands knowledge in our minds.

Such a procedure is indeed different from analytic judgments, which turn on formal logic. Therefore, it can be said that the synthetic method inheres in the very nature of practical activities. It is the method of “eating and digesting objects” (Mao Zedong).⁶²

⁶⁰Which is contrary to Aristotle and Leibniz, who hold that concepts precede judgments. Kant, however, maintains that judgments (synthesis) precede concepts (analysis).

⁶¹In the *Lectures on Logic*, Kant states that the “analytic is opposed to synthetic method. The former begins with the conditioned and grounded and proceeds to principles [...] while the latter goes from principles to consequences or from the simple to the composite. The former could also be called regressive, as the latter could progressive. Analytic method is also called the method of invention. Analytic method is more appropriate for the end of popularity, synthetic method for the end of scientific and systematic preparation of cognition” (Kant, and J. Michael Young, *Lectures On Logic*, 639).

⁶²Mao’s thought is from the perspective of the Chinese War of Liberation. However, modern industry more vividly demonstrates the immense power of the practical synthetic of the doctrine of “eat and digest things” to thereby produce products.

In short, social practice is, in my view, the ground of universal, necessary, a priori synthetic judgments. Because social practice has an intimate relation with sensible practice and is a direct expression of human activities, the synthetic method is fundamental. However, modern philosophical schools, e.g., logical positivism, choose to refute Kant from the opposite perspective, which seems misguided. Their criticism is not a priori, but *synthetic*. They either emphasize the blunt division between analytic propositions and synthetic propositions, in order to deny a priori synthetic judgments; or they mistakenly identify a priori synthetic judgments as analytic judgments. Logicism, with Bertrand Russell as its representative, launched a vehement criticism, on the ground of mathematics, against Kant's a priori synthetic judgments. These critics adamantly rejected the a priori synthetic status Kant claimed for mathematics. As a result of their contention, the nature of mathematics became a battlefield for philosophical debate. But this does not come as a surprise, because the question raised by Kant about the nature of mathematics is a philosophical question of profound significance. In modern science, industry, and technology, mathematics has increasingly acquired a pragmatic function. As a powerful tool of signs, just as with any material tool, mathematics opens the prospect of infinite possibilities and plays a crucial role in people's activities of cognizing and transforming the world. It becomes an important object for epistemology. I will dwell on this theme in the next section and, by contrasting the antithetical views of Kant and Russell, discuss the essential significance of practice and synthesis as the ground of knowledge.

2.6 On the Nature of Mathematics

Kant holds that mathematics is not analytic, and that, therefore, it is not identical with formal logic. He emphasizes that mathematics is related to aesthetic intuition,⁶³ for instance, we use fingers to help us count, and other intuitive operations to produce and change quantities (algebra and geometry both presuppose intuition). To Kant, analytic judgments are only valid in logic, while synthetic judgments are valid in reality, and the former must have the latter as its ground. The truths of mathematics are obviously universally necessary. Logicians believe that mathematics is simply logic, so Frege deduces cardinal numbers, e.g., 1, 2, 3 ... and operations like addition from logical definitions, while Russell attempts to reduce the whole of mathematics to the systematic deduction of logical propositions. This work has made an important contribution to mathematics and logic, and has had a huge impact on methodology, even apparently fusing logic and mathematics. As Russell states: "Some have argued that the objects of mathematics were obviously

⁶³See "the Distinction between Analytic and Synthetic Judgments" in the *Critique of Pure Reason* for Kant's criticism of Leibniz. Kant points out that a difference of quantity is not the same as one of concepts, because it is related to the senses, which cannot be proved by formal logic.

not subjective, and therefore must be physical and empirical; others have argued that they were obviously not physical, and therefore must be subjective and mental. Both sides were right in what they denied, and wrong in what they asserted; Frege has the merit of accepting both denials, and finding a third assertion by recognising the world of logic, which is neither mental nor physical.”⁶⁴

Russell’s idea is that number is neither objectively physical nor subjectively psychological; rather, it is a logical relation that is beyond perception. For instance, a natural number is a set of sets. It is not incorrect to say that it is “a third assertion,” and I indeed agree that it is a third assertion. However, Russell’s third assertion demands that mathematics completely break away from sensible reality and become a pure form of relation in a logical language; these relations are eventually seen as conventional tautologies that “simply record our determination to use words in a certain fashion,”⁶⁵ that is, as grammatical rules for using language signs. Russell’s followers say that “a mathematical proposition is really a rule for the manipulation of symbols.”⁶⁶ That is to say, it is a rule for calculation. They all tend to believe that analytic propositions have nothing to do with experience.

Reducing mathematics to logic cannot solve the problem, however. For instance, the axiom of infinity originally did not belong to logic, even though without it Russell could not complete the project of his *Principles of Mathematics*. Philosophically, it can be said that Russell regressed from Kant to Hume (Hume explains that mathematics, as opposed to empirical science, is a matter of pure analytic judgment). Russell merely reaffirms Leibniz’s view of mathematics. Kant rejects Hume as well as Leibniz, both of whom think that the law of contradiction can define mathematics. Kant maintains that mathematics cannot be guaranteed by formal logic but must instead be referred to the conditions of sensuous intuition.

This view is superior to that of Hume, just as the formalism of modern mathematics that is influenced by Kant is superior to logicism, which is influenced by Hume. Hilbert, who is at the helm of formalism, states: “We find ourselves in agreement with the philosophers, notably with Kant. Kant taught—and it is an integral part of his doctrine—that mathematics treats a subject matter that is given independently of logic. Mathematics, therefore, can never be grounded solely on logic.”⁶⁷ Kant emphasizes the relation between mathematics and sensible reality, but sees this relation as the a priori forms of intuition, time and space. The intuitionism of modern mathematics takes over Kant’s inclination, directly identifying the notions of number and time with intuition.⁶⁸

⁶⁴Russell (1960). In *Human Knowledge: Its Scope and Limits*, Russell acknowledges at last that some propositions in science are “hypotheses” that are independent of experience. He attributes these to biology or psychology. However this approach is Humean rather than Kantian.

⁶⁵Ayer (1952).

⁶⁶Newman (1956).

⁶⁷David Hilbert, “On the Infinite.” [quoted from Woleński (1994)].

⁶⁸Among the three major schools of mathematical philosophy, intuitionism is closer to the truth than logicism and formalism. Brouwer holds that structure has intrinsic significance in

Logicism, which concludes that mathematics (axioms) is either convention or tautology, is more mistaken than intuitionism.⁶⁹ However, the terms of convention and tautology themselves need explanation. These questions, namely, why convention is needed and how to establish conventions, are ultimately to be determined by practical experience. Otherwise they would end up as sheer mystery. The same applies to the reduction of mathematics to primitive concepts of logic. Propositions (or axioms) that cannot be proven are questionable. Kurt Gödel's famous undecidability theorem proves that any system of consistent axioms must have at least one true proposition that cannot be proven within the system, but this conclusion is fatal for logicism.

Gödel makes quite an interesting remark: "Rather they [i.e., the givens that govern mathematics], too, may represent an aspect of objective reality, but, as opposed to the sensations, their presence in us may be due to another kind of relationship between ourselves and reality."⁷⁰ Gödel's statement is somewhat obscure and he does not explain what this "other kind of relationship" is, but he nevertheless expresses the inclination of some mathematicians to pursue the actual nature of mathematics. Gödel claims that he is a Platonist and differs greatly from Russell's logicism.

What is the nature of these mathematical (arithmetic) propositions, e.g., $2 + 2 = 4$, $7 + 5 = 12$, which are universally applicable? Are they analytic a priori deductions? The approach that Hume and Russell adopted is not correct. Are they empirical inductions? John Stuart Mill's inductive explanation of mathematics, and the attempts of new Hegelians today, such as Brand Blanshard, to argue that arithmetic is meaningful because there are divisible objects in the world, are also futile.⁷¹ Induction cannot produce universally applicable and necessarily valid mathematics. It is impossible to comprehend the nature of mathematics by means of the senses and passive observation. Yet the essence of mathematics does not lie in Kant's transcendental intuition either.

Mathematics is not logic but is related to aesthetic intuition. However, it is not related to Kant's a priori forms of intuition but rather to human sensible experience. As Hegel said, mathematical abstraction is still sensible.⁷² Nevertheless, I believe

mathematics, that number is related to society, and that causality is related to the order of precedence in time.

⁶⁹Formalism sees mathematics as a sort of game of contradictions. This view is also mistaken. Paul J. Cohen states that "according to the Formalist point of view, mathematics should be regarded as a purely formal game played with marks on paper, and the only requirement this game need fulfill is that it does not lead to inconsistency" (*Set Theory and the Continuum Hypothesis*, Introduction). This view is, of course, rather close to logicism. Robinson holds also a similar view, while Hilbert does not. Modern radical formalism goes farther than Hilbert.

⁷⁰Benacerraf and Putnam (1983).

⁷¹See Blanshard (1962).

⁷²For example, when discussing geometry, Hegel states: "The shining example of the synthetic method is the science of geometry ... On the other hand, the abstract subject matter is still space, a non-sensuous sensuous; intuition is raised into its abstraction; space is a form of intuition, but is still intuition" (Hegel and Di Giovanni 2010).

that sensibility is not about objects of sense, but is, first of all, about the activities of sense and their origin in the practical activities of primitive human society. Contrary to Ernst Cassirer's Kantian view on primitive thought, I believe that the origin of numbers lies in primitive practical activities, that is, in primitive labor characterized by using and making tools. The origin of mathematics, first of all, is not in external things, but in the abstraction of subjective activities of sensibility. The basic forms of mathematics, such as pure quantity, are not deduced from external objects but abstracted from the practical activities of the subject. Yet what they reflect are aspects of objective reality, instead of the perceptual relations we have with the external world in our observations of it. Gödel vaguely grasps this point in what he referred to as his "third assertion," that is, discovering certain structures, including numbers, in the objective world through the forms of sensibility and in relation to the most primitive and basic practical activities (**primarily manual labor**) of human society.

We stipulate that $1 + 1 = 2$, $1 + 1 + 1 = 3$, and so on. These propositions seem to be analytic (definitional), which was also Russell's assumption. On the contrary, they are essentially synthetic, originating from primitive practical activities, such as the activities of defining and describing, or counting. The same point holds for the application and comprehension of division, unification, reversibility, identity, symmetry, infinity, and so on. All these various operations are, at first, practical activities on objects, and subsequently evolve into operations on signs. In the beginning, all of these operations generally take the form of shamanistic rituals. Because of this beginning, mathematics is not merely for cognizing actual objects or subject matter but mainly a means of cognition that possesses a certain formal character that surpasses a particular time, space, and empirical causality; and it differs from all other disciplines of science that have empirical objects as their subject matter, since these always require observation and experiment as their basis, while mathematical operations are their own guarantor.

Mathematics is just another tool, a cognitive tool and sign-language peculiar to human beings, but it also expresses the subjective spontaneity of human cognition and its pure forms. This cognitive spontaneity, philosophically speaking, is still a highly abstract but practical human activity. This should constitute the starting point for studies of primitive concepts of mathematics and the comprehension of mathematical structure. Therefore, the universal necessity of mathematics, from its origin, is a universal necessity of abstract practical activities (labor and operation).⁷³ That is the reason why propositions like $2 + 2 = 4$ and $7 + 5 = 12$ are valid no matter what the degree of the macrocosmic or the microcosmic that our practices (including modern astronomical observation) have reached and regardless of their specific experiential circumstances. This is also the philosophical principle that

⁷³For instance, "infinity" does not refer to things in the actual world, the infinity of objects, but rather to the idea that human beings can continue indefinitely or endlessly. This idea eventually becomes an indispensable concept in mathematics. It is because people believe in the infinity of the universe that human beings can carry on infinitely. Therefore, this mathematical concept of infinity is also applicable to the objective world.

explains the reason why mathematics has become one of the most powerful tools (attested by the tremendous achievements accomplished by the widespread use of mathematics in modern science) that human beings have to cognize and transform the world, and why it manifests the salient characteristic of human cognitive spontaneity. Leibniz remarks that mathematics is the language of God. I would say that mathematics is the pride of human beings.

If we were to analyze the seemingly simplest pure mathematics, which bears ample testimony to the nature of mathematics, we would find that it basically consists of two components. One is the law of noncontradiction (the law of identity, $A = A$) of formal logic; the other includes the concepts of operations such as addition and subtraction, and the natural numbers. The two components are reflections of primitive labor and operations (practice) in human society. These concepts, for instance, addition and subtraction, originate from the most basic forms of ongoing operations in primitive labor. Originally, natural numbers emerged from the abstract quantities (pure quantity) that appeared and were apprehended in practical activities. Grasping the identity of forms, structures, and quantities, as mentioned above, marks a tremendous leap in human cognition. From then on, the world is cognized with the highly abstract form and structure of quantity and relation. On this ground, and combined with the capability of free intuition with which human beings relate to the sensible world, humans have continuously created **free and idealized** relations of constitution, spontaneous ideas, and systems of structures (most of them divorced from prototypes, as if purely deduced from the world of ideas). These, in turn, become sharp tools for cognizing the world without the aid of prototypes in reality, just as human beings have been continuously making material tools that have no prototypes in reality. Mathematics is a special kind of sign-tool as well as a structure of objective reality. The relationship between these two roles is a question that still needs further investigation. However, seen from its origin, mathematics has undergone a long process of objectivizing aspects that related to forms of labor, abstracting and transforming them into basic rules for sign operations in calculation; for instance, Piaget's reversibility of operations ($A + B = B + A$) and conservation ($A = A$). (The parts that are directly related to the objects of objective experience, on the other hand, transform into classifiers in logic, or, notions and signs such as "of".) It seems quite certain that the nature of mathematics possesses a synthetic quality. The difference between logic and mathematics is that **the former is a formal abstraction from practical activity, while the latter is a formal abstraction of the mode of relation between practical activity and the sensible world.** Therefore, the former is analytic while the latter is synthetic.

The nature of the elements of formal logic in mathematics and formal logic itself comes from the relative stability demanded by primitive labor and its operations, for example, the proposition "if one does this, then one cannot do that ($A \neq A$)."

These propositions—after a **long historical process, in response to the demand for relative stability in practical activities, and by means of conscious attention, which is an important psychological function peculiar to humans (see Chap. 4)**—transformed into concepts and the relative stability of words, as demanded

by language and thought, so as to almost become the nature of thought and the laws of language.⁷⁴ The transforming process of abstraction is achieved through coercive measures in society, at first through primitive and shamanistic rituals to formalize, reinforce, and centralize highly formulaic gestures, poses, incantation, repetitions, and orders. I believe that the rigorous demand for conformity in primitive society, manifested first in religious ritual, then in morality, expressed this quality. Through these powerful ideological activities, primitive people transcended their chaotic and confusing minds and their dream-like pre-logical thinking about right and wrong, and shifted to a logical-thinking stage that was characterized by the law of identity. It was a long historical process, the consequence of which eventually constituted the analytic aspect of mathematics. In short, structural features of primitive practical labor were abstracted, extracted, internalized, and composed into the elements of language, thought, logic, and mathematics. Thus was universal necessity established.

It is evident that mathematics is neither a priori analysis (the view of Hume and logical positivism), nor empirical induction (Mill), nor a priori synthesis (Kant), but the unity of the analytic and synthetic, with practice as its basis and synthesis as its nature. The invention of the computer allows some analytic work, such as demonstration, to be done by machine, which makes more prominent the synthetic nature of mathematics in discovery and invention. This empirical trend in contemporary mathematics is noteworthy.

As mentioned above, I believe the most noteworthy thoughts on this question in modern literature are those of Piaget. This psychologist opposes logical positivism through ample experiments on the psychology of children, and maintains that logic cannot arise from language. He also opposes Chomsky, arguing that logic is not some deep structure of the mind. He stresses that logic and mathematics arise only from primitive activities, that “in this hypothesis the abstraction is drawn not from the object that is acted upon, but from the action itself. It seems to me that this is the basis of logical and mathematical abstraction.”⁷⁵ He also points out that “all these forms of coordinations have parallels in logical structures, and it is such coordination at the level of action that seems to me to be the basis of logical structures as they develop later in thought.”⁷⁶ Piaget argued from the perspective of child psychology, and insightfully pointed out that Bourbaki’s three “matrix structures”

⁷⁴In our national debate on formal logic in 1955, one camp advocated that its laws were innate to the nature of thought and language, while the other camp insisted that they were reflections of the relative stability of the objective world. The former is idealistic, while the latter is passive materialism. At that time, I held the view that the relative stability of the objective world could be reflected in the basic laws of thought only through the relative stability required in practical activity. Without this active agent, the question of how the basic laws of formal logic came to be is unintelligible. As to the question of how the relative stability required by practical activity eventually became the laws of thought, it could only be established and cultivated in association with ritual activities in primitive society. This is an important reminder.

⁷⁵Jean Piaget, and Eleanor Duckworth, *Genetic Epistemology*, 15.

⁷⁶*Ibid.*, 17.

actually arise from the collaboration of perceptual movement.⁷⁷ All these views are of philosophical value. The collaborative structure is the basis for “synthetic” reversibility, order, topology, binary operations, and the associative law. These fundamental formal features of mathematics are abstractions of the child’s collaborative operational character. Piaget’s conception of the forms of activity and operation is superior to the logicians’ proposal to explain everything either by perception or language, as well as to Chomsky’s use of the deep structure of mind to explain language. Unfortunately, although Piaget understands from psychology that activities and operations are the basis for forming logical thinking and mathematical conceptions in the primitive mind, he fails to give an explanation from **the perspective of anthropological social history. As a result, his explanation of activities and operations is disconnected from social practice, which is to say, from the whole of history.** In particular, Piaget does not give enough attention to the great significance of using tools in operational activities. But it was the agency of tools that produced our understanding of causality in the objective world. Therefore he inevitably eventually falls into a biological mechanism, as if unconsciously downplaying the fundamental distinction between active human cognition and that of animals, and overlooking the huge impact of coercive education on humankind, especially on children.

Pragmatists also employ practical views to criticize Kant. They also talk about tools, operations, and practices, arguing that knowledge is an interrelation between the subject and the situation, and that thought is essentially action-activity, while concepts are merely operational rules (the operationalist Bridgeman holds this view). Dewey states that laws are tools that are determined by operations.⁷⁸ The experimental activities of research are comprised through logic, while knowledge is constructed from chaotic materials. C. I. Lewis states: “what an objective fact means is certain possibilities of experience which are open to realization through our action.”⁷⁹ These pragmatists replace Kant’s transcendental forms with practical operations that act on objects to obtain knowledge. It seems to me that this formulation is noteworthy because it bears some similarity to Marx’s theory. However, the practice and operation pragmatists refer to, first of all, is fundamentally the biological activity of adapting to the environment, rather than human social practice, which is historical in nature. Pragmatism stresses the importance of the role played by tools; however, the tools they refer to are all-inclusive, including intellect and thought. In so doing, they obscure **the original historical meaning of humans’ making material tools**, thus overlooking the basic significance of the material nature of labor and material production in **the origin of the human race and the development of society.** It is through the practical activities of using and making material tools that human beings comprehend and employ the laws of the objective world, gradually constituting them in the mind. Pragmatists confuse

⁷⁷See Piaget, *Structuralism*.

⁷⁸See Dewey, *Logic: The Theory of Inquiry*.

⁷⁹Irving Lewis (1946). Lewis also opposes Kant’s concept of the a priori synthetic.

material tools with tools of thought, and practical activities with intellectual sign activities; therefore, they fail to stress the defining importance of material tools on practice at its origin.

The Marxist theory of practice, on the other hand, exactly emphasizes the super-biological nature of human practical activities; therefore, it discerns that human cognition has a **super-biological nature**, which is attained initially through using and making material tools.

Second, Kant acknowledges that things in themselves are independent of human beings.

The pragmatists, however, totally deny the objective, independent existence of an external material world, not to mention practice as activities that comprehend objective laws. The practice they refer to is a subjective arrangement and a heap of chaotic feelings. Therefore, they reject the need for synthetic activities that possess universal necessity.

In short, when criticizing Kant from the perspective of the theory of practice, a clear line should be drawn separating it from the criticism of Kant from the standpoint of mechanical materialism (which merely emphasizes an ideology reflecting existence). As Lenin's "two aphorisms" point out: "1. Plekhanov criticises Kantianism (and agnosticism in general) more from a vulgar-materialistic standpoint than from a dialectical-materialistic standpoint, insofar as he merely rejects their views a limine, but does not correct them (as Hegel corrected Kant), deepening, generalising and extending them, showing the connection and transitions of each and every concept. 2. Marxists criticised (at the beginning of the twentieth century) the Kantians and Humists more in the manner of Feuerbach (and Büchner) than of Hegel."⁸⁰ One should recognize, in the manner of Hegel, the important questions concerning cognitive spontaneity and dialectics raised by Kant. First of all, one needs to expound the question of the materialistic origin of human cognitive spontaneity, rather than merely arguing that Kant's theory does not meet the requirements of materialism. In other words, in epistemology one should pay attention to the study of human cognitive spontaneity, and be vigilant lest one halt or regress to the old standpoint that, to put it in Marx's words, spontaneity is developed by idealism. On the other hand, emphasizing human practice and the subjective spontaneity of cognition does not mean one rejects the objective historical nature of social practice, or embarks on the path, trod by the pragmatists, of either a social contract or the species adapting to the environment.⁸¹

When reading Kant's philosophy, one should try to "correct, deepen, generalize, and expand." The correcting here means to place the question of universal necessity, which Kant raised in the wider context of the whole history of the human race,

⁸⁰Lenin, *Philosophical Notebooks*. Marx Engels Internet Archive 1994.

⁸¹There are two tendencies among Kant scholars. One is to pull Kant toward idealism, interpreting subjective spontaneity as the power of spirit. There are also scholars, e.g., A. Riehl, who attempt a realistic interpretation. But most of them remain on the level of the old materialism. In short, Kant's argument on cognitive spontaneity cannot be grasped without comprehending human practical spontaneity.

under its specific objective social conditions and to investigate the question on this ground. Even the investigation of natural science should be related to social history. For instance, independent and autonomous forms of truth (mathematics), which seem to be entirely unrelated to social life and the world of experience, have their roots in the primitive forms of social practice—in primitive operational activities. Just as material production—labor and operations—manifests the spontaneity of human practice, sign operations—mathematical structures—manifest the cognitive spontaneity peculiar to the human being. This spontaneity is an important aspect of the cultural-psychological structure of human subjectivity. In other words, this spontaneity is a fundamental factor in the structure of human culture, it is nothing less than our very intelligence. From the perspective of psychology, it is also internalized from practice, that is, from practical operations. In terms of the epistemology of Marxism, this spontaneity is a reflection of social practical activities. This is how I understand the Marxist theory of active reflection, namely, as practical philosophy and as anthropological ontology. It should be noted that these terms, “anthropological,” “anthropology,” and “anthropological ontology” do not refer to the biological terms of Western philosophical anthropology, which is disconnected from historical social process. On the contrary, what is emphasized here is **the specific process of human development in the whole history of social practice**. This is social being, which transcends biological species. The term “subjectivity” also implies this meaning. Human subjectivity, on the one hand, manifests practical social activity in material reality, with its core in the activity of material production. This is the objective aspect of subjectivity, namely, techno-social structure. In other words, subjectivity is the fundamental aspect of social existence. On the other hand, subjectivity also includes social consciousness, that is, the subjective aspect of cultural-psychological structure. What I have discussed is the subjective psychological structure, which, first of all, refers to the spiritual culture of collective historical achievement, which is comprised of intellectual structure, ethical consciousness, and aesthetical pleasure—in short, the capacity of human nature. When criticizing Kant’s philosophy, one should investigate in detail Kant’s transcendental forms of cognition, the categories, pure intuition, the categorical imperative, and the aesthetic common sense, situating them within their social historical origin and particular process of development. This is crucial for the study of anthropological ontology and the question concerning subjectivity.

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Chapter 3

Epistemology: II. Space and Time



Kant's epistemology begins from aesthetic intuition. The thesis of the opening chapter of the *Critique of Pure Reason* concerns the transcendental aesthetic, and Kant begins by setting forth a series of definitions and explanations of basic concepts, e.g., intuition, sensibility, sensation, material, and form. However, as pointed out in the previous chapter, these definitions and explanations and their later use are extremely abstruse and involved. For instance, the ubiquitous term "object" is an important concept and poses many puzzles. Kant constantly uses *Objekt* and *Gegenstand* as a pair of synonyms; but his use does not follow a strict definition.

Objekt originally referred to objects that exist without our perception or awareness of them; but sometimes it also refers to the objective content in our consciousness, that is, the object of appearance that emerges after the stimulation of our senses. The term appears twice in the first line of the Transcendental Aesthetic, and is already used with two distinct meanings.¹ This is also the case with other concepts, such as sensibility and sensation. It is noteworthy that the concepts and terms that are most important are polysemous and obscure from the beginning of the book. This situation indicates that it cannot be a matter of negligence; rather,

¹Kemp Smith interprets this phenomenon in this vein: "In the first part of the sentence 'object' means object of intuition. In the latter part it signifies the cause of intuition. And on Kant's view the two cannot coincide. The object which affects the mind is independently real; the immediate object of the intuition is a sense-content [...] The term object is thus used in two quite distinct meanings within one and the same sentence" (Norman Kemp Smith, *A Commentary to Kant's Critique of Pure Reason*, 80). Paton also notes: "The word 'object' is used by Kant in at least four senses. It is used for the thing as it is in itself, and for the thing as it appears to us; or, in more technical language, it is used for the thing in itself and for the appearance of the object.

Furthermore the phenomenal object is itself composed of a matter given to sense and a form imposed by thought; and each of these is called by Kant the object [...] Hence he is capable of saying that the object is not known, and that the object must be known; and again that the object is given to us apart from thought, and that there is no object apart from thought" (Paton 1936). "No doubt this position is complicated, too complicated for either Kant or an expositor of Kant to repeat every time the word 'object' is used" (Ibid., footnote to Chap. 17). Also see H. A. Prichard, *Kant's Theory of Knowledge*.

these details involuntarily betray a characteristic of Kant's philosophy. This situation is also convenient for some of the expositors of Kant's philosophy who emphasize the idealistic inclination of some of the terms and definitions. For instance, they read Kant's "object," "experience," and "sensibility" as the products of subjective consciousness.

3.1 Time and Space Are Aesthetic Forms of Intuition

The basic view of Kant's epistemology is that things in themselves supply intuitive aesthetic material, while the subject supplies forms of cognition. The gist of the Transcendental Aesthetic is that the objective object, which is independent of our consciousness, provides sensible material, impressions, or matter, while the subject possesses a priori forms of intuition, namely, time and space, to arrange the material. Time and space, as pure forms of intuition, cannot exist without the sensible material, while awareness of such material would be impossible without a priori forms of intuition. Our feelings are in a completely confused state, and cannot support any objective sense perception. Kant states: "The capacity (receptivity) for receiving representations through the mode in which we are affected by objects, is entitled sensibility.

Objects are given to us by means of sensibility [...] and it alone yields us intuitions, they are thought through the understanding, and from the understanding arise concepts. But all thought must, directly or indirectly, by way of certain characters, relate ultimately to intuitions, and therefore, with us, to sensibility, because in no other way can an object be given to us."² However, Kant's exposition also goes in the other direction:

The pure form of sensible intuitions in general, in which all the manifold of intuition is intuited in certain relations, must be found in the mind a priori. This pure form of sensibility may also itself be called pure intuition. If, then, I take away from the representation of a body that which the understanding thinks in regard to it, substance, force, divisibility, etc., and also itself be called pure intuition. If, then, I take away from the representation of a body that which the understanding thinks in regard to it, substance, force, divisibility, etc., and likewise what belongs to sensation, impenetrability, hardness, colour, etc., something still remains over from this empirical intuition, namely, extension and figure. These belong to pure intuition.³

Kant is saying that human knowledge must start from sensibility, and all thoughts are ultimately related to sensibility. On the other hand, even in the sensible intuitions of experience, the mind of the subject must have pure intuitions.⁴ The pure forms of

²Kant, and Kemp Smith, *Critique of Pure Reason*, A19/B33.

³Ibid., A20-1/B34-5.

⁴Commentators have argued about the similarities and differences between pure intuition and forms of intuition. For instance, they insist on the difference between forms for intuiting and the forms of the intuited. In fact, Kant often uses these two terms interchangeably because pure intuition

intuition are a priori, they are independent of any sensations or sensible material (e.g., qualities like impenetrability, solidity, or color). Kant argues that the unity of these two aspects alone, that is, a priori forms of intuition and sensible material, can produce actual, empirical, sensible intuitions. In this unity, the former (a priori forms of intuition) guarantees the universal, necessary, objective validity of sensible cognition. Therefore, these intuitions take the leading role in Kant's investigation of the principles of the transcendental knowledge of sensibility.

Kant holds that the pure intuition of human beings has the forms of time and space. He admits that the reason why there are only two forms cannot be answered. In his time, there were two major views about time and space, namely, the views of Newton and Leibniz. Newton believed that time and space have their own independent reality; they are attributes of God, infinite and eternal, independent of any object or human subjective consciousness. They are, as it were, boxes that contain various things. Leibniz believed that time and space are relations, whether an order of coexistence (space) or succession (time), and they themselves have no autonomous existence apart from the objects that are related; but the relation is abstracted from experience and enjoys an idealized existence in the mind. In reality, time and space are blurred representations of experience. They seem to have independence, but actually cannot exist apart from empirical objects.

Kant thinks that neither view can be established, though both have their merits. Newton's conception of time and space, as existing apart from their material content, does not hold up well because experience cannot prove this view. If Newton were right, time and space would still exist even if all the things in the world were destroyed. Time and space would then seem to be God himself. As Newton stated of God, "by existing always and everywhere, he constitutes duration and space."⁵ Pseudo-problems concerning time, space, and God, such as where non-material entities (e.g., the soul) are located in time and space, continue to puzzle theologians, though Kant adamantly denies their validity. However, he refutes the idea that time and space are sheer fabrications; the merit of Newtonian time and space is their omnipresent universal necessity, which can be used as the ground for scientific knowledge. Leibniz's view does not have this merit, for he sees time and space as obscure representations of the relations of things.

Regarding knowledge of spatial science (geometry) as an abstraction from experience destroys its universal necessity and makes geometry unreliable. The merit of Leibniz's view is that he stresses the relational character of time and space, and argues that they are not substantial entities, but rather relations and well-founded phenomena. For a long time, Kant wavered between Newton and

is not sense-perception, since it excludes the sense factor, nor can it exist apart from experience. Pure intuition can only be a form of empirical intuition. That is why it is also called the form of intuition. But we need not get into this meticulous distinction here. The German word *anschauen* is not an active but a passive verb, while in English and French, the word "intuit" is active, therefore the translation is not quite proper. The word is sometimes translated as "perceive" in English.

⁵Newton et al. (1803).

Leibniz, seeking to reconcile them; but after several attempts, he finally proposed a new solution, which was that time and space are forms of sensible intuition.

Kant explains: “What, then, are space and time? Are they real existences? Are they only determinations or relations of things, yet such as would belong to things even if they were not intuited? Or are space and time such that they belong only to the form of intuition, and therefore to the subjective constitution of our mind, apart from which they could not be subsumed to anything whatsoever?”⁶ This first view is Newton’s, the second is Leibniz’s, while the third is Kant’s own, which understands time and space as subjective modes of perception. Time and space cannot be derived from experience; rather, they constitute the conditions of all sensible experience. Time and space cannot exist independently, yet are the universal necessary conditions of all sense experience.

Kant lays out a series of expositions divided into a Metaphysical Exposition and an A Priori Exposition. In the metaphysical exposition he explains the metaphysical nature of time and space, according to which time and space are not empirical but are rather a priori and independent of experience. In the transcendental exposition, he explains why time and space, when applied in experience, have universal necessary validity. He sets forth four points in the Metaphysical Exposition (there are five in the first edition, one of them is moved to the A priori Exposition in the second edition). The four can in turn be divided into two parts. The first and second expositions refute the claim that time and space are not empirical representations, and argue that they are a priori; the third and fourth expositions argue that time and space are forms of intuition rather than concepts (Kant does admit that there are concepts of time and space, but such concepts should be distinguished from time and space as forms of intuition, since the concepts are abstractions of an experience that presupposes the forms of intuition).

In the first exposition, Kant states: “Space is not an empirical concept which has been derived from outer experiences.”⁷ That is to say, representations of space do not apprehend things in a space existing apart from perception. Kant argues that the opposite is true. Empirical perceptions of things outside me must have a representation of space in its entirety as their condition. For instance, in order to perceive A and B together in space, we must have a space that allows this simultaneity. In other words, when perceiving outer things, we have already made a representation of space, whether or not the perceiver subjectively realizes it. “The representation of space cannot, therefore, be empirically obtained from the relations of outer appearance. On the contrary, this outer experience is itself possible at all only through that representation.”⁸ That is to say, if my perception is to be related to certain things outside of me, and allows me to perceive that they are outside of me and that they are different from each other, each occupying a different location, then I must have a representation of space as the ground of this experience. Therefore,

⁶Kant, and Kemp Smith, *Critique of Pure Reason*, A23/B37-38.

⁷*Ibid.*, *Critique of Pure Reason*, A23/B38.

⁸*Ibid.*, A23=B38.

space is the condition for perceiving outer things, rather than outer things being that from which we abstract our representation of space.

In the second exposition, Kant states: “We can never represent to ourselves the absence of space, though we can quite well think it as empty of objects. It must therefore be regarded as the condition of the possibility of appearances, and not as a determination dependent upon them.”⁹ Kant’s first point emphasizes that space is not abstracted from the experience of perceiving things outside; there is already a representation of space the moment we perceive the external object. Let us stress once again that empirical objects, in order to be perceived, are dependent on space, while space is independent of empirical objects. Therefore, we can conceive of a space without any objects, while it is impossible to imagine objects without space.¹⁰

In the third exposition, Kant states: “Space is not a discursive or, as we say, general concept of relations of things in general, but a pure intuition.”¹¹ The first two arguments have established that space cannot be derived from experience; rather, it is an a priori condition for the possibility of experience. The third argument points out that this a priori condition is not a concept of the understanding but rather a sensible intuition. All concepts have their logical intension and extension. For instance, concepts such as “human” and “red” are abstracted from many particular human beings or things that are red in color. However, that is not the case with the concept of space. It does not have these logical relations of intension and extension. There is only one space. Its relation to other different spaces is the relation of the whole to its parts rather than the relation of species and individuals (e.g., the relation of the concept of the human being to a Chinese, or the concept of red to a particular rose). A specific location in space is a part of space, and not an example or instance of a species. Space as pure intuition is the condition of all specific spaces. For instance, we can immediately intuit the different spatial positions occupied by our right and left hands, which cannot be deduced from concepts, because the different relations our right and left hands have to our body are not a difference in concept. In other words, the difference cannot be logically deduced, but can only be intuited by sense. Kant explains: “Thus, to make intelligible to ourselves the difference between similar and equal yet incongruent things (e.g., snails winding opposite ways), we must relate them to the right and the left hand. That means that it must be done through intuition; it can’t be done through any concept.”¹²

In the fourth exposition, Kant states: “Space is represented as an infinite given magnitude.”¹³ The infinity of space also makes it clear that space is not a concept. A concept contains a certain number of attributes, while the intuition of space can

⁹Ibid., A24=B39.

¹⁰Hence some scholars read Kant’s first proof as Platonic idealism and the second as a realism akin to that of the ancient Greek atomists, as for example in his thought that the existence of space precedes objects in space (see Gottfried Martin, *Kant’s Metaphysics and Theory of Science*).

¹¹Kant, and Kemp Smith, *Critique of Pure Reason*, A24/B39.

¹²Kant and NetLibrary (1990).

¹³Kant, and Kemp Smith, *Critique of Pure Reason*, A25/B39.

expand without limit. Of course, that does not mean that we can intuit infinite space; it is rather to say that our sensible intuition about individual objects can expand continuously. The intuition of “red” (actually perceiving red) is totally different from the concept of “red.” The former is a spatial intuition that can be indefinitely expanded, whereas the latter refers only to a certain limited attribute of an object.

These are the four Metaphysical Expositions on space as pure intuition. However, a good grasp of the A priori Expositions is more important. As mentioned in the previous chapter, Kant’s doctrine on the transcendental aesthetic endeavors to solve the problem of the universal necessity of mathematics by explaining that time and space are forms of sensible intuition. I have discussed how Kant, in distinction from Leibniz and the logicians of the present day, emphasizes the differences between mathematics and logic, and holds that mathematics is a science that is related to the forms of aesthetic intuition. Mathematics as a priori synthetic judgments is possible because it is related to the a priori intuition of time and space. Kant’s argument begins from the self-evident axioms of Euclidean geometry to argue that space is an a priori intuition rather than an empirical concept. While Euclidean geometry was generally acknowledged to have universal necessary objective validity in Kant’s time, how can we explain this status?

Kant believes that this formal quality cannot be induced from experience, however abundant. No experience can guarantee the unconditional validity of geometrical axioms, or that space is three-dimensional, or that a straight line is the shortest distance between two points. We cannot guarantee the universal necessary and applicability of these geometrical axioms.

Similarly, these axioms cannot be deduced from concepts and mere thought. Whatever methods we employ to analyze a straight line, we cannot reach the conclusion that it is the shortest distance between any two points, nor can mere conceptual analysis establish that space must be three-dimensional. It is the same with the concept of the triangle. No mere analysis can establish the conclusion that the sum of its three interior angles is 180° .

Kant thinks that this evidence demonstrates that geometrical axioms are results of spatial intuition, but spatial intuition is not an experience. No experience of measuring lines between points, or of triangles drawn on the blackboard could establish these conclusions. Kant argues that only a formal intuition can establish that a straight line is the shortest between any two points. This is a universal, necessary, a priori constitutive principle of geometry. Therefore, in Kant’s view, the theory of Leibniz, which distinguishes ideal lines in mathematics from real lines in space, obscures both the nature of lines in mathematics and the nature of sensible bodies in space. Kant points out that time and space, as sensible appearance, are distinct rather than obscure. While the world of reason, which is characterized by such concepts as the soul and God that are considered to be fully real by the rationalists, is actually obscure and not distinct. Kant stresses that space is an a priori sensible intuition that is applicable to everything in external appearance. Euclidean geometry (which Kant regards as the vital part of mathematics) demonstrates this point; that is, space as intuition is a priori, and is universally applicable to experience. This is the transcendental exposition of space.

The exposition of time follows that of space, and its format and content are similar. Kant maintains that time is not an empirical concept, but the succession of objects in experience is possible only on the presupposition of time. We cannot remove time itself, though we can very well think of time as devoid of objects. There is only one and the same time; different times are merely a part of this one time. Therefore, time is different from a logical concept. To Kant, the relation of arithmetic to time is just like that of geometry to space. Counting, as an empirical orderly succession, is related to time as a form of intuition; the successive order of counting is only possible because time is a form of intuition. In other words, it takes time to count 1, 2, 3... It is also the case that geometric axioms are possible only with a pure intuition of space.

Moreover, Kant associates motion and change with time, and compares the relation of mechanics to time with the relation of geometry to space. He explains that only when time is seen as an a priori form of intuition can motion (change of location) be comprehended. Hence, time is the universal and necessary condition of motion and change. This condition is not a concept of the understanding, but an intuition of sensibility. Even if time has only one dimension, or if different times are always successive, these principles still cannot be derived from the concept.

Kant points out one characteristic of time that is different from space, namely, that time is the form of *inner* sense. In other words, time is the form in which we self-consciously intuit ourselves and our inner states. Hence, its scope is broader than space, which is a form of outer sense only, and is the form of intuition for external objects. An intuition of external objects must include our inner state, and time is therefore the form of inner sense: "It is the immediate condition of inner appearances (of our soul), and thereby the mediate condition of outer appearances."¹⁴ Nevertheless, time and space are mutually dependent; space surely cannot exist apart from time, while time has to manifest itself in the perception of external objects in space. An example of this situation is that the time-dimension can be represented by a straight line in space. Time as the form of inner sense involves a series of complex issues and I will return to this topic later (see Chaps. 4 and 5).

3.2 Empirical Realism and Transcendental Idealism

In the *Transcendental Aesthetic*, Kant summarizes his argument about time and space. First, time and space are a priori forms, that is, they are derived non-empirically. They are subjective conditions that every human being has in common, and this has psychological and logical implications. Psychologically, time and space precede experience; logically, time and space are independent of experience. Kant refers mainly to this latter implication. External sensible material, arranged and ordered by these a priori subjective forms of intuition, becomes

¹⁴Kant, and Kemp Smith, *Critique of Pure Reason*, A34/B50.

objectively organized into objects that are either successive in time or simultaneous in space. Second, time and space are a priori forms of sensible intuition, and not concepts of the understanding. Third, time and space are not applicable to things in themselves, but only to the sensible intuitions that are provided by things in themselves.

This is Kant's exposition of empirical reality and transcendental ideality, by means of which he wants to differentiate his position from those of both transcendent realism (e.g., Leibniz) and empirical idealism (e.g., Berkeley).

The term "empirical realism" means, first, that time and space are related to sensible experience. Kant explains that there is no reason to rule out an intellectual intuition that is beyond or in no need of time and space (see Chap. 10, etc.), but such an intuition does not belong to human beings. Human intuition can only be sensible. "It is, therefore, solely from the human standpoint that we can speak of space, of extended things, etc."¹⁵ "Time," he says, "is therefore a purely subjective condition of our (human) intuition (which is always sensible, that is, so far as we are affected by objects)."¹⁶ In other words, nothing that is not related to time and space can be given to us in experience. Second, since time and space are directly related to sensible material (and only indirectly related to concepts), these forms possess direct objectivity. In other words, time and space, though forms of subjective intuition, possess objectivity in experience. They constitute objective orders of succession (time) and simultaneity (space) in the world of appearance, and are fundamentally different from subjective sensations, e.g., sound, color, scent, taste, or warmth. Kant argues that such sensations "cannot rightly be regarded as properties of things, but only as changes in the subject, changes which may, indeed, be different for different men."¹⁷ Moreover, "they are mere sensations and not intuitions, [and] do not of themselves yield knowledge of any object, least of all any a priori knowledge."¹⁸ Kant stresses the essential differences of time and space from sensory qualities like sound, color, scent, taste, and warmth; the latter are sensations, hence they have only a subjective validity, while the former are forms of intuition and are objectively valid. As a result, the order of the world of phenomena, constructed through intuitions of time and space, is not subjective but objective and in that way real—an empirical realism. Kant is against Berkeley's conception of time and space, which treats time and space like sound, color, scent, taste, and warmth, as if time and space were subjective empirical sensations. Kant argues that from subjective experience alone one cannot distinguish between waking and dreaming, or truth and illusion, because these are all subjective experiences. This is the view taken by empirical idealism, which is opposed to Kant's empirical realism.

Kant distinguishes time and space from sound, color, scent, taste, and warmth in order to arrive at objectivity. He nonetheless opposes regarding time and space as

¹⁵Ibid., A26/B42.

¹⁶Ibid., A35/B51.

¹⁷Ibid., A28/B45.

¹⁸Ibid., A28/B44.

properties or qualities of the objects themselves (things in themselves), as if space and time belonged “to things absolutely, as their condition or property, independently of any reference to the form of our sensible intuition,”¹⁹ That is the view of transcendental realism, which sees time and space as belonging to things in themselves, instead of as forms of intuition belonging to the subject.

Contrary to this view, Kant excludes from an independent reality anything that is related to the properties and experiences of sensible objects. For instance, he completely separates motion from time and space, because motion always involves the experience of sensible objects. He explains that “motion presupposes the perception of something movable. [...] Consequently the movable must be something that is found in space only through experience, and must therefore be an empirical datum.”²⁰ Likewise, alternation must also presuppose the empirical data of objects, for time itself does not alternate. In short, motion and alternation are merely empirical qualities of empirical objects. They do not derive from the intrinsic nature of time and space, which are forms of subjective intuition and not transcendent realities. This is Kant’s transcendental idealism.

Kant’s method of raising problems, for example, by raising the issue of empirical realism and transcendental idealism in the discussion of time and space, constitutes the main characteristic of his whole epistemology. He himself claims that his philosophy combines transcendental idealism and empirical realism. On the one hand, because he holds that forms and structures of cognition do not derive from objects, but are supplied a priori to the objects by the subject, his theory is a form of transcendental idealism. On the other hand, because he maintains that the materials of cognition are empirically given by things in themselves, his theory is a form of empirical realism. Kant here opposes both rationalism and materialism (which, for Kant, is transcendental realism),²¹ and the attribution of time and space to the objective material world, or to any sort of spiritual entity or property. On the other hand, he also opposes Berkeley’s empirical idealism, which sees time and space as mere subjective perceptions of experience (Kant calls this view empirical idealism, or realistic idealism). Kant holds that time and space are a priori forms of intuition, on the one hand; while, on the other hand, he maintains that apart from the sensible materials given by external things, time and space would be meaningless. Time and space cannot independently exist *prior to* sensible material. Time and space are subjective forms, despite enjoying an objective universal necessity in experience. Kant requires both *a priority* (independent of experience) and objectivity (universally applicable to sensible experience). In short, as his argument proceeds from the transcendental aesthetic to the theory of the understanding and its categories, Kant’s view on the reality of time and space expressly betrays the dualism of critical philosophy.

¹⁹Ibid., A 36/B52.

²⁰Ibid., A 41/B58.

²¹Transcendental realism is not the same as materialism. But for Kant, Leibniz’s idealism is transcendental realism, and so is materialism.

3.3 Contemporary Western Philosophical Criticism of Kant's View on Time and Space

Just as with the criticism of Kant's philosophy as a whole, there have always been two strands in the criticism against Kant's view of time and space. Schopenhauer, who sees the world as a merely illusory subjective representation, admires Kant's doctrine of things in themselves, and sees Kant's view of time and space as the most remarkable part of his philosophy.

Schopenhauer thinks that, according to Kant, just as the ears and eyes create sound and color, so does the mind create time and space. On the other hand, he criticizes Kant for failing to see his own correspondence with Berkeley. This criticism can be seen as representative of subjective idealism's misinterpretations and distortions of Kant. But the more influential criticism of Kant is from subjective idealists as early as Herbert Spencer, and comes cloaked in scientific empiricism. Spencer, from a positivistic point of view, regarded Kant's view of time and space in the *Critique of Pure Reason* as ridiculous, and refused to consider the problem more closely.²² From then on, philosophers such as Ernst Mach, Russell, and the logical positivists generally refuted Kant with a brew of Berkeleyanism and Humeanism.

I will dwell only on Russell's criticism. Although Russell's study of time and space is not as profound as those by other scholars such as Reichenbach, I choose him because he is a more influential philosophical representative. In the widely read *A History of Western Philosophy*, Russell comments that Kant's exposition of time and space is "the most important part" of the *Critique of Pure Reason*, although Russell does not explain why that is.²³ It may be because of its association with modern mathematics. As mentioned in the previous chapter, Russell, as an advocate of logicism, firmly opposed Kant's view of mathematics as a priori synthetic, which also led him to oppose Kant's view of a priori time and space as conditions of the a priori synthetic knowledge of mathematics. In *A History of Western Philosophy*, Russell sketches out the main points of Kant's epistemology and brushes off other parts, dwelling on Kant's expositions of time and space, and refuting them point by point. Russell's refutation exposed the problems of Kant's theory, but it also made clear that Russell not only fails to understand the main point of Kant's argument but has even regressed to a pre-Kantian stage.

Russell's refutation of Kant's four metaphysical expositions runs as follows. First, Russell states that there is "a difficulty which he seems to have never felt. What induces me to arrange objects of perception as I do rather than otherwise? Why, for instance, do I always see people's eyes above their mouths and not below them?"²⁴ That is to say, Kant's a priori forms of time and space cannot resolve the

²²See Paul Carus, *Kant and Spencer*.

²³See Bertrand Russell, *A History of Western Philosophy*.

²⁴Russell (2009).

particular temporal and spatial orders of things. However, Kant clearly states that such orders are mainly given by experience, and that any given spatial determination has its ground in its unknowable object.²⁵ In other words, objects affect senses and the subject provides universal and necessary forms of time and space; particular temporal and spatial relations, such as size, shape, and sequence, are then formed with the specific dimensions and orders conditioned by objects.²⁶ This point would be more salient if we extended our reading to the principle of causality in Kant's Doctrine of Categories. Second, Russell states: "But I should emphatically deny that we can imagine space with nothing in it [...] But I do not see how absolute empty space can be imagined."²⁷ This is well said. Kant himself refutes Newton's assumption that time and space are subsistent realities, as if they were empty boxes. In the Transcendental Analytic, Kant also firmly denies any absolutely empty space.

Therefore, the word "imagine" here, apart from being a clumsy psychological description, mainly refers to the idea that we can extract all sensible objects in the mind, but cannot extract time and space, because time and space are not sensible objects. They are pure forms of sensible intuition. It is on this point that Russell fails to offer a refutation. Third, Russell states: "What we call 'spaces' are neither instances of a general concept 'a space,' nor parts of an aggregate [...] since neither 'space' nor 'spaces' can survive as a substantive."²⁸ As mentioned above, Kant denies that time and space are independent entities, and his expositions are mainly directed at differentiating intuitions from concepts, and sensibility from understanding. Russell is unable to deny this distinction. Fourth, concerning space as an infinite quantity to be intuited, Russell taunts, "this is the view of a person living in a flat country, like that of Königsberg: I do not see how an inhabitant of an Alpine valley could adopt it."²⁹ As a matter of fact, Kant does not think that space, as the whole of infinite quantity, can be given in intuition. What Kant wishes to explain is that the infinity of sensible cognition must relate to the quantitative infinity of space; therefore, space cannot be a concept.

Kant's expositions are indeed contrived and equivocal.³⁰ However, Russell's criticism retrogresses from Kant to Berkeley. What he criticizes is not the a

²⁵See *Metaphysical Basis of Natural Science*.

²⁶Some commentators illustrate Kant's view by using the example of wearing blue glasses to look at things. Everything is blue through the blue lens, but the shades and shapes of blue are still determined by the object itself. Similarly, the specifics of the temporal and spatial relation is given by the object itself. See Paton, *Kant's Metaphysic of Experience*, vol. 1, Chap 6.

²⁷Bertrand Russell, *A History of Western Philosophy*, 573.

²⁸Ibid.

²⁹Ibid., 574.

³⁰Scholars have tirelessly pointed out that Kant fails to prove that time and space are not objective forms of bodies (things in themselves), since forms of intuition can also be proved as forms of intuitive objects, and transcendental ideality can actually be transcendental reality (see *Kant* by Koner, Chap 2). It is entirely due to the integrity of his whole philosophical system that Kant insists that time and space belong to the subject rather than to the object (things in themselves).

priority of time and space in Kant's theory, but their objectivity, which differs from subjective sensations. Kant emphasizes that time and space are qualitatively different from sound, color, or taste; while Russell abolishes this distinction. Russell asserts that sound and color, as subjective sensations, have corresponding objective sound waves and color waves; and he thinks that time and space should be the same. Russell argues that: "But there is no difference in this respect between space and other aspects of perception [...] There is no reason whatever for regarding our knowledge of space as in any way different from our knowledge of colour and sound and smell."³¹

Mach, like Russell, maintains that the notions of time and space, like arithmetic and geometry, arise from subjective experience. "If physical experience did not tell us that a multiplicity of equivalent, immutable and permanent objects exists, nor biological needs impel us to gather these into groups, then counting would be without sense of purpose. Why count as in a dream? If direct counting in order to determine larger numbers were not impossible in practice because of the time and effort required, the inventions of calculation or mediate counting would never have forced itself on us. By direct counting we take note only of what is given in direct sense perception. Since calculating is a form of indirect counting, it cannot be learnt from direct counting. How, then, could mathematics prescribe a priori laws to nature?"³² Both Mach and Russell appear to refute transcendentalism from the perspective of empiricism. They both hold that the notions of time and space arise from experience, and that time and space have some correspondence in real things. However, they are actually downright idealists who are trying to refute Kant with the Berkeleyan empirical idealism that Kant has already refuted. To Mach and Russell, time and space are mere experience; and experience, fundamentally, is compounded of sensible materials or sensations. Therefore, like sound and color, time and space are merely subjective sensible experiences. Mach argues: "For us, therefore, the world does not consist of mysterious entities, which by their interaction with another, equally mysterious entity, the ego, produce sensations, which alone are accessible. For us, colours, sounds, spaces, times,... are provisionally the ultimate elements, whose given connexion it is our business to investigate." And also, "the antithesis between ego and world, between sensation (appearance) and thing, then vanishes, and we have simply to deal with the connexion of the elements..."³³ However, in my opinion, we should regard our representations and notions of time and space as historically formed and emerging through social practice. They are indeed different from sound, color, scent, taste, or warmth. It is of profound significance that Kant reveals this difference, and sees time and space as forms of intuition, which, unlike passive sensations, possess an active synthetic

Just as Heimsoth comments: "The critical limitation of knowledge (especially the limitation of time and space to phenomena) is determined by some fundamental metaphysical conviction."

³¹Bertrand Russell, *A History of Western Philosophy*, 650.

³²Mach (1976).

³³Mach (1914).

nature. However, Kant fails to see that this synthetic nature is a historical achievement of practice, and that this psychological structure is an outcome of social history. Only from the philosophical perspective of social practice can Kant's view of time and space be correctly analyzed and criticized.

Philosophers such as Russell revoke the distinction Kant draws between time and space, on the one hand, and qualities like sound, color, scent, taste, or warmth, on the other. This revocation is similar to Berkeley's canceling of Locke's distinction between primary and secondary qualities. Both Russell and Berkeley try hard to attribute objectivity to subjective sensible experience. But while time and space indeed have an intimate relation with the primary qualities, Berkeley subsumes all primary qualities to secondary qualities, while Russell and Mach argue that time and space are of the same nature as sound, color, scent, taste, and warmth. They ignore the important historical fact that the distinction between the primary and secondary qualities that was made by Galileo, Descartes, and Locke has a historical scientific background and an origin in social practice.

The profound historical significance of this distinction is that the primary qualities (extension, motion, number, etc.) of bodies, unlike their secondary qualities (sound, color, etc.), are more closely related to the social practices of a certain historical period in which they were first employed, comprehended, and understood by human beings. Consequently, the primary qualities are more than sensations. Certainly, our five senses (the organs of sense) are an achievement of history; they themselves have sedimented the nature and function of a particular society. It was through their efforts to transform the world (practice) that humankind first comprehended the world, and our five senses are restricted and affected by this practice.

However, in terms of the physiological aspect of the senses, there is no difference between humans and beasts. Therefore, for the physiological organs of sense, there is no essential difference between primary and secondary qualities.

Locke argues that: "The ideas we get by more than one sense are, of SPACE or EXTENSION, FIGURE, REST, and MOTION. For these make perceivable impressions, both on the eyes and touch; and we can receive and convey into our minds the ideas of the extension, figure, motion, and rest of bodies, both by seeing and feeling."³⁴ Locke's argument about "more than one sense" and using one organ of sense as one of the grounds for the distinction between primary and secondary qualities obviously comes from the viewpoint of the sensualism of the old materialism. Locke is unable to understand that **the activity of the senses, which involves more than an organ since it depends on human labor and practice, arises from the use and making of tools, which are capable of producing qualitative differences that go beyond distinctions made by sense perception.** Although he stressed the synthetic function of time and space as forms of intuition, neither can Kant discover the genuine ground of their synthetic nature. As a matter of fact, in human social practice, these particular activities involve "more than one organ" and differentiate human beings from other animals, who only have passive

³⁴Locke (1824).

sensations. A human being's notions of time and space are not formed by passively perceiving the world; rather they are required, determined, and formed in the course of making and using tools, and this opens up possibilities for transforming the environment of a collective historical social structure. Therefore, time and space differ greatly from pure sensations, e.g., sound, color, and taste. The objective sociality of time and space is prominent and significant, because the origin of our notions of them is not animal sensations, but the collective practice of sociality.

This is the true significance of synthesis as the characteristic of time and space.

The view of Galileo and Locke, that extension, motion, and number are the primary qualities belonging to external bodies, does not depend upon how many sense organs are involved. Instead, their view depends upon demonstrating the achievements of human practice, which are reflected in the historical achievements of social practice and the scientific experiments of their time. Theirs was the age of mechanics, which mainly dealt with extension, motion, and number in the bodies familiar from daily life; discovering and extracting these qualities from an objective world; and seeing them as objective properties. In short, these are qualities that occupy space. But these objective properties of bodies in the objective world are first manifested through the characteristics of the social practice by which human beings transform the world. This is why, in a certain historical period, the primary qualities can appear objective and of more importance than merely subjective sensations like sour and sweet or fragrant and foul. We can hardly find any essential difference in the sensations themselves corresponding to what are supposed to be secondary qualities and what are supposed to be primary qualities. Does extension have no color? What is extension if it does not have color?

These questions cannot be answered using the doctrine of senses of the old materialism.³⁵ To this day, it is still a feature of modern philosophy to regard the senses or perception as the beginning and the end of epistemology, without realizing that the senses and perception are historical constructions. The difference between time, space, and other senses expressly confirms this point.

Therefore, it is only from a particular historical social practice, rather than from abstract, immutable, animal nature or individual sense, that we can grasp that primary qualities and secondary qualities are not as Locke argued; namely, it is not the case that primary qualities are objective properties while secondary qualities rely on the subject. Rather, both primary and secondary qualities are objective properties of things. Subjective sensations of color are determined by different lengths of objective light-waves, while subjective sensations of smell are determined by the motions of molecules; although light-waves are different from color,

³⁵Berkeley seizes on precisely this point, arguing that since the secondary qualities (e.g., sound, color, smell, taste, and warmth) are not objective properties of things, but empirical sensations depending on the sense structure of the subject, so why shouldn't primary qualities be so as well? What is the essential difference among the senses such as sight, hearing, touch, and taste, when the reflection of the senses relies on and is restricted by the sense organs of the subject, and cannot objectively cognize the world? It follows that the objective world is merely subjective empirical perception. Thus Berkeley arrives at his renowned saying that "to be is to be perceived."

and motions of molecules are different from smell. The position, motion, and extension of bodies are not the same as the position, motion, and extension that we perceive in objects (the theory of relativity has proved this point, which is all the more salient in the microcosm). But primary and secondary qualities, although distinct from each other, are not essentially different. The differences that do exist should be investigated in the context of what practice produced that knowledge, and what particular historical relation of primary and secondary qualities existed, in order to reveal that primary and secondary qualities manifest different aspects and depths that correspond to the scientific levels at different historical times.

In essence, Kant's view of time and space adopts Locke's distinction between primary and secondary qualities.³⁶ As Schopenhauer points out, Kant decided to position both primary and secondary qualities in the world of appearance, and deny them to the things in themselves. This is because the primary qualities, in contrast to secondary qualities (subjective sensations), include the a priori forms of time and space and the categories of the understanding, and have universal, necessary objectivity. Because Berkeley assimilates primary and secondary qualities, regarding them all as subjective sensations, his view is therefore empirical idealism. Kant understands the distinctions between these two categories of qualities, but he nevertheless rules out the materiality of primary qualities and assumes that time and space are a priori forms of intuition. Kant's further abstraction is, as he himself admits, a formalistic idealism. However, while philosophers from Berkeley to Mach have advocated subjective idealism, what Kant propounds is an idealism about the forms of cognition. The former stresses psychologically particular sensations, while Kant stresses the universal forms of cognition. As idealisms, they all oppose Locke and the French materialists, who see primary qualities as properties of things in themselves; but these two idealisms cannot be treated as the same thing. That would neither correspond to the facts, nor to the necessary progress of the history of philosophy, because Kant is much more profound than Berkeley.

³⁶Although Kant directly inherits Locke's view of attributing primary qualities to phenomena, in so doing he assimilates his view to Berkeley's by ascribing primary qualities to secondary qualities. However, Kant emphasizes that "the existence of the thing that appears is thereby not destroyed" (*Prolegomena*, trans. James Fieser). The emphasis on the existence of things in themselves makes Kant's view essentially different from that of Berkeley. Kant was furious when his theory was equated with Berkeley's view, and he tried to defend himself from the charge: "Hence we may at once dismiss an easily foreseen but futile objection, "that by admitting the ideality of space and of time the whole sensible world would be turned into mere sham" (*Ibid.*, 3). In the *Critique of Judgment*, Kant also distinguishes between objective and subjective sensations, the former, such as grass, and the latter, such as the pleasure that arises in the mind from the perception of the grass. The former is associated with perception, while the latter with emotions. This view is probably taken from the idea of tertiary qualities proposed by Shaftesbury and Hutcheson. We should note this factor because Kant's philosophy is greatly influenced by British empiricism.

3.4 “The Essential Forms of All Being Are Space and Time”

Engels maintains that “the essential forms of all being are space and time.”³⁷ Time and space are indeed different from other perceptions, and this difference, as was discussed above, is due to the fact that the representations of time and space are not only obtained through individual sense organs, but also more importantly through social practice. Human beings possess time and space as sensible frames (representations, concepts) because human social practice is a part of the material world; and practice unfolds in space at given locations, and sequentially in time.

Therefore, practice demands both a social and an objective determination. Representations or concepts of time and space do not have any transcendental or a priori nature; they are sedimentations of social practice internalized in our subjective consciousness. Here, the crucial intermediate links are the two factors of the social (non-individual) and of practice (perception). Although animals can have certain sensations of time and space, as adaptive orientating responses, these sensations are essentially different from the representations of time and space that human beings possess. It is also because of this that representations of time and space are fundamentally different from such qualitative sensations as sound, color, smell, and taste.

Subjectivity and diversity are most salient in individual perception, whereas awareness of time and space requires a strict social regulation of language-signs. If not, the individual’s psychological sensations of time and space would be as subjective and diverse as their sensations of sound, color, smell, taste, and so on. For instance, individual experiences of time are, in fact, very diverse. Einstein states the significance of the theory of relativity as, “There exists, therefore, for the individual, an I-time, or subjective time.”³⁸ “Real” time is in fact individual, subjective, and heterogeneous. But this aspect, despite its use in art and in certain aspects of everyday life, is secondary. The more important aspect of time is its consistency in social life and in scientific knowledge. Because of sociality, time acquires a homogeneous determination. Even the idealistic intuitionist Bergson, who stresses the duration of time (that is, that moments of time permeate or interpenetrate each other), acknowledges that the demands of social life produce scientific concepts of time and space. This concession is contrary to Bergson’s emphasis on psychological sensations. Bergson argues that “our perceptions, sensations, emotions and ideas occur under two aspects: the one clear and precise, but impersonal; the other confused, ever changing, and inexpressible, because language cannot get hold of it without arresting its mobility or fit it into its commonplace forms without making it into public property.” “The reason is [...] social life is more practically important to us than our inner and individual existence. We instinctively tend to solidify our

³⁷ *Anti-Dühring*.

³⁸ Einstein (2005).

impressions in order to express them in language.” “Science has to eliminate duration from time and mobility from motion before it can deal with them.”³⁹ Bergson attempts to downplay the philosophical significance of this aspect, and denies that it is the “nature” of time, which, for him, is indescribable individual subjective time. However, Bergson’s argument in fact reveals that the nature of time and space are indeed an objective sociality; and it is society that gives to time and space their regulated expression, e.g., year, month, clock, watch, territorial map, compass, and so on, in order to coordinate people’s lives and practice. It is precisely this social, coordinating aspect of time and space that has profound philosophical content and significance in an anthropology that embraces the whole of human historical existence.

Einstein states that “by the use of a clock the time concept becomes objective.”⁴⁰ And that time is “a means designed to better understand our sense experience.”⁴¹ The evolution of the conceptions of time and space, from Newton’s view of box-like time and space, to the theory of relativity in the present day, demonstrates that people’s view of time and space is continuously advancing in social practice.⁴²

Therefore, the view of spatialized time, although it seems to be inconsistent with the nature of time, has its reasonable ground. In remote times, childlike primitives conceived of time and space as chaotic and continuous. As human society advanced, their view started to introduce elementary divisions. Time was intimately associated with real life and particular things, and entangled with tangible contents, but was nonetheless without general form. For instance, time was entangled with the seasons and solar positions, space was entangled with the cardinal points of the compass and, as in ancient China, thoroughly entangled with the rhythms of agriculture.

The limitations and tangibility of these primitive conceptions of time and space are similar to the conceptions of children. Both demonstrate that the comprehension and the understanding of objective time and space are determined by the historical nature of social practice. While the relative, universal necessity of their conception expresses a certain objective sociality.

³⁹Bergson (1913). One of Bergson’s important contributions is on the question of time. He breaks through Newton’s static, infinitely divisible, box-like conception of time and space, which has no relation to substances, and emphasizes that every moment of time has its individuality inseparable from substances. It is not like cinema, where every frame exists for a moment only to be replaced by the next. It is rather like life itself, in which succeeding moments contain the preceding. Bergson, of course, employs subjective idealism to expound this view. Einstein scientifically proves the inseparability of time and space from the existence (motion) of matter.

⁴⁰Einstein and Infeld (1960).

⁴¹Einstein and Calder (2006).

⁴²On the relation between Kant’s view of time and space and modern physics, see Ernst Cassirer, *Substance and Function and Einstein’s Theory of Relativity*, and C. B. Garnet, *Kant’s Philosophy of Space*. The former argues that Kant and Einstein are not contrary to each other, but are actually consistent; while the latter emphasizes the inconsistencies in the sections on the Aesthetic and Analytic in the *Critique of Pure Reason*, and maintains that the theory of time and space in the Analytic corresponds with that of modern physics, while that of the Aesthetic does not.

Therefore, the universal, necessary, absolute a priori forms of time and space that Kant expounds do not exist. His attempt is futile, even if he avails himself of mathematics for his argument. History shows that the earliest Greek arithmetic resulted from the activities of counting sheep, fruits, and so on, while geometry began to take its shape from the practical activities of measuring land. Engels explains that “the concepts of number and figure have not been derived from any source other than the world of reality. The ten fingers on which men learnt to count, that is, to perform the first arithmetical operation, are anything but a free creation of the mind [...] So the idea of figure is borrowed exclusively from the external world, and does not arise in the mind out of pure thought.”⁴³ Arithmetic is intimately connected with the notions of time and space, because natural numbers and operations such as addition and subtraction are mainly abstracted from the practical activities that the subject carries out in time. For instance, the repetition of the same activity is related to the forming of the notion of the number 1; while addition and subtraction are related to division and unification in the labor activities of the subject. As was mentioned in the previous chapter, equations such as $2 + 2 = 4$ or $7 + 5 = 12$ cannot be induced from the mere observation of external objects; they are symbolized standards of primitive practical activities, hence their relation to time and their formation are grounded in the practical activities of counting and measuring.⁴⁴ In addition, notions like location, straight line, curve, and so on are abstracted from manual labor; and it is especially from the subject’s using and making tools and **controlling of space** that geometry was discovered. Newborn babies and primitives do not have a geometrical notion of space. In short, human beings grasp time and space and determine the forms of the objective world, gradually internalize them, and transform them into forms of cognition and psychological structures, including time and space. This is done neither through passive observation and induction from external objects, nor through a priori pure intuitions; but rather through manual, operational practices that actively transform the world. This is what I call the internalization of reason. The laws of the objective world are turned into the subject’s tools and means of cognition, which means that, in transforming the objective world, social practice also changes the subjective world. This is the case with cognitive content and also with the forms and structures of cognition. Mathematics is, of course, an important aspect of these forms and structures, and also a powerful tool for cognizing forms and structures in the world.

Mathematics, although derived from the regulation of practical activities in the actual world, is fundamentally linked with time and space. As Engels points out, “as in every department of thought, at a certain stage of development the laws, which were abstracted from the real world, become divorced from the real world, and are set up against it as something independent, as laws coming from outside, to which

⁴³*Anti-Dühring*. Marx Engels Internet Archive 1994.

⁴⁴“The fatal error that the necessity of thinking, preceding all experience, was at the basis of Euclidian geometry and the concept of space belonging to it, this fatal error arose from the fact that the empirical basis, on which the axiomatic construction of Euclidian geometry rests, had fallen into oblivion”(Einstein, and Jean Piccard, *Physics and Reality*).

the world has to conform.”⁴⁵ So it is with Kant’s transcendental idealism, which regards the laws abstracted from reality as transcendental laws to which the world must conform. For example, the axiom that the straight line is the shortest distance between two points, which originally emerged from long human practice, acquires self-evidence. However, Kant claims its nature is an a priori form legislated by human reason to which nature must conform. From the perspective of the historical development of mathematics, however, we can see that the relation between mathematics and sensible time and space evolves from direct into indirect, and from **the sensible to a whole set of supersensible formal structures**. This evolution is a profound demonstration of the influence of objective reality, and also opens up new possibilities of cognition. Einstein repeatedly states that geometrical space derives from the separation of solid bodies in physical space. The intimate relation of mathematics, space, and time to human beings’ social practices becomes all the more true when we consider the practical activities of modern industrial technology and scientific experiment, which have provided the occasion for introducing various non-Euclidean geometries. Because of the great familiarity of Euclidean space in daily life, it seems impossible to perceive or even conceive of non-Euclidean geometrical space. And yet this is not only a possible development of logic, but also an important opportunity for us to reach profound knowledge of objective relations.⁴⁶

Cognition is always approximate. It can never be exhaustive, but only gradually reaches a deeper level. The same applies to the representations of time and space, and to the mathematical and physical sciences. Representations of space such as north and south, and right and left, and representations of time such as the succession of moments, and arithmetic and geometry, from their primitive beginnings to Newtonian mechanics to the theory of relativity, all have progressed from the limited and simple to the vast and complicated, from the elementary to the advanced level. The conception of time and space will keep on advancing, as social practice is continuously making headway. One point in Kant’s view of time and space is of special interest, namely its emphasis on the relation between time, space, and sensible intuition. I regard this as a significant insight. Time and space are neither concepts of reason, nor are they similar to passive sensations such as color, taste, scent, or touch. **Sensible intuitions sediment social reason; and therefore, to individuals, time and space seem to be a priori forms of intuition without origin**. However, from the perspective of humankind as a totality, they are nonetheless the fruits of social practice. Such fruits, unlike formal logic, are not merely internalized operations or external practical activities transformed into internal structures of reason; rather, they are a sedimentation by which social reason becomes sedimented in sensible perceptions. The former (internalization) is logic,

⁴⁵*Anti-Dühring*. Marx Engels Internet Archive 1994.

⁴⁶Although various formal systems of symbolic computation are entirely divorced from Euclidean geometrical space, this is the notion of space in daily life.

while the latter is the result of free intuition, which is related to taste, which can enlighten truth by means of the beautiful, and expresses the nature of free creation.

The birth and development of mathematics relies on these two aspects of internalization and sedimentation. While this process has yet to be studied fully by psychology, Piaget has made a start with his theory of internalization. I merely propose this approach from a philosophical perspective.

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Chapter 4

Epistemology: III. Categories



4.1 Categories as Pure Concepts of the Understanding

Kant divides human knowledge into two parts, sensibility and understanding. Therefore, critical philosophy has to investigate two forms of a priori knowledge. In the first part of the Transcendental Analytic, which follows after the Transcendental Aesthetic, Kant states:

Our knowledge springs from two fundamental sources of the mind; the first is the capacity of receiving representations (receptivity for impressions), the second is the power of knowing an object through these representations (spontaneity of concepts). Through the first an object is given to us, through the second the object is thought in relation to that [given] representation [...] Intuition and concepts constitute, therefore, the elements of all our knowledge, so that neither concepts without an intuition in some way corresponding to them, nor intuition without concepts, can yield knowledge.¹

If the receptivity of our mind, its power of receiving representations in so far as it is in any wise affected, is to be entitled sensibility, then the mind's power of producing representations from itself, the spontaneity of knowledge, should be called the understanding. Our nature is so constituted that our intuition can never be other than sensible; that is, it contains only the mode in which we are affected by objects. The faculty, on the other hand, which enables us to think the object of sensible intuition is the understanding. To neither of these powers may a preference be given over the other. [...] These two powers or capacities cannot exchange their functions. The understanding can intuit nothing, the senses can think nothing. Only through their union can knowledge arise.²

¹Kant, and Kemp Smith, *Critique of Pure Reason*, A50/B74.

²Ibid., A51/B75. In a letter to Marcus Herz, May 26, 1789, Kant said that “the antinomies of pure reason could provide a good touchstone for that, which might convince him that one cannot assume human reason to be of one kind with the divine reason, distinct from it only by limitation, that is, in degree—that human reason, unlike the divine reason, must be regarded as a faculty only of thinking, not of intuiting; that it is thoroughly dependent on an entirely different faculty (or receptivity) for its intuitions, or better, for the material out of which it fashions knowledge” (Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 155).

Because sensibility and understanding are two independent faculties, Kant criticizes rationalism and empiricism for jumbling them together:

Leibniz intellectualised appearances, just as Locke, according to his system of noogony (if I may be allowed the use of such expressions), sensualized all concepts of the understanding, i.e., interpreted them as nothing more than empirical or abstracted concepts of reflection. Instead of seeking in the understanding and sensibility two sources of representations which, while quite different, can supply objectively valid judgments of things only in conjunction with each other, each of these great men holds to one only of the two, viewing it as in immediate relation to things in themselves. The other faculty is then regarded as serving only to confuse or to order the representations which this selected faculty yields.³

Rationalism sees sensibility as a chaotic representation of the understanding, while empiricism sees the understanding as an abstraction from sensibility. One attributes sensibility to the understanding, while the other attributes understanding to sensibility. Kant believes that both rationalism and empiricism thus defined are a dead end, because neither sensibility nor understanding can produce the other. Sensibility and understanding can be compared with two mountains standing opposite one another, as represented in the synopsis below:

Sensibility: from the object, passively received, chaotic, particular content, subjective, empirical.

Understanding: from the subject, active creation, synthetic, universal forms, objective, a priori.

It is obviously on the basis of this sharp dichotomy that Kant emphasizes that knowledge arises from the union of sensibility and the understanding.

This union results from the understanding's acting on sensibility. The understanding regulates, organizes, and constitutes sensibility. Knowledge arises from the organizing of sensible material, while synthesis unifies the material provided by intuition into a conceptual system of logical forms. This is how knowledge is possible. In the "Transcendental Analytic," Kant mainly expounds on this theme.⁴ His argument in this part belongs to the domain of transcendental logic, which Kant conceives in a very different way from traditional formal logic.

³Kant, and Kemp Smith, *Critique of Pure Reason*, A272/B327.

⁴"The very fact that the totality of our sense experiences is such that by means of thinking [...] it can be put in order, this fact is one which leaves us in awe, but which we shall never understand. One may say 'the eternal mystery of the world is its comprehensibility.' It is one of the great realizations of Immanuel Kant that the setting up of a real external world would be senseless without this comprehensibility." (Einstein, *Physics and Reality*). "It seems that the human mind has first to construct forms independently before we can find them in things: Kepler's marvelous achievement is a particularly fine example of the truth that knowledge cannot spring from experience alone but only from the comparison of the inventions of the intellect with observed fact" (Einstein, *Johannes Kepler*). Although Einstein opposes Kant's immutable transcendental categories, he seems to be in agreement with Kant on some basic views in epistemology.

Traditional logic is analytic, with the law of non-contradiction as its basis, and deals with the necessary forms of all thought.⁵ It is not capable of providing sufficient conditions and positive standards of truth (Kant is here attacking Leibniz's principle of sufficient reason).

Transcendental logic, on the other hand, is synthetic. It requires the correspondence of knowledge and its object, and involves cognitive content. Kant maintains that this is the logic of truth.⁶ Transcendental logic focuses on conditions of thought that are independent of experience yet make experience possible. In other words, the analysis of concepts and the principles of pure understanding serve as the transcendental ground for natural science. Kant's transcendental logic is a rebellion against rationalism, against the exclusive use of formal logic to resolve the question of knowledge, and against the exclusive use of the law of non-contradiction to cognize the world (see Chap. 1). Kant maintains that the axioms of geometry and arithmetic are self-evident because they are related to sensibility, whereas the axioms of mechanics lack the self-evidence of sensible intuition and therefore require the deductions of transcendental logic to guarantee their objective universal necessity.

Transcendental logic mainly concerns the understanding and reason, with the Transcendental Analytic focused on the understanding and the Transcendental Dialectic focused on reason. For Kant, the understanding is fundamentally different from sensibility. The concepts and principles of pure understanding cannot be abstracted from sensible impressions or experience, but are only found in the activities of the understanding, which are mainly for passing judgment. As Kant says, "we can reduce all acts of the understanding to judgments."⁷ To pass judgment is to apply concepts and to unite representations. While concepts, as lively activities of the mind, cannot function without judgments and are, in fact, products of synthesis. A concept that could not be used in judgments would be meaningless, for cognition requires judgment. Since cognition is not a state but an activity of the mind, the active character of judgment should be emphasized with a view toward advocating that judgment precedes concept.⁸ In this context, judgment is no longer a formal determination of logic but is instead concerned with the content of knowledge and refers to the basic activities and functions of unified consciousness. Kant states that "the understanding may therefore be represented as a faculty of judgment. For, as stated above, the understanding is a faculty of thought."⁹ He regards the forms of judgment in traditional formal logic as being well attested, unchanging,

⁵When Kant refers to formal logic, he actually means some of its basic laws, such as the law of identity, the law of non-contradiction, and the law of the excluded middle.

⁶This view anticipates Hegel's logic. See also Kant's *Lectures on Logic*, which is actually a mixture of traditional formal logic and modern epistemology.

⁷Kant, and Kemp Smith, *Critique of Pure Reason*, A69/B94.

⁸Which involves matters of both logic and psychology. In the *Lectures on Logic*, Kant distinguishes between clarifying a concept (analysis) and inventing a clear concept (synthesis). Also, the formal logic he refers to is not the logic of propositions but of judgment.

⁹Kant, and Kemp Smith, *Critique of Pure Reason*, A69/B94.

and exhaustive. They are actually unified functions of synthesis and belong to epistemology and transcendental psychology. Any judgment, be it analytic or synthetic, has such a unifying function, subsuming a manifold of intuitions under concepts. Following the logical tradition, Kant classifies judgments as follows:

- I. Quantity of Judgment: Universal, Particular, Singular
- II. Quality: Affirmative, Negative, Infinite¹⁰
- III. Relation: Categorical, Hypothetical, Disjunctive
- IV. Modality: Problematic, Assertoric, Apodeictic¹¹

When dealing with the understanding, Kant equates function with form. The function of judgment is the form of judgment because the function of the understanding is to synthesize intuitions and constitute judgments, and its forms serve this synthetic function. It is evident that “synthesis” is the key word here, because it breaks through the conventional psychological dichotomy between sensibility and the understanding and highlights their unity.¹² This concept also overcomes the earlier tendency to ascribe sensibility to the understanding (rationalism) or to ascribe understanding to sensibility (empiricism), thus underscoring their different origins and warning against the error of confusing the two. In order to form knowledge, one must unite sensibility and the understanding through synthesis, and in synthesis the understanding has the active function. Judgment, in essence, is an active function of the understanding that yields the unity of representations, that is, the pure concepts of the understanding. Kant states that “the same function which gives unity to the various representations in a judgment also gives unity to the mere synthesis of various representations in an intuition; and this unity, in its most general expression, we entitle the pure concept of the understanding.”¹³ Just as pure intuitions exist in all empirical intuitions as the forms of intuition, pure concepts also exist in all activities of the mind as forms of thought (judgment). Therefore, there must be pure concepts of the understanding and its unifying function, corresponding to every form of judgment in traditional formal logic. We can only discover the origin of these forms of judgment by tracking down the pure concepts of the understanding. The grounds for various logical judgments are conditions for

¹⁰The word “infinite” means that the subject belongs to an unlimited (not closed) category, such as, A is non-P, as Kant explains: “The infinite judgment indicates not merely that a subject is not contained under the sphere of a predicate, but that it lies somewhere in the infinite sphere outside its sphere; consequently this judgment represents the sphere of the predicate as restricted.

Everything possible is either A or non-A. If I say, then, something is non-A, e.g., the human soul is non-mortal, some men are non-learned, etc., then this is an infinite judgment. For it is not thereby determined, concerning the finite sphere A [...] which is really no sphere at all.” (*Lectures on Logic*, §22).

¹¹Kant, and Kemp Smith, *Critique of Pure Reason*, A70/B95.

¹²A remark made by Wilhelm Windelband is worth mentioning: “This conception of synthesis is a new element which separates the *Critique* from the *Inaugural Dissertation*; in it Kant found the common element between the Forms of the sensibility and those of the understanding” (Windelband 1935).

¹³Kant, and Kemp Smith, *Critique of Pure Reason*, A79/B104-5.

the possibility of these judgments. To Kant, these pure concepts of the understanding are categories. The work of the *Metaphysical Deduction of Categories* is to determine, through the investigation of judgment, the *a priori* nature of the categories, which are also called pure concepts of the understanding. It is evident that Kant’s transcendental logic is intended to transcribe formal logic (forms of judgment) into philosophy (categories) through psychology (functions).

This point will become clear in the next chapter, which discusses the subjective and objective deductions. Psychology (empiricism) becomes an intermediary for the transition from formal logic to transcendental logic (epistemology), which is also the course of development of Kant’s philosophy (see Chap. 1).

Kant is the first philosopher after Aristotle to raise the forms of judgment in formal logic, as functions, to the height of epistemology and a new doctrine of categories.¹⁴ What Kant has done is a significant development in the dialectical normalization of thought. Aristotelean categories were ontological, concerning beings, whereas Kant’s categories are epistemological and concern the mind.

Taking the classification of judgments in traditional formal logic, Kant modifies Aristotle’s ten categories (e.g., Kant holds that time is a form of sensible intuition rather than a category of the understanding), and proposes a table of categories as follows:

Table of categories

<i>I</i>
Of quantity
Unity
Plurality
Totality
<i>II</i>
Of quality
Reality
Negation
Limitation
<i>III</i>
Of relation
Of inherence and subsistence (<i>substantia et accidens</i>)

(continued)

¹⁴Robert Paul Wolff claims that Kant’s table of categories was not derived from formal logic, but was deduced from self-consciousness (*Kant’s Theory of Mental Activity*). G. Martin also holds that since formal logic is analytic to Kant, the categories, which are forms of synthesis, cannot be derived from judgments of formal logic, and therefore cannot derive from judgments (*Kant’s Metaphysics and Theory of Science*). I agree with neither of them. A statement in the *Lectures on Logic* explains Kant’s reason for thinking that the judgments of formal logic are necessary conditions for the truth of knowledge. Kant argues that for knowledge to be complete it must possess universality (quantity), clarity (quality), truth (relation), and certainty (modality). Quantity, quality, and so on each have their own epistemological content. So it is evident that Kant intends to transform formal logic into epistemology.

(continued)

Of causality and dependence (cause and effect)
Of community (community between agent and patient)
IV
Of modality possibility—
Impossibility existence—
Non-existence necessity—
Contingency ^a

^aKant, and Kemp Smith, *Critique of Pure Reason*, A80/B106

Kant has obviously made many changes in his effort to deduce the table of categories from forms of judgment of formal logic. Judgments of formal logic are basically a classification of external forms, while Kant's categories involve content. For instance, categorical, hypothetical, and disjunctive judgments are transformed into the category of relations of substance, cause and effect, and community. However, this deduction introduces a great deal of subjective arbitrariness. On the one hand, there is the question of whether or not the categories of the understanding are exhausted by the deduction of its twelve categories from the twelve forms of judgments. The deduction evidently cannot be exhaustive, and there are more categories than the twelve Kant lists. In the appendix entitled "The Amphiboly of the Concepts of Reflection," Kant lists four pairs of concepts, namely, identity and difference, agreement and opposition, inner and outer, and matter and form, and believes that they are related to sensibility rather than to the categories. In fact, these concepts have no distinct, definite difference from Kant's twelve categories. His decision to limit the categories and their standards to the forms of judgment in formal logic is not a developmental but a static view.¹⁵ On the other hand, Kant sets less weight on some of the twelve categories than others, which are included merely to make the number of categories correspond to the traditional twelve forms of judgments. In fact Kant uses only eight of these forms and says very little about the remainder. Some of the important categories, the three categories of relation, for instance, are jumbled together with others, and their significance downplayed. In short, the table of categories is thoroughly static and rather uninspiring.

However, if seen from the perspective of the history of philosophy, the transition from a classification of judgments in traditional formal logic to a table of categories in transcendental logic demonstrates Kant's endeavor to investigate the nature of logical thought by means of tracking down the origin of formal logic. He gives the principles and standards for abstracting categories from judgments of thought, and

¹⁵From Fichte to Hegel, categories are no longer given but rather established by the mind, that is, they have a process of development. As to why there should be twelve categories, Kant admits there is no reason. It is just as in the case of the rules of language: "We can't give a reason why each language has just this and no other grammatical structure, let alone why its formal rules are just these, neither more nor less." (Kant, Immanuel, and Inc NetLibrary. *Prolegomena to Any Future Metaphysics*, §39).

points out that the forms of thought, which human beings have possessed for a long time, contain a further synthesizing function of the understanding. This insight is substantially different from the rationalistic doctrine of innate ideas, such as was held by Descartes and Leibniz, as well as by the metaphysical empiricists. Kant poses the problem of epistemology in a more profound way, opening up a new approach that leads to an intimate relation among epistemology, logic, and dialectic, and provides important hints for the study of cognitive spontaneity in human thought. Unlike Hegel, who identifies formal logic with metaphysics in order to dispatch both, Kant takes note of the relation between formal logic and transcendental logic (epistemology). He notes their differences, namely, that the former simply focuses on forms of thought, while the latter focuses on the content of knowledge; and their similarities, that both are forms and functions of knowledge.

Kant arranges the twelve categories into four classes with three members each. He states that “it is significant that in each class the number of the categories is always the same, namely, three. Further, it may be observed that the third category in each class always arises from the combination of the second category with the first.”¹⁶ For instance, “totality,” which is the third category of quantity, is the “unity” of “plurality,” that is, a unified (singular) plurality. The category of “limitation” is the combination of “reality” with “negation.” The category of “community” is the causality of substances reciprocally determining each other, while the category of “necessity” is “existence” given through “possibility.”¹⁷ Kant later explains the distinction between his trichotomy and the dichotomy of traditional formal logic, stating that the former is synthetic, while the latter is analytic. The distinction is not that of A and non-A in formal logic. It is rather that of “(1) a condition, (2) something conditioned, (3) the concept that arises from the unification of the conditioned with its condition.”¹⁸ This view of Kant’s was taken over and fully developed by Hegel, who sees this trichotomy as the turning wheel of logic, and further expounds on the relation, independence, conflict, transition, development, and transition among the categories. Hegel develops the dynamic progress of the transformation and development of categories, which are no longer the same as Kant’s static twelve categories and no longer assume the forms of traditional logic, but are charged with the dialectic of thought, which is an inter-related and ongoing development. This dialectic inversely manifests the objective dialectical laws of development in the material world, hence constituting the essence of Hegelian philosophy. However, were it not for Kant’s table of categories, it would not have been easy for Hegel to have developed this dialectic. Aristotle transformed, through Plato, what was for Socrates the internal into the external abstract Universal; while Hegel, through Fichte and Schelling, transformed what was for Kant the internal into the concrete Universal¹⁹ by transforming Kant’s

¹⁶Kant, and Kemp Smith, *Critique of Pure Reason*, B110.

¹⁷Ibid., B111.

¹⁸Kant and Bernard (1951).

¹⁹See A. D. Linsay, *Kant*.

table of categories of subjective knowledge and regulative principles into objective and objectized spirit and ideas (see Chap. 6).

Kant and Hegel differ concerning the question and focus of their investigations of categories. Hegel makes use of absolute spirit to produce, control, and alter everything, emphasizing how logical categories can be consistent with history, and can even subordinate history under logical categories. Kant focuses his exposition on how categories, as pure concepts of the understanding, apply to sensibility, and how to make them relate to sensible experience.

For Kant, understanding the form and function of the categories is a question of synthesis. Categories are, in fact, specific forms of synthesis that are emphasized by Kant. The difference between Kant and Hegel runs through their entire systems of epistemology. Kant mixes epistemology with questions of psychology and natural science, while Hegel does not at all take psychology into account and his focus revolves solely around the historical development of society.

4.2 Transcendental Schemata²⁰

As discussed above, Kant held that categories are a priori “pure concepts of the understanding” (i.e., the self-consciousness of transcendental apperception, see Chap. 5). Consciousness of time is closely bound up with self-consciousness. But unlike general concepts, they do not derive from experience. How then could they apply to sensible intuition? Since general concepts are drawn from experience and are homogenous with intuitions, there is no difficulty in applying them to intuition. For instance, the concept of the circle can be applied to a plate because the geometrical concept is homogeneous with the sensible intuition of the plate.

However, the categories, as transcendental “pure concepts of the understanding,” are not homogeneous in that way with sensible intuition. Kant states:

But pure concepts of the understanding being quite heterogeneous from empirical intuitions, and indeed from all sensible intuitions, can never be met with in any intuition. For no one will say that a category, such as that of causality, can be intuited through sense and is itself contained in appearance. How, then, is the subsumption of intuitions under pure concepts, the application of a category to appearances, possible? Obviously there must be some third thing, which is homogeneous on the one hand with the category, and on the other hand with the appearance, and which thus makes the application of the former to the latter possible. This mediating representation must be pure, that is, void of all empirical

²⁰According to the structure of the *Critique of Pure Reason*, the Transcendental Deduction, which explains the objective validity of the categories of the understanding in application to empirical objects, comes after the table of categories in the Analytic (the section on “Metaphysical Deduction”). Since the Transcendental Deduction is the kernel of Kantian epistemology, I discuss this in detail later (see Chap. 5). This discussion goes more smoothly if we proceed from the discussion of the table of categories to that of principles. Some scholars, for instance, A. C. Ewing (*A Short Commentary on Kant's Critique of Pure Reason*), often place the discussion of the Transcendental Deduction before that of the table of categories.

content, and yet at the same time, while it must in one respect be intellectual, it must in another be sensible. Such a representation is a transcendental schema.²¹

Kant's schemata are not particular sensible figures or images. Rather, they are a sort of abstract sensible form directed at concepts but are not themselves concepts. Instead, they are a sort of sensibly conceptualized pattern, somewhat like a diagram, map, or blueprint. Kant cites mathematics as an example. In his illustration, these five dots "•••••" are an image, not a schema; while the number 5 is a schema and not an image. It is more obvious with larger numbers that they are schemata rather than images, and it is the same with the triangle in geometry (not triangles drawn on a blackboard or on paper). The triangle differs from a circle. We can acquire the experience of the circle from circular objects, but we cannot acquire the image of the triangle in this simple way. Our image of the triangle must necessarily be acute, right, or obtuse, and not an image of the triangle in general. Images are particular and specific sensible figures, while schemata are more abstract sensible structures. All images are sensible, but not all sense experience has an image. So, too, for schemata, which are neither empirical concepts nor images of things, but are instead conceptual sensible structures, structural principles, or functions. They are not figures passively received, but rather principles actively constructed. For instance, the schema of dog is not a picture of a dog; it is a composition of a four-footed animal with the features of a dog (e.g., the anatomy of a dog). In short, schemata are abstract sensible structures that link specific sensible data. They operate at the intersection of the understanding and sensibility, and their main characteristic is an actively created abstract sensibility.

Kant maintains that time is the transcendental schema that mediates between pure concepts of the understanding (categories) and sensibility because it meets the three conditions of transcendental schemata mentioned above. A transcendental schema must be pure, and without any empirical content. Time, as pure intuition, meets this requirement. A transcendental schema must also belong to understanding as well as to sensibility. For Kant, time meets this requirement as well. On the one hand, things must be contained in time, taken as a transcendental form of sensible intuition, in order to be perceived. For instance, in order to cognize a house we must go from part to part through a sequential perceptual process, so that the house becomes an object of cognition only through being thus related to time. On the other hand, as the form of inner sense, time is different from space and is intimately related to the categories of the understanding and to self-consciousness, which must unfold in time. Therefore time also possesses the characteristics of the understanding. And on one hand, time is a pure form of intuition that is related to sensibility; on the other, it has a kind of universality and is related to the understanding. Kant states:

Now a transcendental determination of time is so far homogeneous with the category, which constitutes its unity, in that it is universal and rests upon an a priori rule. But, on the other hand, it is so far homogeneous with appearance, in that time is contained in every

²¹Kant, and Kemp Smith, *Critique of Pure Reason*, A137-8/176-7.

empirical representation of the manifold. Thus an application of the category to appearances becomes possible by means of the transcendental determination of time, which, as the schema of the concepts of the understanding, mediates the subsumption of the appearances under the category.²²

In a letter written in his later years, Kant once again tried to clarify his conception of the schema. The elucidation is quite clear and to the point:

This subsumption of an empirical concept under a category would seem to be the subsumption of something heterogeneous in content; that would be contrary to logic, were it to occur without any mediation. It is, however, possible to subsume an empirical concept under a pure concept of the understanding if there is a mediating concept, and that is what the concept of something composed out of the representations of the subject's inner sense is, insofar as such representations, in conformity with temporal conditions, present something as a composition, i.e., as composed a priori according to a universal rule. What they present is homogeneous with the concept of the composed in general (as every category is) and thus makes possible the subsumption of appearances under the pure concept of the understanding according to its synthetic unity (of composition). We call this subsumption a schema.²³

Whence then come the transcendental schemata? Kant believes that they arise from a synthetic activity of transcendental creative imagination. Categories come from pure forms of logical judgments and have the abstract unity of pure logic. For instance, the category of substance comes from the subject term of all object terms, and the category of causality comes from the logical concept of "in accordance." But this is not the case with schemata. Schemata are connected with sensibility and the synthesis of the sensible manifold in time and space.

Therefore, they do not have a purely logical significance, but are bound up with empirical judgments and are represented as eternity (substance) and subsequence (causality) in time. Here Kant still employs **empiricism (psychology) to rectify rationalism (logic)**. He declares that schemata are fruits of a priori imagination, which mediates between sensibility and the understanding. This transcendental creative imagination is an active spontaneity of the understanding acting on sensibility, and therefore differs from passive reproductive imagination, which simply inducts or abstracts from sensory images. Creative imagination is identical with the spontaneity of the understanding; it is, in fact, a particularized spontaneity of the understanding. The general possibility of the unity of empirical objects derives from the understanding, while a priori imagination, that is, creative imagination, unifies a specific, given manifold of intuition into the unity of a particular empirical object. This creative imagination supplies rules and plans to produce schemata, just as reproductive imagination produces images. But images produced by reproductive imagination can be related to concepts only through schemata. Thus it is evident that schemata are not restricted by particular images of experience. Kant claims that the power of schemata "is an art concealed in the depths of the human soul, whose real modes of activity nature is hardly likely ever to allow us to discover, and to

²²Ibid., A138-9/B177-8.

²³Letter to J. H. Tieftrunk, December 11, 1797. Kant and Zweig (1986).

have open to our gaze.”²⁴ After this rather limited exposition, Kant does not return to the topic, which leaves creative imagination as one of the most vital yet obscure terms in Kant’s epistemology.²⁵

Kant swiftly subsumes four of the categories under temporal schemata: the schema of quantity is number, i.e., a time-series; the schema of quality is measure, i.e., a time content; the schema of relation is temporal sequence; and the schema of modality is time in general. The meaning of this passage will become clear later when we discuss the principles of the understanding. Kant does not give an explicit exposition of the different schemata for each of the twelve categories. He dwells mainly on the schemata associated with totality under the category of quantity and of limitation under the category of quality. Some scholars avail themselves of Hegel’s view and propose that Kant intends to emphasize the third category among thesis, antithesis, and synthesis.²⁶ However, this interpretation is not quite right because Kant presents a detailed account of the first two categories of relation, which indicates that he does not set up a rigid rule for exposition.

How can the understanding have objectivity? This is the heart of Kant’s discussion to which we will return in Chap. 5. Schemata and creative imagination are bridges by which the understanding connects with sensibility and thus acquires objective reality. They are the pivot point that allows the understanding to relate to sensibility. The function of the schemata is to allow categories to have reality in their application to appearance, on the one hand, and to restrict categories within the domain of sense experience, on the other. Kant states: “The categories, therefore, without schemata, are merely functions of the understanding for concepts; and represent no object. This [objective] meaning they acquire from sensibility, which realises the understanding in the very process of restricting it.”²⁷ Additionally, “thus the categories, apart from the condition of sensible intuition [...] have no relation to any determinate object, cannot therefore define any object, and so do not in themselves have the validity of objective concepts.”²⁸

Take for instance the category of substance. If it is not related to sensible intuition, that is, if it is without a temporal schema as its medium for application to sensible appearance, it will have no value to cognition. So what is substance? It cannot be grasped without the determination of time. However, substance, with a temporal schema as its medium, amounts to the idea of something everlasting and continuous in time, despite the alteration of its attributes. Thus substance is made sensible and this category becomes applicable to intuitions and appearances. As a

²⁴Kant, and Kemp Smith, *Critique of Pure Reason*, A141/B180-1.

²⁵Transcendental synthesis of imagination and transcendental synthesis of apperception are in fact two sides of the same coin. Kant states that “it is one and the same spontaneity, which in one case, under the title of imagination, and in the other case, under the title of the understanding” (Kant, and Kemp Smith, *Critique of Pure Reason*, B161). Yet their relation is still rather complex. For more details, see Chap. 5.

²⁶See E. Caird, *Critical Philosophy of Immanuel Kant*. This is certainly a Hegelian interpretation.

²⁷Kant, and Kemp Smith, *Critique of Pure Reason*, A147/B187.

²⁸*Ibid.*, A246.

pure concept of the understanding, the applicability of the category of substance to experience depends on such a temporal schema as its medium. Similarly, the category of causality is schematized by temporal succession.

Kant's transcendental categories are pure concepts of the understanding and are totally independent of experience, but once he touches on specific categories, he dwells longest on their schemata. For instance, in dealing with the category of substance, most of Kant's exposition concentrates on its temporal schemata of succession and eternity. Consequently, there is no significant difference between the categories and their schemata. That categories are used synonymously with schemata means the collapse of pure transcendentality for the categories.²⁹ Schemata are said to employ sensibility to restrict the categories of the understanding. Some Kant scholars discredit the schemata, maintaining that Kant's transcendental idealism is incomplete and is inconsistent with the Transcendental Deduction. Others believe that the doctrine of schematism is insignificant and avoid this section as best they can. However, the theory of schematism is, in fact, one of the keys to our understanding of Kant's critical epistemology. His design is to use schematism to build a bridge between the transcendental and the empirical, between understanding and sensibility, between the general and the particular, between nature and appearance. It is of great importance that Kant poses this problem of a bridge between these oppositions in a thoroughly idealistic manner.

4.3 Transcendental Principles of the Understanding

I. Quantity and Quality

Following his account of the doctrine of schematism, Kant expounds on the "Transcendental Principles of Understanding," which is actually a specification of the time schema. Kant states:

The table of categories is quite naturally our guide in the construction of the table of principles. For the latter are simply rules for the objective employment of the former. All principles of pure understanding are therefore—

1. Axioms of intuition.
2. Anticipations of perception.
3. Analogies of experience.
4. Postulates of empirical thought in general.³⁰

²⁹This, of course, refers to epistemology. In Kant's philosophy as a whole, e.g., in the ethics, categories with schemata are still significant.

³⁰Kant, and Kemp Smith, *Critique of Pure Reason*, A161/B200.

Kant maintained that any experience or science was possible only as schematized under the four categories. For instance, in his *Metaphysical Foundations of Natural Science*, he applied the categories to natural science and regarded physics, defined as the study of all motions in nature, as dividing into four branches: kinematics, which deals with the quantity of motion (velocity and direction); dynamics, which deals with the quality of motion (force and torque, and their constituting the degrees of substances of different intensity, i.e., creating motion); mechanics, which deals with relation of motions (e.g., the equality of action and reaction); and phenomenology, which deals with the different states of motion (straight lines, curves, and so on). He pointed out in the Transcendental Principles of Understanding that, in order to apply to all experience, the categories must rely on these principles. For instance, for the category quantity to apply to experience so that the manifold of sensible experience constitutes an object of knowledge, it must proceed under the transcendental principle of the axioms of intuition, which state that “all intuitions are extensive magnitudes.” Kant argued that only after having given the exposition of the principles of understanding, which brings the Transcendental Analytic to a conclusion, could he finally resolve the epistemological puzzle of the possibility of a priori synthetic judgments. The section on the Principles of Understanding is not only a specification of Kant’s table of categories and his doctrine of schematism, but also the richest discussion in his epistemology.

Thinking about mathematical and mechanical facts, Kant raised the question “How are a priori synthetic judgments possible?” and saw time and space, which are forms of intuition, and the categories of understanding as the two transcendental elements. He proceeded from the abstract to the particular in his metaphysical and transcendental exposition or deduction, until he reached the section on schemata and principles, where he unfolded and completed his explanation. The question of how the understanding is connected, controlled, and allowed to interact with sensibility to constitute knowledge is explicitly described by this synthetic method. At this point in the argument, the unification of sensibility and understanding, which until now have been treated as if they were quite separate and even opposed, is finally achieved.³¹

Let’s consider these points in turn:

First, the Axioms of Intuition. “Their principle,” Kant says, is this: “All intuitions are extensive magnitudes.”³² This is also the principle of time and space, which are forms of intuition that enter the schema of temporal sequence because intuition is a continuous synthesis of part to part in successive moments; this is the so called “time sequence.” Only under the third category of quantity (totality),

³¹Some Chinese scholars have employed the relation between *ti* (substance) and *yong* (function) to interpret categories and principles (see Zhen Xin, *An Introduction to Kant’s philosophy*). The analogy may appear relevant, yet one must guard against the mistaken impression that *ti* (not meaning the categories) could exist without *yong* (not meaning principles). To Kant, without principles, the categories could not have a cognitive function despite their ontological significance in ethics (e.g., in the idea of a free cause).

³²Kant, and Kemp Smith, *Critique of Pure Reason*, B202.

i.e., the schema of number, could appearance be known to us in the way that mathematics requires.³³ It is evident that in the Transcendental Aesthetic, the account of mathematics as a priori synthetic judgments was concerned only with time and space as transcendental forms of sensible intuition, which was not sufficient. Knowledge, including geometry and arithmetic, must unite sensibility and understanding and apply the principles of understanding mentioned above. Sensibility and understanding “can determine objects only when they are employed in conjunction.”³⁴ The a priori synthetic judgments of pure mathematics are no exception.

It was purely for the convenience of argument that Kant singled out mathematics in the Transcendental Aesthetic, treating it as if forms of intuition could be knowledge without any contribution of the understanding. In fact, Kant always held that mathematical knowledge required the participation of the categories of understanding (quantity) and an appropriate principle of the understanding. Therefore, it can be said that the first principle of the understanding is a direct development of his doctrine of the aesthetic. Its importance lies in stipulating that every object of knowledge, instead of being indivisible and uncountable, must have a countable quantity, hence also be divisible. Kant holds that all categories directed at transcendental synthesis require homogeneous data when they express mathematical functions, while heterogeneous data are subsumed by mechanics. Extensive magnitude specifically belongs to the former. Therefore, the category of quantity actually becomes a transition from the aesthetic (time and space) to the understanding (the categories). The identity of quantity and temporal homogeneity are indeed related. In my view, it is the homogeneity of time and the identity of quantity that caused the primitive ideology of human beings to gradually grow from an illusory mythology to scientific and historical knowledge. Kant attaches great importance to quantity in cognition, using quantity to determine quality. He stresses that the mathematical method was used to construct objects, and argues that the mathematization of data is a condition of any natural science. All these views can be connected with an important feature of modern natural science, namely, the emphasis on formalization or mathematization. Mathematics possesses extensive universal applicability and this universality is increasingly important as the empirical sciences advance.

³³In his inaugural dissertation, Kant had already proposed, “The pure image of all objects of sense, generally, is time. Now the pure schema for quantity, regarded as a concept of the understanding, is number. Number is a presentation comprising the successive addition of homogeneous units. Number, therefore, is simply unity in the synthesis of the manifold in a homogeneous intuition accomplished by my generating time itself while apprehending my intuition” (Kant and Eckoff 1970). L. E. J. Brouwer, of the Intuitionist school of mathematical thought, adopted Kant’s theory and held that the nature of mathematics lies in the continuity of time; while other scholars asserted that Kant, in this axiom, was trying to explain how mathematics could apply to experience.

³⁴Kant, and Kemp Smith, *Critique of Pure Reason*, A258/B314.

Second, the Anticipations of Perception. Its principle is: “In all appearances, the real that is an object of sensation has intensive magnitude, that is, a degree.”³⁵ In contrast to Hegel’s idea of quality preceding quantity, quantity precedes quality in the Kantian categories, just as intuitive forms precede the content of perception. This sequence has profound significance. The subordination of Hegelian quality to quantity is in effect the elimination of quality. Hegel’s quality was a sort of pure logical determination, thoroughly in line with his absolute idealism, while Kant’s schematic category of quality indirectly confirms the existence of external material. Kant argues:

No perception, and consequently no experience, is possible that could prove, either immediately or mediately (no matter how far-ranging the reasoning may be), a complete absence of all reality in the [field of] appearance. In other words, the proof of an empty space or of an empty time can never be derived from experience.³⁶

And again:

Every reality has, according to its quality, some specific degree ... Thus a radiation which fills a space, as for instance heat, and similarly every other reality in the [field of] appearance, can diminish in its degree in infinitum, without leaving the smallest part of this space in the least empty.³⁷

Kant does not acknowledge an absolute void, either in space or time, but maintains that as forms of intuition (quantity), time and space are inseparable from quality (beings, material reality.) He endorses the heterogeneity of empirical contents and opposes trying to explain quality solely in terms of difference of quantity. He argues: “The real has therefore magnitude, but not extensive magnitude.”³⁸ And again, “the real in the [field of] appearance has always a magnitude. But since its apprehension by means of mere sensation takes place in an instant and not through successive synthesis of different sensations, and therefore does not proceed from the parts to the whole, the magnitude is to be met with only in the apprehension.”³⁹ In other words, this magnitude is different from the extensive quantity mentioned earlier, which was merely parts added to parts; this magnitude is not a quantity of the forms of intuition that enables apprehension. The degree of quality refers to the quantity immediately obtained by apprehension, because at any moment the object of apprehension is always a magnitude of a certain quality (because of its material reality). The terms were not germane to each other and are irrelevant.⁴⁰ Magnitude is about forms of intuition, while extensive magnitude is about material data; thus

³⁵Ibid., A258/B314.

³⁶Ibid., A172/B214.

³⁷Ibid., A174/B216.

³⁸Ibid., A168/B210.

³⁹Ibid., A168/B210.

⁴⁰Many scholars have identified the magnitude of anticipation of perception with quality, or reduced it to the quantity of the forms of intuition. They regard it either as internal or as external quantity. Such interpretations were contrary to Kant’s original intent. See Richard Kröner, W. H. Walsh.

the former belongs to the axioms of intuition, while the latter belongs to the anticipations of perception. That is because the latter concerns the intensity of perceptions, which never lack some degree. If this degree were to diminish to zero, there would be no perception and empirical knowledge would be impossible. This magnitude is not given part after part in temporal sequence; rather, it must be present at any moment of time. In fact, Kant here anticipates the ideas of “determinate being” and “degree” in Hegelian logic, even though he did not unify quality and quantity in the fashion of Hegel’s dialectic.⁴¹ In short, Kant maintained that although the particular material of apprehension cannot possibly be anticipated, the existence of such material must be transcendently anticipated; that is, there must exist external real matter to supply the content of perception. As in the account of the principle of quantity, the principle of quality is also a necessary condition for scientific knowledge. Therefore, it can be said that in expounding the anticipations of perception Kant regarded objective existence in the material world as a sort transcendental determination. Such a view, albeit shackled in transcendental idealism, nevertheless indirectly confirms the objective existence of the material world.

4.4 Transcendental Principles of the Understanding

II. Substance and Causality

Kant divides the principles of the four categories into two parts, each of which in turn consists of a pair. The first pair is the principles of mathematics, while the second pair is the principles of mechanics. The first are intuitions of appearance, and exhibit mathematical characteristics such as continuity, limit, and so on, and are directly related to sensibility. The second pair is about the existence of essence, with no direct relation to sensibility. The former constructs objects, while the latter regulates knowledge. The former enjoys immediate self-evidence, while the necessity of the latter can be established only through a deduction.

Kant’s third principle is called the analogies of experience. “The principle of the analogies is: Experience is possible only through the representation of a necessary connection of perceptions.” That is to say that experience is possible only through the analogy of some necessary connection of perceptions (not the subjective apprehension of a contingent series). To know a thing, one must know its relation to other things. Knowledge cannot be attained from the cognition of an isolated thing torn from its relations. Knowledge about the relation of an object to other objects, however, cannot be attained through intuitive apprehension, but only through thinking. For instance, the causal relation between two objects cannot be intuited,

⁴¹“An example of extensive magnitude would be a collection of similar things (for example, the number of square inches in a plane); an example of intensive magnitude, the notion of degree (for example, of illumination of a room).” Letter to J. H. Tieftrunk, December 11, 1797. Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 538.

but can only be inferred. The relation between a substance and its attributes also cannot be intuited but only thought. Therefore, Kant believes that the principles of relational categories, unlike the previous two principles, cannot be intuited, but only inferred. This is not the intuitive mathematical construction of an object, but rather a logical ordering of the object.

The schema of the categories of relation is time-order. Kant states: “The three modes of time are duration, succession, and coexistence. There will, therefore, be three rules of all relations of appearances in time, and these rules will be prior to all experience, and indeed make it possible.”⁴² However, time, as a form of intuition, does not independently exist. We cannot perceive time itself. Nor could these three modes of time exist independently. They could not be cut off from sensible materials, and could have meaning only for sensible reality. They are constituted and determined by objective relations of real things in time. To Kant, all things are always in relations of time, otherwise experience would not be possible. If the time relation could not be determined objectively, there would be no objects of experience, but only some chaotic contingent collection of subjective ideas. Thus, these three modes of time are interrelated and contain each other. Duration is possible only in correspondence with succession; and there must be duration for succession to be possible. These two in turn presuppose coexistence. The three analogies deal with three aspects of the same matter and are closely related to the categories of substance and causality.

Kant first states the principle of substance, which is that “in all change of appearances substance is permanent; its quantum in nature is neither increased nor diminished.”⁴³ He explains that: “The permanent is the substratum of the empirical representation of time itself; in it alone is any determination of time possible. Permanence, as the abiding correlate of all existence of appearances, of all change and of all concomitance, expresses time in general.”⁴⁴ “In all appearances,” he says, “the permanent is the object itself, that is, substance as phenomenon; everything, on the other hand, which changes or can change belongs only to the way in which substance or substances exist, and therefore to their determinations.”⁴⁵

What Kant means is that change can be discussed only when the category of substance and the schema of permanence are transcendently assumed, because change is always the change of something (the permanent). If there is change, then there must be something unchangeable whose attributes undergo change. Without the abiding and permanent, the changes cannot be known.

All these are apprehended in time. Our perception is within time, and things appear in time with duration, succession, and coexistence. Hence comes the necessity of assuming that time has a permanent substratum in the object of perception. Without this permanent substance, no empirical time-order is possible.

⁴²Kant, and Kemp Smith, *Critique of Pure Reason*, B219.

⁴³Ibid., B224.

⁴⁴Ibid., A183/B226.

⁴⁵Ibid., A183-4/B227.

Nevertheless, this permanent substance is not time itself, because time itself has nothing to do with either change or stasis. Time itself is a form of intuition in the subject. Divorced from things, we cannot perceive time; while the changes we perceive are all in time. We are aware of duration, succession, and coexistence; though what we are really aware of is duration, succession, and coexistence through time. Therefore, the permanent substance can only be “something” in time. As to what this “something” is, Kant cannot say. However, one point is plain. This permanent immutable thing cannot be anything spiritual. On the contrary, it must be an object of sensible experience, and can only have meaning in sensible experience. When we cognize an object, we do not see it as a heap of subjective perceptions, but instead represent it as a coexistence of parts. For instance, when we look at a house, we do not merely form subjective perceptions of colors, bulk, and so on, but cognize its several parts and their coexistence. The category of substance must be brought into play in our cognition of this kind of experience. Kant points out that if this “permanent sensible condition” were not tied to a concept of substance, then it could not receive any predicates, could not inform us of anything, and would be utterly valueless for knowledge.

So while Kant does not state this explicitly, the category of substance refers to permanent substance in nature. Contrary to Augustine’s doctrine that time is the extension of thought, Kant’s view is conditioned by the energy conservation law in Newton’s mechanics.⁴⁶ Newton proposed four rules of reasoning for his natural philosophy, and one of them is: “The qualities of bodies, which admit neither intensification nor remission of degrees, and which are found to belong to all bodies within the reach of our experiments, are to be esteemed the universal qualities of all bodies whatsoever.”⁴⁷ In fact, these universal qualities are qualities of material existence as substance.

Therefore, just like the principle of the anticipations of perception, Kant’s principle of the permanence of substance endorses the permanence of the material world, although in a distorted way.⁴⁸ Kant dogmatically assumes the permanence of

⁴⁶Kant repeatedly states that “through all changes of corporeal nature, the over-all amount of matter remains the same—neither increased nor lessened.” (*Metaphysical Foundations of Natural Science*). Again: “A philosopher, on being asked how much smoke weighs, made reply: ‘Subtract from the weight of the wood burnt the weight of the ashes which are left over, and you have the weight of the smoke’” (Kant, and Kemp Smith, *Critique of Pure Reason*, A185/B228). Nothing can come from nothing, nor can something be completely reduced to nothing. This is the difference between reality and dreams. The word “substance” is sometimes used in the singular, sometimes in the plural, therefore, it is evident that it refers not to subjective perception but to objective bodies. There has been much debate on this issue among commentators, on which we shall not dwell.

⁴⁷*Mathematical Principles of Natural Philosophy*, part 3.

⁴⁸Most Kant scholars interpret substance as something belonging to the senses, e.g., sensible material, and base their argument on some of Kant’s ambiguous and contradictory expressions, e.g., when he states that matter is mere phenomenon rather than a thing in itself. These scholars deny the materialistic aspect of the principle of substance, just as Kant denied it of things in themselves as the source of sensibility. It is more so with the anticipations of perception, which they consider to be merely about the senses. None of these opinions is plausible. Nevertheless, it is

the natural world in time as the foundation for the duration and changes of experience, as if these changes must have their ground in a permanent substance. In the *Metaphysical Foundations of Natural Science*, Kant gives a definition of matter: “Whatever is movable and fills a space, becomes an object of experience.” This definition indeed draws his conception of matter closer to the concept of substance in science. Kant believes that some basic principles of natural science (physics)—for example, that nothing can come from nothing and that no being can be entirely annihilated—are possible only on the ground of this definition. The whole of natural science is based on these basic principles (the conservation of mass and energy, and so on). This is also the case for experience in general. Without the continuous existence of substance (matter) in time, changes could not be objectively comprehended, in which case, things could not be cognized as relatively stable objects, but would instead be little more than a chaotic dream.

Kant admits that “though the above principle is always postulated as lying at the basis of experience (for in empirical knowledge the need of it is felt), it has never itself been proved.”⁴⁹ In other words, the principle of the permanence of substance as the basis of experience “has never itself been proved,” because it is an a priori supposition of the understanding. Kant explains that “we have nothing permanent on which, as intuition, we can base the concept of a substance, save only matter, and even this permanence is not obtained from outer experience, but is presupposed a priori as a necessary condition of determination of time.”⁵⁰ Attributing the permanence of the material world to an a priori condition of subjective thinking (the understanding) independent of experience seems to be a premise of logic, which is the nature of this principle of substance. It contains a materialistic element on the one hand, and on the other hand it subsumes matter under idealistic transcendental forms.

The second analogy concerns causality, as Kant explains: “All alterations take place in conformity with the law of the connection of cause and effect.”⁵¹ Causality is the most difficult and important among Kant’s categories. If it can be said that the principle of substance is about existence, then the principle of causality is about process. The principle of substance aims at refuting rationalism, which advocates spiritual substance, while the principle of causality aims at refuting empiricism, which denies the existence of causality. These two aims are intimately related. The principle of causality is based on the previous analogy, that is, the principle of substance; but it goes further because causality and the alteration of things must be based on the existence of the immutable, i.e., substance, and substance in turn is the

true that Kant uses many expressions to refer to substance, and often refers to it as the force of motion, i.e., repulsion and attraction. He also identifies it with the permeating ether, in such statements as that matter (the ether) “is distributed everywhere in the universe,” that “all matter is physically divisible,” and that “matter proceeds the formation of bodies” (see *Metaphysical Foundations of Natural Science*).

⁴⁹Kant, and Kemp Smith, *Critique of Pure Reason*, A185/B228.

⁵⁰Ibid., B278.

⁵¹Ibid., B232.

fundamental and primitive “cause.” However, any change in a substance has a cause. A thing without a cause, e.g., a religious miracle, does not belong to the realm of knowledge, and therefore cannot constitute an object of science. In the *Philosophical Notebooks*, Lenin first quotes a passage from Hegel: “Substance attains ... actuality only when it has become cause,” then comments: “On the one hand, knowledge of matter must be deepened to knowledge of Substance in order to find the causes of appearance. On the other hand, the actual cognition of the cause is the deepening of knowledge from the externality of appearance to the Substance.”⁵² This dialectical process of development and transmutation, from substance to causality to community, is also a process of deepening cognition in everyday life. Hegel will take over and lay stress on this insight, whereas Kant himself only occasionally mentions it without fully arguing for the relation of transmutation in these categories.⁵³

Newton established the law of causality in mechanics to explain the existence and movement of material in the universe. According to this law, everything, from the sun and stars to dust, is controlled by the objective causality of mechanics. This view has been conclusively proved by empirical facts. Kant, in fact, endeavors to establish such a universal principle in philosophy.

Before Kant, Hume was already skeptical of causality and argued that causality is not a logical or purely rational relation as the rationalists had said. Rather, it is a subjective habit that people form through experience. People often observe that A appears before B, and B and A are often related in such a manner that when they are encountered people are accustomed to believe that A is the cause of B. That is to say, the habit of “A before B” makes people believe that “A, thus B.” Hume argues that a causal relation for A to B cannot be deduced from a mere analysis of their concepts, and from this he concludes that causality does not exist in the objective world.

Kant certainly opposes the rationalists’ reduction of cause to logical reason, and he holds that causality is not a relation of pure logic that is guaranteed or proven by reason. For Kant, logical truths arise out of the mere analysis of concepts, while causes require the synthetic unity of experience. However, he is not happy with empiricism either. Arguing against empiricism, which rejects causality altogether, Kant points out that the concept of succession is not the same as the succession of concepts. The latter is an association in psychological experience, whereas the former involves passing a logical judgment about objective facts. Therefore, Kant demands that we distinguish two orders, a subjective succession and an objective succession. What standard can be employed to distinguish these two orders? Kant explains that it depends upon whether the order of succession can be reversed. A subjective succession is a perceptual order that can be reversed at will. For

⁵²*Philosophical Notebooks*. Marx Engels Internet Archive 1994.

⁵³Kant states that “causality leads to the concept of action, this in turn to the concept of force, and thereby to the concept of substance” (Kant, and Kemp Smith, *Critique of Pure Reason*, A204/B249).

instance, when looking at a house, we are free to look from the roof to the foundation, or the reverse, from the foundation to the roof. This sequence of perception is reversible. In addition, subjective imagination can also be shifted randomly. An objective succession, on the other hand, is not at the disposal of our will, and its sequence is irreversible. For instance, the perception of a boat going downstream can only be from upstream to downstream, and cannot be reversed in accordance with our arbitrary wishes. This sequence of perception is forced on us by external objects that oblige us to perceive them in a certain way.⁵⁴ That is to say, objective succession consists of an inevitable connection, namely, causality. An objective succession in time has the causality of the objects as its premise.

Therefore, the consciousness of this time-order is also the consciousness of causality in objective things. Because of causality, nature constitutes an objective time-order. Although the different locations of the boat at different times are not themselves a relation of cause and effect, the apprehension of this objective sequence presupposes the category of causality. Kant explains:

For instance, I see a ship move downstream. My perception of its lower position follows upon the perception of its position higher up in the stream, and it is impossible that in the apprehension of this appearance the ship should first be perceived lower down in the stream and afterwards higher up. The order in which the perceptions succeed one another in apprehension is in this instance determined, and to this order apprehension is bound down.⁵⁵

In the perception of an event there is always a rule that makes the order in which the perceptions (in the apprehension of this appearance) follow upon one another a necessary order. In this case, therefore, we must derive the subjective succession of apprehension from the objective succession of appearances.⁵⁶

In conformity with such a rule there must lie in that which precedes an event the condition of a rule according to which this event invariably and necessarily follows. I cannot reverse this order [...] Let us suppose that there is nothing antecedent to an event, upon which it must follow according to rule. All succession of perception would then be only in the apprehension, that is, would be merely subjective, and would never enable us to determine objectively which perceptions are those that really precede and which are those that follow [...] That is something merely subjective, determining no object; and may not, therefore, be regarded as knowledge of any object.⁵⁷

Only in so far as our representations are necessitated in a certain order as regards their time-relations do they acquire objective meaning.⁵⁸

Note that Kant refers here to the logical order of time rather than the duration or lapse of time and his remarks thus also apply to events of simultaneous causality,

⁵⁴Arthur O. Lovejoy holds that what Kant proves is the different perception of static and moving objects rather than the difference of reversibility and irreversibility between subjective and objective succession.

⁵⁵Kant, and Kemp Smith, *Critique of Pure Reason*, A 192/B237.

⁵⁶Ibid., A 193/B238.

⁵⁷Ibid., A 193-4/B238-9.

⁵⁸Ibid., A197/B243.

such as fire (cause) and warmth (effect). Kant argues: “The time between the causality of the cause and its immediate effect may be [a] vanishing [quantity], and they may thus be simultaneous; but the relation of the one to the other will always still remain determinable in time.”⁵⁹ Nevertheless, like time, cause and effect are irreversible. It should also be mentioned that the irreversibility of apprehension is not automatically a relation of causality. Kant does not mean that that which precedes is necessarily the cause of that which follows; sequence is only an indicator of objective causality.

Kant’s argument for causality is rather intricately wrought, and while some scholars break it down into as many as five distinct arguments, I do not intend to go into those details here.⁶⁰ The main point is that a rule of succession is necessary for the order of apprehension to be neither a merely subjective and arbitrary perception nor a mere fiction of representation. Our subjective perception must obey the objective succession of things and also originate from necessary causality. The objective causality in objects is the prerequisite for a corresponding time-order in subjective perception. Otherwise, time-order itself could neither exist nor be meaningful.

But this is only one side of Kant’s argument. He also holds that since we can objectively cognize objects, empirical scientific knowledge is therefore possible. We can discover the objective causality relating objects because our understanding carries time-order over into our perception, which is the result of the category of causality acting on sensual material through its temporal schema. Kant explains that “[the understanding’s] primary contribution does not consist in making the representation of objects distinct, but in making the representation of an object possible at all. This is done by carrying the time-order over into the appearances.”⁶¹ In other words, although we do not yet know specific causes and effects, which we have to discover in experience, the transcendental concept of causality, as a category of the understanding, assures us that everything that exists has a cause.

Kant first argues that the objective causality of objects determines the subjective succession of perception. He then argues that our transcendental categories underwrite the experience of particular causal relations among empirical objects by their regulation of perception. As mentioned, the transcendental category of causality has no objective application that is independent of experience. I have also pointed out that it is not only logically independent of any specific empirical causality, but is also the prerequisite of all empirical causes and effects. Thus Kant refutes the Leibniz-Wolffian contention that causality belongs to pure reason and admits of transcendental application to things in themselves. Kant also refutes Hume, who holds that causality is a subjective habit of perceptual representation and lacks objectivity. Kant maintains that, on the one hand, the application and validity of causality must lie in experience while, on the other hand, causality has universal

⁵⁹Ibid., A203/B2438.

⁶⁰For discussions on the topic, see the works of Kemp Smith and T. D Weldon.

⁶¹Kant, and Kemp Smith, *Critique of Pure Reason*, A 199/B244.

validity and does not arise from experience. Such is Kant's ambivalent stance toward causality, emphasizing both its objectivity (which must lie in experience and cannot, therefore, be subjective perceptual habit but must be sought in objective objects) and its transcendental ideality. It is imposed on experience by our understanding, and arises only from the transcendental categories of the understanding. He has no choice but to waver between the two opposite views.

Kant's attempt to reconcile this irreconcilable conflict results in his being caught in a dilemma. The dominant part of this dilemma is the transcendental aspect. As in the first analogy, "substance" is a transcendental category while, for example, protons and electrons are given by empirical science. In the same manner, the universal category of causality is transcendental while specific laws of causality in science must be discovered by experience. To put it simply, in whatever we do or think, in whatever discipline of science, we first have the idea that everything that exists has a cause, then we start to pursue the cause in some specific case. It would be impossible to carry out any inquiry if we did not first have the very idea of causality. This is one difference between human beings and animals. According to Kant, the idea of causality is a transcendental category and belongs to human reason (in its broad sense). This category directs, regulates, and organizes particular thoughts and the general form of sensuous material; the idea that everything has a cause is not induced from experience. The specific empirical induction that, say, all crows are black would be invalid the moment we see a single white crow. However, if we have a scientific attitude, whenever we encounter something that seems to be without a cause, we redouble our effort to discover its cause rather than conclude that, in fact, it has none. So we cannot really doubt the idea that everything has a cause. It is evident that this idea is not induced from experience but is instead universally and necessarily applicable to all objects of experience, and can therefore only come from reason, as a transcendental category of the understanding. Kant's proposition that reason gives laws to nature and that, just as a judge questions a defendant, reason poses questions to nature and demands an answer from it also contains this implication.

4.5 Transcendental Principles of the Understanding

III. Community and Three Standards of Empirical Thought

Having discussed the categories of substance and causality, Kant proceeds to expound on the category of community. Its principle is "all substances, in so far as they can be perceived to coexist in space, are in thoroughgoing community."⁶² Community includes interrelation, when two things are cause and effect for each other. Its temporal schema is "simultaneous existence." However, perception cannot grasp simultaneous existence, which manifests as the perception of A and B

⁶²Ibid., B256.

reciprocally exchanging locations; furthermore, in causality, because of the sequential temporal order, A and B cannot do so either. Since there is a necessary objective relation between the objects, it is possible to perceive them in reverse order, but this relation can only be apprehended through the category of community with its schema of simultaneous existence.

This category is less important than those of substance and causality, though one point deserves our attention. We should remember that the exposition focuses on space, rather than on time as in the other expositions. Space, as the form of outer intuition, is different from time, which is the form of inner intuition. Space is more closely related to the objective reality of experience, therefore it exercises greater determination on the objectivity of objects. In the second edition of the *Critique of Pure Reason*, Kant augments the emphasis on space.⁶³ In the *Metaphysical Foundations of Natural Science*, he also lays great stress on space. In that work, space has the same important position as does time in the *Critique of Pure Reason*. Kant's conception of the principle of community is consistent with the direction of physical research in his time, which employed Newton's laws of mechanics to investigate spatial relations and positions between, for example, the sun and planets. For Kant, reason alone is not sufficient to grasp the category of community, whose objective reality can only be determined through intuition, specifically, the outer intuition of space. Only in space can reciprocal relations and influence between matter and substances be apprehended. It is also through community that different spatial locations can manifest their coexistence, and that nature can be experienced as mutually related. Just as the principles of substance and causality expressed the state of natural science at the time, the principle of community expressed in philosophy the prospect in science (astronomy in particular) that the mutual relation of objects, including their causality, constituted the whole domain of mechanics. However, Kant does not consider his philosophical principles to be drawn from natural science. On the contrary, he believes that natural science is made possible by the transcendental principles of the understanding he describes. The principle of substance (continual (持续) existence) makes the knowledge of the birth and death of things possible. The principle of causality (necessary succession) makes the knowledge of change possible. The principle of community (simultaneous existence) makes the knowledge of simultaneous relation and covariance possible.

According to Kant's table of categories, the principle of community, as the third item in the category of relation, has the significance of being a final cause. In other words, the category of community (the third principle) stands for substances (the first principle) causally related (the second principle) to each other. Hegel further develops this point, and makes community the supreme category of the logic of essence.

⁶³In the discussion of substance and causality, Kant states that "to demonstrate the objective reality of this concept, we require an intuition in space (of matter). For space alone is determined as permanent [...] in order to exhibit alteration as the intuition corresponding to the concept of causality, we must take as our example motion, that is, alteration in space. Only in this way can we obtain the intuition of alteration" (Kant, and Kemp Smith, *Critique of Pure Reason*, B291).

The section following the three categories of relation is entitled “The Postulates of Empirical Thought in General.” Unlike his earlier discussion, this section does not elaborate on the qualities of the categories but on the relation between categories and subjective knowledge. Unlike such categories as quantity, quality, substance, causality, and community, which are directed at external empirical objects, this category is directed at states of knowledge and is concerned with questions of the possibility, actuality, and necessity of knowledge. The knowledge in question is the knowledge of science or daily life, and for that reason its postulates are called the postulates of empirical thought, meaning the rules that empirical thought must abide by. There must first be sensibility as material to be determined within the scope of particular empirical cognition, thereby emphasizing the sensible objective aspect of these categories. The three postulates of empirical thought are as follows:

1. That which agrees with the formal conditions of experience, that is, with the conditions of intuition and of concepts, is possible.
2. That which is bound up with the material conditions of experience, that is, with sensation, is actual.
3. That which in its connection with the actual is determined in accordance with universal conditions of experience, is (that is, exists as) necessary.⁶⁴

Their temporal schemata are: to exist at some time (possibility), to exist in a period of time (actuality), and to exist at any time (necessity). Kant states that possibility can only be proven by sensation and experience, and that “without such confirmation [possibilities] are arbitrary combinations of thoughts, which, although indeed free from conflict, can make no claim to objective reality, and none, therefore, as to the possibility of an object such as we here profess to think.”⁶⁵ He points out that possibility in scientific knowledge is a sort of possibility of reality. A quality that is possible in experience must appear in time and cannot merely be a merely logical possibility in the realm of pure thought. Scientific and ordinary thought alike should be based on sense experience rather than on speculative reason preoccupied with the mere possibilities of things. Leibniz’s monad would neither occupy time and space (without the schema of the category of quantity), nor perceive it (without the schema of quality categories). This impossible, contradictory monad is a substance, yet without causality or community with other substances (without the schema of category of relation), and a logical rather than a physical or empirical possibility without actual existence. Therefore, it is evident that formal logic’s law of non-contradiction cannot be the criterion (准则) for the possibility of empirical knowledge. Anything that violates the law of non-contradiction is not possible in logic but may nonetheless be a possible reality, such as, the unity of opposites discussed in Chap. 1. Also, something logically non-contradictory may be possible in logic but not possible in reality if it does not meet the formal

⁶⁴Kant, and Kemp Smith, *Critique of Pure Reason*, B266.

⁶⁵Ibid., A223/B270.

conditions of experience. For instance, forming a figure with two straight lines is logically possible, but the reality of daily life cannot provide appropriate sensible intuitions, therefore such a figure is not a real, empirical, objective possibility, as was also the case for Leibniz's monad.

It is all the more so in the case of reality. Kant states: "I do not, indeed, demand immediate perception [...] What we do, however, require is the connection of the object with some actual perception, in accordance with the analogies of experience."⁶⁶ He illustrates with an example of the perception of the magnetic attraction of iron filings. Although we cannot immediately perceive the magnetic field, we know its existence by analogy. That is to say, although we might not perceive a thing at the present moment, it must be connected with some actual perception in accordance with the analogies of experience. Although actuality has greater scope than immediate sensation, it is fundamentally based on perception and must finally be proven by perception. This point demonstrates that from the categories, applied to perception, we can deduce the actuality of other things. Actual things are not limited to the narrow scope of immediate perception. One aspect of this principle is directed at rationalism, which purports to establish the actuality of objects merely on the ground of reasoning.⁶⁷ The other aspect is directed at empiricism, which denies the existence of objects on the ground that they cannot be proven by sensations.⁶⁸ Kant's principle stresses perception as the ground for reasoning but also denies immediate sensations as the criterion for actual existence. Kant's work thus imparts to philosophy the new scientific method of combining experience and mathematics which natural science had also recently adopted.

The category of necessity implies that "the necessity of existence can never be known from concepts, but always only from connection with that which is perceived, in accordance with universal laws of experience."⁶⁹ That is to say, necessity cannot be a product of thought and reason, as the rationalists think. What is properly described as necessary is not determined by mere logic, but has to be confirmed through actual sensation, on the ground of the analogies of experience. The proposition that "All men are mortal" is an example of such necessity. Kant holds that this proposition does not logically negate its opposite, "Some men are immortal." The second proposition is logically possible although it cannot be proved by experience. Therefore, the proposition "All men are mortal" is not logically necessary but is instead a necessity of empirical reality, which relates to

⁶⁶Ibid., A225/ B272.

⁶⁷In the *Mathematical Principles of Natural Philosophy*, Newton also exhibits an inclination to refute idealism, demanding the rejection of hypotheses. He states that "the qualities of bodies are only known to us by experiments."

⁶⁸On the one hand, Kant despises that sort of meaningless conceptual speculation, while on the other hand, he admires the achievements of logical reasoning. He says: "Every logically perfect cognition always has some possible use, which, although we are as yet unacquainted with it, will perhaps be found by posterity. If in the cultivation of the sciences one had always looked only to material gain, their use, then we would have no arithmetic or geometry." Kant (1992).

⁶⁹Kant, and Kemp Smith, *Critique of Pure Reason*, A227/B279.

scientific knowledge. The necessity of a proposition such as “Some men are immortal” cannot be established from the data provided by experience. Therefore it should be banished from the realm of knowledge and scientific investigation. It is evident that Kant’s emphasis on necessity is also an emphasis on the relation of knowledge to empirical perception.

As to the difference and relation among the three categories, Kant states elsewhere that “possibility is thought without being given; actuality is given without being thought; necessity is given through being thought.”⁷⁰ His idea is that although possibility meets the requirements of the formal conditions of empirical knowledge, i.e., the principles of the three categories mentioned above, it is not presently given in sensation. Actuality is already given but yet to be proven, that is, it has not yet been brought under the formal conditions of empirical knowledge. Necessity is the unification of these two; the object is given by data provided by sensation and is determined by the schemata of the categories of substance and causality. Possibility thus provides the formal conditions of experience and actuality provides the material conditions. The former comprise forms of intuition, time, space, and the categories of the understanding; the latter is sensation. Actuality unifies possibility and necessity. In fact, actuality is already a unity rather than being merely the material of sensation.

Kant did not fully unfold the relations among the three. Hegel took over at this point from Kant, and developed the relations into a set of dialectical ideas which are interdependent and transmutable. For instance, actuality and necessity, which are ambiguously equated in Kant, are developed into a profound dialectical relation. On this basis Hegel proposes such well-known doctrines as “what is rational is real, and what is real is rational” and “in the course of its development reality proves to be necessary.” On the other hand, in developing Kant’s three categories, Hegel abandoned the materialistic element of Kant’s conception, that is, his assumption that any actual existence must relate directly or indirectly to the experience of the senses (all scientific instruments and measuring devices are merely extensions of our sense organs for the sake of expanding our perception). Therefore, we can see that unlike Hegel’s effort to make these categories dialectical, Kant’s focus is on their nexus with knowledge. Kant repeatedly emphasizes, at the end of the section on the principles, that the categories of the understanding cannot have transcendent employment separated from sensibility. In his conclusion he says:

The final outcome of this whole section is therefore this: all principles of the pure understanding are nothing more than principles a priori of the possibility of experience, and to experience alone do all a priori synthetic propositions relate—indeed, their possibility itself rests entirely on this relation.⁷¹

⁷⁰Quoted from Kemp Smith, *A Commentary to Kant's 'Critique of Pure Reason.'*

⁷¹Kant, and Kemp Smith, *Critique of Pure Reason*, B294.

Moreover:

All concepts, and with them all principles, even such as are possible a priori, relate to empirical intuitions, that is, to the data for a possible experience. Apart from this nexus they have no objective validity, and in respect of their representations are a mere play of imagination or of the understanding.⁷²

And again:

They cannot, when separated from all sensibility, be employed in any manner whatsoever.⁷³

Were it not for sensibility, the categories of the understanding would only be a logical possibility without objective actuality and universal validity, and consequently would be of no value to knowledge. Kant holds that since epistemology seeks to inquire into the question of the correspondence between concepts and objective objects, it cannot obtain knowledge purely through logic. Therefore, as I take it, Kant's emphatic belief that the pure understanding cannot cognize reality, his demand for unity between the understanding and sensibility and between universal principles (categories of the understanding) and particular reality (sensations of experience), and his refutation of the dogmatism implicit in both rationalism and empiricism is of important constructive value to epistemology and is a philosophical expression of the methodology and epistemology of the experimental science of his time. These are important parts of Kant's philosophy, which many Kantian scholars have tended to dismiss lightly or brush aside.

On the other hand, the understanding, which Kant requires to be united with sensibility, is fundamentally transcendental, and entirely isolated from sensibility. Kant emphasizes the interdependence of the understanding and sensibility in experience, and neither concepts nor intuitions can be excluded in cognition. But he separates and contrasts the nature and origins of the understanding and sensibility. Therefore, the unity of the two is merely a confused assembly of dualistic components. Because sensibility and understanding are fundamentally separated, sensibility cannot rise to the level of understanding, while understanding and its categories cannot be derived from sensibility. Sensibility is rooted on the earth, while understanding is in the heavens. As a result, the understanding, because of its lofty position, rules over sensibility, that is, the transcendental rules over experience.

The reason is epistemological. Kant does not understand the historical origin of the categories of the understanding and the stages of development of rational knowledge. He realizes that the categories of the understanding cannot be abstracted directly from scraps of sensible experience (as is conceived by Locke), therefore he bluntly separates them from experience in his idealistic transcendental manner. Hegel also claims that "the categories are not contained in the sensation as it is given us. When, for instance, we look at a piece of sugar, we find it is hard,

⁷²Ibid., A239/B298.

⁷³Ibid., A248/B305.

white, sweet, etc. All these properties we say are united in one object. Now it is this unity that is not found in the sensation. The same thing happens if we conceive two events to stand in the relation of cause and effect. The senses only inform us of the two several occurrences which follow each other in time. But that the one is cause, the other effect—in other words, the causal nexus between the two—is not perceived by sense; it is only evident to thought.”⁷⁴ If it is true that the categories, such as substance and causality, are functions of thought, and cannot by any means be given in sensation, then where do these functions and categories come from? How do the categories of thought arise? Hegel does not give a straightforward answer. Instead he regards thought as the noumenon of the world, from which he deduces everything. In so doing, Hegel sees no need to answer this question.

4.6 The Kantianism of the Theory of Causality in Natural Science

To Kant, the importance of the category of causality to natural science (physics) is like that of the forms of intuition, time and space, to mathematics: they are transcendental elements that vouchsafe the establishment of science. The question of causality has been an important topic in modern theories of physics. In some of the influential debates on this topic, Kant’s name has often been mentioned and he rarely goes unmentioned in philosophical writings on natural science, while Hegel is completely obscured in this field and, in fact, skillfully skirted around the problem of causality.

Werner Heisenberg states: “Kant says that whenever we observe an event we assume that there is a foregoing event from which the other event must follow according to some rule. This is, as Kant states, the basis of all scientific work [...] Therefore, the law of causality is reduced to the method of scientific research; it is the condition which makes science possible.”⁷⁵ But Heisenberg immediately points out that this theory will not do for modern physics. In the micro-world, the causal determination of classical mechanics is replaced by statistical probability, leading to the claim that causality no longer exists, and even the declaration that the electron has “freedom of the will.” He states that “the atoms or the elementary particles themselves are not...real; they form a world of potentialities or possibilities rather than one of things or facts.”⁷⁶ Niels Bohr, on the other hand, proposes his complementarity principle as an epistemology capable of unifying human knowledge. He underlines an “uncontrollable interaction between the object and the measuring instrument.” The limit between the subject and the object can be indefinite, thus it cannot be subjected to arbitrary division, and that which belongs to psychology and

⁷⁴Hegel, *Encyclopedia of the Philosophical Sciences: Logic*, §42.

⁷⁵Werner Heisenberg, *Physics and Philosophy: The Revolution in Modern Science*, Chap. 5. [quoted from Du Preez (1991).].

⁷⁶*Ibid.*, Chap 9.

physics becomes complementary: the subject of perception creates the object. Bohr states that “any observation necessitates an interference with the course of the appearance, which is of such a nature that it deprives us of the foundation underlying the causal mode of description. [...] Causality may be considered a form of perception by which we reduce our sense impressions to order.”⁷⁷

The logical positivist M. Aebi criticizes Kant’s view of causality for having triggered Hegel’s determinism, and Hans Reichenbach refutes Kant’s transcendental category of causality and the supposed axiom that “everything that exists has a cause.” “This argument,” Reichenbach says, “is fallacious. If we seek for a particular cause, we need not assume that there is one. We can leave this question open, like the question of what is the cause.”⁷⁸ Moreover, “the empiricist Hume appears superior to [...] the rationalist Kant.”⁷⁹ Reichenbach states that “it has sometimes been said that this problem is specific for quantum mechanics, whereas for classical physics there is no such problem. This is, however, a misunderstanding of the nature of the problem. Even in classical physics we meet with the problem of the nature of unobserved things [...] let us assume we look at a tree, and then turn our head away. How do we know that the tree remains in its place when we do not look at it?”⁸⁰ This obviously inclines towards Berkeleyianism.

The circumstances are complex. It can also be seen, in the general tendency to regress from Kant back to Berkeley, that some scholars waver between Hume and Kant, or retrace their course from Hume to Kant. Increasingly, the latter tendency has been overwhelming the former.

Contemporary literature on quantum mechanics mostly admits causality. Max Born, an eminent figure in the field of quantum mechanics, maintains that “causality is such a principle, if it is defined as the belief in the existence of mutual physical dependence of observable situations,” then “[metaphysical problems] are ‘beyond physics’ indeed and demand an act of faith.”⁸¹ The logical positivists A. J. Ayer and Herbert Feigl are also, to a certain extent, inclined to move from Hume to Kant. They gradually acknowledge that it is not right to reduce all science to experience (sensible material). Philosophers such as Gilbert Ryle note as well that categories do not depend merely on the use of language. Even Russell eventually acknowledges things that are neither purely logical nor merely empirical. These people all appear to be vehemently criticizing Kant but they are in fact admitting the value of Kant’s a priori synthesis. They expound on such questions as how to apply logic

⁷⁷Bohr (1934).

⁷⁸Reichenbach (1951).

⁷⁹Ibid.

⁸⁰Hans Reichenbach, *Philosophic Foundations Of Quantum Mechanics*. Reichenbach also expresses dissatisfaction with logical positivism, holding that theories cannot be completely reduced to “observational statements.” He thus shows a realistic inclination toward acknowledging the independence of the physical world.

⁸¹Max Born, *Natural Philosophy of Cause and Chance*. In *Human Knowledge: Its Scope and Limits*, Bertrand Russell states that “belief in an external cause of perception is embedded in animal behavior and in the very idea of perception, as it is implied in common language.”

(analysis) to experience (synthesis), and how concepts can unite with experience in science. All these views are distorted forms of Kant's question about how a priori synthetic judgments are possible.

The case is the same for some of Einstein's philosophical views. He believes that causality and the existence of the objective world are independent of human beings. This stance is quite different from the Copenhagen school of quantum mechanics.⁸² Einstein holds that while causality exists, it is still a belief that cannot be proven; but he nonetheless states that "the belief in an external world independent of the perceiving subject is the basis of all natural science."⁸³ He also believes that although concepts are given by experience, they are not induced from experience; on the contrary, sense experience is organized by our concepts so as to constitute knowledge. These concepts are our free creation. In order to have value for cognition, these concepts must be connected with sensible material.

Einstein repeatedly states:

All our thoughts and concepts are called up by sense-experiences and have a meaning only in reference to these sense-experiences. On the other hand, however, they are products of the spontaneous activity of our minds; they are thus in no wise logical consequences of the contents of these sense-experiences.⁸⁴

The concepts which arise in our thought and in our linguistic expressions are all—when viewed logically—the free creations of thought which cannot inductively be gained from sense experiences.⁸⁵

For even if it should appear that the universe of ideas cannot be deduced from experience by logical means, but is, in a sense, a creation of the human mind, without which no science is possible, nevertheless this universe of ideas is just as little independent of the nature of our experiences as clothes are of the form of the human body.⁸⁶

It is evident from these statements that Einstein nearly repeats Kant's view.⁸⁷ The only difference between them is that Einstein insists that all concepts (not just

⁸²Although it was a mistake for Einstein to deny the significance of probability in the microcosm, he is more clearheaded than some other representatives of quantum mechanics on the philosophical issues. Einstein calls the notion of "free will" nonsense, and points out that "our present rough way of applying the causal principle is quite superficial [...] Quantum physics has presented us with very complex processes and to meet them we must further enlarge and refine our concept of causality" ("Conversations on Causality and Free Will," see Max Planck's *Where Is Science Going?*).

⁸³"Maxwell's Influence on the Evolution of the Idea of Physical Reality," see Maxwell.

⁸⁴Einstein (1955).

⁸⁵Albert Einstein, "Remarks on Bertrand Russell's Theory of Knowledge," in *The Philosophy of Bertrand Russell*, ed. Paul Arthur Schilpp.

⁸⁶Albert Einstein, *The Meaning of Relativity*.

⁸⁷Einstein's philosophical views are rather complicated, and have undergone much change in his lifetime. Roughly speaking, his views can be summarized as follows: (1) Natural laws are objectively independent of human thought or experience; (2) belief in such laws is a religious feeling; (3) the content of such laws is not determined by perception, but rather by thought, though the evidence that confirms them is perceptual; (4) therefore, it is free imagination rather than induction (experience) or deduction (logic) that discovers natural laws and the concepts by which

the twelve categories Kant selected) are free creations rather than transcendental. This difference is certainly not substantial, as Einstein himself admits: “The theoretical attitude here advocated is distinct from that of Kant, only by the fact that we do not conceive of the ‘categories’ as unalterable (conditioned by the nature of the understanding), but as (in the logical sense) free conventions. They appear to be a priori only insofar as thinking without the positing of categories and of concepts in general would be as impossible as is breathing in a vacuum.”⁸⁸

Kant would have agreed with and probably would have approved of Einstein’s view. In a certain sense, it is out of the same concern that Kant proposes a priori synthetic judgments, which resemble neither pure analytic nor pure synthetic judgments; while Einstein proposes free imagination, which is neither logical deduction nor empirical induction. They both concentrate on the question of human creative activities and the functions of cognition. As to the question how these activities and functions work, that remains a philosophical and scientific problem that needs further investigation. In the same way as Einstein opposes the criterion of observability for empirical reality, one of the characteristics of modern natural science is to maintain that theories are invented rather than discovered, that theories precede observation, and that any genuine systematic theory has some content or factor that is unobservable and cannot be proven by experience. Such a systematic theory actively constructs abstract theory and ideal models through the nexus of highly mathematical abstractions and particular empirical data, deducing and predicting new realities in advance of experience and observation.

The human creative, psychological function has been increasingly exhibiting its power and influence and profoundly manifesting its cognitive spontaneity, which neither empirical induction nor logical deduction can explain. Therefore it is not surprising to see the shadow of Kantianism flitting about in the theories of the natural scientists. Quantum mechanics and Einstein are representative examples of this. In the 1930s, H. J. Paton said that “the scientists themselves are finding paradoxes and inconsistencies thrust upon them as in the case of the quantum theory and the theory of relativity. It is even asserted that time is merely a human way of looking at things, and is not to be found in the physical world; and that we are aware only of our own measurements, but have no idea of what it is that we are measuring. Such assertions, made quite independently of Kant’s influence, look very like a revival of the Kantian doctrine.”⁸⁹

they are expressed. Like Kant, Einstein wanders between rationalism and empiricism and seeks to reconcile them.

⁸⁸Einstein, “Reply to Critics”, in *Albert Einstein: Philosopher—Scientist*, ed. Paul Arthur Schilpp.

⁸⁹Paton (1936, Chap. 2).

B. B. Wolman also said that “theoretical physicists, among them Niels Bohr, De Broglie, Arthur Eddington, Albert Einstein, Werner Heisenberg, James Jeans, Max Planck, and Erwin Schrodinger, are today’s leading philosophers of the physical science. They do not share the beliefs of Mach and Wittgenstein; Max Planck (1931) was highly critical of the logical positivists, [...] does not believe Carnap and Lear, his epistemology is not logical positivism” (*Handbook of General Psychology* (New Jersey: Prentice Hall, 1973), 31). However, not every theoretical

Engels had already remarked earlier that “propositions that were advanced in philosophy centuries ago, which often enough have long been disposed of philosophically, are frequently put forward by theorising natural scientists as brand new wisdom and even become fashionable for a while.”⁹⁰ This is true enough, even if Kant’s propositions have yet to be dismissed.

Some Neo-Kantians of an older generation attempted to reduce causality to an innate physiological structure. F. A. Lange suggested that “perhaps some day the basis of the idea of cause may be found in the mechanism of reflex action and sympathetic excitation. We should then have translated Kant’s pure reason into physiology and made it more easily conceivable.”⁹¹ The concept of causality as an innate physiological structure is still favored by some scholars.⁹²

Even though the idea was challenged long ago, it nonetheless **deserves notice** because evolutionary history might have influenced physiological structures such as the cerebral cortex.⁹³ This is a difficult scientific question that deserves further investigation. In particular, we need a physiological psychology developed from the viewpoint of the philosophical idea of sedimentation if we are to scientifically discover a channel from society (history) to psychology (the individual). The progression from a **deep-level history to a deep-level psychology**, from social practice and historical achievement to the psychological mechanisms of consciousness and the unconscious, might well become the direction for future philosophy and science. This is also a scientific prerequisite for the complete solution to the riddle of Kant’s transcendental doctrine. From an epistemological point of view, genetics is surely a mere potentiality of physiology. For that potentiality to transmute and develop into actuality requires social practice (and, for the individual, education).

physicist has the same philosophical inclination. For instance, Max Planck is inclined towards realism and Schrödinger to subjective idealism; but in general the philosophical inclinations of these physicists, founders of modern physical science, cannot be confined to Humeanism (or logical positivism), and many of them lean toward Kantianism.

⁹⁰Engels (1994b).

⁹¹F. A. Lange, *History of Materialism*, vol. 2, Chap. 2.

⁹²Heisenberg was sympathetic to ideas from genetics. Some linguistic philosophers claim that the roots of language might be biological. See Chomsky’s doctrine of deep structure.

⁹³For instance, the Japanese scholar Kuwaki Genyoku points out in his accessible book *Kant and Modern Philosophy* that ignorance of the philosophical significance of the Kantian transcendental theory led to the use of the theory of evolution to explain this idea.

4.7 “The Proof of Necessity Lies in Human Activity, in Experiment, and in Labor”

As with the problem of time and space, the various doctrines mentioned above attempt to correct Kant’s category of causality, either from the perspective of Kantianism, Humeanism, or Berkeleyanism. Historical materialism seeks to criticize Kant’s transcendental doctrine from the perspective of anthropology in order to discover the realistic origin of the category of causality.

Engels is very concerned with the problem of causality, and has many discussions about this topic. He states: “The empiricism of observation alone can never adequately prove necessity. Post hoc but not propter hoc [...] But the proof of necessity lies in human activity, in experiment, in work: if I am able to make the post hoc, it becomes identical with the propter hoc.”⁹⁴ “In this way,” he says, “by the activity of human beings the idea of causality becomes established, the idea that one motion is the cause of another. True, the regular sequence of certain natural appearance can by itself give rise to the idea of causality: the heat and light that come with the sun; but this affords no proof, and to that extent Hume’s skepticism was correct in saying that a regular post hoc can never establish a propter hoc. But the activity of human beings *forms the test* of causality. If we bring the sun’s rays to a focus by means of a concave mirror and make them act like the rays of an ordinary fire, we thereby prove that heat comes from the sun.”⁹⁵ Causality refers to the essential and necessary nexus among things.

Discovering this essential nexus and forming the notion of causality does indeed require more than perception, observation, and induction, and could not be carried out by animals. It is a mode of rational knowledge characteristic of human beings, and can arise only through the social practical activities of human beings over their long history.

The question of how knowledge is possible fundamentally arises from the question of how the human being is possible. Only by looking at the social consciousness of human beings—including categories such as causality—from the viewpoint of the latter question, that is, from the viewpoint of the social existence of human beings, can the question find a historical-materialistic answer in terms of a theory of practice that does not separate man from man’s social nature. From the perspective of human origins, the practical activities of human beings are different from the living activities of animals. The most essential difference lies in using and making tools. The hands and upright posture that are characteristic of human beings result from the use of tools.⁹⁶ A consequence of using and making tools in practical

⁹⁴Engels, *Dialectics of Nature. Complete Edition of Marx-Engels*, vol. 20, 572.

⁹⁵Ibid., 573.

⁹⁶Kant holds that man’s upright posture was not naturally formed, but was impelled by reason. He argues that while nature preserves man as an animal species, reason compels him to stand upright. He thinks this upright posture is not physiologically beneficial but serves human purposes and makes human beings superior to animals. “On the Essential Corporeal Differences Between the

activities is not only that human beings’ limbs and organs become extended, but that they also come to grasp the laws of external nature in order to use those laws to act on nature.

First, the manifold of practical activities of using and making tools (clubs, stone and bone tools of different functions and shapes, different ways of holding and handling these tools) fundamentally breaks the inflexibility, limitation, and particularity of the limbs, organs, and merely physical or biological capacities of the human species, which go beyond anything the limbs and organs of animals can do (their sharp fangs, claws, nimble legs or wings, or any abilities such as running, preying, or climbing). The latter are determined by the animal’s living activities, which can only serve to limit the animal. **The limbs, organs, and abilities of animals are limited by the objective causal relations that gradually evolved into animal instinct and are passed on generation after generation.** Human abilities are poles apart from this. By actively acting on reality and bringing about manifold and extensive objective causalities, the objective attributes and laws of the material world of reality are increasingly and exhaustively revealed through our practical activities. The transmutation of quantity to quality is evident.

In natural history, the extraordinary transition from ape to human begins with the transition from tools as scarce and intuitive to tools in great quantity and non-intuitive in both use and procedures of construction. The ground of this transition is primitive practical activity. In this process, primitive operations are refined and abstracted into action-thought, then joined with language, gradually evolving into the systematic concepts of language-thought. As I have repeatedly stressed, primitive sorcery and ritual play a decisive role in mediating this transition. Therefore, the ultimate explanation of how objective laws of causality can be grasped by human beings and how causality becomes an important category of knowledge lies, first of all, in the practical social activities of human beings rather than in passive perception, observation, and induction. As Engels points out: “The mastery over nature, which begins with the development of the hand, with labour, widened man’s horizon at every new advance. He was continually discovering new, hitherto unknown, properties of natural objects.”⁹⁷

Causality, as an important attribute of the objective world, gradually emerges in human consciousness through primitive language. Yet it has its own historical development from the specific to the abstract. In the beginning, the notion of cause is very specifically connected with particular things and ideas (see the vast literature on primitive society). It took a long time for the category of causality and the understanding that “everything that exists has a cause” to develop, and to gradually be abstracted from particular notions of cause.⁹⁸ In essence, this category is a

Structure of Animals and Humans,” 1771. This simple idea of two hundred years ago is rather interesting.

⁹⁷Engels (1994a).

⁹⁸Piaget offers many insightful arguments from child psychology in his study of the origin and development of ideas such as causality.

necessary product of human practice and cannot be a product of mere induction. On the other hand, the formal emergence and use of causality as a dialectical category appears much later in history, as do other categories, such as *yin-yang*, the five elements, complementary opposition, and the unity of opposites. Engels states that “dialectical thought—precisely because it presupposes investigations of the nature of concepts themselves—is only possible for man, and for him only at a comparatively high stage of development (Buddhists and Greeks), and it attains its full development much later still through modern philosophy.”⁹⁹

We see, then, that categories are neither empirical inductions from sensibility (empiricism), nor transcendental deductions of reason (Kant), nor logical hypotheses (positivism), nor rules of operation (pragmatism), nor physiological structures (Lange). Categories are not inductions of any individual perception or experience, but are rather the internal fruition of the historical practices of human society. The process from the prototype in the unconscious to the sign in consciousness to abstract dialectical ideas can arise only on practical grounds that contain social historical content. Empirical research limited to the experience of the senses and subjectivistic interpretation cannot explain this.

Not only the dialectical categories, but also rational knowledge, such as ordinary concepts and judgments that are abstracted from sensation and perception, are a leap unique to human cognition, and palpably manifest cognitive spontaneity. This leap also has its ground in practice and requires the language-signs of human society. Therefore, to the sensations of an individual (e.g., children), the concepts, judgments, and modes of reasoning that require language-signs appear to be transcendental forms of the understanding, as do Kant’s transcendental concepts of the understanding, imposed on the sensible experiences of the individual so as to constitute knowledge.¹⁰⁰ But what seems transcendental to an individual is actually abstracted from the long historical experience of the human community. Although the transcendental cannot be directly induced from individual perception, it can be effected by historical social practice within material reality, and preserved in our science and culture. The transcendental can accumulate and develop so as to increasingly expand human beings’ cognitive power.

Such thinking not only reflects the world but also creates a thinking subject no less than its thoughts. Thus arises our understanding of such propositions as “The labour of a man who has also disposable time, must be of a much higher quality than that of the beast of burden,”¹⁰¹ and “When it is of a scientific and at the same time general character, not merely human exertion as a specifically harnessed natural force, but exertion as subject ... appears in the production process not in a merely natural, spontaneous form, but as an activity regulating all the forces of nature.”¹⁰² It is the subject, with his creative activities of rational knowledge rather

⁹⁹Engels (1994a).

¹⁰⁰Kant of course does not think that ordinary concepts are transcendental, only the twelve categories of the understanding.

¹⁰¹Marx (1994a).

than his limited physical strength, who subdues the world. Human beings have been handing down this wealth of reason just as we hand down material wealth from generation to generation, developing it in the processes of transmission and preservation. The questions raised by Kant, Einstein, and Piaget need further inquiry from the basic viewpoint of anthropological ontology.

Kant raises the question of categories in an idealistic fashion. The gist of his treatment is to emphasize the spontaneity with which the subject cognizes the world. Kant sees that the knowledge of any object cannot be obtained without categories, although the subject may not be consciously aware of this. For instance, when we know that XX is XX, this ordinary judgment relies on categories such as substance. Kant believes that categories are different from general concepts and of greater importance in knowledge. His view is more insightful than that of the logical positivists, who hold that these abstract concepts and categories are useless and should be eliminated. Marxism also underscores the significance and central function of categories in knowledge. Lenin remarks in the *Philosophical Notebooks* that “man is confronted with a web of natural appearance [...] Conscious man does distinguish, categories are stages of distinguishing, i.e., of cognising the world, focal points in the web, which assist in cognising and mastering it.”¹⁰³ And, “the moments of the cognition (=of the ‘idea’) of nature by man—these are the categories of logic.”¹⁰⁴ Moreover, “these categories serve people in practice.”¹⁰⁵ The specific modality of the category of causality certainly changes as the sciences develop; it can either be a classical linear sequence or a modern reticular structure with feedback functions.

There is a concept of causality in classical determinism, and another in modern probability and non-mechanical determinism. The concept’s specific form cannot be unchangeable a priori, although being an abstract philosophical concept, it nonetheless has a particular kind of law of conservation. Concepts of matter have altered their specific forms, and so too the philosophical category of substance.

This holds all the more for the account of schematism. Schemata have the characteristic of a formal construction according to laws. Whether as the necessary ladder to ascend to theories of pure science, or in the application of theories to practice (e.g., models, blueprints, or charts), schemata are a very important link to knowledge and have a significant status, even a central one, in scientific theories, inventions, and designs. Examples such as Mendeleev’s periodic table of chemical elements, which is not only a schema but also a theory, emphasize this point. It is also the case with various “models” in physics, which function as bridges between experiments and theories. Theoretical modeling has posed a difficult question for the methodology of modern science, when the procedure becomes far more

¹⁰²Marx (1994b).

¹⁰³Lenin (1994).

¹⁰⁴Ibid.

¹⁰⁵Ibid.

important than empirical observation.¹⁰⁶ The schemata that Kant attributes to creative imagination are intimately related to this topic, which requires further inquiry if we are to fully understand the contribution of spontaneity to the theory of knowledge in modern science.

Kant does not explain the reason why categorical schemata are always temporal. Some scholars say that it is because thought (the understanding) necessarily occupies time. Kant indeed holds that time is the form of inner sense, so that the existence of outer objects depends on inner sensations of time. This is also why some scholars identify Kant with Berkeley. In fact, time as a transcendental schema is essentially what Lenin calls “a focal point in the web” of knowledge that results from the spatialization and internalization of human practical activities. The fact that time occupies a more important position than space in the philosophies of Kant and Hegel is actually related to the question of the human being (society). Kant maintains that animals do not have consciousness of change, i.e., no time, because they only have outer intuition and no inner intuition, while Hegel believes that nature does not have development in time, only repetition in space. It is also because of this that many philosophers emphasize time in a mystic manner. Time is a profound question in science and philosophy.¹⁰⁷ For instance, the relation between time and mathematics, the significance of time and mathematics in the schematism, the identity between homogeneous time and pure magnitude, and the relation between the part and the whole all have important scientific and philosophical implications.

However, Kant, because of his idealistic approach, turns the question upside down. We must recognize that it has been the social practice of human beings over a long history to internalize the laws of the objective world as categories. Kant, on the contrary, believes that ahistorical, transcendental categories are applied to sensibility through temporal schema. Hegel trods after Kant on the same track. Instead of seeing the formation of the categories of dialectics in the historical practices of human beings, he turns human history into the unfolding of the absolute idea. Idealism separates the spontaneity of cognition from the long history of human practice and in so doing human knowledge becomes transcendental and like a stream without source or a tree without roots.

Thus it is evident that the theory of practice has first of all to reverse transcendental theory, so as to discover its ground in reality. Kant’s transcendental doctrine holds that categories are products of a priori reason, while the theory of practice maintains that they are historical products of objective practice. Transcendental doctrine believes that schemata are the work of a priori imagination employed to combine the material of sensibility and organize experience, while the theory of practice regards these schemata as an abstraction from sensibility,

¹⁰⁶See Nagel (1961).

¹⁰⁷Zhang Binglin (1868–1936) says that “it is because of his idea of past and future that man differs from birds and beasts.” “A Rebuttal to the Proposal for the Adoption of Esperanto in China.” The Confucian *Analectics* and the Daoist *Zhuangzi* have similar sayings. Time has been a philosophical topic at all times and in all lands.

although still a creative, objective abstraction. So, should the spontaneity of cognition be explained in a mystical manner, or traced to the spontaneity of practice? This question takes its most concentrated form in the theory of self-consciousness, which is the center of Kant’s epistemology.

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Chapter 5

Epistemology: IV. Self-consciousness



5.1 Self-consciousness as the Heart of Kant's Epistemology

Kant expounds his thoughts on self-consciousness in the section entitled “The Original Synthetic Unity of Apperception,” which is a key part of Kant’s epistemology and has also been regarded as the most difficult section of the *Critique of Pure Reason*. It has even been called the enigma of Kant’s epistemology. The question of self-consciousness is mainly dealt with in the Transcendental Deduction of the categories, which falls under the division of the Transcendental Analytic.¹ Kant states: “I know no enquiries which are more important for exploring the faculty which we entitle the understanding, and for determining the rules and limits of its employment, than those which I have instituted in the second chapter of the Transcendental Analytic under the title Deduction of the Concepts of the Understanding. They are also those which have cost me the greatest labour labour, as I hope, not unrewarded.”²

The difficulty as well as the importance of this section are due to the fact that Kant raises, in an idealistic manner, the question of cognitive spontaneity, which in turn is invoked to solve the question of the objectivity of knowledge. Like the transcendental exposition of time and space, the transcendental deduction aims to explain why categories have universal, necessary, objective validity in their empirical use. The argument moves through the idea and transcendental conditions of “self-consciousness,” which becomes the ground and origin of the pure concepts of the understanding (i.e., the categories) discussed in the previous chapter. The application of the categories of the understanding is merely its particular fulfillment. Kant takes the transcendental unity of this “self-consciousness” (also called the

¹The so called Transcendental Deduction, as Kant explains, is not a deduction in the sense of logic but rather that of law, where to deduce is to prove. The point of the Transcendental Deduction is to prove the objectivity of the categories.

²Kant, and Kemp Smith, *Critique of Pure Reason*, Axvi.

synthetic unity of pure apperception³) to be the highest point of knowledge. He states time and again that “the synthetic unity of apperception is therefore the highest point, to which we must ascribe all employment of the understanding, even the whole of logic, and conformably therewith, transcendental philosophy. Indeed this faculty of apperception is the understanding itself.”⁴ And, “the principle of the synthetic unity is the supreme principle of all employment of the understanding.”⁵ And again, “the principle of apperception is the highest principle in the whole sphere of human knowledge.”⁶ Kant argues that since time and space are immediately related to sensibility, they therefore have objectivity, whereas the categories do not have such an immediate relation with sensibility and their objective validity depends upon self-consciousness.

The transcendental deduction is divided into a subjective deduction and an objective deduction. These two parts are often so interwoven that it is very difficult to distinguish between them. In short, the subjective deduction inquires into the conditions of knowledge, how knowledge is possible from a subjective psychological perspective, and explains self-consciousness as arising in the process of the development of human knowledge. Kant says that this subjective deduction starts from the fact that consciousness first manifests as the consciousness of time, and he describes three syntheses of subjective spontaneity: the synthesis of apprehension in intuition, the synthesis of reproductive imagination, and the synthesis of recognition in a concept. The psychological element is rather prominent here.⁷ The objective deduction proceeds more directly.

Since transcendental categories arise from pure reason, how can they have objective validity in experience? Kant insists on the difference between our awareness of an empirical object and awareness of the self, or self-consciousness. The first edition of the *Critique of Pure Reason* focuses mainly on the subjective deduction, although Kant states in the Introduction that the objective deduction has more weight. He also explains that what he intends to discuss is not the question of how experience arises, which is a psychological question, but rather the philosophical question of how experience is possible at all. His replies to criticism indicate his difference from Berkeley. Kant made many changes to this section in the second edition, deleting many psychological arguments and stressing the objective deduction. Commentators have contributed a massive amount of

³The term “apprehension” is from Leibniz, who uses it to refer to the reflective consciousness of the inner state of sensibility. He states that perception is “the internal condition of the monad representing external things,” while apperception “is consciousness or the reflective knowledge of this internal state.” *The Principles of Nature and Grace*, §4. Kant uses “pure apperception” to emphasize that it is neither self-consciousness nor reflective knowledge.

⁴Kant, and Kemp Smith, *Critique of Pure Reason*, B134.

⁵Ibid., B136.

⁶Ibid., B135.

⁷Although some Kant scholars have denied this point, the entanglement of epistemology and psychology has nevertheless become a regular phenomenon in modern philosophy, much as contemporary philosophy has become entangled with linguistics.

interpretation to the two deductions; and many scholars complain of the dry, dull writing, describing it as “an immense desert”⁸ that is difficult to navigate as they have pored over every sentence of these “arabesque” passages.⁹ I do not intend to get entangled in this topic and will only give brief and summary comments on this section.

I mentioned in a previous chapter that Kant clearly demarcates between sensibility and understanding. How are the two faculties related to each other in cognition? He argues that objects can only give us a manifold of sensible representations. The combination of elements in this manifold is beyond the power of sensibility and relies on imagination, which in turn has to rely upon what it combines into concepts, which finally unify the manifold. Kant states:

But the combination (*conjunction*) of a manifold in general can never come to us through the senses, and cannot, therefore, be already contained in the pure form of sensible intuition [...] All combination—be we conscious of it or not, [...] is an act of the understanding. To this act the general title ‘synthesis’ may be assigned [...] and that of all representations combination is the only one which cannot be given through objects. Being an act of the self-spontaneity of the subject, it cannot be executed save by the subject itself.¹⁰

Although combination means the synthesis and the unity of the manifold, unity cannot arise out of mere combination. “On the contrary, it is what, by adding itself to the representation of the manifold, first makes possible the concept of combination.”¹¹ In other words, sensibility can give only a jumble of representations (colors, sounds, and so on). What combines and synthesizes these disorderly elements into an object (chair, tree, and so on) is the active unity of the consciousness of the subject. The priority of this unity (which is not a precedence in time) makes possible the combination of the manifold.

So what is this unity and where does it come from? Kant believes that it does not arise from categories such as unity and substance. On the contrary, it is the prerequisite for the application of the categories (that is, it makes the use of the understanding possible). It is a sort of fundamental synthetic unity. Kant calls it “the original synthetic unity.” The key term in this phrase is “synthetic.” In Chaps. 2 and 4, I have pointed out that synthesis is the prerequisite of knowing truth, and the ground of categories. After the expositions of the categories, Kant immediately raises the question of a transcendental deduction, which leads to the exposition of the schemata and the principles of the understanding. The focal point of the transcendental deduction is synthesis, specifically, the original synthetic unity, the synthetic unity of apperception. In a letter written in his later years, Kant put down his thoughts in a concise manner:

The concept of the synthesized in general is not itself a particular category. Rather, it is included in every category (as synthetic unity of apperception). For that which is

⁸Paton, *Kant's Empirical Metaphysics*.

⁹Weldon, *Kant's Critique of Pure Reason*.

¹⁰Kant, and Kemp Smith, *Critique of Pure Reason*, B130.

¹¹*Ibid.*, B131.

synthesized cannot as such be intuited; rather, the concept or consciousness of synthesizing (a function that, as synthetic unity of apperception, is the foundation of all the categories) must be presupposed in order to think the manifold of intuition (that is, what is given) as unified in one consciousness. In other words, in order to think the object as something that has been synthesized, I must presuppose the function of synthesizing; and this is accomplished by means of the schematism of the faculty of judgment.¹²

5.2 Subjective Deduction

In this section, Kant first explains how unity arises from the consciousness of time. He states that “all our knowledge is thus finally subject to time, the formal condition of inner sense. In it they must all be ordered, connected, and brought into relation.”¹³ First of all, the consciousness of temporal continuity allows the intuitions of sensibility to manifest as a manifold or manyness. Otherwise, each moment would be isolated, and could only be an absolute single entity, and could never constitute knowledge. Therefore, a simple perception already contains the gathering and unity of a manifold of sensations as well as time consciousness. In other words, a unity is contained at the outset of perception, and it combines the manifold of sensible representations. Otherwise, the elements of the manifold would merely be isolated, fragmentary, and disorderly intuitions. Rather than passively receiving that which sensibility supplies, the unity that synthesizes the manifold must operate with the active synthetic function of the soul.

This is what Kant calls the synthesis of apprehension in intuition.

Second, representations must be preserved in memory and then reproduced by imagination (which Kant calls “a blind but indispensable function of the soul”). Only in this way can sensible intuitions (i.e., the manifold of sensibility) combine in a certain sequence, and one perception connect and unify with another. Otherwise, with the arrival of the second perception, the first one would have already been forgotten, making a complete representation impossible. This process of imagination is obviously related to a consciousness of time and proceeds in time. This is what Kant calls the synthesis of reproduction in imagination. In fact, the synthesis of apprehension in intuition discussed earlier is also inseparable from the operation of imagination.¹⁴

¹²Letter to J. H. Tieftrunk, December 11, 1797. Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 245.

¹³Kant, and Kemp Smith, *Critique of Pure Reason*, A99.

¹⁴In *Anthropology from a Pragmatic Point of View*, Kant divides imagination into three types: (1) Plastic imagination, for instance, spatial images in dreams (uncontrolled) or artistic images (controlled); (2) association; (3) affinal imagination, for example, imagination that combines the manifold of the same object. Reproductive imagination is an instance of the second type. Kant believes that the third type is the most important to cognition.

The third as well as the most important synthesis is that of recognition of a concept. Since “if we were not conscious that what we think is the same as what we thought a moment before, all reproduction in the series of representations would be useless.”¹⁵ Therefore the concepts are needed to combine and synthesize the representations recalled by imagination with representations of present perception, and to recognize the successive perceptions and the manifold impressions of imagination as referring to the same single object of cognition. Thus comes about knowledge of an object. Without the contribution of concepts, the combination of perception and imagination could not possibly constitute an object of knowledge. Concepts must be imposed on the manifold of intuitions to unify and synthesize representations. Kant states that “the word ‘concept’ might of itself suggest this remark. For this unitary consciousness is what combines the manifold, successively intuited, and thereupon also reproduced, into one representation.”¹⁶ Only through concepts can the identity of an object in consciousness be possible, or an object even appear to exist. In fact, concepts synthesize and unify at the outset of perception. This is all the more so in the case of imagination, which does further synthesis by means of concepts. Kant attaches great importance to the immense function that concepts have in knowledge, and he regards them as the essential difference between human beings and animals.

Kant believes that because of the spontaneous unity in the consciousness of the subject that combines and synthesizes, we can know an object by means of perception, imagination, and concepts; disorderly sensible impressions can become a unified object by means of a synthesis of perception, imagination, and concepts. The unity of the object arises from the synthetic unity of the consciousness of the subject that constitutes it. This unity of the consciousness is the “I think.” That is to say, in the activity of synthesis, the “I think” preserves its continuity and identity. For the activity of synthesis to be consistent and stable, the “I think” must be its ground. In other words, a permanent “I think” must act as the ground for all syntheses of perception, imagination, and concepts. This is the exposition of the original synthetic unity of apperception, i.e., the self-consciousness.

Kant repeatedly stresses that without the synthetic unity of apperception (i.e., self-consciousness), no synthesis of concepts, imagination, and perception would be possible. The manifold of intuition would only be a mass of incomprehensible sensations, a jumble of colors, and so on, which could neither be combined nor synthesized to constitute an object of knowledge, and this would preclude experience no less than objective knowledge. Kant explains that “it must be possible for the ‘I think’ to accompany all my representations [...] All the manifold of intuition has, therefore, a necessary relation to the ‘I think’ in the same subject in which this manifold is found. But this representation is an act of spontaneity, that is, it cannot be regarded as belonging to sensibility. I call it pure apperception.”¹⁷

¹⁵Kant, and Kemp Smith, *Critique of Pure Reason*, A103.

¹⁶Ibid., A103.

¹⁷Ibid., B131-132.

Sensible material must be combined, synthesized, and unified at the commencement of sensible intuition. These sensible materials cannot automatically unify themselves. There must be a spontaneous subject that is constantly active in the process of synthetic unification, abstracting sensations (sound, color, scent, taste, etc.) into concepts in order to constitute an object of experience (a piece of sugar, a flower, a table, etc.). Such a functioning subject and the faculty of the subject is the “I think,” i.e., the self-consciousness. “I think” is also the unity of the cognitive process, which is not possessed by animals. Kant states that “animals have apprehensions, but not apperceptions, and cannot, therefore, make their representations universal.”¹⁸ To Kant, the self-consciousness is the fundamental characteristic of human cognition, while imagination and the understanding merely manifest the self-consciousness of the subject under difference circumstances. The self remains latent in the understanding and imagination, but becomes self-conscious in the application of concepts, when it first becomes aware of itself.

The subjective deduction begins from empirical facts of inner sense and time consciousness, argues for the empirical self-consciousness from a psychological point of view, and then derives the a priori self-consciousness. I want to draw attention to the main point here, which is the important spontaneous function of the subject in the psychological process of cognition. Even the simplest perception contains cognitive spontaneity, which is often constitutional rather than an entirely passive reflection. Modern psychology offers many illustrations of this point. For instance, human sense perception enjoys substantial latitude and is often carried out under the control of concepts, as is hinted at in the well-known saying “We only see what we know.”¹⁹

The question of self-consciousness is also noteworthy. In a certain sense, the combination of the manifold in sensation and the synthesis of apprehension in intuition are all related to this question. Self-consciousness is not something that arises when external objects attract the instinctive needs of the subject. Such consciousness is spontaneous. In my opinion, **conscious attention is the earliest psychological expression of human spontaneity, which restrains spontaneous consciousness and instinctive needs.** The object of conscious attention has nothing to do with animal instinct, desire, interest, or demand.²⁰ The sense of sight combines, synthesizes, and unifies visual with motor and tactile sensations, not because of external objects such as food, but because of subjective practical human activities (labor), and the conscious attention these activities compel. It is only in such a way that our physical labor can gradually meet with the demands of objective laws and achieve its aim of serving species survival.

¹⁸Quoted from Kemp Smith, *Commentary to Kant's Critique of Pure Reason*.

¹⁹Reports on feral children supposedly raised by animals illustrate this point very well. These children have no awareness of stimuli, even powerful ones, that do not attract their attention.

²⁰See Ribot (1890). Unfortunately, modern psychology has not investigated this question under controlled conditions and has not made much of a contribution to this topic.

The earliest spontaneous psychological characteristic unique to human beings, which arises in the process of the using and making tools, is the earliest “intellectual state” that distinguishes human beings from other animals. Over history, the objective causality of labor (such as hunting for food with weapons) is gradually reflected and finally internalized as a subjective notion of causality. Apes can make and use tools under both natural and laboratory conditions (Wolfgang Köhler’s experiments are well known). But these activities are individual contingences rather than historically necessary species activities and they cannot engender spontaneous psychological capacities such as self-consciousness so as finally to form concepts of causal relation. Apes cannot apprehend the significance and function of using tools as a causal link to the subject’s acquiring food. Consequently, it is not surprising that they do not preserve or improve on the tools they happen to use. Instead, they just toss them away.

The key to human consciousness lies in the subject’s using and making of tools. By continuously combining, synthesizing, and unifying sensations so as to preserve the consciousness of the identity of the objects, the subject becomes conscious of an objective object. This is transcendental apperception, which is precisely a product of human labor, and is further refined and preserved through the activities of primitive sorcery and ritual. Indeed, experiments have shown that apes only have consciousness of objects, but not self-consciousness of their own activities, while children cultivate this capability in their social environment and education. Thus the cultivation of this self-consciousness has nothing to do with instinct but is instead an outgrowth of early education. This self-consciousness is also closely linked with another capability unique to human beings, namely, self-control. The spontaneity of knowledge (including sensations) historically arises from the spontaneity of practice (i.e., human labor).

After self-consciousness, imagination is another important characteristic of the spontaneity of human psychology. Sensory consciousness is not only related to individual things, but is also under active control. The issue is very complicated, so I will not go into detail here. I do not intend to further discuss the cognitive spontaneity of concepts for the reason that these points will sound familiar to most readers. Thus I end my discussion of psychological development by emphasizing that the characteristic of spontaneity is unique to human beings.

It seems to me that the study of human psychology should be differentiated from animal psychology. The former should proceed from psychological structures and characteristics that emerge from social practice, and then sensations and perception should be investigated. Since human social practice differs from an animal’s survival activity, human sensations and perceptions differ from those of animals. Modern psychology has accumulated a great deal of firsthand data regarding these points, even though it has been unable to elucidate the question fully. Instead, human psychology has been biologized; the psychological characteristics of human spontaneity have been ignored, and the fundamental difference between human beings and animals has been blurred. Even Pavlov’s theory of two signal systems has this flaw.

Most modern psychological theories attempt to explain human psychology without touching on the fundamental ground of social history and fail to investigate the origin of practical activities in the millions of years since the dawn of the human species and the emergence of primitive society. I wish to point out again that the origin of human psychological characteristics lies in the physical activities of using and making tools. These activities are consolidated in collective life through social and ideological activities such as sorcery and elaborate rituals and are eventually transformed into psychological forms, functions, and features. Isolated from anthropology, these psychological questions cannot be solved.

Leslie White's theory of cultural anthropology deserves mention here. He correctly opposes the trend of reducing culture to psychology, and emphasizes the essential function of tools and signs (language) in forming culture, which transcends individual psychology. He stresses the fundamental importance of technology (e.g., energy and tools), but confuses material production with materialized spiritual production (e.g., the production of ideology and signs), and fails to note the importance of using and making tools in the genesis of psychological structures that are unique to human beings. Consequently his theory of cultural anthropology has some vulgarized and partial features. In short, the question of cognitive spontaneity that Kant's subjective deduction raises from a psychological point of view remains an important topic that has not yet been fully studied.

5.3 Objective Deduction

No empirical psychology can replace epistemology. The question of the objective truth of knowledge cannot be philosophically solved by arguing for transcendental apperception ("I think") in the subjective deduction, or by explaining the psychological functions involved in the cognitive process of synthetic unity. Hence, Kant stresses the objective deduction in the second edition. The subjective deduction basically argues from the process of constituting an object of knowledge to prove that the spontaneous "I think" of pure apperception must be the ground of this process, while the objective deduction sets aside this process to show how the understanding can correspond with objects and how categories have objectivity. In other words, it raises the questions of the relation between forms of knowledge and empirical content, between the unity of consciousness and the manifold of sensibility, and between self-consciousness and consciousness of an object. This is basically a subjective deduction in the psychological realm.

In philosophical terms, this subjective deduction is an analytic unity, such as saying that "I am I." What this statement says is that "the representations that I have are my representations." More important is the synthetic unity, which has to explain how the manifold of intuition, which is different from this "I," is combined and unified in my consciousness in a way that leads to truth. As a judgment, human knowledge is based on the categories of the understanding, but we do not yet have an account of how the categories apply to experience, i.e., how transcendental

understanding can have empirical application, which is the argument Kant calls the Transcendental Deduction. This problem cannot be solved merely by psychological argument.

The unity of the object that corresponds to the unity of self-consciousness must be explained, and the manifold of representations must be apprehended as belonging to the unity of the object.

Only in this synthetic, objective unity can the analytic unity or the subjective unity of self-consciousness be possible.

“Synthetic unity” and “analytic unity” are intricate concepts in Kant’s epistemology. Seen as abstractions from different representations, concepts have an analytic unity, that is, they proceed from the specific to the abstract. On the other hand, concepts have a synthetic unity insofar as they combine and unify the manifold of intuitions in thought, proceeding from the abstract to the concrete. For instance, only when the judgment that “this is a house” combines and unifies the manifold of representations under the concept “house” can that concept have specific content, i.e., apprehend the manifold in a concrete representation. This is synthesis, the manifold of intuition constitutes an object of knowledge through concepts.

Kant attaches great importance to this synthesis. To him, only when the synthetic unity combines different representations can the analytic unity be possible (that is, the abstraction of concepts). Synthesis is the ground and condition for analysis, and knowledge originates from synthesis. This point will become clearer if seen in the light of the statements made in the previous chapter, where I explained how judgment precedes concept. Kant finally moves from a psychological argument to a philosophical account and begins to investigate the consciousness of the object.

The consciousness of the object refers to the object constructed in consciousness, that is, the object as it appears to consciousness. Kant believes that this object does not arbitrarily arise from psychological processes such as association but is an objective order and unity which allows consciousness to surpass all natural psychological processes, such as animal association, and to acquire universal necessary knowledge. Kant directly raises the fundamental question in epistemology, namely, the subject-object relation between consciousness and existence. He states:

The synthesizing itself is not given; on the contrary, it must be done by us: we must synthesize if we are to represent anything as synthesized (even space and time) [...] The grasping (*apprehension*) of the given manifold and its reception in the unity of consciousness (*apperception*), is the same sort of thing as the representation of a composite (that is, it is only possible through synthesis), if the synthesis of my representation in the grasping, and its analysis insofar as it is a concept, yield one and the same representation (reciprocally bring forth one another). This agreement is applied to something that is valid for everyone, something distinguished from the subject, that is, an object, since it lies exclusively neither in the representation nor in consciousness but nevertheless is valid (communicable) for everyone.²¹

²¹Letter to S. Beck, July 1, 1794. Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 215.

His point is that the unity of knowledge can be explained not from the perspective of the subject, but from that of the object. This is an important insight in Kant's epistemology. However, in proving this argument, Kant becomes entangled in the subject-object dichotomy.

From perception to imagination to concept to object, the movement from sensation to knowledge and from concepts to objects are two aspects of the same process. To be conscious of an object (cognition) is a process in which the synthesis of perception and imagination come under a certain concept that agrees with the object. This is the basic content of Kant's objective deduction. The presupposition of the self-consciousness as apperception is necessary in order to demonstrate the objectivity of the agreement between the understanding and the object. Kant argues:

The transcendental unity of apperception is that unity through which all the manifold given in an intuition is united in a concept of the object. It is therefore entitled objective and must be distinguished from the subjective unity of consciousness.²²

The subjective unity of consciousness is an empirical unity, a combination of representations. For instance, as a perception, a table is merely a combination and unification of sensations such as hard, yellow, heavy, and so on. Kant holds that an object is not a mere combination of sensations, which was Berkeley's doctrine and makes empirical objects a mere "play of ideas" no better than a "daydream." Kant argues that perception, imagination, and knowledge have an objective ground and must be distinguished from views that see them as random collections of subjective sensations. In the *Prolegomena*, Kant explains this point rather clearly. He stresses the distinction between a "judgment of perception" and a "judgment of experience."²³ The former is a subjective judgment valid only for the individual and is a random combination of sensations, while the latter is an objective, i.e., universal necessary, judgment that is valid for everyone.

Kant states:

To think, however, is to unite representations in a consciousness. This unification either arises merely relative to the subject and is contingent and subjective, or it occurs without condition and is necessary or objective. The unification of representations in a consciousness is judgment. [...] Judgments are therefore either merely subjective, if representations are related to one consciousness in one subject alone and are united in it, or they are objective, if they are united in a consciousness in general, i.e., are united necessarily therein.²⁴

The objective validity of a judgment of experience signifies nothing other than expressing not merely a relation of a perception to a subject, but a property of an object; for there would be no reason why other judgments necessarily would have to agree with mine, if there were not the unity of the object – an object to which they all refer, with which they all agree, and, for that reason, also must all harmonize among themselves.²⁵

²²Kant, and Kemp Smith, *Critique of Pure Reason*, B139.

²³See *Prolegomena*, §18–20.

²⁴*Prolegomena*, §22.

²⁵*Ibid.*, §18.

Objective validity and necessary universal validity (for everyone) are therefore interchangeable concepts, and although we do not know the object in itself, nonetheless, if we regard a judgment as universally valid and hence necessary, objective validity is understood to be included.²⁶

A judgment of perception [...] has thus far only subjective validity; it is merely a connection of perceptions within my mental state, without reference to the object.²⁷

Here Kant carefully distinguishes his position from that of empiricists like Locke, Berkeley, and Hume. He stresses cognitive spontaneity and associates this spontaneity with the universal, necessary, objective validity of knowledge. Kant holds that passive receptivity (perception) forms subjective judgments that seem to proceed from experiences, such as sensations and perceptions, but actually only result in subjective judgments of perception, which do not have universal necessity. Such judgments, theoretically speaking, can lead to Berkeley's subjective idealism or Hume's skepticism. Therefore, objective validity cannot come from an immediate perception of the object, but only from the conditions that constitute universality. This is the function of the understanding, with transcendental apperception as its ground, which expresses a judgment of experience and constitutes objective knowledge. Kant states:

...if, however, through the concept of the understanding the connection of the representations which it provides to our sensibility is determined as universally valid, then the object is determined through this relation, and the judgment is objective.²⁸

To Kant, to say that a judgment is true is to say that it can construct its object under certain conditions. Therefore, objective truth does not lie in the passive reflection of the senses but in the spontaneous construction of thought. **Sensibility itself cannot guarantee the objectivity of knowledge, which can only be obtained through the imposition of reason (the categories of the understanding) on sensible material.** In other words, the objectivity of truth comes from the human cognitive spontaneity that is characterized by a synthesis of the understanding.

Because human beings use transcendental categories such as quantity, quality, causality, and substance to synthesize and unify the manifold of sensibility, knowledge can have universal valid objectivity. I have discussed in a previous chapter (on schemata and principles) how the categories can be applied to sensibility and how they constitute empirical objects and laws. Here we are dealing with the fundamental ground, i.e., apperception, or self-consciousness, where the categories possess the function of combining, synthesizing, and unifying sensations.

Kant explains that a proposition such as "the sun shines on a stone, the stone becomes hot" is merely a judgment of perception and does not have necessity.²⁹

²⁶Ibid., §19.

²⁷Ibid., §20.

²⁸Ibid., §19.

²⁹Kant is being contradictory here. For instance, in the *Critique of Pure Reason*, he holds that perception cannot pass judgment. Judgment must have the categories of the understanding imposing on it. Without the understanding, perception is not possible because perception is a

It still belongs to the empirical apperception of inner sense, that is, the mere combination of my subjective sensations. On the other hand, if we were to say, “the sun heats the stone,” this would be a different case.

This judgment is based on transcendental apperception and employs pure concepts of the understanding, specifically, the category of causality. The category of causality combines “the sun” and its necessary result “heats the stone,” making the judgment universal and objectively valid. Kant argues that a statement such as “bodies are heavy” is not merely a combination of two concepts in my perception. It is a combination of objects, regardless of the conditions of the subject. A judgment with a copula verb such as “to be” cannot be identified with “I feel,” because such a judgment has objectivity and can therefore be entitled a judgment of experience, in distinction from a judgment of perception.³⁰

As a natural scientist, Kant is indeed different from Bishop Berkeley. What Kant pursues is the universal, necessary, objective validity of knowledge. Thus, he has to acknowledge that the object does have its own order and nature, which cannot be altered according to our will. Kant believes that there is an objective “affinity” among the objects of appearance which compels us to imagine and think the objects according to certain laws or orders, and not whimsically.³¹ He explains that if cinnabar were sometimes red and sometimes black, sometimes light, sometimes heavy, without any objective order and stability, then our imagination would not be able to combine redness and heaviness into a synthetic representation, and we would not have any objective knowledge. The affinity of the object of appearance produces the objective unity which, in distinction from a mere subjective unity, determines consciousness of an objective representation. Because of objective unity, the manifold can be combined and synthesized in an object, and intuition can be associated with consciousness to constitute knowledge. Obviously this objective unity refers to the structural features of objective laws, which the object manifests in consciousness. Kant attempts to reduce objective unity to consciousness of the object.

combination and synthesis of the manifold of sensibility. Kant further argues that, without the transcendental activities of imagination, no definite intuition is possible. Kant’s commentators have proposed various solutions to these problems. Caird believes that, without the understanding, even sensible material is not possible and there would be a mere heap of elements in a chaotic manifold. Others, such as Lindsay, hold that without the understanding there could still be images, although they could not constitute objects of knowledge.

³⁰“E.g., *In touching the stone I sense warmth*, is a judgment of perception, but on the other hand, *The stone is warm*, is a judgment of experience” (*Lectures on Logic*, §40).

³¹Affinity, in particular, transcendental affinity, is another term for which Kant does not give a clear explanation. Affinity can be seen as belonging to the subject rather than the object, and as the result of an a priori synthesis of imagination. The transcendental synthesis of imagination is the origin of affinity. But I will not dwell on this term here.

5.4 The Interdependence of the Self-consciousness and Consciousness of the Object

In the objective deduction, self-consciousness corresponds with the consciousness of the object. So what is self-consciousness? Kant explains that it is not empirical, but is rather an a priori self-consciousness. The empirical self-consciousness is what the self is aware of itself in thought, perception, imagination, memory, and so on. A priori self-consciousness differs from this empirical self-consciousness. Kant holds that just as consciousness of an object is merely an unstable manifold, the “I” of the empirical self-consciousness is also a volatile sensible experience. On the other hand, a priori self-consciousness is a permanent form of the consciousness that is unique to human beings. It logically precedes all definite thought. This “self” is not a sense experience of the individual but a form of knowledge. Therefore, Kant calls it the transcendental self. Perceptions and sensations belong to the individual, and because of a priori self-consciousness and the knowledge that it grounds, they are able to rise to the level of objective cognition. But a priori self-consciousness cannot independently exist without the empirical consciousness of experience. It exists as a form in all empirical consciousness and is determined by the consciousness of the object in experience. It is called a priori because it is universally and necessarily applicable to empirical knowledge and has objective validity.

Here we reach the crucial part of Kant’s argument, namely, the interdependence of the self-consciousness and consciousness of the object. On the one hand, transcendental self-consciousness is only a pure form and cannot exist independently, but only as empirical consciousness, i.e., the consciousness of an object. Therefore it is evident that self-consciousness is determined by the consciousness of the object. On the other hand, the consciousness of the object is only possible when transcendental apperception applies the categories of the understanding to the intuitions of sensibility. Hence, the consciousness of the object is principally determined by the self-consciousness. Only with the consciousness of the object, which is directed by thought and necessarily related in inner sense, can self-consciousness, as transcendental apperception, exist in reality; otherwise, there would only be empty nothingness. Without the synthetic identity of consciousness of the object, the soul cannot think that its own identity is transcendental. At the same time, the object, as an item of appearance, becomes a comprehensible unity because it is subordinated under and obeys the forms of apperception of transcendental self-consciousness. The consciousness of the object is constructed and established by transcendental self-consciousness and its sensible material. On the one hand, the object compels us to think in such and such a way; on the other hand, the objective laws of the object are possible only if transcendental self-consciousness applies the categories to the manifold of sensibility. Unlike an empiricist, Kant points out that the universal necessary knowledge of objective truth does not rely on the senses alone, but comes from the understanding. It is the spontaneous understanding, given with self-consciousness, that guarantees the

objectivity and truth of knowledge. Unlike a rationalist, Kant stresses that the spontaneous understanding cannot exist independently of sensible experience. On the contrary, it is expressed solely in empirical consciousness and depends on the knowledge of specific objects. Without objects the spontaneous understanding would not be possible, nor would objective knowledge and the criteria of truth. Hence, the objective order and unity of specific objects determine the synthetic unity of self-consciousness. It is evident, then, that the self-consciousness cannot be separated from, but is dependent on, consciousness of the object, whereas consciousness of the object is constructed by the self-consciousness.³² Consequently, the self-consciousness and the consciousness of the object are antithetical as well as interdependent, they mutually determine each other despite lacking any association. Thus, the problem of the relation between objectivity and the spontaneity of knowledge is all the more prominent.

This conflict is the result of Kant's dualistic views. It arises because Kant admits there is a manifold of sensibility that is independent of self-consciousness and that any knowledge of empirical objects must begin with given sensible material. Just as empirical concepts have their corresponding empirical objects, self-consciousness also has its corresponding object, that is, the transcendental object. As an indefinite "something," the transcendental object is the prerequisite of all judgments of experience. For instance, when we judge something to be a flower, the manifold of intuition given to us by the judgment concerns a certain object that is independent of the soul rather than a mere subjective conjury of sensation. Because there is such a "something" existing a priori in our cognition, our knowledge enjoys objective validity. Kant argues that the activity "I think" would not happen if the empirical representations did not give material for thought. He states that "only our sensible and empirical intuition can give to them [concepts] body and meaning."³³ On the other hand, apperception (the self-consciousness in synthetic unity) must be the condition of the understanding's combining, organizing, and ordering sensible material so as to form an object and constitute knowledge. Because of the self-consciousness, i.e., the synthetic unity of apperception, that "something" can become a known thing and the object of the subject's conscious awareness. "The synthetic unity of consciousness is, therefore, an objective condition of all knowledge,"³⁴ Kant says, and "only in intuition, which is distinct from the 'I,' can a manifold be given; and only through combination in one consciousness can it be

³²“The concept ‘object’ is a means of taking into account the persistence in time or the continuity, respectively, of certain groups of experience-complexes. The existence of objects is thus of a conceptual nature, and the meaning of the concepts of objects depends wholly on their being connected (intuitively) with groups of elementary sense-experiences. This connection is the basis of the illusion which makes primitive experience appear to inform us directly about the relation of material bodies (which exist, after all, only in so far as they are thought).” Einstein (1955).

³³Kant, and Kemp Smith, *Critique of Pure Reason*, B149.

³⁴*Ibid.*, B138.

thought.”³⁵ The manifold comes from the sensible object while the unity comes from the understanding of the subject. Only through the categories of the understanding can experience be known as an object. But it still relies on sensible material to determine what sort of an object it is. Kant argues that “empirical laws, as such, can never derive their origin from pure understanding. That is as little possible as to understand completely the inexhaustible multiplicity of appearances merely by reference to the pure form of sensible intuition. But all empirical laws are only special determinations of the pure laws of the understanding, under which, and according to the norm of which, they first become possible.”³⁶ As I said in a previous chapter, the category of causality, as a form, belongs to the understanding while specific causal laws and relations depend on specific objects of experience. Thus, a priori self-consciousness and the transcendental object are complementary to each other and together they form the ground for knowledge. Kant holds that this ground is unknowable. We shall fully discuss this topic in Chap. 7.

The purpose of Kant’s argument on self-consciousness is to oppose Leibniz’s doctrine of pre-established harmony, which holds that it is due to a predestined harmony that the object conforms with our knowledge. To Kant, such a metaphysics transcends possible experience and is therefore impossible to prove. Kant also opposes the epistemology of Locke’s empiricism, which holds that our knowledge and categories conform with objects because they arise from our experience with objects. Kant argues that such a view is impossible because categories cannot arise from experience. Hence he needs to find a third way, which he does with his theory of the conformity between knowledge and the object that is established by the formal conditions of experience. Kant calls this “the Copernican Revolution” in epistemology. Although he opposes Leibniz’s pre-established harmony, he nevertheless replaces it with a pre-established harmony between understanding and sensibility, i.e., the harmony among the inner faculties of the subject. Consciousness of an object can only be established through the harmony of the consciousness of the subject. In the interdependent relation between self-consciousness and consciousness of an object, the former plays the major role. “The object,” which appears in the manifold as the unity of consciousness, is the object of that consciousness, and the conditions that constitute self-knowledge are identical with the conditions that form the object of knowledge. The conditions of the subject’s knowledge of the object and those of the objectivity of knowledge become identical. The synthetic unity of self-consciousness, Kant states, “is not merely a condition that I myself require in knowing an object, but is a condition under which every intuition must stand in order to become an object for me.”³⁷ Everything is carried out in the realm of transcendental self-consciousness. Kant transforms the pre-established harmony, which Leibniz regards as “objectively adopted” (i.e., holding among things), into a pre-established harmony that is

³⁵Ibid., B135.

³⁶Ibid., A128.

³⁷Ibid., B138.

“subjectively adopted” (i.e., holding among the transcendental faculties of experience and knowledge). Kant argues that these are “two faculties belonging to the same nature, in which sensibility and the understanding harmonize to form experiential knowledge.”³⁸ The origin and harmony of these two are transcendently determined and unknowable. Consequently, the ontology of Leibniz’s rationalism turns into Kant’s transcendental epistemology.

5.5 Kant’s Opposition to Treating the “Self” as the Entity of the Soul

Self-consciousness, as the active, major, determinate aspect of the form of apperception and the capacity of synthetic unity, cannot exist independently of the consciousness of an object and the experience of the senses. Kant specifically stresses that self-consciousness is neither inner sense nor the “I think” of Descartes’ doctrine, nor is it the awareness of the entity of the soul, as was held by the rational psychology of the time. Apperception differs from inner sense because it is a transcendental faculty (a form) without any sensible intuition. It transcends space and time, while inner sense belongs to the empirical self-consciousness. Transcendental apperception (the “I think”) is a condition that makes empirical self-consciousness possible, while the empirical self-consciousness unfolds in inner sense and its manifold. The empirical self-consciousness in inner sense, on the other hand, requires consciousness of the external world as its premise. Therefore, the Cartesian *cogito* cannot be Kant’s transcendental self-consciousness. The latter is a pure form while the former has empirical content.

In arguing against Descartes’s doctrine of *cogito ergo sum*, Kant points out that the indubitable inner experience of the “I think” is possible only on the condition of external experiences of something other than the “I,” a non-I. The consciousness of “I” is precisely the consciousness of that which is outside of the consciousness of “I.” Kant states:

I am conscious of my own existence as determined in time. All determination of time presupposes something permanent in perception. This permanent cannot, however, be something in me, since it is only through this permanent that my existence in time can itself be determined. Thus perception of this permanent is possible only through a thing outside me and not through the mere representation of a thing outside me; and consequently the determination of my existence in time is possible only through the existence of actual things which I perceive outside me. Now consciousness [of my existence] in time is necessarily bound up with consciousness of the [condition of the] possibility of this time-determination; and it is therefore necessarily bound up with the existence of things outside me, as the condition of the time-determination. In other words, the consciousness of

³⁸Letter to Marcus Herz, May 26, 1789. Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 154.

my existence is at the same time an immediate consciousness of the existence of other things outside me.³⁹

In the above proof it has been shown that outer experience is really immediate [...] inner experience is itself possible only mediately, and only through outer experience.⁴⁰

The subject must be determined. But in order so to determine it, outer objects are quite indispensable; and it therefore follows that inner experience is itself possible only mediately, and only through outer experience.⁴¹

Not only are we unable to perceive any determination of time save through change in outer relations (motion) relatively to the permanent in space (for instance, the motion of the sun relatively to objects on the earth).⁴²

His point is that the inner experience of "I think" can only have the outer experience of "what I think" as its premise. From the thinking I, which differs from that which I think, we cannot deduce that the thinking I can produce that which I think, for that material content can only be given by experience. Without such experience, the "I" is merely an empty form. Only with the existence of empirical objects is the inner experience of "I think" possible. The thinking I itself, as a form, is not an object of sensible intuition. Therefore, from "I think" we cannot deduce the conclusion that "I am." Being cannot be deduced from thought. Being must have its evidence in sensible intuition given by the thing in itself. Kant explains:

The 'I' is indeed in all thoughts, but there is not in this representation the least trace of intuition, distinguishing the 'I' from other objects of intuition. Thus we can indeed perceive that this representation is invariably present in all thought, but not that it is an abiding and continuing intuition, wherein the thoughts, as being transitory, give place to one another.⁴³

I do not know myself through being conscious of myself as thinking, but only when I am conscious of the intuition of myself as determined with respect to the function of thought.⁴⁴

My existence cannot, therefore, be regarded as an inference from the proposition 'I think,' as Descartes sought to contend.⁴⁵

In the Transcendental Dialectic, Kant again devotes a good deal of space to refuting the doctrine of soul as substance in rational psychology. Rational psychology is an extension of Leibniz's rationalism. In the *Monadology*, Leibniz argues that "it is also through the knowledge of necessary truths and through abstractions from them that we come to perform Reflective Acts, which cause us to think of what is called the I, and to decide that this or that is within us. It is thus, that in thinking upon ourselves we think of being, of substance, of the simple and compound, of a material thing and of God himself, conceiving that what is limited

³⁹Kant, and Kemp Smith, *Critique of Pure Reason*, B276.

⁴⁰Ibid., B276-277.

⁴¹Ibid., B277.

⁴²Ibid., B277-278.

⁴³Ibid., A350.

⁴⁴Ibid., B406.

⁴⁵Ibid., B422.

in us is in him without limits. These reflective acts furnish the principal objects of our reasonings.”⁴⁶ Unlike Leibniz, Kant emphasizes that “I think,” i.e., the self-consciousness, is not a substance known by reflection, because without sensible intuition the category of substance cannot be applied. Kant explains that “the unity of consciousness, which underlies the categories, is here mistaken for an intuition of the subject as object, and the category of substance is then applied to it. But this unity is only unity in thought, by which alone no object is given, and to which, therefore, the category of substance, which always presupposes a given intuition, cannot be applied.”⁴⁷ The transcendental “I think” does not have any sensible intuition, nor is it an object of experience. It differs from the empirical “I think,” which is an object of experience. The transcendental [postulate] of a priori self-consciousness makes the point that cognition always contains the existence and activity of the “I think.” The combination of the subject term and object term in this sentence may seem to form a tautology because cognition, or the process of cognition, is the self-consciousness and its process. But human knowledge itself is the “I think.” Therefore transcendental self-consciousness (“I think”) is not an ordinary form of consciousness. Kant employs it to refer to all transcendental faculties or possibilities of empirical consciousness, therefore it is not itself just mere empirical consciousness. It has only a logical significance and cannot have substantial existence. It actually refers to the activity rather than to any substantial subject of thought. Rational psychology fallaciously substantializes the “I think.”

John Watson explains rather clearly Kant’s refutation of the substantialized “I think”: The fact that in all determination of objects the self-consciousness is implied does not prove that there underlies the permanence of the subject. [...] The unity of self-consciousness only shows that so long as there is a consciousness of objects there is a self-consciousness: it can never warrant the inference that there is a thinking substance which is permanent and indestructible....If we ask what the I is, we can only say that it is the general form of all the ideas through which a knowledge of objects is obtained; and to take this general form of experience as an object, which exists and can be known independently of experience, is a mere confusion of thought or paralognism.⁴⁸

Kant always stresses that the “I think,” the a priori self-consciousness (transcendental apperception) has only pure form and has a merely logical significance. The I of the “I think” is inseparable from specific material content, i.e., empirical objects and concepts. Therefore, it is neither inner sense (empirical self-consciousness), nor a specific psychological process, because both involve experience and sensuous content. If the “I think” (transcendental apperception) were to be separated from the things that we think, separated from specific

⁴⁶Leibniz and Montgomery (1902).

⁴⁷Kant, and Kemp Smith, *Critique of Pure Reason*, B422.

⁴⁸John Watson, *The Philosophy of Kant Explained*. Kemp Smith thinks that “the ‘I think,’ though intellectual, can find expression only in empirical judgments—in other words, that it is in and by itself formal only, and presupposes as the occasion of its employment a given manifold of inner sense; and secondly, by the statement that the ‘existence’ which is involved in the ‘I think’ is not the category of existence” Smith (1930).

empirical thoughts, or if self-consciousness were to be completely separated from consciousness of an object, then we could not possibly know what it is. It would be a completely empty "I," not only without objective reality, but also "the most empty representation of all representations." The concept "I think" cannot have any particular reference because it is only used to guide our thought "and we cannot even say that this is a concept, but only that it is a bare consciousness which accompanies all concepts."⁴⁹

In short, Kant's a priori self-consciousness is a premise and condition of empirical consciousness. It is a form, capacity, or faculty and has no independent substance or existence.⁵⁰ It is evident that, rather than merely arguing for its existence as an independent substance, Kant points out the immense function of the self-consciousness from an epistemological viewpoint, and employs it to unify knowledge, to constitute objects, and to guarantee the universal necessary objective validity of knowledge. Kant firmly opposes the practice of substantializing the "I think," i.e., self-consciousness. He refuses to regard it as a sort of spiritual existence (be it subjective or objective). This tendency is an important materialistic element in Kant's philosophy.

5.6 Hegel's Self-consciousness

The question of consciousness that Kant raised has had great influence in the history of philosophy, with different schools of philosophy branching out from this point. Fichte comes after Kant and, regardless of Kant's opposition, proposes the pure thought of the "I think" in order to establish the "non-I" (sensible nature and the whole world), and argues for an ontological view of the "non-I" within the "self." Hence, Fichte comes to see Kant's conception of the "I think," which is a spontaneous form of knowledge, as a thinking substance that establishes the world of objects by its activity, which he links to a supersensible world.

Obviously this line of thought no longer concerns the question of how knowledge is possible, but rather how existence is possible. Fichte argues that "idealism explains the determinations of consciousness on the basis of the activity of the intellect. [...] The intellect, for idealism, is an act, and absolutely nothing more [...] since it is not included in its principle and everything else must first be deduced.

⁴⁹Kant, and Kemp Smith, *Critique of Pure Reason*, A346/B404.

⁵⁰Modern linguistic philosophy attempts to clarify the use of language in order to refute certain traditional philosophical propositions. For instance, in *The Concept of Mind*, Gilbert Ryle argues that "to talk of a person's mind is not to talk of a repository which is permitted to house objects that something called 'the physical world' is forbidden to house; it is to talk of the person's abilities, liabilities and inclinations to do and undergo certain sorts of things, and of the doing and undergoing of these things in the ordinary world." Also see John Austin's analysis of the use of words such as "self" and "I." However, this newest revolution in philosophy is actually much shallower than Kant.

Now out of the activity of this intellect we must deduce specific presentations: of a world, of a material, spatially located world existing without our aid, etc., which notoriously occur in consciousness.⁵¹ This is no longer the Cartesian doctrine of “I think therefore I am,” but “I act therefore I am.” Moreover, this “act” is thought, a subjective thought without any objects with which to start thinking.

As a result of Fichte’s intervention, these questions concerning the relation between thought and existence become all the more prominent. Kant’s dualistic distinction between self-consciousness and the consciousness of objects is abolished and replaced by absolute subjective idealism. Fichte states: “The resources of the unconditioned and absolutely certain are now exhausted; and I would wish to express the outcome in the following formula: In the self I oppose a divisible non-self to the divisible self.”⁵² He says, “[the thing] is nothing else but the totality of these relations unified by the imagination.”⁵³ He thus substantializes the self-consciousness of Kant’s epistemology (which Kant stridently opposed), and conceives of the self as the absolute thinking substance itself.

After Fichte, Hegel attempts to revise and develop Kant from the direction of objective idealism.⁵⁴ He transforms the self-consciousness in Kant’s epistemology into absolute spirit and raises Kant’s conception of the a priori self to an ontological level, endowing with substantial reality something that had only a formal, transcendental reality in Kant. The objectivity of concepts in knowledge becomes the objectivity of noumena, and the objective validity of knowledge is identified with the universal necessity of thought.⁵⁵ To Kant, spontaneity and objectivity are

⁵¹Fichte et al. (1970).

⁵²Ibid., 110.

⁵³Ibid., 23.

⁵⁴Kant’s concept of the self does not refer to the individual. This implication is more obvious when seen in the development from Kant to Fichte, Hegel, and finally Schelling’s objective idealism. Schelling states that “it is evident that something higher is contained in the concept of the self than the mere expression of individuality”; and “From this alone it is evident that something higher is contained the concept of the self than the mere expression of individuality; that it is the act of self-consciousness as such, with which, admittedly the consciousness of individuality must enter at the same it, but which does not itself contain anything individual.” (von Schelling et al. 1978).

⁵⁵Kantian commentators on Hegelianism have contributed a clarification of the question which is worthy of reference. In their opinion, Kant’s subjective and objective deductions should be seen as one and the same process. According to his conception, self-consciousness produces experience and its laws. The object is not outside of self-consciousness but rather latent in it. In this process, the self (soul) seeking its own unity in an externalized world of objects is a process of self-knowledge. To know an object is to know the self. Thus, the object falls totally within consciousness. Kant explains that the activity of consciousness guarantees the objectivity of truth in epistemology, which here has ontological significance. Consciousness no longer spontaneously cognizes the world, but instead actively creates it. Hence, the objective validity that Kant emphasizes is completely identified with the universal necessity of consciousness, eliminating the requirement for sensible material given by things in themselves. Consequently, Kant obtains objectivity from mere universality. This line of interpretation thoroughly Hegelianizes Kant’s philosophy. See Caird, *The Critical Philosophy of Kant*.

intimately connected in the realm of knowledge, while to Hegel they are related in the realm of ontology, hence thought is endowed with objectivity. The identity of epistemological objectivity and ontological objectification makes history itself a transcendental field. Thought is no longer restricted to the realm of subjective knowledge, and categories do not merely determine knowledge but become laws of objective nature and social development. The transcendental logic of Kant's epistemology becomes objective logic and indeed the motor of world history. The conflict between the manifold of sensibility (the object) and the identity of self (the subject) in Kant becomes a historical dialectic of the unity of opposites of the idea, which first externalizes (the subject), then returns to itself (the object).

What Hegel rejects in Kant's philosophy is the materialistic element that made self-consciousness inseparable from the consciousness of the object, understanding inseparable from sensibility, and knowledge possible only with sensible experience. Hegel's doctrine re-establishes the metaphysical ontology that Kant refuted, substantializing the faculty of knowledge and turning self-consciousness into the god-like absolute idea. This absolute idea is all-inclusive, encompassing everything in the world. It molds the universe and is in effect another name for God. This view certainly carries idealism through to the end, yet it also lingers on the verge of materialistic criticism.

Hegel argues:

Kant employed the awkward expression, that I "accompany" all my representations—and my sensations, desires, actions, etc., too. "I" is the universal in and for itself, and communality is one more form—although an external one—of universality. All other humans have this in common with me, to be "I," just as all my sensations, representations, etc., have in common that they are mine. But, taken abstractly as such, "I" is pure relation to itself, in which abstraction is made from representation and sensation, from every state as well as from every peculiarity of nature, of genius, of experience, and so on. To this extent, "I" is the existence of the entirely abstract universality, the abstractly free.

Therefore "I" is thinking as the subject, and since I am at the same time in all my sensations, notions, states, etc., thought is present everywhere and pervades all these determinations as [their] category.⁵⁶

⁵⁶Hegel, *Encyclopaedia Logic*, §20. Hegel also states that "just as thinking constitutes the substance of external things, so it is also the universal substance of what is spiritual. In all human intuiting there is thinking; similarly, thinking is what is universal in all representations, recollections, and in every spiritual activity whatsoever, in all willing, wishing, etc. These are all of them just further specifications of thinking. When thinking is interpreted in this way, it appears in quite a different light than when we simply say that, along with and beside other faculties such as intuiting, representing, willing, and the like, we have a faculty of thinking. If we regard thinking as what is genuinely universal in everything natural and everything spiritual, too, then it over grasps all of them and is the foundation of them all. As the next step, we can add to this interpretation of thinking in its objective meaning (as *nous*) [our account of] what thinking is in its subjective sense. First of all, we say that man thinks, but, at the same time, we say too that he intuit, wills, etc. Man thinks and is something universal, but he thinks only insofar as the universal is [present] for him. The animal is also in-itself something universal, but the universal as such is not [present] for it; instead only the singular is ever [there] for it. The animal sees something singular, for instance, its food, a man, etc. But all these are only something singular for it. In the same way our sense

The Ego is what is originally identical, at one with itself, and utterly at home with itself. [...] Thus the Ego is, so to speak, the crucible and the fire through which the indifferent multiplicity is consumed and reduced to unity. This, then, is what Kant calls “pure apperception,” as distinct from ordinary apperception; the latter takes up the manifold into itself, as a manifold, whereas pure apperception must be considered the activity of making [the object] mine.

Now this certainly expresses correctly the nature of all consciousness. What human beings strive for in general is cognition of the world; we strive to appropriate it and to conquer it. To this end the reality of the world must be crushed as it were; i.e., it must be made ideal. At the same time, however, it must be remarked that it is not the subjective activity of self-consciousness that introduces the absolute unity into the multiplicity in question; rather, this identity is the Absolute, genuineness itself. Thus it is the goodness of the Absolute, so to speak, that lets singular [beings] enjoy their own selves, and it is just this that drives them back into absolute unity.⁵⁷

Lenin comments in the *Philosophical Notebooks* that “Hegel regards as Kant’s great merit the advancement of the idea of the ‘transcendental unity of apperception’ (the unity of the consciousness in which the *Begriff* [concept] is created), but he reproaches Kant for his one-sidedness and subjectivism. Hegel raises Kant’s idealism from being subjective to being objective and absolute.”⁵⁸ Lenin says, “Kant admits the objectivity of concepts (*Wahrheit* [truth] is their object), but all the same leaves them subjective. He makes *Gefühl* [feeling] und *Anschauung* [intuition] precede the understanding.”⁵⁹ The lines Lenin quotes from Hegel are these: “The Notion must not here be considered as an act of self-conscious the understanding, or as subjective the understanding: what we have to do with is the Notion in and for itself, which constitutes a STAGE AS WELL OF NATURE AS OF SPIRIT. LIFE, OR ORGANIC NATURE, IS THAT STAGE OF NATURE AT WHICH THE NOTION EMERGES.”⁶⁰ Lenin comments on the margin of this passage that we are posed here at “the ‘eve’ of the transformation of objective idealism into materialism.”⁶¹

Hegel sees thought as the unity of concept and reality, stressing the identity of thought and existence (as mutually dependent and transmutable). He criticizes Kant’s dualism for separating thought and existence, as well as what he sees as Kant’s tendency to regard categories of the understanding (thought) as merely

experience always has to do only with something singular (this pain, this pleasant taste, etc.). Nature does not bring the nous to consciousness for itself; only man reduplicates himself in such a way that he is the universal that is [present] for the universal. This is the case for the first time when man knows himself to be an ‘I.’ When I say ‘I,’ I mean myself as this singular, quite determinate person. But when I say ‘I,’ I do not in fact express anything particular about myself. Anyone else is also ‘I,’ and although in calling myself ‘I,’ I certainly mean me, this single [person], what I say is still something completely universal.” Hegel, *Encyclopaedia Logic*, §24. The evolution from epistemology to ontology is rather evident.

⁵⁷Hegel *Encyclopaedia Logic*, §42.

⁵⁸Lenin, *Philosophical Notebooks*.

⁵⁹Ibid.

⁶⁰Ibid.

⁶¹Ibid.

subjective. Hegel's abstract categories of the understanding transcend sensibility so as to obtain knowledge about the nature of objects. But to the idealist Hegel, knowledge of the nature of objects is, in a nutshell, knowledge of God. It is the idea itself cognizing itself. More importantly, this self-consciousness can only be obtained in the dialectic process of objectification and return to itself. Therefore, the question arises of the unity of opposites with the material world. The transcendental apperception of self in Kant's subjective idealism turns into the absolute idea of self in Hegel's objective idealism. The self and the object are not only independent in cognition (epistemology), but also become a real unity of opposites, which is transmutable in objective reality. To Kant, self and object are opposites and independent, without a transmutable dialectic relation, whereas Hegel stresses dialectic transmutability, that things are my things, and the "I" is the "I" of things, i.e., the objectification of human (thought), the humanizing of the object. Thus is the summit of classical German idealism reached.

Classical German idealism identifies the human being with God, and regards self-consciousness as the primitive driving force, whether for knowledge of the world (Kant) or for its transformation (Hegel). It greatly elevates the value and status of the human being.⁶² However, this elevation is idealistic and abstract. First, the human being referred to is an abstraction rather than a person in human society and history; second, this human being is a speculating consciousness rather than a real person. In Hegel, "self" and thought become one, and everything is contained in the "self," which is the speculating spirit. Things and "I," existence and thought, are interdependent and dialectically transmutable. Everything belongs to the activities of the realm of spirit-speculation, rather than the realm of sensible reality. Labor and production are conceived speculatively and history is reduced to the alienation and self-return of the thinking self. Marx remarks that "for Hegel the human being—man—equals self-consciousness. All estrangement of the human being is therefore nothing but estrangement of self-consciousness."⁶³ "Hence," he concludes, "in contradistinction to materialism, the active side was developed abstractly by idealism—which, of course, does not know real, sensuous activity as such."⁶⁴ Hegel's replacement of the historical and particular man with an abstract human being is an expression of bourgeois ideology. Indeed, his whole treatment of the thinking man as the ruler of reality reflects the unique character of German bourgeois thought at the time.

As a materialist, Feuerbach wants to restore sensuality to the human being. He points out that the error of idealism lies in its treating the general, whether in thought or language, as God; regarding them as having universal necessary permanence; and treating sensibility as the individual, contingent, and temporary appearances of ordinary experience. He states that: "Kant's philosophy is the

⁶²Lacroix holds that Kant's three *Critiques* all center on the question of the status of human beings in the universe, and that Kant's transcendental self is the noumenon of his ethics.

⁶³Marx (1994a).

⁶⁴Marx (1994b).

conflict of subject and object, essence and existence, thinking and being.”⁶⁵ Fichte, Schelling, and Hegel tried to overcome this conflict in thought alone.

Feuerbach comments: “The human being is the existence of freedom, the existence of personality, and the existence of right. Only the human being is the foundation and basis of the Fichtean I, of the Leibnizian monad, and of the absolute.”⁶⁶ “The new philosophy therefore regards as its epistemological principle, as its subject, not the ego, not the absolute—i.e., abstract spirit, in short, not reason for itself alone—but the whole being of the real man. Man alone is the reality, the subject of reason. It is man who thinks, not the ego, not reason. [...] If the motto of the old philosophy was: ‘The rational alone is the true and real,’ the motto of the new philosophy is: ‘The human alone is the true and real,’ for the human alone is the rational; man is the measure of reason.”⁶⁷ The new philosophy attempted to replace the reasoning spirit, the ego, the absolute, with a real and sensuous human being, and to replace the universality of reason with that of sensibility. Feuerbach says: “The new philosophy joyfully and consciously recognises the truth of sensuousness: It is a sensuous philosophy with an open heart.”⁶⁸ “The unity of thought and being has meaning and truth only if man is comprehended as the basis and subject of this unity.”⁶⁹ Therefore, Feuerbach’s philosophy is indeed a criticism of the idealism implicit in the doctrines of Kant and Hegel. Feuerbach emphasizes that the notion of a supersensuous God comes from our experience of the sensuous man, while the content of reason comes from the content of sensibility. “All we have to do is not separate the intellect from the senses in order to find the supersensuous—spirit and reason—within the sensuous.”⁷⁰ And also, “not only is the finite and phenomenal of being, but also the divine, the true being, an object of the senses—the senses are the organs of the absolute.”⁷¹ That is to say, the senses alone can know the truth.

However, despite his effort to restore the dignity of the senses, Feuerbach’s new philosophy does not substantially surpass Locke and French materialism. Feuerbach argues that there is nothing in the intellect that is not first given in the senses, which was exactly Locke’s idea as well (see Chap. 1). Nor does this new philosophy significantly depart from the old materialism before Kant. “Certainly Feuerbach has a great advantage over the ‘pure’ materialists in that he realises how man too is an ‘object of the senses.’ But apart from the fact that he only conceives him as an ‘object of the senses,’ not as ‘sensuous activity’ [...] Thus he never manages to conceive the sensuous world as the total living sensuous activity of the individuals composing it; [...] As far as Feuerbach is a materialist he does not deal with

⁶⁵Feuerbach (1994, §22).

⁶⁶Feuerbach (1972).

⁶⁷Feuerbach (1994, §50).

⁶⁸Ibid., §36.

⁶⁹Ibid., §51.

⁷⁰Ibid., §42.

⁷¹Ibid., §39.

history.”⁷² Feuerbach's man is still a non-social, non-historical natural being, and his senses are passive sources of perception separated from sociality (which implies passive perceptions). It is still unclear whether or not sensibility has universality, and what significance such a universal sensibility might have. Kant's purpose is to reveal that the old materialism, starting from the senses, can neither grasp the spontaneity of knowledge nor guarantee the universal, necessary, objective validity of knowledge, and to establish in its place his own transcendental idealism. Feuerbach brings his philosophy from idealism back to materialism, and from the self-consciousness back to sensuous man. However, because his sensuous man is of such a nature that it cannot allow for the subjective spontaneity that is unique to knowledge, neither can it resolve the problem of universal, necessary, objective validity. “The highest point reached by contemplative materialism, that is, materialism which does not comprehend sensuousness as practical activity, is contemplation of single individuals and of civil society.”⁷³ Because that position is entirely incapable of explaining the spontaneity of knowledge, it can only be said that Feuerbach regresses rather than progresses from the point reached by Kant.

5.7 “The Question Lies in Changing the World”

Marx's theory of practice is the historical solution to all of these problems.

Marx points out that “Feuerbach, not satisfied with abstract thinking, wants contemplation; but he does not conceive sensuousness as practical, human-sensuous activity.”⁷⁴ In fact, the difference between these two kinds of sensualism is the fundamental difference between human beings and animals. For animals, life activity and its objects are the same and both are subjected to the same determinate laws of nature. Marx states: “The animal is immediately one with its life activity.”⁷⁵ He says, “the animal does not enter into ‘relations’ with anything, it does not enter into any relation at all.”⁷⁶ Therefore, the division of subject and object is invalid for the animal, thus precluding the spontaneity of cognition that is unique to human beings.

The practices of primitives, especially making and using tools, break through this limitation. Human practice is no longer merely the narrow life activity of an animal species but becomes an objective activity of controlling and transforming nature, with infinite possibilities of development, restricted only by historical social structure, and increasingly expanding and deepening the human being's grasp of the objective world. **Therein lies an essential distinction with the animal's survival**

⁷²Marx (1994c).

⁷³Marx (1994b).

⁷⁴Marx (1994b).

⁷⁵Marx (1994d).

⁷⁶Marx (1994c).

activities, which adapt instinctively to the environment. It is at this conjunction that the distinction between the subject and object acquires its true significance. Social practice, making use of nature to act upon itself so as to make nature serve the human being, is different from nature. The existence and development of human beings, which is always a social development, also differs from other phenomena of nature. Thus arises the great distinction between natural objects and the subject of history and practice. Feuerbach cannot explain this difference, and is compelled to comprehend human essence “as ‘genus,’ as an internal, dumb generality which naturally unites the many individuals.”⁷⁷ Social existence, characterized by practical productive activities and the making and use of tools, and social consciousness, characterized by language and sign systems, mold biological *Homo sapiens* into a subject profoundly differentiated from the natural world. If the discussion of practice and language is not rooted in this ground, the most distinctive human activities would be identical with the animal’s life activity and the sensuous state of animal psychology, while language would become a mysterious structure and a transcendental instinct of the organism.

In the literature of modern Marxism, the term “practice” is rather prevalent. It is used to refer to all human activities, from daily life to theoretical research and cultural activities. In his early manuscripts and in the *Theses on Feuerbach*, Marx stresses that the activities of the sensuous human, which unify theory and practice, constitute *praxis*. The term *praxis* embraces all human life activities. However, from early on, Marx already emphasized the fundamental status and decisive significance that human labor, material production, and economic activity have on human society, firmly maintaining that material production is the ground of social life. Marx’s historical investigations of modes of social production established his theory of base and superstructure, and his doctrine of historical materialism deepened the theory of practice and made it concrete.

In my view, Marx’s theory of practice is one with historical materialism. Therefore one must comprehend which among the wide variety of human practical activities belong to the base and enjoy that fundamental level of significance. Historical materialism stresses the economic base while the forces of production are, as it were, the base of the base. Are forces of production not the practical activities in which people use and make tools to carry out material production? The first principle and fundamental aspect of *Homo sapiens* is that they evolved from such activities (see Engels, “The Part Played by Labour in the Transition from Ape to Man”).

Historically speaking, these activities belong to a process that developed from unconscious, purposeless contingency to conscious and purposeful necessity. In this process, language, self-consciousness, signs, and thought also emerged. However, the question of the development of language from tools, and the relation between material tools and signs (which are a kind of tool), need further investigation. I have repeatedly mentioned Piaget because his theory, based on his careful

⁷⁷Marx (1994b).

investigation of child psychology, sheds light on the anthropological ontology of the theory of practice. I have also mentioned Wittgenstein because in his later work he definitively argues for the determinate function of social life and practice in the formation of language as well as for individual psychology and consciousness. All these theories help to explicate Marx’s theory of practice.

The genuine subject of the human self is not the transcendental self-consciousness that Kant discussed, but is rather historical human practice, a material reality. Practice, as the experience of real activity, is essentially universal despite being expressed in the acts of individual human beings. It is universal not only because practice is always the activities of certain social structures acting universally on nature, but also because it expresses universal spontaneity in transforming the world. The productive activities of human practice must have some overall conformity with objective nature, despite possible temporary lapses; otherwise the objective transformation of nature that is a historical fact would be impossible. History as a totality necessarily possesses a realistic power to actualize human reason. Non-rational impulses and blind actions are admittedly forces of sensuous reality, but their nature belongs to the animal or the individual, and lack the historical necessity of self-actualizing reason.

Lenin states that “practice is higher than theoretical knowledge, for it has not only the dignity of universality, but also of immediate actuality.”⁷⁸ This actuality not only refers to general practices that have sensuous material force, but also to objective practical activities that bring about their own ends. This allows the existence of the subject to be not only of actual universality (i.e., conforming to universal natural law), but also of universal actuality (i.e., actualizing the purpose of the subject that conforms with universal laws). But subjective consciousness and the universality of thought are mere expressions of the universality of the subject’s practice in material reality. The relations and orders among perception and consciousness are precisely what practice discovers in objective nature and abstracts in thought and consciousness. Therefore, Kant’s conceptions, namely, the consciousness of an object and the reproduction of objects in thought, and the spontaneous synthesis in thought of sensible material to constitute knowledge of the object, must have their ground and premise in the spontaneous transformation of reality in practice. As pointed out in Chap. 2, synthesis has its premise in practice’s spontaneous transformation of the object. When explaining transcendental apperception, Kant vigorously stresses that the synthetic function and capacity for self-consciousness reflect the practical self, as the subject actually and sensibly transforms the object. He insists on the transcendental “I think” as the unchangeable ground of synthetic consciousness, but its permanence actually belongs to human subjective practice and expresses the unification it continually discovers in objective nature. The spontaneity of knowledge comes from practice, while the objectivity of knowledge and the standard of truth are also in practice. The unity of spontaneity and objectivity that Kant emphasizes as the

⁷⁸Lenin (1994).

essential characteristics of the self-consciousness actually come from the spontaneity and objectivity of human practice.

Engels criticizes Dühring, who appropriates Kant's thoughts and passes them off as his own, for the idea that thought turns being into unity and that the nature of all thought lies in its combination of elements into a conscious unity. Engels points out that the unity of being does not lie in thought, but in materiality. In fact, the unity of the material world must precede the unity of thought, while the unity of the material world can only be transformed into the spontaneous unity of the consciousness and of thought through human practice. This is also the case with the unity of forms of speculation and consciousness. When discussing the Subjective Deduction, I spoke of how this psychological and conscious unity comes from the unity of practice (labor activities). Similarly, high-level forms of logical thought (e.g., dialectical categories and formal logic) and free intuition are also an internalization and **sedimentation** of the universal qualities of practice. Such forms of knowledge as logic, mathematics, and the concept of causality are unique to human beings as representations of the spontaneity of knowledge, and they fundamentally originate from the operational practice of human beings. The particular content of thought, as is commonly known, is historically determined by the practical content of a particular epoch. We can identify practice neither with sensuous experience (as logical empiricism believes) or language activities (Wittgenstein); nor regard it as a merely subjective activity without objective material determination; nor can we see practice as all-inclusive, which is the view of Western Marxism. Instead, we should restore the determination of practice through material structure, which means particular historical and objective actuality.

This is the genuine theory of practice. This is why I stress, even at the price of being tedious, the use and manufacture of tools. A great deal of literature today discusses Marx's theory of practice, but none of it adequately emphasizes this point (see Chap. 8).

Feuerbach and all the older materialists, although they claim to start from the senses, actually proceed from the individual, which has actuality but not universality. Kant and Hegel claim to start from the universal, but they actually proceed from thought, which has universality but not actuality. Only a theory that proceeds from practice can have not only universality but also actuality. Should we seek a foothold in the senses and sensibility, or in reason, i.e., abstract speculation? Or should we seek our foothold in practice and specific historical social activities? In answering these questions, Marx's theory of practice departs from all theories of knowledge proposed by either the old materialism or idealism. The old materialists (including Locke, the French materialists, and Feuerbach) base their theories on the senses (passive existence), while German idealists base their theories on consciousness (active reason). Marxism, however, bases its theory on practice (material activities). To proceed from practice implies proceeding historically from modes of social production and the daily life of millions of ordinary people.

Such a practice fundamentally refers to the operational activities of making and using tools. That is why historical materialism is the philosophical ground for the

theory of knowledge. In criticizing contemplative materialism and natural science, which fail to grasp historical materialism, Marx and Engels state time and again:

Feuerbach speaks in particular of the perception of natural science; he mentions secrets which are disclosed only to the eye of the physicist and chemist; but where would natural science be without industry and commerce? Even this ‘pure’ natural science is provided with an aim, as with its material, only through trade and industry, through the sensuous activity of men. So much is this activity, the unceasing sensuous labour and creation, this production, the basis of the whole sensuous world as it now exists.⁷⁹

Again:

Industry is the actual, historical relationship of nature, and therefore of natural science, to man. If, therefore, industry is conceived as the exoteric revelation of man’s essential powers, we also gain an the understanding of the human essence of nature or the natural essence of man.⁸⁰

Moreover,

Natural science, like philosophy, has hitherto entirely neglected the influence of activity on their thought; both know only nature on the one hand and thought on the other. But it is precisely the alteration of nature by men, not solely nature as such, which is most essential and immediate basis of human thought, and it is in the measure that man has learned to change nature that his intelligence has increased.⁸¹

Their point is that only in social, practical activities can the objective world as well as human beings and human knowledge, sensibility, and reason be understood. This practice is not Fichte’s subjective spontaneity of pure thought but mainly the activity of material production, which presumes natural beings and, through using and making tools, enables human technology to make use of objective nature. From the primitive stone axe to modern automatic machines, this development marks the human being’s liberation from animal life activity. Human beings are no longer merely armed with the limited physical strength, organs, and instinctual skills that belong to a natural biological species. It is because of his tools that man is the measure of all things.

Marx maintained: “Technology reveals the active relation of man to nature, the direct process of the production of his life, and thereby it also lays bare the process of the production of the social relations of his life, and of the mental conceptions that flow from those relations.”⁸² Marx particularly values technology, which he describes as “the history of the productive organs of man in society, of organs that are the material basis of every particular organization of society,” and compares it with

⁷⁹*The German Ideology*, Marx Engels Internet Archive 1994.

⁸⁰*Economic and Philosophic Manuscripts of 1844*, Marx Engels Internet Archive 1994.

⁸¹*Dialectics of Nature*, Marx Engels Internet Archive 1994.

⁸²Marx (1994e).

Darwin's study of "the history of natural technology, i.e., the formation of the organs of plants and animals, which serve as the instruments of production for sustaining their life."⁸³

Marx states that "the coincidence of the changing of circumstances and of human activity can be conceived and rationally understood only as revolutionizing practice."⁸⁴ The practice of revolution, as a great and living material force of actuality, is the subjective self that molds nature and unifies all things. This self, as the subject, possesses genuine objective force. From the emergence of modern mechanical mass production to contemporary automated machinery and computers, this force can all the more immediately face the world with its infinitely developing intelligence, knowledge, and science. As a result, science can directly transform into forces of production. Materialized intelligence, as a mode of production, will increasingly become a prominent feature of the self.

This self even has a spiritual significance. Kant's a priori self-consciousness is merely an idealistic harbinger of this genuine self of human practice. As a supposedly omnipresent form in thought, Kant's transcendental synthetic apperception is really a mere projection of this practical self as a material force in reality that transforms the world. Only when this practical self unifies everything in reality can the rational self unify everything in consciousness. Therefore the creator of history, the transformer of the objective world, and the ground of scientific knowledge is not the thinking self but the practical self; it is not the spiritual self of reason but the self of the people and of society. This is the materialistic theory of reflection, which is also called the theory of practice, and which maintains that people create history.

We Chinese have a folk song that goes like this: "There is no Jade Emperor in heaven, nor Dragon King in the ocean, I am Jade Emperor and I am Dragon King. I bid the mountain yield to my step." It is this "I" who bids that the mountain yield to the creator of history and the master of social practice. It is this "I," as a human being in general, that is the true self and subject of the theory of knowledge. Only on the ground of this objective self can all forms of knowledge of the subjective self spontaneously arise. The understanding, judgment, and reason that Kant wants to establish are indeed beyond the animals, and only human beings have these universal necessary faculties. However, these faculties only arise historically from practice. Only with human material practice as its empirical ground and premise is the progress from the animal and subjective senses to the objective and spontaneous forms of knowledge, and from individual judgments of perception to common judgments of experience, possible.

Here is the true unity of ontology and epistemology as well as the agreement of anthropology and psychology. Here also lies the true materialistic significance of the self. On the ground of modern science, technology, and industry, the human subject, which transforms the world, is increasingly prominent, as are questions related to the status, function, significance, creativity, and variety of the individual.

⁸³Ibid.

⁸⁴Marx (1994b).

5.8 Copernican Revolution

It is evident that the philosophical development from Kant to Fichte and Hegel tries to base everything on the spontaneity of thought, while Marx makes the practical social activity of material production the ground of the unity of man and nature, and thereby **sets psychology and logic** on a foundation of historical materialism. Such is the approach for **proceeding from Marx to Kant**.

Kant proposes self-consciousness as the pivot of the subjective spontaneity of knowledge and rejects a passive theory of reflection, styling his theory as a “Copernican Revolution.”⁸⁵ Copernicus derived the apparent motion of the planets from the real motion of the earth. Kant derives the apparent objectivity of experience from the a priori forms of human cognition. This shift from regarding material nature as noumenon to the spiritual consciousness of the human being as noumenon, and from regarding the human being rather than nature as the center of the universe, is called Kant’s Copernican Revolution in philosophy.⁸⁶ It is a shift from the epistemology of Locke and French materialism to that of classical German idealism, and opposes the old materialism to idealistic transcendentalism.

However, as pointed out earlier, Kant’s transcendental self-consciousness depends on the objective empirical content of the particular “I think” as well as on the consciousness of the object, and that implies that the Copernican Revolution has not been fully realized. Only with Hegel’s absolute idea—although it must be manifested in the empirical world to fulfill its spiritual progress—is self-consciousness finally fully realized. Hegel definitively raises spirit and consciousness to the level of first principles and finally accomplishes the Copernican Revolution, i.e., the idealistic refutation of materialism that Kant began.

When absolute idealism reaches its summit, it also makes ready the conditions of its reverse movement, which is the dawn of a higher level materialism. The young Hegelians criticized Hegel beginning precisely from the concept of self-consciousness. The young Marx, in his doctoral dissertation, expounded a critical

⁸⁵In the Introduction to the second edition of the *Critique of Pure Reason*, Kant also mentions this point: “If intuition must conform to the constitution of the objects, I do not see how we could know anything of the latter a priori but if the object (as object of the senses) must conform to the constitution of our faculty of intuition, I have no difficulty in conceiving such a possibility. [...] Either I must assume that the concepts, by means of which I obtain this determination, conform to the object, or else I assume that the objects, or what is the same thing, that the experience in which alone, as given objects, they can be known, conform to the concepts. In the former case, I am again in the same perplexity as to how I can know anything a priori in regard to the objects. In the latter case the outlook is more hopeful” (B xvii). In other words, that intuitive forms of categories of the understanding transcendently exist in the transcendental apperception of self-consciousness makes scientific knowledge possible.

⁸⁶There has been much controversy about Kant’s comparison of himself to Copernicus. Some hold that Copernicus’s overthrow of the Ptolemaic system, which put man (the earth) at the center of the universe, is exactly the opposite of Kant’s establishing the human being as the center. However, the gist of Kant’s thought is to compare the spontaneity of the human being with the spontaneity of the earth.

theory of self-consciousness using the Epicurean conception of the atom, since the problem of self-consciousness was crucial to the dissolution of Hegelian doctrine at the time. In his criticism of the spiritualized self-consciousness of the young Hegelians, Marx veers toward historical materialism. He states:

We shall, of course, not take the trouble to enlighten our wise philosophers by explaining to them that the ‘liberation’ of man is not advanced a single step by reducing philosophy, theology, substance and all the trash to ‘self-consciousness’ and by liberating man from the domination of these phrases, which have never held him in thrall. Nor will we explain to them that it is only possible to achieve real liberation in the real world and by employing real means, that slavery cannot be abolished without the steam-engine and the mule and spinning-jenny, serfdom cannot be abolished without improved agriculture, and that, in general, people cannot be liberated as long as they are unable to obtain food and drink, housing and clothing in adequate quality and quantity. ‘Liberation’ is an historical and not a mental act, and it is brought about by historical conditions, the development of industry, commerce, agriculture, the conditions of intercourse.⁸⁷

Self-consciousness becomes a key link in the development from Hegel to Marx, from idealism to materialism, and from the subjective self of thought to the historical, material, and actual self. Through the medium of Feuerbach, Marx finally accomplished his critical revision of Hegel. In the development from Locke and French materialism to Kant and Hegel, and from Kant and Hegel to Marx, lies a dialectic which has profound significance in the history of human knowledge: negation of the negation, that is, from the material to the spiritual, then from the spiritual to the material. This dialectic becomes the end and completion of the modern history of philosophy. Lenin comments on the “‘circles’ in philosophy: Modern: Holbach—Hegel (via Berkeley, Hume, Kant). Hegel—Feuerbach—Marx.”⁸⁸

Materialism develops from a passive theory of reflection to a spontaneous theory of practice. An immense leap in the development of materialism is taken when it advances from Locke and the French materialists, who passively observe nature (the senses) and regard nature as the center, to an active transformation of the world (practice) that regards historical man as the center. In the old materialism, man is only a part of nature and is subject to nature.⁸⁹ Marx’s theory of practice stresses human spontaneity, hence man becomes the master of the whole world including nature. This is truly a Copernican Revolution in philosophy, and was achieved through criticism of the Copernican Revolution of Kant and Hegel in classical German idealism. French materialism subordinates man to nature and German idealism subordinates nature to spirit, while Marxist materialism subordinates nature to man’s spontaneous material transformation of the world. This

⁸⁷*The German Ideology*. Marx Engels Internet Archive 1994.

⁸⁸Lenin (1994).

⁸⁹D’Holbach also stresses that man should not confidently flatter himself and call himself king of the universe, “man has no just, no solid reason to believe himself a privileged being in Nature; because he is subject to the same vicissitudes as all her other productions” *The System of Nature*, vol. 1, Chap. 6.

development also runs from natural ontology (French materialism) to the ontology of consciousness (German idealism) to anthropological ontology (Marxism). In this process, the collective self of human beings, no less than the individual self, has undergone a continuous development, and the existential significance, nature, rights, status, and richness of the individual self have been notably renewed and illuminated, while self-consciousness has acquired revitalizing significance as well.

Only on the ground of the spontaneous transformation of nature can the individual self acquire and develop his unique existential value, character, and dignity. Although animals also possess a biological endowment, even temperament and skills, they do not have true character. The richness and variety of human character develop and expand as the collective—that is, as social existence and social consciousness—develop. Piaget believes that children’s character develops along with their sociality, and individual subjectivity develops along with their knowledge of the objective social environment. It was inevitable and necessary for the human being that individuality as suppressed and overlooked, and the individual self as drowned in the collective self appeared in history before the coming of Communism. Just as the most telling evidence of the loss of individuality was the rise of universal systems of signs that externalized, depersonalized, and materialized the self, so the most telling evidence of the true power of the individual lies in artistic structures that prove the uniqueness, variety, and richness of the individual human being; this evidence, through its unfolding in various domains of society, had to await the end of human prehistory. I shall touch on this topic again in Chap. 10.

In previous chapters I discussed time and space as forms of intuition, and the categories of the understanding, while in this chapter I have dwelt on Kant’s idea of self-consciousness and how Marx, through Hegel, moved from these theories of self-consciousness to historical materialism. I have thus prepared the way for a theory of the objective ground of the cultural and psychological structure of human subjectivity in historical social practice. The subjective self is constituted by the two factors of techno-social structure and cultural-psychological structure.

Technology and social material production are our proper first principles. That is what I wish to clarify in this chapter.

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Chapter 6

Epistemology: V. Antinomy



6.1 Transcendental Illusion and Dialectic

The second division of Kant's first *Critique* is entitled Transcendental Dialectic, and is relatively straightforward. The Analytic explained how knowledge (truth) was constituted, while the Dialectic explains how paralogisms arise and belongs to the second part of the Transcendental Logic. Kant claims that the fundamental mission of epistemology is to prevent knowledge from intruding into domains beyond its proper reach. It is also for this reason that his philosophy is called a critical philosophy. Kant states that "the greatest and perhaps the sole use of all philosophy of pure reason is therefore only negative; since it serves not as an organon for the extension but as a discipline for the limitation of pure reason, and, instead of discovering truth, has only the modest merit of guarding against error."¹ (This statement appears rather similar to some of the views of modern logical positivism and linguistic analysis.) In the Dialectic, Kant defines the proper, limited domain of the understanding, and asserts that metaphysical concepts like the soul, free will, and God, because of their lack of empirical ground in sensible intuition, cannot provide material with which the understanding can operate scientifically. Kant refutes in turn all of the arguments for the soul, free will, and God that were popular at the time (chiefly, rational psychology, rational cosmology, and rational theology). In particular, he discusses in detail the theological version of the ontological proof of God (Anselm) as well as the philosophical version in Descartes.

Kant's refutation is of great significance, especially if we bear in mind the power that religion had at that time. As discussed in Chap. 1, at the time of the French Revolution Germany was undergoing a philosophical revolution that ended the life of seventeenth-century metaphysics as well as the life of the theological proofs of the existence of God. Engels mentions how the poet Heinrich Heine noticed the

¹Kant, and Kemp Smith, *Critique of Pure Reason*, A795/B823.

philosophical revolution in Germany. In *On the History of Religion and Philosophy in Germany*, Heine compares Kant's *Critique of Pure Reason* to the National Assembly during the Reign of Terror in the French Revolution. Heine remarked that as Robespierre sent Louis XVI of France to the guillotine, Kant had done the same with God. From then on, any attempt to prove the existence of God was a lost cause. Kant maintained that the existence of God cannot be proven; it is purely a matter of subjective faith. As we know, human beings have intelligence and human intelligence can strengthen or weaken faith. Because of this, the church and the guardians of religion will always seek out new ways to prove God's existence. However, now that Kant has banished the question of God from the domain of knowledge, people's faith in God can be expected to weaken. Although this was not Kant's intention, such an effect was predictable.

Heine celebrated Kant's achievement as a revolution, while the religious authorities saw it as apostasy. In fact, what Kant showed is that neither the existence nor the non-existence of these objects—an immortal soul, a free will, and God—can be proven. As objects of faith, however, they are not only beneficial to morality but also have a role to play in scientific understanding: as regulative principles, they have positive significance for human knowledge. Therefore, in the Dialectic as in the Analytic, the two tendencies of Kant's philosophy are locked in profound confrontation, although this is not manifest as a direct conflict, but is expressed in a typically compromised form. On the one hand, Kant's whole epistemology reaches its completion in the Dialectic, while on the other hand it gradually shifts from epistemology to ethics. In fact, it is in this section of the work that Kant begins the transition from theoretical to practical reason.

The Transcendental Aesthetic focuses on sensibility and the Transcendental Analytic is mainly about the understanding, while the Transcendental Dialectic dwells on reason. Both Kant and Hegel insist on the division of sensibility, understanding, and reason in the human cognitive faculties. Sensibility is the receptive faculty, i.e., the senses, with time and space as forms of intuition; and the understanding is the conceptual faculty. Reason, however, has a rather particular status in German idealism. It differs from both sensibility and the understanding, and refers to something at once more fundamental and on a higher level. Sometimes it has a rather mysterious undertone, and sometime "reason" is entirely synonymous with the understanding.

Here is how Kemp Smith interprets the term:

Reason (*Vernunft*) is used in the Critique in three different meanings. In the above title it is employed in its widest sense, as the source of all a priori elements. It includes what is a priori in sensibility as well as in the understanding (*Verstand*). In its narrowest sense it is distinct even from the understanding, and signifies that faculty which renders the mind dissatisfied with its ordinary and scientific knowledge, and which leads it to demand a completeness and unconditionedness which can never be found in the empirical sphere.

The understanding conditions science; reason generates metaphysics. The understanding has categories; reason has its Ideas. Thirdly, Kant frequently employs the understanding and reason as synonymous terms, dividing the mind only into the two faculties, sensibility and spontaneity.²

The third use, namely, reason as synonymous with understanding, is approximately equal to our use today, as for example when we divide knowledge into knowledge of the senses and knowledge of reason. However, for Kant (as well as for Hegel), the important thing is not the use of the word but the use of reason, which should be distinguished from the use proper to the understanding. Anyway, we see that the term “reason” contains extremely complicated and confusing content, and we shall have occasion to return to this topic in Chap. 9. Now we are going to dwell on the role of reason in Kant’s epistemology, where it chiefly refers to “pure speculative reason.” It is also called “pure theoretical reason” in distinction from the “pure practical reason” of ethics. In the Dialectic, however, reason does not refer to another faculty or capacity of thought different from the understanding, but to the objects and contents of thought that are different from those of the understanding. The object and content of the understanding is sensuous experience, while the object and content of reason is the understanding itself. Reason is associated solely with the activities and applications of the understanding, and has nothing to do with sensibility. Kant explains: “For pure reason never relates directly to objects, but to the concepts which the understanding frames in regard to objects.”³ Additionally, “reason never applies itself directly to experience or to any object, but to the understanding, in order to give to the manifold knowledge of the latter an a priori unity by means of concepts.”⁴

The concepts of pure understanding are categories, while the concepts of pure reason are called ideas. The categories of pure understanding have the capacity to synthetically unify sensuous intuitions, subordinating the manifold of sensibility to the understanding through imagination. Ideas of pure reason, on the other hand, have a unifying capacity for the understanding, which reason supplies with regulative principles. The understanding gives unity to sensibility while reason gives unity to the understanding. Since reason merely unifies the understanding, it has no relation to sensibility. It is therefore not concerned with empirical unity but rather with the unity of concepts, a unity that arises from the application of concepts in constructing a system. Categories determine the sensible concepts applied to experience, while ideas are directed at the non-empirical. The unity of reason is merely subjective, without any objective significance or effect. In other words, the ideas of reason that unify the understanding do not refer to actual objects or have objective determination; this distinguishes reason and its ideas from the categories and concepts of the understanding.

²Norman Kemp Smith, *A Commentary to Kant's 'Critique of Pure Reason'*, 2.

³Kant, and Kemp Smith, *Critique of Pure Reason*, A335/B392.

⁴*Ibid.*, A302/B359.

The ideas of reason appear to be not much different from the concepts of the understanding, since both are abstract. Their difference, however, lies in the point mentioned above. The object of the understanding is sensuous experience and this experience concerns conditional and limited particulars. However, we are not content with conditioned and limited empirical knowledge, but endeavor to attain knowledge of the unconditional and unlimited absolute totality, which cannot be given in the experience of the senses. Kant maintains that “the absolute totality of all possible experience is not itself an experience.”⁵ For instance, the world as a totality cannot be given by the experience of the senses because the experience of the senses is conditional and limited. When the understanding moves from the conditional and limited experience of the senses to deduce the existence of an unconditional and unlimited absolute totality, this use of the understanding and its categories fallaciously transcends the conditions of experience and falls into dialectical illusion. The soul, free will, and God are also transcendental ideas and illusions that arise when the understanding pursues the unconditional and unlimited.

Kant states that “the concepts [ideas] of reason extend to the completeness, i.e., the collective unity of the whole of possible experience.”⁶ In other words, the understanding is in charge of experience, while reason pursues the complete unity of the whole of experience through an illegitimate, fallacious, or, as Kant says, dialectical use of the concepts of the understanding.

Kant employs formal logic as an analogy, comparing judgment and inference with the understanding and reason. Just as every judgment of formal logic contains a concept of pure understanding, i.e., a category, so does every syllogism (inference) of formal logic contain a concept of pure reason, i.e., an idea.⁷ From the twelve forms of judgments Kant derives his twelve categories of the understanding; and from the three kinds of syllogism (categorical, hypothetical, and disjunctive) he derives the three ideas of reason. From the categorical syllogism he derives the idea of a subject that is not an object, i.e., the soul; from the hypothetical syllogism he takes the idea of a premise that does not need anything as its condition, i.e., freedom of the will; and from the disjunctive syllogism he derives the idea of an unconditional totality, i.e., God. The categories of the understanding do not arise from sensibility, but only from logical judgments; and the ideas of reason do not arise from judgments, but only from reasoning. This is because judgment is direct inference, while reasoning has major and minor premises, i.e., conditions. Hence, Kant continuously traces from the conditioned to the unconditioned, and arrives at the three ideas mentioned above.⁸

⁵*Prolegomena to Any Future Metaphysics*. §40.

⁶*Ibid.*

⁷Kant’s “idea” does not refer to people’s subjective ideator thought, nor does Kant’s conception of idea imply an objective being, as does that of Plato or Hegel.

⁸The derivation of three ideas from forms of reasoning exemplifies Kant’s architectonic method, which he devised for the sake of building up his system, although this method actually confounds the accurate expression of his thought.

Kant explains that “all transcendental ideas can therefore be arranged in three classes, the first containing the absolute (unconditioned) unity of the thinking subject, the second the absolute unity of the series of conditions of appearance, the third the absolute unity of the condition of all objects of thought in general.”⁹ The idea of an absolute unity of subjective thinking (the immortal soul) is derived from the first class; the idea of an absolute unity of objects is derived from the second class, giving rise to the cosmological antinomies; and the absolute unity of all subjective and objective conditions, i.e., God, is derived from the third class. Kant underlines that “we therefore take the subjective necessity of a connection of our concepts, which is to the advantage of the understanding, for an objective necessity in the determination of things in themselves.”¹⁰ In other words, it is a transcendental illusion to see that which is pursued in subjective thinking (our endless search for conditions of conditions) as an objective being. This transcendental illusion is not a purely logical error which could be avoided or corrected once discovered; nor is it an empirical illusion, for it arises from reason. Just as under certain conditions empirical illusion is inevitable, as for example when the moon on the horizon appears to be bigger than the sun, transcendental illusion is also inevitable when reason attempts to obtain knowledge of the unconditioned. Although illusory, their appearance is inevitable.

Empirical illusion results from erroneous judgment because the senses affect our understanding, while **transcendental illusion results when the understanding transcends empirical conditions**. Such illusions arise because of the psychological **demand by human beings for metaphysical knowledge**, which is an inevitable inclination in the progress of thought. There is in everyone a metaphysical impulse that demands a grasp of the supersensible totality.

Kant asserts that since transcendental illusion—which regards the false as the true, concepts as facts, and subjective ideas as objective realities—inevitably arises in cognition, the task is to investigate it and to expose its errors and conflicts. The exposition of the errors and conflicts of transcendental illusion is called dialectic. Dialectic is the logic of transcendental illusion, which arises when we regard the subjective necessity of thought as the objective necessity of existence. Dialectic aims to expose this conflict. Kant explains: “For here we have to do with a natural and inevitable illusion which rests on subjective principles, and foists them upon us as objective [...] There exists, then, a natural and unavoidable dialectic of pure reason [...] one inseparable from human reason.”¹¹

⁹Kant, and Kemp Smith, *Critique of Pure Reason*, A334/B391.

¹⁰Ibid., A297/B353.

¹¹Ibid., A298/B354.

6.2 Four Antinomies

The fullest expression of the dialectic of cognition is in the four cosmological antinomies, which comprise the most important part of Kant's discussion of the ideas of reason. We have already touched on the first transcendental idea, the soul as substance, and will turn to the third transcendental idea, God, in Chap. 9.

Kant writes: "I entitle all transcendental ideas, in so far as they refer to absolute totality in the synthesis of appearances, cosmical concepts, partly because this unconditioned totality also underlies the concept—itself only an idea—of the world-whole."¹² The antinomies of speculative knowledge arise from our tendency to pursue an idea of the absolute totality of the universe. This pursuit of totality produces an unresolvable conflict that results in transcendental (or dialectical) illusion. Kant maintains that since such illusions involve a synthesis of experience they can be expressed by the four categories of quantity, quality, relation, and modality.

Corresponding to quantity is the dilemma between limited and unlimited time and space; corresponding to quality is the dilemma of whether or not matter is infinitely divisible; corresponding to relation is the dilemma of whether or not there is a free causality of the will that is different from the causality of nature; and corresponding to modality is the dilemma of whether or not there is a final cause or a first beginning of the universe. Here is a summary of these four antinomies.

First antinomy:

Thesis: The world has a beginning in time, and is also limited as regards space.¹³

Antithesis: The world has no beginning, and no limit in space; it is infinite as regards both time and space.¹⁴

Second antinomy:

Thesis: Every composite substance in the world is made up of simple parts, and nothing anywhere exists save the simple or what is composed of the simple.¹⁵

Antithesis: No composite thing in the world is made up of simple parts, and there nowhere exists in the world anything simple.¹⁶

Third antinomy:

Thesis: Causality in accordance with a law of nature is not the only causality from which the appearances of the world derive. To explain these appearances it is necessary to assume that there is also another causality, that of freedom.¹⁷

¹²Ibid., A407-408/B434.

¹³Ibid., A426/B454.

¹⁴Ibid., A427/B455.

¹⁵Ibid., A434/B462.

¹⁶Ibid., A435/B463.

¹⁷Ibid., A444/B472.

Antithesis: There is no freedom; everything in the world takes place solely in accordance with a law of nature.¹⁸

Fourth antimony:

Thesis: There belongs to the world, either as its part or as its cause, a being that is absolutely necessary.¹⁹

Antithesis: An absolutely necessary being nowhere exists in the world, nor does it exist outside the world as its cause.²⁰

Kant employs proof by reduction to absurdity to argue that both the theses and antitheses of the four antinomies can be logically established, thereby revealing the dilemma of speculative knowledge. He holds that these antinomies arise because absolute totality is beyond the scope of possible experience. Sensible intuition cannot supply the understanding with an experience of the universe as a totality, which the senses cannot perceive. The empirical world given in sensible intuition is always limited, incomplete, partial, related to other things, and subject to the causal nexus of nature. The “absolute totality in the synthesis of appearances” cannot be given in experience. Therefore the four antinomies cannot be proven by experience. No objects of experience can confirm either the thesis or the antithesis of these antinomies (therefore they can only be proven using the proof of conflict).

Kant maintains that the cosmological ideas are either too broad or too narrow for the concepts of the understanding, which apply solely to experience and allow the world to be empirically known to us. If we are to say that the world has no beginning, is composed of infinitely divisible parts, and has no first cause, such an idea would be too broad for any possible experience or empirical concept of the understanding; whereas if we are to say that the world has a beginning, is composed of indivisible simple parts, and has a first cause, this idea would be too narrow. Experience and the understanding will continue to progress and science will continue to discover and invent; they never recognize any limit, but always press their inquiries further. So the idea that the world has a beginning or that matter is infinitely divisible can never be proved by experience, while the idea that the world has no beginning and that matter is ultimately atomic and indivisible is not something that experience can definitively falsify.

How then might we resolve these dilemmas? Kant claims “transcendental idealism as the key to the solution of the cosmological dialectic.”²¹ He believes that the antinomies prove that transcendental idealism, i.e., the division between unknowable things in themselves and empirical appearances, is correct. Applying this transcendental distinction to the antinomies, Kant decides that the theses of these antinomies apply to things in themselves while the antitheses apply to experience. As things in themselves, the theses confirm the existence of God and the freedom of

¹⁸Ibid., A445/B473.

¹⁹Ibid., A452/B480.

²⁰Ibid., A453/B481.

²¹Ibid., A490/B518.

the will, which are not objects of knowledge or sensible intuition but are rational ideas proper to the domain of ethics. That is why the theses are correct. As appearances in the world of experience, however, the antitheses are also correct because the non-existence of God and free will agrees with our experience. There is no place in the sensible intuitions of time and space and the empirical world for a supernatural causality or spontaneous free will.

Kant maintains that the first and second antinomies are wrong, either in respect of things in themselves or the world of appearances. Things in themselves are not objects of knowledge, hence, time and space are not applicable to them, nor are questions of whether they are limited or unlimited, single or multitude (i.e., either finitely or infinitely divisible). Thus, to say that things in themselves are either finitely or infinitely divisible is wrong, because knowledge of the world of appearances is inseparable from our subjective forms of intuition. As mentioned above, as a series of appearances, forms of intuition can exist only in an empirical regress. Since they are dependent on our empirical knowledge, we cannot arrive at a confirmative conclusion, which will be either too broad (infinite) or too narrow (finite) for empirical knowledge. The claim that time and space are finite and that matter is not infinitely divisible does not conform to empirical knowledge, because empirical knowledge will continue to expand; likewise, the claim that time and space are infinite and that matter is infinitely divisible does not conform to empirical knowledge, because this can never be given to us by empirical knowledge. Therefore, both theses and antitheses are meaningless to experience. Kant argues that “since the world does not exist in itself, independently of the regressive series of my representations, it exists in itself neither as an infinite whole nor as a finite whole. It exists only in the empirical regress of the series of appearances, and is not to be met with as something in itself. If, then, this series is always conditioned, and therefore can never be given as complete, the world is not an unconditioned whole, and does not exist as such a whole, either of infinite or of finite magnitude.”²² Besides, “the number of parts in a given appearance is in itself neither finite nor infinite. For an appearance is not something existing in itself, and its parts are first given in and through the regress of the decomposing synthesis, a regress which is never given in absolute completeness, either as finite or as infinite.”²³ This empirical regress of time and space itself is not ongoing finitely or infinitely, but is ceaselessly ongoing. In other words, the ceaseless synthesis of our knowledge cannot be determined finitely or infinitely either, because synthesis does not have a finite or infinite absolute completeness. If we were to confirm that the regress can be infinitely ongoing, then we would have to presume that time and space are infinite, that is, “with the world having infinite magnitude as its premise.” If we were to confirm that the regress can only be finitely ongoing, then “such absolute limitation is impossible in experience.” That is, the regress would be too narrow to experience, because experience would keep expanding.

²²Ibid., A505/B533.

²³Ibid., A505/B533.

Hence, the key to resolving the dilemma between finite and infinite is to pin down that experience can keep expanding. These two antinomies are, instead of being contradictory judgments, opposite judgments of formal logic. That is, both of them can be false, therefore, there can be a third way (i.e., to be ceaselessly ongoing). “Ceaselessly ongoing” implies that experience is neither finite or infinite, and that it will keep going forever.

The theses and antitheses of the four antinomies indicate two sources and inclinations of Kant’s philosophy. The theses belong to traditional rationalism, and agree with theology and religion and the tendency of idealism. The antitheses belong to empiricism, and disagree with theological doctrines and the prevailing moral customs of his time. The antitheses are close to materialism in acknowledging the infinity of time and space and rejecting God and the non-natural causation of a free will. Kant himself expressly acknowledges that these antinomies exhibit the contrast between the Platonic and Epicurean schools of ancient Greek philosophy. He states that “the contrast between the teaching of Epicurus and that of Plato is of this nature. Each of the two types of philosophy says more than it knows. Epicurus encourages and furthers knowledge, though to the prejudice of the practical; Plato supplies excellent practical principles, but permits reason to indulge in ideal explanations of natural appearances in regard to which a speculative knowledge is alone possible to us—to the neglect of physical investigation.”²⁴ However, Kant himself compromises between these two schools and between the theses and antitheses of his antinomies. He sometimes inclines towards the antitheses and finds it lamentable that the philosophical world is under the sway of rationalism and fails to appreciate the justice of the antitheses. He claims that “it is extremely surprising that empiricism should be so universally unpopular.”²⁵ But he also abides by the religious ideology of the time and complains that when empiricism “becomes dogmatic in its attitude towards ideas, and confidently denies whatever lies beyond the sphere of its intuitive knowledge, it betrays the same lack of modesty; and this is all the more reprehensible owing to the irreparable injury.”²⁶ In his theory of knowledge, Kant admires Epicurus, who recommends that deductions should never be pressed beyond the limit of experience: “He showed in this regard a more genuine philosophical spirit than any other of the philosophers of antiquity.”²⁷ In ethics, however, Kant admires Plato. The noumenon is superior to appearances, as Plato said; and ethics is superior to scientific knowledge, as Epicurus said.

However, as a system that supposedly synthesizes these two antithetical positions, Kant’s transcendental idealism is the most advantageous position.

Due to the demand for conformity with fact, Kant’s arguments for the antitheses tend to be relatively clear, whereas his arguments for the theses are comparatively

²⁴Ibid., A471-472/B499-500.

²⁵Ibid., A472/B500.

²⁶Ibid., A471/B499.

²⁷Ibid., A471/B499.

weak. Here we shall illustrate the point with Kant's arguments for the thesis and antithesis of the first antinomy, that is, the arguments for and against finite time and space. The arguments are as follows:

Thesis: The world has a beginning in time, and is also limited as regards space.

Antithesis: The world has no beginning, and no limits in space; it is infinite as regards both time and space.

Proof [of the thesis]:

If we assume that the world has no beginning in time, then up to any given moment an eternity has elapsed, and there has passed away in that world an infinite series of successive states of things. Now the infinity of a series consists in the fact that it can never be completed through successive synthesis. It thus follows that it is impossible for an infinite world-series to have passed away, and a beginning of the world is therefore a necessary condition of the world's existence. This was the first point that called for proof. As regards the second point, let us again assume the opposite, namely, that the world is an infinite, given whole of co-existing things. Now the magnitude of a quantum which is not given in intuition [i.e., perception] as being within certain limits can only be thought through the synthesis of its parts, and the totality of such a quantum only through a synthesis that is brought to completion through repeated addition of unit to unit. In order, therefore, to think of a world, as a whole, that fills all spaces, the successive synthesis of the parts of this infinite world must be viewed as completed, that is, an infinite time must be viewed as having elapsed in the enumeration of all co-existing things. This, however, is impossible. Therefore, an infinite aggregate of actual things cannot be viewed as a given whole, nor consequently as simultaneously given. The world is, therefore, as regards extension in space, not infinite, but is enclosed within limits. This was the second point in dispute.²⁸

Proof [of the antithesis]: First let us assume that the world has a beginning. Since the beginning is an existence that is preceded by a time in which the thing is not, there must have been a preceding time in which the world was not, i.e., an empty time. Now no coming to be of a thing is possible in an empty time, because no part of such a time possesses, as compared with any other, a distinguishing condition of existence rather than of non-existence; and this applies whether the thing is supposed to arise of itself or through some other cause. In the world, many series of things can, indeed, begin; but the world itself cannot have a beginning, and is therefore infinite in respect of past time. As regards the second point, let us start by assuming the opposite, namely, that the world in space is finite and limited, and consequently exists in an empty space which is unlimited. Things will therefore not only be related in space but also related to space. Now since the world is an absolute whole beyond which there is no object of intuition, and therefore no correlate with which the world stands in relation, the relation of the world to empty space would be a relation of it to no object. But such a relation, and consequently the limitation of the world by empty space, is nothing. The world cannot, therefore, be limited in space; that is, it is infinite in respect of extension.

These proofs really only use one argument: that an infinite series cannot be completed ("synthesized") either in thought, perception, or imagination. This was also Aristotle's argument against infinite space. There are two arguments here: First, that there is no reason for the universe to come to be at one time rather than

²⁸Ibid., A426-428/B454-456.

another when all points in an empty time are alike. Second, that objects can only be spatially related to each other, not to empty space, which is not an object.²⁹

The argument for the antithesis, although rather tedious, is fairly clear because it conforms to experience and common knowledge. This argument can be put in brief terms: If the world had a beginning, then there would be empty space before the beginning, while eventless empty time would be similar at any time. Therefore, since the beginning of the world cannot be distinguished in empty time, the world has no beginning and time is infinite. The argument for the thesis is rather different. The finitude of space is derived from the finitude of time, while the finitude of time is in turn based on time having a beginning, which makes it finite. This derivation is quite confusing in its wording and in its specious argumentation. It completely changes the essential nature of the time-vector and confuses “the beginning” that moves toward the future with a “fulfillment” that refers to the past series. “The beginning” that needs to be proven is transformed into a premise of the argument. This argument in fact jumbles together the actual infinite and the more potential infinite series of mathematics.

6.3 “Conflict Is Inevitable”

When refuting Dühring, Engels quotes this argument of Kant’s verbatim and observes that the infinity of time and space “is something quite different from that of an infinite series, for the latter always starts from one, with a first term. The inapplicability of this idea of series to our object becomes clear directly we apply it to space.” He writes that “because in mathematics it is necessary to start from definite, finite terms in order to reach the indefinite, the infinite, all mathematical series, positive or negative, must start from 1, or they cannot be used for calculation. The abstract requirement of a mathematician is, however, far from being a compulsory law for the world of reality.”³⁰ Actual time and space do not have either a beginning or an end, and Kant obviously conflates the supposedly actual infinity of time and space with the merely potential infinity of a mathematical series. Hence Kant’s argument on the finitude of time and space cannot stand.

However, the significance of this part of the work lies in Kant’s raising the dialectical relation between the infinite and the finite, and exposing the dilemma that rational thought inevitably encounters. He sees the dilemma as an illusion of subjective knowledge that arises when rational thought is applied to experience, but that does not mean that these ideas cannot have some kind of positive significance. This conclusion has been influential in the history of philosophy. Hegel time and again mentions Kant’s antinomies, commenting, for instance, that the “Kantian conception of the antinomies is that they ‘are not sophistic artifices but conflicts

²⁹Ibid., A427-429/B455-457.

³⁰Engels (1994).

reason must run up against.’ This last is a Kantian expression, and the view expressed is an important one.”³¹ Additionally, “The stain of conflict ought not to be in the essence of what is in the world; it has to belong only to thinking reason, to the essence of the spirit.”³² Hegel acknowledges that Kant sees conflicts as problems that reason necessarily encounters, but criticizes Kant for regarding these conflicts as mere subjective illusions. He says:

This true and positive significance (expressed generally) [of these contradictions] is that everything actual contains opposed determinations within it, and in consequence the cognition and, more exactly, the comprehension of an object amounts precisely to our becoming conscious of it as a concrete unity of opposed determinations.³³

It is quite correct to say that we can go beyond any determinate space and similarly beyond any determinate time; but it is no less correct to say that space and time are only actual in virtue of their determinacy (i.e., as “here” and “now”), and that this determinacy lies in their very concept.

When the antinomy of freedom and necessity is more closely considered, the situation is that what the understanding takes to be freedom and necessity are in fact only ideal moments of true freedom and true necessity; neither of them has any truth if separated from the other.³⁴

All these remarks aim to elucidate how actual things themselves harbor conflicts that the search for truth cannot evade or ignore. Instead, truth can only be attained in the process of grasping the unity of these opposites and transforming their conflict by the *Aufhebung*, or cancellation and preservation at a higher level, of the abstract partiality that characterizes the concepts of the understanding. Hegel sees knowledge as the dialectical movement of concepts, and this process requires the development of conflicts and the unfolding of antinomies. Hegel holds that “the main point that has to be made is that antinomy is found not only in the four particular objects taken from cosmology, but rather in all objects of all kinds, in all representations, concepts, and ideas.”³⁵ However, “Kant only identifies the four conflicts, that is too few, for every concept harbors conflicts.”³⁶ Additionally, “A true solution can only consist in that two determinations, in being opposed and yet necessary to one and the same concept, cannot have validity in their one-sidedness, each for itself, but have truth rather only in their sublated being, in the unity of their concept.”³⁷ It can be said that this unity is obtained in the cognitive process of the deriving of concepts. Hegel holds that knowledge should resolve its problem of finitude with its own movement, and thereby resolve its own conflicts.

³¹Hegel, and George Di Giovanni, *the Science of Logic*, 191.

³²Hegel et al. (1991).

³³Ibid., §4 8. 93.

³⁴Ibid., §4 8. 94.

³⁵Ibid., §48, 92.

³⁶Hegel, E. S. Haldane and Frances H. Simson, *Lectures on the History of Philosophy*.

³⁷Hegel, and George Di Giovanni, *the Science of Logic*, 158.

Kant is not unaware that all concepts and things may conflict. From his first treatise written in the 1750s to his “An Attempt to Introduce the Concept of Negative Quantities into Philosophy,” written in the 1760s, and the essay “On History,” written in the 1780s, Kant always emphasizes the potential conflicts of things and concepts, which he thought were not at all detrimental to knowledge. On the contrary, he often underscores their positive significance by discussing repulsive forces and counteractions in nature, the unsociable in society, and the process of development through discord and competition (see Chap. 9). These are important moments that prepare Kant’s philosophy for its Hegelian development. Kant raises four antinomies, while Hegel acknowledges the omnipresence of antinomies and sees them as an intrinsic dialectic of concepts. Marxism acknowledges that rational knowledge is obtained through concepts that are inevitably fixed and rigid and can only partially and abstractly reflect a fragmented objective reality. Only with practice as its ground, and by overcoming the partiality and static fixation of concepts in the process of their ceaseless combination, transition, and transformation, can knowledge conform to objective actuality and attain truth. The finite and infinite, causality and contingency, freedom and necessity—all these antinomies actually exist in nature and in history, and have to be worked through in the progress of human thought. The same point can be made with respect to the development from simple mechanical change to the evolution of organisms, from the macrocosm revealed by the theory of relativity to the microcosm revealed by quantum mechanics, and in the endlessly complicated social life and tumultuous class struggles of history. As pointed out by Engels:

Motion itself is a conflict: even simple mechanical change of position can only come about through a body being at one and the same moment of time both in one place and in another place, being in one and the same place and also not in it. And the continuous origination and simultaneous solution of this conflict is precisely what motion is.

Life consists precisely and primarily in this—that a being is at each moment itself and yet something else. Life is therefore also a conflict which is present in things and processes themselves, and which constantly originates and resolves itself; and as soon as the conflict ceases, life, too, comes to an end, and death steps in.

We likewise saw that also in the sphere of thought we could not escape contradictions. Here once again we find the same contradiction as we found above, between the character of human thought, necessarily conceived as absolute, and its reality in individual human beings all of whom think only limitedly. This is a contradiction which can be resolved only in the course of infinite progress, in what is—at least practically for us—an endless succession of generations of mankind. In this sense human thought is just as much sovereign as not sovereign, and its capacity for knowledge just as much unlimited as limited. It is sovereign and unlimited in its disposition, its vocation, its possibilities and its historical ultimate goal; it is not sovereign and it is limited in its individual realisation and in reality at any particular moment.³⁸

³⁸Engels, *Anti-Dühring*.

6.4 Particularities of the Four Antinomies

From his early years Kant had always emphasized the contradictions present in actual things, and many of his works are devoted to the topic of such contradictions. So why does he present only four antinomies in this discussion of the dialectical illusions? There is a reason. The theses and antitheses of the four antinomies are obviously distinct from the theses and antitheses of contradictory concepts in general. One should not bury, as Hegel does, the specific content of the four antinomies under the dialectic of the unity of opposites in general. Rather, one should investigate the particularity of their contradictions. The problem of the particularity of the four contradictions cannot be resolved by merely dwelling on their universality.

We mentioned in Chap. 1 Kant's claim that the four antinomies woke him from a dogmatic slumber and compelled him to expel this scandal of human reason, which he finally did with his system of critical philosophy and transcendental idealism. Kant employs his distinction between things in themselves and appearances to resolve the four contradictions and shake off transcendental illusion. In the *Prolegomena*, Kant writes that "this product of pure reason in its transcendent use is its most remarkable phenomenon, and it works the most strongly of all to awaken philosophy from its dogmatic slumber, and to prompt it toward the difficult business of the critique of reason itself."³⁹ He elaborates on this point in the *Critique of Pure Reason*:

From this antinomy we can, however, obtain, not indeed a dogmatic, but a critical and doctrinal advantage. It affords indirect proof of the transcendental ideality of appearances a proof which ought to convince any who may not be satisfied by the direct proof given in the Transcendental Aesthetic. This proof would consist in the following dilemma. If the world is a whole existing in itself, it is either finite or infinite. But both alternatives are false (as shown in the proofs of the antithesis and thesis respectively). It is therefore also false that the world (the sum of all appearances) is a whole existing in itself. From this it then follows that appearances in general are nothing outside our representations which is just what is meant by their transcendental ideality.⁴⁰

Kant's critical philosophy crucially depends on both his appreciation of the scientific achievements of his time and his struggle with rationalism. The four antinomies directly relate to this investigation and struggle. In the first place, the question of the finitude or infinity of the world is not just a controversial debate that goes back to the beginning of Western philosophy among the Pre-Socratics (e.g., Parmenides holds that space is finite, while the atomists and Pythagoras hold that space is infinite; Plato's time can be said to be finite, while Aristotle's is otherwise); it was also a topic of scientific debate in Kant's time, and that is what drew his attention to the problem.

³⁹*Prolegomena to Any Future Metaphysics*, §50. The cosmological ideas are the product Kant is referring to here.

⁴⁰*Critique of Pure Reason*, A506-507/B534-535.

Newton maintained the absolute existence of infinite time and space, while Leibniz believed that both time and space were merely relational. Kant devoted many years to the investigation of this question and wrote many essays on this topic, but the problem was not solved until he found his way to his critical philosophy. The same point can be made concerning the antinomy between atomism and continuous theories of matter, which reflects both the controversies sparked by ancient atomism and Aristotle's criticism of it, as well as differences once more between Newton and Leibniz. The third and fourth antinomies concern issues arising from similarities and conflicting differences in science, religion, and metaphysics (see Chap. 1). The contradiction between the infinite and finite or between causality and freedom compels Kant to break through the rationalist dogma of transcendental realism and to conceive his critical philosophy of transcendental idealism. "Transcendental realism" refers to the rationalists' idea that God and free will are realities that utterly transcend sensuous experience. However, from the viewpoint of Kant's transcendental idealism, the world, as the object of human knowledge, is not a real thing in itself, nor is free will a metaphysical reality that scientific metaphysics can establish as true. The question of whether the world is finite or infinite only arises in the continuous progress of our knowledge, and does not bear on the intrinsic reality of the world in itself. Kant maintains that the conflict between causality and freedom is resolved with the distinction between appearances and things in themselves. The sensible world of appearance is controlled by necessary mechanical causality, which absolutely excludes freedom, while freedom can be (problematically) attributed only to noumena (things in themselves) which, however, cannot be proven by experience; it is only a logical instead of an actual possibility or existence. It can be thought but cannot be known. One should not confuse appearance and reality or noumenon and phenomenon, as rationalists did and which led them into the insuperable problems Kant exposed in the antinomies of pure reason.

It is evident therefore that the four antinomies have a special, particular place in Kant's system, and that their resolution is the keystone of Kant's critique.⁴¹ The question of finitude and infinity, as a topic in science and philosophy, has been around for a long time, and is still under heated debate. Zeno of Elea in ancient Greece exposed several well-known paradoxes concerning the reality of time and motion, and Chinese philosophers of the pre-Qin period also discovered these problems. "If from a stick a foot long you every day take the half of it, in myriad ages it will not be exhausted," and "That which is so great that there is nothing outside it may be called the Great One." Indeed, we are still discussing today whether the universe is finite or infinite, and the particle divisible or indivisible, just

⁴¹Therefore it can be said that the form of the *Critique of Pure Reason* corresponds to some degree with the history of its composition. It begins with the Aesthetic, whose ideas about time and space were earlier expressed in the Inaugural Dissertation, proceeds to the Dialectic by raising the problem of the antinomies, and finally explicates the distinction between appearances and things in themselves. This sequence of Kant's writing was revealed by scholars, rather than being apparent in the actual structure of the book.

as with the possibility of free will. So it is appropriate that these problems should find a special, particular place in Kant's system. It is also the case with the questions of causality (necessity) and freedom that they have been a focus of debate since ancient times. Such is the particularity of the four antinomies, unlike other conflicts in general, that gives them their important significance.

Hegel's contribution to dialectic was to have raised and then properly solved the four antinomies. Hegel sees infinity as merely a potentially endless expansion of a series, which he calls a "bad infinity" because its end is unreachable, e.g., 1.2.3.4... or $1\frac{1}{2}, 1/4, 1/8...$ As Lenin points out, this infinity "qualitatively counterposed to finitude, not connected with it, separated from it, and if the finite were *diesseits* [on this side], and the infinite *jenseits* [on that side], as if the infinite stood above the finite, outside it."⁴² Newton's cosmology belongs to this "bad" kind of infinity. Kant disposes of the difficulty of this infinity, whereas Hegel finds a "true" infinity that resolves the conflict. Hegel maintains that there is a process of the finite becoming the infinite; the finite contains the infinite. His so-called bad infinity is like a straight line that extends endlessly, while true infinity is like a circle, "without beginning and end."⁴³ Our modern view that the universe is a four-dimensional space can also be said to belong to Hegelian infinity. Nevertheless, this infinity is actually finite because modern cosmology has calculated the dimensions of the universe. Perhaps the conflict between infinity and finitude has not yet finally been resolved.

The two antinomies concerning time and space are Kant's mathematical antinomies and are concerned with magnitude, such as the infinite or finite divisibility of matter. The other two antinomies are dynamical, involving not magnitude but "existence." Kant states that "the dynamical concepts of reason [...] possess this peculiarity that they are not concerned with an object considered as a magnitude, but only with its existence."⁴⁴ To describe them as concerned with existence means that they concern the actual existence of a totality. Is there such a totality or not? The third and fourth antinomies are in fact about the same question, because whether or not the universe has a final supernatural cause and whether or not a free causality different from that of nature exists both ultimately come down to the question of the existence of God.

In my view, the problem of the final cause of the world, with the assumption that the world forms a closed, complete totality, inevitably leans toward mysticism because our concepts, such as our concept of causality, are reflections of conditions in the objective world from which they are inseparable. If we foist these concepts onto the totality or try to extend them back to the supposed absolute beginning of the world, we are not only guilty of a linguistic error (as maintained by logical positivism), we raise pseudo-questions and inevitably fall into mysticism.

⁴²Lenin, *Philosophical Notebooks*.

⁴³Hegel, *Science of Logic*, vol. 1.

⁴⁴*Critique of Pure Reason*, A535/B563.

Wittgenstein claims: “Not how the world is, is the mystical, but that it is.”⁴⁵ In other words, the laws and appearances of the universe are not mystical, but why the universe exists at all is an inevitably irresolvable mystery. Wittgenstein keenly raises this “metaphysical question,” which is of course the very one that Kant was also grappling with in the third and fourth antinomies.

The crucial point in Kant’s discussion of the ideas of reason, including his cosmological antinomies, is the question of totality, which constitutes an important feature of dialectic from Kant to Hegel. For Kant, objective totality raises the cosmological antinomies and the problem of God, while the problem of a subjective totality raises the question of the soul. The soul and God are merely mystical manifestations of the idea of totality in these antinomies. After Kant, Hegel also reaches for the concept of totality and puts it in an intimate nexus with dialectic, thereby according it an unprecedented significance. Hegel maintains that totality can only truly exist and be known in the whole process of dialectic. Totality is the whole process of dialectical development. To put it plainly, we can say that totality is a system. Here also lies the difference of modern dialectics, which was initiated by Kant and brought to consummation by Hegel, in contrast to ancient dialectics (e.g., the contradictions of Zeno and the Chinese opposition of *yin* and *yang*). The modern conception of dialectic deals with the whole movement and course of history instead of merely disposing of opposite items (contradictions) in things or thought.

Hegel’s dialectical logic differs entirely from the ancient idea of contradiction. In Hegel’s system of logic, the unity of opposites is the core of dialectic but not its entire content. Its entirety unfolds as the dialectical movement of opposites that ultimately form a totality. The law of the negation of the negation is also an abstraction from the totality of this process and represents the unique character of the Hegelian dialectic. This law is by no means a superficial dogmatic process of “thesis-antithesis-synthesis,” as so many commentators claim. Its essence lies in the process of the unity of opposites, developed through ceaseless negation and the attainment of truth in the unfolding of the totality. It is a historical mode manifested by the unity of opposites.

Marxism emphasizes Hegel’s law of the negation of the negation. The struggle and resolution of conflicts (the unity of opposites) is negation, and the negation of this negation is the synthesis that Kant emphasized. It should be noted that to negate is not merely to cast aside but to sublimate and absorb the essence and overcome partial views, to consume and digest conflicting forces in a way that ultimately makes real progress. Such is the development of dialectic.⁴⁶ Marx sees Hegel’s dialectic as a “dialectic of negation.” Engels, in defining dialectic, expressly points out that “the development arises from conflict, or the negations of negation—[a] spiral form of

⁴⁵Wittgenstein, *Tractatus Logico-Philosophicus*, 6.44.

⁴⁶Piaget sees negation as dialectical reason, explaining that “in logic and mathematics, construction by negation has practically become a standard method.” *Structuralism*, Chap. 7. He underlines the reversibility of the operation and discerns the importance of negation for construction.

development.”⁴⁷ While Lenin comments: “From assertion to negation—from negation to “unity” with the asserted—without this dialectics becomes empty negation, a game, or skepsis.”⁴⁸ It is evident that the gist of the law of the negation of the negation does not lie in the external form of thesis-antithesis-synthesis, especially not when this form is construed in either a mystical or an overly rigid way. The gist is to comprehend truth in a systematic and organic structure, which is obtained through the totality of the whole process of various contradictory movements. “Truth lay now in the process of cognition itself, in the long historical development of science.”⁴⁹

The totality of a system is greater than the sum of its parts; it must be thought historically and comprehensively. For instance, we comprehend the present from a comprehensive understanding of the past and the future, which are **out of reach in the experiences of the present. This distinguishes the dialectical method from scientific and positivistic empirical methods, which merely focus on parts and details of the whole. Dialectic is the method of reason and grasps the totality, while positivism is the method of the understanding and comprehends partial, merely abstract aspects and elements.** Because dialectic focuses on totality it does not result in determinism. It understands causality not as a linear mechanical determinism but rather as the complex structure of a system forming a **plural and reticular causal nexus in which alternative possibilities abound.** Meanwhile, any selection among these alternatives must affect the whole system and its structure. Hence, the process of totality cannot be seen as a necessary mechanical determinism. **Contingency**, multiple possibilities, and alternatives should be noted.

In sum, if dialectic did not include the concept of totality it would not be able to determine truth objectively and would amount to nothing more than the trite observation that there are two sides to everything, or that opposites have their hidden unity. Then the great power of the negative would reduce to an “empty negation.” This pseudo-dialectic does not proceed historically and comprehensively from totality. Instead, it grabs a question or a historical stage and blathers selectively or quibbles sophistically. A properly objective dialectic reflects the totality of the material process and its unity.⁵⁰ This is why Lenin repeatedly states that “truth is a process” and “the unfolding of the sum-total of the moments of actuality N.B. = the essence of dialectical cognition.”⁵¹ Only in this way can the unity of opposites (contradictions) have historical force. Here also lies the character of the Hegelian dialectic and its great historical sense. Human beings, who first created tools as well as material and social machines to subdue the world, and who were in turn reduced to the status of subsidiaries to these tools and machines, may thereby be liberated from their alienation and become the true masters of the world. This historical course of freedom is the true foundation of dialectic and of Hegelian idealism.

⁴⁷Engels, *Dialectics of Nature*.

⁴⁸Lenin, *Philosophical Notebooks*.

⁴⁹Engels, *Ludwig Feuerbach and the End of Classical German Philosophy*.

⁵⁰Lenin (1994).

⁵¹Ibid.

Hegel's dialectic, characterized by the law of the negation of the negation, is not only a view of history but also an ontology of the externalization and return of the spirit. Hegel's noumenon is a complex panoramic course of evolution as the absolute spirit's self-externalization (or objectification) in the form of nature, and its eventual return to itself. The whole course is seen as truth itself and forms an organic whole, which is the whole course of history. In this movement of externalization and return, the spirit encompasses all things, thereby obtaining for itself richness, actuality, and profundity. Here also lies the significance of the panoramic course. Kant sees totality as merely subjective ideas and dialectical illusions, whereas Hegel views it as a great power of ontological actualization unfolding along an inevitable historical course. Ideas of reason, which in Kant are merely subjective regulative principles, become in Hegel objective principles with active controlling power. For Kant, ideas of reason belong to methodology and guarantee the unity and system of the understanding (knowledge), while, for Hegel, they belong to ontology and guarantee the unity and system of actuality (existence). Hegel Spinozicizes (as it were) or substantializes Kantian ideas of reason, availing himself of the spontaneity by which Fichte used the self to establish the non-self. "In the speculative way of speaking, this operation is called comprehending Substance as Subject, as an inner process, as an Absolute Person, and this comprehension constitutes the essential character of Hegel's method."⁵² Unlike Spinoza's melting everything into substance, Hegel offers a whole course of externalization and restoration of the subject through the process of thesis-antithesis- synthesis (i.e., the negation of the negation). Nature, which is seen by Kant as the opposite of subjective reason, is with Hegel integrated into the course of reason and becomes one of its links and turning points. Human spirit, as an objective creative power, seizes and transforms nature.

To Hegel, true infinity (the good infinity) resides only in the history of human spirit. His concrete universal, the identity of thought and existence, as well as the unity of subject and object are founded on this ground. Hence it can be said that Hegel's view of history as "negation of the negation" is an ontological view which sees the spirit as a force of transformation in the world. Hegel replaces Kant's transcendental logic of dialectical illusion with an idealistic- historical logic, unifying epistemology, logic, history, and ontology in a complete system of philosophy. This system promotes the dialectic of speculative logic as ruling over everything, which unfortunately leads to the loss of a healthy and important content—which is what Kant should have taught us to expect when logic is separated from experience.

Marx states:

Hegel has conceived the negation of the negation, from the point of view of the positive relation inherent in it, as the true and only positive, and from the point of view of the negative relation inherent in it as the only true act and spontaneous activity of all being, he has only found the abstract, logical, speculative expression for the movement of history, which is not yet the real history of man as a given subject, but only the act of creation, the history of the origin of man.⁵³

⁵²Marx and Engels (1994).

⁵³*Economic and Philosophic Manuscripts*. Marx Engels Internet Archive 1994.

The actual history of human beings is the ongoing progress of practical activities that enrich them through the transformation of nature. This progress often manifests as a circle that forms a spiral of twists and turns. What happens in experience and history can also happen in philosophical systems and debate. This is why Lenin sets great store on the Hegelian thought of circular development. The ground for the circular movement of the negation of the negation, from the perspective of Marxist materialism, is neither objective spirit nor the self-consciousness, as in Hegel's logic and ontology, but can only be the social practice of human beings. Dialectic should not be allowed to become an abstract logical framework placed above subjective practice, but only a sort of regulative idea. In practice, dialectic still needs to obey the fundamental principle of what is knowable and operational on the basis of experience.

History unfolds in objective time. One of the heated debates of modern philosophy is about time. Bergson and Heidegger see the subjective experience of time as the real, and exclude the objective time of social practice, hence the history they talk about is actually non-dialectical individual experience isolated from the progress of an objective totality. Modern structuralism also emphasizes the idea of the whole, although the fundamental defect of structuralism is its lack of a philosophy of history. It does not have a historical concept of totality. It is thus advisable to critically absorb and adopt the methods and concepts of structuralism while never forgetting that its philosophical ground is not historical dialectic but transcendental metaphysics. Only with a dialectic that unfolds in historical process can a scientific and historical-structural analysis be truly carried out. The Western Marxists also set great store by the concept of totality, but their conception of totality (such as that of György Lukács) is rather vague. The concept of totality they oppose to historical materialism is actually subjective, individual, cultural, and psychological, and thus obliterates objective processes (see Chap. 9). In this chapter, I wish to underline the historical nature of totality through an illustration of methodology, which sees dialectic as a system of totality. This historical nature actually arises from the objective, actual process of human practice, but the "agreement between logic and history" of the dialectic often results in the latter subjugating the former, which leads to serious consequences.

Thus, we have briefly touched on the series of problems concerning "totality" that are raised by the theory of dialectic illusion in Kant's *Transcendental Dialectic*. We should also note that Kant's three ideas of reason (the soul, free will, and God) are not only ideas of a totality that the understanding pursues to unify and synthesize. They also have a power and status superior to empirical knowledge. They are not only transcendental logical illusions but also postulates of practical reason in ethics; and a full consideration of their role in Kant's philosophy must eventually lead us from epistemology to ontology.

Kant's ideas of reason have both negative and positive functions and implications. Their negative aspect is to warn against the understanding's transcendent use, against its reach beyond the domain of experience. Their positive aspect is to focus thought on the inevitable limits of the understanding and assist us in making the transition from appearances to noumena. Both aspects can be essentially attributed

to the question of things in themselves. Kant states: “Thus all human knowledge begins with intuitions, proceeds from thence to concepts, and ends with ideas.”⁵⁴ The *Critique of Pure Reason* reaches its destination in epistemology before Kant finally proposes his ontology of ethics. This last part contains essential ethical thoughts, which though not fully expounded will be carried over to the *Critique of Practical Reason*, as well as the teleological thoughts in the *Critique of Judgment*. It is therefore evident that the third and fourth antinomies, with the problematic affirmation of things in themselves as their final end, are an important link in the transition to ethical ontology, which will be the theme of the next chapter.

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⁵⁴Kant, and Kemp Smith, *Critique of Pure Reason*, A702/B730.

Chapter 7

Epistemology: VI. Things in Themselves



Self-consciousness, that is, the ground of a priori synthetic judgment, is the center of Kant's epistemology, while the doctrine of the thing in itself is the center of Kant's whole system of philosophy. In the conclusion to the Transcendental Analytic, Kant devoted an entire chapter to "The Ground of the Distinction of all Objects in general in Phenomena and Noumena." There he explained the concept of the thing in itself. The poet Heine regarded this chapter as the most important part of the whole book, even though Kant provides much discussion on the topic of the thing in itself before and after this chapter and indeed throughout the *Critique of Pure Reason*, e.g., in the chapters on the "Transcendental deduction," "erroneous reasoning," the third and fourth antinomies, the transcendental ideal, the appendix to dialectic, etc.

Because of its pivotal status in Kant's philosophy, the implications of the concept of the thing in itself become rather involved. In epistemology, the meaning of this concept is threefold: the source of sensibility, the limits of knowledge, and an idea of reason.¹ It is also crucial to the transition from epistemology to ethics.

7.1 The Thing in Itself as the Source of Sensibility

The first and basic meaning of the thing in itself is as the source of sensible material in knowledge. Kant holds that things in themselves are the ultimate, albeit unknowable, source of our sensible intuitions. Things in themselves exist independently of us and our sensibility is aroused by their action on our sense organs. Without things in themselves, sensibility would provide no empirical data, and knowledge would not have a starting point. In this sense, things in themselves refer to the objective material world that exists independently of our consciousness. If we examine the whole *Critique of Pure Reason* and understand it in conjunction with

¹The role of the thing in itself as an ontological concept is to limit the experience of the senses, though as Kant himself admits, in doing so, this concept also limits the understanding.

Kant's other works (such as *Prolegomena to any Future Metaphysics*, *Metaphysical Foundations of Natural Science*), it is evident that sense, as the source of experience, is the ground of appearances and that this ground exists independently of our consciousness and is nothing spiritual such as Berkeley's God.

Kant declared in the *Prolegomena* that "it never came into my mind to doubt" the existence of things. For Kant, "the word transcendental, however, which with me never signifies a relation of our cognition to things, but only to the faculty of cognition...[it is] reprehensible idealism to transform actual things (not appearances) into mere representations."² He also says, "Thus perception of this permanent is possible only through a thing outside me and not through the mere representation of a thing outside me."³ Kant often uses the phrase "thing in itself" in the plural, which seems to imply that the phrase actually refers to distinct spatial bodies.⁴ As the source of sensibility, things in themselves cannot refer to a single particular spiritual substance. Strictly speaking it cannot be correct to attribute plurality, unity, or causality to things in themselves, as these concepts are all categories of the understanding and are limited to possible experience. However, the way Kant describes the thing in itself reveals its true nature. Although we have to dig to uncover its materialistic aspect, I consider this aspect to be decisive to the whole system of his epistemology because it accounts for the inseparability of the understanding from sensibility and the prohibition of its transcendent use.

Kant stresses time and again that the principle of the understanding is experience rather than ideas, and intuition rather than concepts. Experience and intuition alone can prove the actuality and truth of knowledge (see Chap. 4). Kant's refutations of Descartes's idea of the "cogito ergo sum" and Leibniz's rationalism and his effort to distinguish his position from Berkeley and Fichte all imply what I consider to be the materialistic aspect of Kant's conception of the thing in itself (Kant saw Fichte's philosophy as a sort of pure logic without actual objects, see Chap. 5). He affirms that the thing in itself, as the source of sensibility, exists independently of human consciousness. He maintains that the intuited manifold of sensibility is given independently of the activity of the understanding; moreover, it is also the only criterion of knowledge. Kant argues that "there is one feature from which I could not abstract, the feature, namely, that the manifold to be intuited must be given prior to the synthesis of the understanding, and independently of it."⁵ Additionally:

²*The Prolegomena to Any Future Metaphysics*, §13, Note III.

³Kant, and Kemp Smith, *Critique of Pure Reason*, B275.

⁴See Prichard, *Kant's Theory of Knowledge*. He explains that "the interest which it has excited is due to Kant's use of language which at least seems to imply that bodies in space are things in themselves, and therefore that here he really abandons his main thesis" (p. 319). Kemp Smith comments that "his use of 'body' as a name for the thing in itself is likewise without justification" (*A Commentary to Kant's Critique of Pure Reason*, 306). Paton also asks "if we cannot apply our human categories to things in themselves, how can we speak of things in themselves in the plural?" *Kant's Metaphysic of Experience*, vol. 1, Chap. 2, Sect. 4.

⁵Kant, and Kemp Smith, *Critique of Pure Reason*, B145.

Idealism consists in the claim that there are none other than thinking beings; the other things that we believe we perceive in intuition are only representations in thinking beings, to which in fact no object existing outside these beings corresponds. I say in opposition: There are things given to us as objects of our senses existing outside us, yet we know nothing of them as they may be in themselves, but are acquainted only with their appearances, that is, with the representations that they produce in us because they affect our senses. Accordingly, I by all means avow that there are bodies outside us, that is, things which, though completely unknown to us as to what they may be in themselves, we know through the representations which their influence on our sensibility provides for us, and to which we give the name of a body – which word therefore merely signifies the appearance of this object that is unknown to us but is nonetheless real.⁶

I think this argument clearly expounds the materialistic aspect of the doctrine of the thing in itself. The “trans-” in the theory of the transcendental concepts of the understanding (categories) refers to mere logical possibility, while the actuality of knowledge depends on sensibility. Many philosophers, celebrated or obscure, such as Fichte, Hegel, and Schopenhauer, employ various methods to blot out the materialistic aspect of Kant’s thing in itself.⁷ Some believe that the thing in itself, as a sort of objective existence independent of human consciousness, is superfluous to Kant’s philosophy and an unnecessary encumbrance. Others believe that Kant’s thing in itself is actually God, spirit, consciousness, or will, instead of the objective material world.⁸ We can read such kinds of interpretations in many historical books of philosophy. In order to blot out the materialistic aspect of Kant’s thing in itself, commentators try to identify Kant with Berkeley. For instance it is said that “the relation between Kant and Berkeley has yet been an unresolved secret,” and that this relation “is almost backed up by everyone who has studied the relation of these two philosophers.”⁹ They explain that Kant’s disagreement with Berkeley is actually a deliberate misunderstanding, or a misunderstanding due to Kant’s reading only secondary sources, when in fact his views agree with that of Berkeley. Such interpretations have appeared from the beginning, with the publication the first edition of the *Critique of Pure Reason* (see the criticism by Christian Garve), and are still widespread today. I do not buy this view. Kant’s thing in itself is actually compatible with the actual existence of material bodies, and one cannot place Kant and Berkeley in the same camp.

Kant’s thing in itself, although the source of sensibility, is also completely unknowable.

For this reason Kant is called an agnostic. Kant’s thing in itself is not a material thing that science might investigate but is instead the unknowable noumenon behind matter. Kant maintains that matter is the object of outer sense and cannot be reduced to subjective concepts, yet it also cannot be equated with the thing in itself.

⁶Ibid., §13, Note II.

⁷The scholars of the ontological school of Kant-studies reject the Neo-Kantian cancelling of thing in itself, but they maintain that the thing in itself ultimately belongs to the metaphysics of morality and is in no way a materialistic conception.

⁸See A. C. Ewing, *A Short Commentary on Kant’s Critique of Pure Reason*, 189–191.

⁹Kant and Berkeley (1973).

He explains: “space is only the form of our external sensible intuition, so that matter and space are not things in themselves but only subjective modes of representation of objects that are in themselves unknown to us.”¹⁰ Kant uses the term “matter” not to refer to the thing in itself, but to material, i.e., the data for logical judgments and the content of sensible experience. Therefore, the quintessential meaning of the thing in itself is not matter but the unknowable.

The conception of the unknowability of the thing in itself has a long history. It is not only a weapon that idealism carries into its fight with materialism, but also an internal defect of the old materialism itself. We can see this in the concept of substance in Locke. He maintains that a substance exists independently of subjective consciousness as the basis for attributes. When we ask what the nature of this substance is, Locke replies that “it is something we do not know of,” i.e., it is unknowable. He claims: “It is plain then, that the idea of CORPOREAL SUBSTANCE in matter is as remote from our conceptions and apprehensions, as that of SPIRITUAL SUBSTANCE, or spirit.”¹¹ Eighteenth-century French materialism also holds this view.

D’Holbach claims that “we do not certainly know the essence of any being, if by that word we are to understand that which constitutes its peculiar nature. We only know matter by the sensations, the perceptions, the ideas which it furnishes.”¹²

All these representatives of the older materialism intimated the idea that the essence of the material world is unknowable. This older materialism, starting from the passive senses and perception, sees human knowledge of external things as restricted by passive perception, as for instance when D’Holbach argues that we can only know matter by the impressions, representations, and ideas that things furnish to the senses. Matter itself, when separated from these impressions, representations, or ideas, that is, from the essence and nature of these things, is unknowable. The older materialism inevitably reached such a conclusion because it focused on passive sensations and impressions. Such a conclusion provides a convenient departure for idealism. Berkeley, departing from Locke’s sensualism, developed a subjective idealism that sees the objective world as dependent on perception. However, the older materialism is starkly opposed to Berkeley because the former, although acknowledging the unknowability of substance and the inner intrinsic nature of things, affirms that matter is nevertheless an objective material independent of subjective consciousness, while Berkeley holds that there is no such thing as matter, it is only human perception and God that cause that perception.

Kant’s thing in itself is relatively close to the view of Locke while distinctly different from that of Berkeley. Kant and Berkeley also differ in what they make of the older materialism.

¹⁰*Metaphysical Foundations of Natural Science*. [Early Modern Texts, trans. Jonathan Bennett, 2009, 26.].

¹¹Locke, *An Essay Concerning Human Understanding*, vol. 1.

¹²D’Holbach (1994).

While Berkeley straightforwardly develops a theistic subjective idealism, Kant indirectly and evasively moves from dualism to transcendental idealism. This intricate transition renders Kant's subjective idealism more sophisticated, important, and profound than that of Berkeley.

7.2 The Thing in Itself as the Limit of Knowledge

When Kant states that the thing in itself is unknowable, he means that while the thing in itself exists, it resides on the other shore of the transcendent, which our cognition cannot reach. Therefore its existence implies a limitation on knowledge and marks a boundary that knowledge cannot trespass. This is what Kant calls the noumenon. The term "noumenon," as Kant expressly stresses in the *Critique of Pure Reason*, is used specifically for the determination of this limit.

This aspect should be the primary meaning of the term in epistemology. Noumenon is opposed to appearance, and we can know only appearance, and the purpose of the whole of critical philosophy is to expound this view. Kant explains that "the concept of a noumenon is necessary, to prevent sensible intuition from being extended to things in themselves, and thus to limit the objective validity of sensible knowledge. The remaining things, to which it does not apply, are entitled noumena, in order to show that this knowledge cannot extend its domain over everything which the understanding thinks."¹³ Kant holds that the function of the concept of the noumenon is to point out the "negative" limitation past which the experience of the senses cannot extend.

However, the understanding's use of this concept not only limits sensibility but also the understanding itself, whose categories and principles cannot apply to the thing in itself for the reason that the thing in itself is not an object of sensible experience. As a noumenon, the role of the thing in itself is essentially "for the limitation of empirical principles, without itself containing or revealing any other object of knowledge beyond the sphere of those principles."¹⁴ This is the negative aspect of Kant's thing in itself, according to which it merely limits experience and knowledge without positively affirming the transcendent reality of anything.

¹³Kant, and Kemp Smith, *Critique of Pure Reason*, A252-255/B310. Thus the term noumenon refers to the manifestation of the thing in itself in human thought. In other words, it is a concept that is employed to elucidate the nature of the thing in itself. These two terms, "noumenon" and "thing in itself," are not properly synonyms, although Kant often uses them synonymously.

¹⁴*Ibid.*, A260/B315. Kant also holds that it is necessary to employ categories such as substance and causality to think about God. Kemp Smith comments that Kant is inconsistent in this argument, that he first holds that the categories of the understanding can apply to noumena but would be meaningless, and later states that they cannot apply to noumena. Paton thinks that if the categories were to apply to the thing in itself, they would have to be categories of timeless schemata. For instance, for the category of causality to apply to a thing in itself, it could not imply a successive sequence, in which case such an application would not have much significance, being a mere analogy of experience and not knowledge.

From this point of view, the distinction between the thing in itself and appearance does not refer to two separate things, one intrinsically knowable and the other intrinsically unknowable.

However, Kant's unknowable thing in itself actually contains two distinct aspects. In its objective aspect it is the essence of the objective material world; in its transcendental aspect it is the transcendental self, which Kant opposes to the transcendental object in the Transcendental Deduction, i.e., the consciousness of self of the synthetic unity of apperception. As mentioned in Chap. 5, the transcendental self is only an unknowable, empty form in empirical consciousness. In other words, the cognitive subject, the transcendental "I think" or "pure self" is unknowable. Kant states: "It is, indeed, very evident that I cannot know as an object that which I must presuppose in order to know any object."¹⁵ The transcendental self is the origin of time although it is not contained within time, and hence does not belong to the domain of empirical appearance. It is therefore a thing in itself. As Engels points out, "Kant suffers shipwreck also on the thinking ego and likewise discovers in it an unknowable thing in itself."¹⁶ The "unknowable" does not refer to the self as the object of knowledge, but the noumenon of ethics.

We shall have occasion to return to this topic later in this chapter, as well as in the next two chapters.

The thing in itself, as the source of sensibility and the limit of knowledge, is an independent existence beyond the scope of knowledge. In this sense, it is a transcendent object. However, in the *Critique of Pure Reason*, Kant refers to the thing in itself several times as identical with the transcendental object. But these two terms have distinct meanings. As the limit of knowledge, the expression "thing in itself" is also used in many different ways, although transcendent object and transcendental object are the two most important uses among them because they are the ontological and epistemological uses. In epistemology, the expression properly designates the transcendental object, but since this transcendental object is just as unknowable as the transcendent object, the two concepts are in effect identical. However, the transcendent object transcends all objects of knowledge, while the transcendental object merely transcends any particular given empirical object. The theory of the transcendental object implies that there must exist an X, which cannot be specifically determined, as the premise and condition of knowledge so as to become the basis of the unity of the manifold of representation in consciousness. This indeterminate unknown X is the transcendental object. Thus, as the opposite of subjective cognition and the basis of the object's unity in consciousness, the transcendental object actually enters into the cognitive process. This distinguishes it from the transcendent object, which transcends all possible knowledge. The transcendental object does not refer to any particular empirical object, being merely the necessary premise and condition of the knowledge of these experiences. Kant states:

¹⁵Kant, and Kemp Smith, *Critique of Pure Reason*, A402.

¹⁶*Dialectics of Nature*. Marx Engels Internet Archive 1994.

The concept of this unity is the representation of the object = x.¹⁷

and,

These appearances are not things in themselves; they are only representations, which in turn have their object—an object which cannot itself be intuited by us, and which may, therefore, be named the non-empirical, that is, transcendental object = x.¹⁸

Furthermore,

The object to which I relate appearance in general is the transcendental object, that is, the completely indeterminate thought of something in general. This cannot be entitled the noumenon; for I know nothing of what it is in itself, and have no concept of it save as merely the object of a sensible intuition in general, and so as being one and the same for all appearances.¹⁹

From these arguments, it can be said that the transcendental object, which is distinguished from the transcendent object, affirms an indeterminate as well as unknowable object X in the domain of knowledge as the necessary condition of understanding the object.²⁰

It is evident that, having distinguished the transcendental object from the transcendent object, the thing in itself as a transcendental object actually refers to the necessary condition of human knowledge, including both a subjective aspect (the transcendental self) as well as an objective aspect (the transcendental object). Here the transcendental self is also another thing in itself. In short, on the one hand, the two concepts require confirmation of their existence as conditions of human knowledge; however, they themselves are unknowable X. Of the two X, one is the transcendental object as the source and ground of sensibility and the object that must be presumed in cognition; while the other X is the transcendental self as the source and ground of the understanding, the subject that must be presumed in cognition. Both are necessary conditions of knowledge yet they themselves are beyond the reach of experience and knowledge. Ironically, the effort to explain the possibility of knowledge ultimately reduces to the unintelligible coordination of two unknowable things. Knowledge is established by the categories of the understanding and synthetic unity of consciousness is given by the transcendental self.

But how the transcendental object can provide sensible material, and how the transcendental self can give a whole set of categories and principles to the understanding is very hard to make out; and indeed Kant frankly admits that he cannot answer the questions concerning the essence, origin, and existence of these rather mysterious entities, which unfortunately casts a shadow over Kant's epistemology. We can read many key moments where such unknowns raise their heads in the *Critique of Pure Reason*:

¹⁷Kant, and Kemp Smith, *Critique of Pure Reason*, A105.

¹⁸Ibid., A109.

¹⁹Ibid., A253.

²⁰The relation between the thing in itself and the transcendental self is rather intricate, and Kant's commentators hold different interpretations.

The manifold to be intuited must be given prior to the synthesis of the understanding, and independently of it. How this takes place, remains here undetermined.²¹

This peculiarity of our the understanding, that it can produce a priori unity of apperception solely by means of the categories, and only by such and so many, is as little capable of further explanation as why we have just these and no other functions of judgment, or why space and time are the only forms of our possible intuition.²²

But to explain why in the given circumstances the intelligible character transcends all the powers of our reason, indeed all its rights of questioning just as if we were to ask why the transcendental object of our outer sensible intuition gives intuition in space only and not some other mode of intuition.²³

How in a thinking subject outer intuition, namely, that of space, with its filling in of shape and motion, is possible. And this is a question which no man can possibly answer.²⁴

Kant elucidates this point more clearly in another passage:

Nor could we explain why they, as two otherwise completely heterogeneous sources of knowledge, always agree so well as to permit empirical knowledge in general and especially (as the *Critique of Judgment* points out) as to permit an experience of nature under its manifold *particular* and merely empirical laws, of which the understanding teaches us nothing a priori, as if nature were deliberately organized in view of our power of comprehension.²⁵

The transcendental object and the transcendental self cannot maintain lasting peace either in Kant's own system or in the history of philosophy. They always attempt to gobble each other up, and Kant himself eventually realizes that there is a common ground for sensibility and the understanding, which he originally considered as stark opposites, although he holds that human beings can never reach that ground. Kant holds that it is possible for the two opposing entities, that is, the transcendental object and the transcendental self, the two unknowable Xs, to be the same thing, which, even though human beings cannot comprehend it, may simply be God. At the end of the Introduction to the *Critique of Pure Reason*, Kant states that "there are two stems of human knowledge, namely, sensibility and the understanding, which perhaps spring from a common, but to us unknown, root."²⁶ In another passage he explains:

But with all this knowledge, even if the whole of nature were revealed to us, we should still never be able to answer those transcendental questions which go beyond nature. The reason of this is that it is not given to us to observe our own mind with any other intuition than that of inner sense; and that it is yet precisely in the mind that the secret of the source of our sensibility is located. The relation of sensibility to an object and what the transcendental ground of this [objective] unity may be, are matters undoubtedly so deeply concealed that

²¹Kant, and Kemp Smith, *Critique of Pure Reason*, B145.

²²Ibid., B145-146.

²³Ibid., A557/B585.

²⁴Ibid., A393.

²⁵Kant and Allison (1973).

²⁶Kant, and Kemp Smith, *Critique of Pure Reason*, A15/ B29.

we, who after all know even ourselves only through inner sense and therefore as appearance, can never be justified in treating sensibility as being a suitable instrument of investigation for discovering anything save always still other appearances—eager as we yet are to explore their non-sensible cause.²⁷

Kant clearly feels that there might be a common root at the basis of knowledge. But because human beings possess only a passive faculty of sensibility, we are not able to know this “non-sensible cause” which transcends empirical knowledge. Only God, possessing intuitive understanding, could know such a secret. Hence, Kant states that “how the faculty of the understanding achieves this conformity with the things themselves, is still left in a state of obscurity”²⁸; and “If we wanted to make judgments about their origin [sensibility and the understanding]—an investigation that of course lies wholly beyond the limits of human reason—we could name nothing beyond our divine creator.”²⁹

Kant’s doctrine of the thing in itself, with its peculiarity of two opposing and unknowable Xs, has been frequently criticized and refuted by Kant’s contemporaries as well as by later philosophers like Fichte and Hegel, the later existentialists, and any number of commentators on Kant’s philosophy. All of them attempt to unify the two opposing Xs and to find their common root, whether they identify this root with some metaphysical spiritual entity, e.g., Hegel’s Idea, or pursue some positivistic psychological explanation. They regard the unknowable common root as spirit, consciousness, the will, or an inscrutable object of sheer faith. They aim to integrate, deduce, and derive by various means the transcendental object = X from the transcendental self = X. Let us consider these means in turn.

Since its publication, Kant’s doctrine of the thing in itself has met with criticism from his contemporaries such as Salomon Maimon and F. H. Jacobi. Most of them hold that the thing in itself cannot be the ground and cause of appearances in the sense of being the source of sensibility. Jacobi argues that causality, according to Kant’s philosophy, can only apply to appearances, so it would be contradictory to say that the thing in itself is the source of sensibility, i.e., the cause of sensible intuitions. J. F. Fries, on the other hand, attempts to integrate Kant and the mystic Jacobi, holding that the thing in itself is the object of religious faith.³⁰ Jacobi’s well-

²⁷Ibid., A278/B334.

²⁸Letter to Marcus Herz, February 21, 1772. Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 133. Kant and Zweig (1999). One should note that Kant’s thought in this period is still in transition from the Inaugural Dissertation to the *Critique of Pure Reason*, hence his terms have different implications. However, one can still see a common aspect in this transition.

²⁹Letter to Marcus Herz, May 26, 1789. Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 154.

³⁰Jacobi holds the view that knowledge is limited by sense experience and that reason cannot transcend sensibility, though he maintains that immediate intuition can grasp the essence that transcends sensibility. He argues that Spinoza’s is the only truly systematic philosophy, although accepting Spinoza’s thought would mean accepting atheism. Therefore his philosophy is to no avail. Jacobi stresses that the question of God belongs not to reason but to the soul, and that one should replace Spinoza’s thought with faith. He says, “there is light in my heart, but when I would

known refutation certainly does not have any credibility (since Kant expressly states that the “thing in itself and its causality are unknowable”) and has been invoked by later scholars.

Maimon’s refutation anticipates that of Fichte.³¹

Evidently, despite Kant’s displeasure, his followers at the time denied the materialistic implications of the concept of the thing in itself while struggling to derive the empirical object no less than the transcendental object from the subject and the transcendental self.³² This tendency is especially obvious in Fichte. He states that “the thing in itself is a pure invention and has no reality whatever. It does not occur in experience: for the system of experience is nothing other than thinking accompanied by the sensation of necessity.”³³ To Fichte, only thought has true reality while the rest does not have any reality at all. He calls Kant a dogmatist who “wants, indeed, to assure to that thing reality, that is, the necessity of being thought as the ground of all experience.” He says, “the consistent dogmatist is necessarily also a materialist. He could be refuted only on the basis of the postulate of the freedom and self-sufficiency of the I. But this is precisely what he denies.”³⁴ Hegel, coming after Fichte, holds that philosophy cannot proceed from the subjective self, preferring instead to deduce everything from the objective absolute idea and utterly obliterate the thing in itself as the source of sensibility. To Hegel, the thing in itself is the non-rational that opposes the rational and must be brought under the system of reason-logic. Hegel’s approach is to develop Kant’s second X, the transcendental self, and to see it as a noumenon capable of integrating the first X, the transcendental object. He unifies Kant’s two unknowable concepts so as to carry idealism through to the end.

Schopenhauer, coming shortly after Hegel, employs the “will to live,” which he opposes to the world of phenomena (knowledge) as the thing in itself. The anti-rational will to live is that which constitutes the world and human nature. He knits together a Platonic dualistic world and Indian philosophy with a Kantian division of the thing in itself and appearance, in order to construct a philosophy of the will in contrast to the tendency of all philosophical rationalism.

Thus do Fichte, Hegel, and Schopenhauer, the most eminent German philosophers after Kant, all refute Kant’s doctrine of the thing in itself.

bring it to the understanding it disappears.” Jacobi is a well-known “philosopher of faith” and a mystic.

³¹In a letter to Reinhold, in 1795, Fichte wrote: “My esteem for Maimon’s genius is boundless. I firmly believe and am ready to prove that through Maimon’s work the whole Kant’s philosophy, as it is understood by everyone including yourself, is completely overturned.” Maimon rejected the concept of the thing in self (both the object and the subject), and maintained that the human heart is part of the infinite spiritual world.

³²J. Beck, a follower and intimate friend of Kant’s, also rejects the thing in itself, holding that the transcendental apperception of the subject is the starting point. Some scholars believe that certain aspects of Kant’s thought in his last work, the *Opus Postumum*, are influenced by Beck.

³³*Science of Knowledge*, 10. Marx Engels Internet Archive 1994.

³⁴*Ibid.*, 10.

After these eminent philosophers come the interpretations of modern Kantian commentators. Kemp Smith, when explaining Kant's remark that "sensibility and the understanding might originate from the same root," comments that "Kant sometimes seems to suggest that imagination is this common root. It belongs both to sensibility and to the understanding, and is passive as well as spontaneous. But when so viewed, imagination is virtually regarded as an unknown supersensuous power, 'concealed in the depths of the soul.' The supersensuous is the point of union of our disparate human faculties, as well as of nature and freedom, mechanism and teleology."³⁵ In other words, one should regard imagination as the common root of sensibility and the understanding.

In his monograph on Kant, Heidegger holds that the a priori imagination is the heart of Kant's philosophy. It is not just a bridge between sensibility and the understanding but also their common root, linking pure and practical reason as well. Heidegger maintains that the unity of intuition and thought does not occur solely in the cognitive process but also in an ontological synthesis effected by a priori imagination. He sees the schemata given by a priori imagination as the center of Kant's critical philosophy. However, schemata are merely transcendental determinations of original time, and original time is not merely a form of intuition but is the presupposed condition of the understanding and the imagination as well. "Original time" is, in effect, another name for "being." Thus the fundamental question of metaphysics becomes, for Heidegger, the question of "the unity of basic faculties of the human soul." Our comprehension of the world is dependent on our methods of comprehension, on our comprehension of the object's existence for our sake. Therefore, Kant's transcendental object is identified with beings of imagination, while the transcendental self becomes the unity of the past, future, and present.

The contemporary commentator T. D. Weldon holds that Kant's philosophy can be developed in two directions. One is the metaphysical attitude of Hegel, the other the positivistic scientific attitude that employs empirical psychology to interpret Kant's philosophy. Weldon also holds that imagination occupies a pivotal position in Kant's epistemology. It links sensibility and the understanding, possessing what is distinctive about each of them yet differentiated from both. Kant sees imagination as the central link that can intuit (sensibility) as well as synthesize (understanding). Unfortunately, Kant only mentions this point in passing and does not develop it.

The point can either be interpreted metaphysically, or merely be seen as an empirical determination of psychology. Weldon evidently maintains the latter view and attempts to divert Kant's epistemological thesis in the direction of positivistic psychology.³⁶

Evidently, in the studies of Kant's philosophy, whether by Kemp Smith, Heidegger, or Weldon, modern philosophers stress "imagination" as the key to Kant's epistemology, and attempt to use metaphysical or positivistic scientific thought to explain away Kant's contradictions and discover the common root of

³⁵Kemp Smith, *Commentary to Kant's 'Critique of Pure Reason'*, 77.

³⁶See T. D. Weldon, *Kant's Critique of Pure Reason*.

sensibility and understanding, by which route they hope finally to make sense of Kant's idea of the unknowable thing in itself. The unknowable thing in itself is refuted and replaced with the spiritual self (Hegel) and imagination.³⁷ Spirit becomes the origin and noumenon of knowledge, while the Kantian duality of the two unknowable Xs is replaced by an idealistic monism.

Philosophical trends from the rationalism of Fichte and Hegel to the anti-rationalism of Schopenhauer and Heidegger endeavor to explain away the thing in itself and revise Kant's philosophy, whether through some idea of the self, the absolute idea, the will to live, or a priori imagination. An additional line of interpretation that follows logical positivism also tries to revise Kant on this contentious point. The verifiability principle of logical positivism holds that human knowledge comes from experience, and that experience must always relate to observation and measurement in the observable world that is organized by science. However, the objective world beyond our observation is unknowable. Besides, they say, the question of whether or not such a world exists is a meaningless one. Obviously, read in this way, one would not only reiterate Kant but also regress to Hume.

In short, neither the spirit of Fichte and Hegel, nor the will of Schopenhauer can resolve the difficulty raised by Kant's thing in itself. In the same way, neither Kemp Smith nor Heidegger and the logical positivists can plausibly rely on the concept of imagination—be it ontological or psychological imagination—to resolve the difficulty of Kant's thing in itself. The key to all these “unknowable” and “unanswerable” difficulties is not to be found in concepts like spirit, will, or imagination.

7.3 “Human Beings Must Prove the Truth of Their Thinking in Practice”

What is the key to this difficulty, the correct solution to all these “unknowables” in Kant's philosophy? And what is the common root of sensibility and understanding that Kant is vaguely aware of and yet cannot give an answer for? It is neither absolute spirit nor imagination.

Imagination, despite being an important topic worthy of further investigation, is not the solution to the difficulties of the thing in itself and epistemology. The fundamental ground can only be practice.

The term “practice” is fashionable in contemporary philosophy, and is a controversial term as well. What really is practice and how does it differ from the animal's life activities? As mentioned in previous chapters, as the ground of knowledge and the measure of truth, practice is a historical particular. Whether in sensibility or reason, whether as ideas of time, space, or mathematics, whether as

³⁷There are still scholars today who believe that the thing in itself is the “I in itself.” The former is placed in the object by the latter. The I in itself is an Existential Reality, while the thing in itself is Subsistent Reality, and the “I in itself” is the “thinking I.” Miller (1956).

formal logic or dialectic, the practice that forms the ground of knowledge is historically particular practice and objective sociality. In my view, **the question of the possibility of knowledge can be answered only through an answer to the more basic question of the possibility of human social practice.** The essence of human knowledge can be resolved only through a historical and particular analysis of human practice. The subject of knowledge is not the individual, and the starting point of knowledge is not passive sense perception. The subject of knowledge is the social collective, hence the starting point of knowledge can only be historically particular, social, practical activities. The essence unique to the human being emerges precisely from here. The secret of the two famous classical definitions of the human being—**“the human being is a tool-making animal” and “the human being is a rational animal”**—is found in their unity on the ground of social practice. The faculties of sensibility (notions of time and space) and reason (formal logic, mathematics, dialectical categories), which are unique to human knowledge, are neither transcendental nor unknowable; they emerge and become sedimented through practice over long history, and eventually become the cognitive structure of the human subject. Armed with the laws and forms of practice, the subject cognizes, constitutes, and comprehends the object. Kant’s two unknowable Xs should be eliminated, and their opposition can be unified in practice. Practice reveals the essence of the first X (the thing in itself as the transcendental object) and constitutes the second X (the thing in itself as the transcendental self). Practice allows the thing in itself to become “mine,” and allows the unknowable to become knowable. Hence, practice is by no means merely the abstract and subjective activities of individual consciousness.

Marx states that “man must prove the truth—i.e., the reality and power, the this-sidedness of his thinking in practice.”³⁸ Engels comments that “in Kant’s time our knowledge of natural objects was indeed so fragmentary that he might well suspect, behind the little we knew about each of them, a mysterious ‘thing in itself.’ But one after another these ungraspable things have been grasped, analysed, and, what is more, reproduced by the giant progress of science; and what we can produce, we certainly cannot consider as unknowable.”³⁹ Engels says of Kant’s unknowable that “the most telling refutation of this as of all other philosophical crotchets is practice—namely, experiment and industry. If we are able to prove the correctness of our conception of a natural process by making it ourselves, bringing it into being out of its conditions and making it serve our own purposes into the bargain, then there is an end to the Kantian ungraspable ‘thing in itself.’”⁴⁰

These arguments of Marx and Engels illuminate the question of why the ideas of substance, the thing in itself, and the unknowable come into being, from Locke and

³⁸*Theses on Feuerbach*. Marx Engels Internet Archive 1994.

³⁹*Socialism: Utopian and Scientific*, Introduction to the English Edition. Marx Engels Internet Archive 1994.

⁴⁰*Ludwig Feuerbach and the End of Classical German Philosophy*. Marx Engels Internet Archive 1994.

French materialism to Kant. In epistemology, this thought reflects the level of development of industry and science in their time, the historical level of human social practice. Locke states that “the dominion of man, in this little world of his own understanding, being much the same as it is in the great world of visible things; wherein his power, however managed by art and skill, reaches no farther than to compound and divide the materials that are made to his hand; but can do nothing towards the making the least particle of new matter, or destroying one atom of what is already in being.”⁴¹ Surely, man can only alter the modality of matter, but can neither bring forth or destroy matter in the philosophical sense, nor create matter from nothing. However, the important point is that Locke’s thought objectively reflects the level and limitation of the social practice of his time. In his time, men indeed could not create new matter, but could only compound and divide the materials at hand, and could not destroy a single atom.

Human knowledge of the things in nature was at this time fragmentary and superficial, and industry and science were in their elementary stages. Hence the materialism of the time set great store on observation and its starting point could only be sense perception. This is one of the reasons that there arose in philosophy ideas like the so-called unknowable substance (Locke), the nature of things (d’Holbach), and the thing in itself (Kant). Modern industry and science, striding with colossal steps, are far beyond “compounding and dividing the materials that are made to his hand.” Men are not only able to smash atomic nuclei, but are even able to create new materials by altering the modality of matter, e.g., new organic chemical compounds, while scientific experimental inventions, such as the high-energy particle accelerator, have gone beyond what individual sense perception and classical forms of cognition such as observation and induction could achieve.

So as to guide observation and to further human knowledge, modern industry and technology have increasingly become expressions of social practice as we use the power of the material world to spontaneously interfere with nature on the most fundamental level (atom, neutron). Such accomplishments increasingly confirm that the thing in itself has been successfully linked to human social practice and become *ours*. Engels’ argument precisely illustrates the point, stated by Marx in the *Theses on Feuerbach*, that it is only in practice that man can prove the truth, namely, “the reality and power, the this-sidedness of his thinking.”⁴² This practice is social practice, i.e., industry and science; while “this-sidedness” is the opposite of Kant’s unknowable “that-sidedness.” Therefore, the vulgar view of Engels’ criticism of Kant, which is that he regards Kant’s doctrine as meaningless and without value in philosophy, should be shunned. We have explained in Chap. 4 how Engels stresses that human practical activities alone can prove the objective necessity of causality. Here Engels again underlines that only practical human activities, rather than the individual experience of the senses, can fundamentally further human knowledge. These two points are intimately related; indeed, they are the same.

⁴¹John Locke, *An Essay Concerning Human Understanding*, 63.

⁴²*Theses on Feuerbach*, Marx Engels Internet Archive 1994.

Practice is identical neither with sense experience nor with observation. It is an objective feature of history considered as a totality. The starting point of knowledge is not perception and observation but practice (e.g., scientific experiment), of which perception and observation are the results and verifications. This is why I stress that one should adopt the perspective of social practice in the use and making of material tools, rather than that of sense experience or language in the theory of human knowledge.

Therefore, anthropological-ontological questions should receive due attention.

Anthropological ontology underlines the practical relations that human beings bear to the actual world. Anthropological ontology is a philosophy of subjectivity. As mentioned earlier, it consists of two aspects. One is the external objective progress of the human subject, which is marked by the development of the mode of social production and the advancement of technology, and indeed the development of the whole history of material civilization. The other aspect is the internal progress of the human subject, which establishes psychological functions (e.g., intelligence, will, and aesthetic sensibility), as well as materialized forms (e.g., the arts and philosophy), hence our entire spiritual civilization. These two aspects, with the former as their ground, are thoroughly interrelated, despite a certain independent, voluntary development. This bilateral development of the human being indicates two aspects: nature evolving the human being, and human beings humanizing nature (see Chap. 10). It is a transformation of outer as well as inner nature. The contribution of Kant’s philosophy lies in its emphasis on the second aspect, and his exhaustive exposition of the psychological structure of the subject, including his development of the questions of knowledge, ethics, and aesthetics. My intention here is to appreciate the modern significance of the questions raised by Kant and to set out a new direction one can take to resolve them. Such is my criticism of the Kantian critical philosophy.

7.4 The Thing in Itself as an Idea of Reason

Kant’s thing in itself is not just the unknowable limit of knowledge. Were the thing in itself only that, it would be legitimate to question whether philosophy even needs this thing in itself.

Kant claims that both the possibility and the impossibility of the existence of the noumenon (the thing in itself) are unknowable. “Since we are without a determinate concept of them,” he says, “this is a question which can only be answered in an indeterminate manner.”⁴³ Kant’s insistence that the thing in itself is unknowable but nevertheless exists suggests that the thing in itself, although unknowable, is perhaps an object of thought. In the preface to the second edition of the *Critique of Pure Reason*, when pointing out that “we can therefore have no knowledge of any object

⁴³Kant, and Kemp Smith, *Critique of Pure Reason*, A282/B344.

as thing in itself, but only in so far as it is an object of sensible intuition, that is, an appearance,” Kant emphasizes that “our further contention must also be duly borne in mind, namely, that though we cannot know these objects as things in themselves, we must yet be in position at least to think them as things in themselves.”⁴⁴ He maintains that our distinction between appearances and noumena already implicitly regards the latter solely as an object of the understanding and thought rather than of sensible intuition. Hence, he says, we “entitle them intelligible entities (noumena).”⁴⁵ In other words, the thing in itself exists as an object of thought affirmed by intelligence. This existence is opposed to that of the sensible beings of appearance; and as an object of the understanding it is the ground of appearances, that is, the noumenon that is distinct from but also the ground of appearances. Kant presents a negative as well as a positive concept of the noumenon.

The negative meaning refers to the fact that the thing in itself is not an object of sensible intuition, which is the idea of the limit-point of knowledge that we discussed earlier. The positive meaning of the thing in itself understands it as a *possible* object of non-sensible intuition. Take note that Kant means it *can be* such an object, not that it definitely is one. If that second meaning is the predominant one, then there can be an object of knowledge of the intellectual intuition that exists as the thing in itself. However, we can merely think that, and not actually, concretely, scientifically, or philosophically know it to be true, for human beings do not have such intuitive understanding. Nevertheless, this conception is important for a reason I shall explain.

Kant argues:

If by “noumenon” we mean a thing so far as it is not an object of our sensible intuition and so abstract from our mode of intuiting it, this is a noumenon in the negative sense of the term. But if we understand by it an object of a non-sensible intuition, we thereby presuppose a special mode of intuition, namely, the intellectual, which is not that which we possess and of which we cannot comprehend even the possibility. This would be “noumenon” in the positive sense of the term.⁴⁶

Kant rejects the possibility of knowing the existence of the thing in itself, while affirming that its existence can be thought and presumed. In so doing, this existence is made fundamentally different from its existence in the first meaning, which proffers sources for sensibility, and is precisely the direct opposition of the latter. It is not the limitation of knowledge in the second meaning, rather it is the sublation of this limitation. Hence it is no longer the materialistic thing in itself which functions as the source of sensibility (i.e., objective material existence independent of human beings), nor the negative thing in itself which is purely the limitation of the knowledge of sensibility and the understanding (and its existence is unknowable). It is but the thing in itself of positive existence which cannot be known, but can only be thought. The noumenon is an object to which the understanding cannot apply the

⁴⁴Ibid., Bxxvi.

⁴⁵Ibid., B306.

⁴⁶Ibid., B307.

categories and principles (substance, causality, actuality, etc.) that it applies to the experience of the senses. However, when the understanding employs these categories to think it (that is, transcendently applies the categories of the understanding to it), the thing in itself becomes a hypothetical object capable of guiding the understanding in its empirical use.

In the sections on the antinomies and the transcendental ideal, Kant claims that ideas of reason, such as God, free will, and the soul, are precisely what unify the understanding and guide it to the maximum of unity and systematicity. This is the third meaning we distinguished earlier for the thing in itself in epistemology. These ideas of pure reason:

...have an excellent, and indeed indispensably necessary, regulative employment, namely, that of directing the understanding towards a certain goal upon which the routes marked out by all its rules converge, as upon their point of intersection. This point is indeed a mere idea, a *focus imaginarius*, from which, since it lies quite outside the bounds of possible experience, the concepts of the understanding do not in reality proceed.⁴⁷

The hypothetical employment of reason has, therefore, as its aim the systematic unity of the knowledge of the understanding, and this unity is the criterion of the truth of its rules. The systematic unity (as a mere idea) is, however, only a projected unity, to be regarded not as given in itself, but as a problem only. This unity aids us in discovering a principle for the understanding in its manifold and special modes of employment, directing its attention to cases which are not given, and thus rendering it more coherent.⁴⁸

In Kant's view, examples—such as chemists reducing salts into the two categories of acid and alkali in pursuit of ever more fundamental matter or the principle of parsimony according to which entities shouldn't be multiplied needlessly—illustrate the favorable employment of ideas of reason to guide our investigation of nature. This applies even to the idea of God. It is beneficial in the investigation of nature to presuppose an ultimate cause and purpose for everything in the world—such as ideas of reason, God, the soul, and the freedom of the will—so as to achieve the maximum of unity, completion, and order in experience. Such is the role of regulative principles, which differ from constitutive principles, used by the understanding to act on sensibility and constitute knowledge.

The term “regulative” is paired with the term “constitutive.” Constitutive principles are what the understanding employs to act on sensibility and constitute knowledge, while regulative principles are what reason employs to guide the understanding. Kant's distinctions between categories and ideas, and constitutive and regulative principles are of great importance in his critical philosophy. The categories and constitutive principles are scientific principles that act on sense experience to constitute knowledge; while the ideas and regulative principles guide and regulate cognition, but cannot themselves act on sense experience to constitute knowledge. They are not scientific principles, but important philosophical principles of methodology:

⁴⁷Ibid., A644/B672.

⁴⁸Ibid., A647/B675.

But although an absolute totality of experience is not possible, nonetheless the idea of a totality of cognition according to principles in general is what alone can provide it with a special kind of unity, namely that of a system, without which unity our cognition is nothing but piecework.⁴⁹

These ideas therefore have a completely different determination of their use from that of the categories, through which (and through the principles built upon them) experience itself first became possible. [...] but [pure reason] merely demands completeness in the use of the understanding in the connection of experience. [...] Nonetheless, in order to represent these principles determinately, reason conceives of them as the cognition of an object, cognition of which is completely determined with respect to these rules – though the object is only an idea – so as to bring cognition through the understanding as close as possible to the completeness that this idea signifies.⁵⁰

Kant points out that regulative principles and ideas of reason, though beneficial to cognition, cannot replace scientific investigation, because:

...in this field of enquiry, if instead of looking for causes in the universal laws of material mechanism, we appeal directly to the unsearchable decree of supreme wisdom, all those ends which are exhibited in nature, together with the many ends which are only ascribed by us to nature, make our investigation of the causes a very easy task, and so enable us to regard the labour of reason as completed, when, as a matter of fact, we have merely dispensed with its employment.⁵¹

Kant maintains that although we:

...have a regulative principle of the systematic unity of teleological connection—a connection which we do not, however, predetermine. What we may presume to do is to follow out the physico-mechanical connection in accordance with universal laws, in the hope of discovering what the teleological connection actually is.⁵²

As these passages make plain, Kant takes the ideas of reason to be regulative rather than constitutive principles, in order to distinguish ideas of reason from the forms of sensible intuition and the categories of the understanding. Ideas of reason, including that of God, are objects of neither knowledge nor science. Kant explains that “the idea of systematic unity should be used only as a regulative principle to guide us in seeking for such unity in the connection of things, according to universal laws of nature.”⁵³ Hence, what science pursues is the relation determined by a causality of nature, whereas “the idea of a supreme being” (God) is merely a regulative principle of reason enjoining our inquiries to proceed as if every event in the world were an effect of a necessary and sufficient cause. However, ideas of reason such as a final cause or a supreme intelligence can do no more than merely guide empirical enquiry, and do not replace it.

⁴⁹*Prolegomena*, §56.

⁵⁰*Ibid.*, §44.

⁵¹Kant, and Kemp Smith, *Critique of Pure Reason*, A691/B719.

⁵²*Ibid.*, A691-692/B719-720.

⁵³*Ibid.*, A692/B720.

One can neither directly deduce nor argue from knowledge of the empirical world that a final cause of nature or a supreme intelligence actually exists, nor are these ideas any kind of metaphysical source or ground of empirical knowledge.

In his work “On the Volcanoes on the Moon” (1785), Kant claims: “I think it unacceptable to come to a halt and in desperation invoke an immediate divine decree as an explanation.” Discussing nature as a whole, he acknowledges that “this latter must admittedly form the conclusion of our investigation when we talk of nature as a whole; but in every epoch of nature, since no one of them can be shown by direct observation to be absolutely the first, we are not relieved of the obligation to search among the causes of things as far as is possible for us.”⁵⁴ Consequently, then, on the one hand Kant held that since “the world is a sum of appearances,” there “must therefore be some transcendental ground of the appearances.”⁵⁵ In other words, there should be a transcendent object, which is thinkable only by the pure understanding and unreachable by sensibility, as the ground of the world of appearances. This is the thing in itself in its third meaning, i.e., an idea of reason. On the other hand, Kant holds that the transcendental ground of the world of appearances is not substance, and the merely hypothetical idea of the supreme cause of nature cannot be substantialized. Hence, the positive sense of the thing in itself is merely an ideal thing and not an actual object, “for we were not justified in assuming above nature a being with those qualities.”⁵⁶

The conflict between the thing in itself and the world of appearances evolves into an opposition that is more than the opposition between an unknowable objective material world and appearances. This opposition is between the purely rational idea of the unconditional and unlimited absolute totality, on the one hand, and the conditioned, limited experience of the understanding operating on the material of sensibility, on the other. The application of this idea leads us to seek the maximum unity, system, order, and completeness of empirical knowledge, thus opposing closure and the acceptance of the status quo in science. Such is the gist of the third meaning that we have distinguished for the notion of the thing in itself.

In proposing the ideas of reason as ideal sources for the unity and completeness of empirical knowledge, Kant deals with the question of the unity of the world in an idealistic fashion. To him, the unity does not lie in its materiality, but in the existence of a merely hypothetical idea of reason. The inquiry of natural science into the materiality of the world is supposedly carried out under the regulation of this transcendental idea. Thus the opposition between rational ideas of totality (the thing in itself) and limited empirical knowledge is also the opposition between absolute and relative truth.

Kant’s thing in itself eventually appears as the ground for the unity of the things in the world as well as scientific inquiry. Kant regards the advancement of knowledge as under the guidance of ideas of reason such as God, free will, and the

⁵⁴“On the Volcanoes on the Moon,” 8:76.

⁵⁵Kant, and Kemp Smith, *Critique of Pure Reason*, A696/B724.

⁵⁶*Ibid.*, A700/B728.

soul. These ideas are within sight but beyond reach, thinkable but unknowable. The absolute truth, as a thing in itself, is the unreachable far-side of knowledge.

Such is the exposition of the threefold meaning of the thing in itself in the domain of knowledge.

Hegel criticizes every aspect of Kant's conception of the thing in itself. I mentioned that Hegel adopts the transcendental ego to eradicate the thing in itself, and this eradication takes advantage of precisely this third meaning. Hegel severely criticizes Kant's subjective ideas, saying that the thing in itself is an empty product of abstract thought. To Hegel, ideas have to be the unity of concepts and objectivity. In *The Science of Logic*, ideas belong to a higher level stage of cognition than Kant's categories of the understanding. There is neither an end of knowledge nor an unreachable far side, but only the conformity of actuality with concepts, which is truth. In opposition to Kant, Hegel maintains that human knowledge can obtain the objective truth of reality itself. To Hegel, this truth is knowledge of God, which he understands as the self-knowledge of the absolute idea. He criticizes Kant's doctrine of the unknowable thing in itself and emphasizes that ideas of reason are knowable, though knowledge is solely God's. Hence, as Lenin points out: "Kant disparages knowledge in order to make way for faith [whereas] Hegel exalts knowledge, asserting that knowledge is knowledge of God."⁵⁷

The third meaning of Kant's thing in itself raises an important issue, over which various schools of philosophy have had much debate. Neo-Kantians such as Hermann Cohen and Paul Natorp, who concentrate their efforts on the third meaning of Kant's thing in itself, exaggerate Kant's view of the thing in itself as the mere limit of endless experience. They claim that there is no thing in itself behind the sensible material. They say that the thing in itself is merely the ideal, infinitely remote end of advancing cognition. The thing in itself is not a fixed being but a regulating direction, which guides an endlessly developing but never finally complete knowledge. In so doing, these Neo-Kantians completely eliminate the idea of the thing in itself as the source of sensibility and merge the second and third meanings into one. The thing in itself is seen as a requirement and regulation of thought. What got C. S. Peirce interested in Kant's dialectics was the thought that, in accordance with regulative principles, all the fundamental scientific laws can be seen as hypotheses. These views all arise from the third meaning of the thing in itself.

Kant holds that the thing in itself is unknowable yet exists, and he makes it the incomprehensible source of sensible material. He also regards it as an ideal that regulates the understanding and allows knowledge to expand infinitely. This interpretation is more significant than the view that regards the thing in itself as a merely negative limit concept for experience and knowledge. From the perspective of the theory of practice, the ongoing development of human industry endlessly furnishes new objects and topics for people to learn about and problems to solve. All the more so in the domain of human society and history.

⁵⁷Lenin (1994).

The objective world consists not only of beings but also becomings, which means that knowledge cannot possibly have an end. Instead, the human being is unrelentingly moving from relative truth toward absolute truth, without ever finally reaching that end. It is meaningful to presuppose the objective existence of an absolute truth, just as it is to assume the objective existence of a thing in itself and to postulate that human knowledge approaches absolute truth in its historical movement over successive generations. Practice, as a real material activity, brings about the unity of knowledge as well as that of consciousness. In pursuit of its relative truth, practice ceaselessly approaches absolute truth. Lenin comments that: “From the subjective idea, man advances towards objective truth through ‘practice’ (and technique).”⁵⁸ And “man by his practice proves the objective correctness of his ideas, concepts, knowledge, science.”⁵⁹ Human beings can obtain knowledge of truth through practice. The thing in itself, which for Kant is within sight yet beyond our reach, and is thinkable yet unknowable, can in fact be known gradually through practice. The first and third meanings that Kant gives to the thing in itself, although it is still unknowable as noumenon, are unified on the ground of a materialistic theory of practice.

7.5 From Epistemology to Ethics

Kant’s thing in itself undergoes an intricate change, from the source of sensibility and the limit of the understanding to a regulative principle of methodology, and eventually steps out of the domain of epistemology to enter the field of ethics and practical reason. Kant explains that “without reason [there is] no coherent employment of the understanding, and in the absence of this no sufficient criterion of empirical truth.”⁶⁰ The unity of sensibility depends on the understanding and the unity of the understanding depends on reason, while the ideas of reason and the transcendental ideal (God) become the ultimate criteria of truth and the ideal end of knowledge. Therefore, everything is united in transcendental reason. However, as regulative principles, ideas of reason only have the methodological function of guiding the understanding to seek the maximum unity of empirical knowledge, and cannot act on the experience of the senses. Therefore, the thing in itself retains its negative meaning as a limit-concept for knowledge. In Kant’s mind it is not yet, although is indeed rather close to, the positive idea of the noumenon.

Kant maintains that the true positive noumenon is not an object of knowledge but rather of practice and practical reason, which relates not to science but to ethics.⁶¹

⁵⁸Ibid.

⁵⁹Ibid.

⁶⁰Kant, and Kemp Smith, *Critique of Pure Reason*, A651/B679.

⁶¹The differences between the school of ontology and the Neo-Kantians is expressed in their divergent emphases on the positive and negative meanings of the noumenon.

The positive sense of Kant's noumenon is that of an unknowable yet thinkable object, meaning an object of thought that cannot be proven by sensible intuition. Consequently, its existence becomes a matter of faith, and Kant proceeds from transcendental ideas and the ideal of epistemology to the practical reason of ethics. Kant believes that it is only in ethics that we can appreciate the true contribution of the thing in itself in philosophy. Only in the domain of practical reason do ideas of reason like freedom, the soul, and God exhibit their true importance. These entities, though they can never become objects of knowledge in the empirical world of appearance, nevertheless not only act on that world but even regulate the whole of empirical nature.⁶² A noumenal, supersensible world is opposed to the world of sensibility or appearance, and is not only superior to it but also acts on it.⁶³ In the *Critique of Judgment*, Kant connects nature, which is ruled by mechanism, with moral and cultural man by means of teleology, claiming that the cultural man is the moral man as well as the ultimate end of nature. In the "Transcendental Doctrine of Method" section of the *Critique of Pure Reason*, Kant states that "it is evident that the ultimate intention of nature in her wise provision for us has indeed, in the constitution of our reason, been directed to moral interests."⁶⁴ The ultimate end of nature is the human world and the moral man who transcends nature.

Thus Kant's thing in itself, which is originally an idea of reason in epistemology, eventually becomes a moral substance in ethics. The conception of the thing in itself evolves from an unknowable non-empirical presumption with neither practical use nor objective reality (the third meaning in epistemology), to a positive determination that has important practical functions as well as objective reality in ethics, and even enters the domains of belief (religion) and aesthetics. The ideas of reason, which in the domain of knowledge cannot be given in sense experience and the world of appearances, can not only act upon the world of experience, but can thus emerge as the lawgiver and commander of the sensible world. Kant states that "it is a mere idea, though at the same time a practical idea, which really can have, as it ought to have, an influence upon the sensible world, to bring that world, as far as may be possible, into conformity with the idea. The idea of a moral world has, therefore, objective reality."⁶⁵

⁶²Consequently, some scholars identify Kant with Berkeley, and believe that since the thing in itself, as God, eventually becomes noumenon, acting upon the world of appearances, it can also be the source of knowledge. They thus cancel the first meaning of the thing in itself, and eliminate the difference with Berkeley. However, what Kant says of practical reason is irrelevant to knowledge. Therefore, the materialistic sense of the thing in itself cannot be entirely eliminated.

⁶³In a letter to Tieftrunk, December 11, 1797, Kant wrote: "[since the sensible would otherwise lack a non-sensible counterpart, and this would indicate a logical defect in our classification], the idea belongs to pure practical cognition, which is detached from all empirical conditions. The sphere of non-sensible objects is thus not quite empty, though from the point of view of theoretical knowledge such objects must be viewed as transcendent" (Kant, Immanuel, and Arnulf Zweig, *Philosophical Correspondence 1759–1799*, 538).

⁶⁴Kant, and Kemp Smith, *Critique of Pure Reason*, A801/B829.

⁶⁵*Ibid.*, B808/B836.

Here the noumenon, as the ground and cause of appearances, goes beyond its epistemological function to confirm the superiority of ethics over scientific knowledge and of practical over theoretical reason. For instance, A is the cause of B in the world of appearances, and contains the rational sense that ethics is superior to knowledge and that practical reason is superior to theoretical reason (see Chaps. 9 and 10). Hence Kant feels the need to point out once again in the final part of the *Critique of Pure Reason* that “reason has a presentiment of objects which possess a great interest for it. But when it follows the path of pure speculation, in order to approach them, they fly before it. Presumably it may look for better fortune in the only other path which still remains open to it, that of its practical employment.”⁶⁶ Additionally, “even after reason has failed in all its ambitious attempts to pass beyond the limits of all experience, there is still enough left to satisfy us, so far as our practical standpoint is concerned.”⁶⁷

In other words, although reason’s attempt to seek knowledge of absolute entities like God, free will, and the soul in the domain of speculative theory finally failed, it succeeded in the domain of practical reason. This shift of the thing in itself from epistemology to ethics has enormous implications. Kant declares the existence of God to be unknowable for science while still finding a necessary, rational place for God in the practical domain. In the preface to the second edition of the *Critique of Pure Reason*, Kant expressly states that “I have therefore found it necessary to deny knowledge in order to make room for faith.”⁶⁸ The epistemologically negative sense of the thing in itself (as an unknowable limit) makes possible its new positive sense for practice. Thus the whole system of critical philosophy undergoes a transition from epistemology to morality. The dualism and transcendental idealism of Kant’s epistemology is subordinated to his ethics. Kant’s doctrine of the thing in itself, as the pivot of the critical philosophy, thus separates science from ethics, knowledge from action, and nature from human beings.

Existentialism and logical positivism, which are the most in vogue among contemporary philosophical schools, have developed this separation. Karl Jaspers holds that faith is the absolute essence of human existence and can never be replaced by knowledge. Commentators of the ontological school, under the powerful influence of Heidegger, hold that Kant’s self-consciousness is not merely logical but is in fact the moral self of the *Critique of Practical Reason*,⁶⁹ and the significance of the self lies in the freedom of the will, free choice, and the free determination of its relation with the world. Such a reading gives an anti-rationalistic and mystical significance to the transcendental self’s gobbling up of the transcendental object.

The logical positivists also deny that ethics and morality belong to the domain of knowledge and science. Commentators influenced by this school interpret the distinction between the thing in itself and appearances not as a distinction between

⁶⁶Ibid., A796/B824.

⁶⁷Ibid., A828/B856.

⁶⁸Ibid., Bxxx-xxxi.

⁶⁹See Martin, *Kant’s Metaphysics and Theory of Science*, Chap 5.

two different entities but as two ways of description. That is, it is a distinction between two kinds of languages, one of which is appropriate to science and the other to morality. They also claim that Kant's achievement lies in his clarifying the domain of objects that scientific language can reach.⁷⁰ However, since Kant has already presented the idea of the two-aspect view of noumena and appearances, or the two-world view, the logical positivists and existentialists propose nothing new.⁷¹ The relation between the human being as the subject of knowledge and as the subject of practice lies at the heart of a serious problem. Kant is aware of this problem and raises it in the fashion of idealism. However he does not resolve it but instead emphasizes its difficulty, since the solution can be neither Platonic (two worlds) nor Aristotelian (two ways of describing one world).

Some scholars have proposed that Kant's conception of the thing in itself changes along with the development of the question. The thing in itself is, as it were, like Proteus, the old Greek man of the sea who assumes different shapes to escape questions.⁷² As mentioned earlier, this change, from being the source of sensibility to a limit-concept for knowledge, and from being an idea of reason to the ground of morality, bends toward Fichte and Hegel. Some scholars point out that in Kant's *Opus Postumum* the thing in itself as transcendental object is no longer of importance, and the thinking and acting self, which establishes everything, becomes newly salient. The thing in itself becomes the self that is presupposed by thought and is objectivized in order to constitute objects. This is certainly what Fichte expressed in his conception of the ego establishing non-ego. However, in his late years, Kant fiercely opposed Fichte's thought and inclination, declaring that his own views had never altered.⁷³

Many scholars are put in a dilemma by Kant's conflicting attitudes and find it difficult to determine whether his doctrine of the thing in itself truly remained unchanged. In my view, Kant does indeed remain true to his dualistic thought. He does not abandon the conception of the thing in itself as an external being independent of consciousness and acting on sensibility. However, because he fails to resolve the relation between practice and knowledge, the logical development of his thought actually leads him in the direction of Fichte and Hegel.

Only after Hegel eliminated the thing in itself with his absolute idealism, which was in turn attacked by the theory of practice, did the question raised by Kant finally find an answer. The thing in itself, as a moral entity and idea of reason, can only be understood on the ground of social practice. Kant's conception of the thing in itself eventually links to the fundamental question of social ethics. Wittgenstein states that "we feel that even if all possible scientific questions [were] answered, the

⁷⁰See T. D. Weldon, *Kant's Critique of Pure Reason*. Karl Popper's dichotomy between facts (science) and norms (ethics) does not essentially go beyond this thought.

⁷¹On the two-world view, see Kant's inaugural dissertation and his letter to Christian Garve and Jacob Beck in 1783. Also see *Critique of Pure Reason*, Bxviii-xix note, Bxxvii, and A45-46/B62-63.

⁷²See Richard Kröner, *Kant's Weltanschauung*.

⁷³See Kant's (1799).

problems of life have still not been touched at all. Of course there is then no question left, and just this is the answer.”⁷⁴ Wittgenstein holds that the task for philosophy is to demarcate a boundary for thought and make clear what can and cannot be thought or said. He maintains that traditional philosophy misused language and created nothing but nonsense. Nevertheless, Wittgenstein does not oppose metaphysics, but rather banishes it to the domain of art, religion, and poetry, which to him respond to important riddles about life. But these riddles surpass the limits of linguistic significance and cannot become objects of scientific knowledge. Essentially, Wittgenstein’s idea is not fundamentally different from those of Hume and Kant. The distinction lies in Wittgenstein’s reducing philosophy to egoism and mysticism. Eventually, he falls for the idea of doing nothing, leaving everything as it is. “Whereof one cannot speak, thereof one must be silent.”⁷⁵ This great philosopher profoundly betrays a typical Western attitude toward social laws and the objective point of view, demanding that we avoid talking about them. Although Wittgenstein later stressed the intimate relation between language and social life, he nevertheless limits all his investigations to facts about language. But the theory of practice demands that we go further and embark upon the untrod path of anthropological and historical ontology.

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⁷⁴Wittgenstein, *Tractatus Logico-Philosophicus*, 6.52.

⁷⁵*Ibid.*, 7.

Chapter 8

Ethics: I. Moral Laws



8.1 Against Empirical Eudaemonism

Ethics is another component of the Kantian philosophical system. In the course of developing his ideas, Kant's inquiry shifted from Newton to Rousseau, from natural science and its philosophical significance to the spiritual world of humankind. In constructing the critical philosophy, Kant placed ethics on a higher plane than epistemology, although the latter is the starting point of his philosophy.

Whether Kant's philosophy is mainly about epistemology or ethics has been heatedly disputed. The continental school of ontology and Neo-Kantianism—as represented by Ernst Cassirer, who is rather influential in Britain and the United States—diverge on this as well as other issues. Gottfried Martin states: “Neo-Kantianism restricted the systematic task of philosophy to theory of knowledge, and consequently extended this restriction to the philosophy of Kant and to its interpretation. The ontological school contests this restriction. It contests in general that philosophy exhausts itself in theory of knowledge, and it contests in particular that the philosophy of Kant exhausts itself in this way.”¹ In Britain and the United States, Kant scholars, including Lewis White Beck, also emphasize the priority of Kant's ethics. I am in accord with the latter school on this issue and would like to add that Kant's private attitude also confirms the superiority of ethics over epistemology.

We discussed in the previous chapter how, in epistemology, the thing in itself is located on the far, unreachable side of knowledge. However, Kant also states that that far side reverts to a “this side” when we turn to ethics, where the thing in itself finally reveals its power to act on reality. As Kant says, he denies knowledge for the sake of elevating morality. The supreme dignity of this-sidedness is all the more manifest because that far side is simply impossible to reach by any kind of scientific or metaphysical cognition. Because pure reason cannot achieve its infinite, complete, and unified ideal in the objective, empirical world that is studied in episte-

¹Quoted from Scott-Taggart, “Recent Work on the Philosophy of Kant,” *Kant Studies Today*, ed. Lewis W. Beck.

mology, the argument for the existence of God, freedom, and immortality can only be made on the ground of the subjective spiritual world of ethics.

The critique of theoretical reason shows that knowledge cannot be separated from experience, while the critique of practical reason shows that the norms of morality must be separated from experience. The application of theoretical reason to reality is actually not pure, despite Kant's title for his book, while the application of practical reason is indeed pure, despite the book not being entitled a critique of *pure* practical reason. If Kant wished to have fully parallel titles, then the two books should have been entitled the *Critique of Theoretical Reason* and the *Critique of Practical Reason*, or the *Critique of Pure Theoretical Reason* and the *Critique of Pure Practical Reason*. The thesis of the former book is to argue that theoretical reason cannot surpass the bounds of experience. Should it attempt to do so, it must then be severely criticized. The task of the *Critique of Practical Reason* is to show that pure reason does have a practical function and that there is no worry in this domain of it trespassing beyond its proper limits. This is why Kant thinks that the "*Critique of Practical Reason*" is an appropriate title.²

The *Critique of Pure Reason* mainly dwells on the theory of knowledge. However, it already contains the central theme of ethics; therefore, it is appropriate not to use the term "theoretical reason," but instead a term—pure reason—that is non-parallel with the term "practical reason."

Theoretical and practical reason are completely cut off from each other, but they are still the same pure reason and constitute its two aspects. Kant explains that "it can in the end be only one and the same reason that is distinguished merely in its application."³ They both have their distinctive domains, namely, determining universal necessary transcendental principles in knowledge and ethics, yet their underlying nature remains the same. Having said that, there is a difference in the arguments of these two works. Theoretical reason proceeds from sensibility to the understanding, then to reason; while practical reason proceeds in the opposite direction, from principles (moral laws) to the concepts of good and evil, then finally to sense experience. Let us put this distinction into a chart:

Pure reason divides into: (1) theoretical reason, whose critique moves from an analysis of sensibility and the forms of intuition to the categories of the understanding and finally to the ideas of pure reason and their dialectic; and (2) practical reason, whose critique moves from an analysis of moral laws (=freedom) to the concepts of good and evil, to sensibility in the form of moral feelings. Kant states that in practical philosophy "we shall commence with the principles and proceed to the concepts, and only then, if possible, to the senses; whereas in the case of the speculative reason we began with the senses and had to end with the principles."⁴

²Beck maintains that Kant also criticizes practical reason, for instance, in the antinomies of pure practical reason, and that this makes Kant's exposition internally inconsistent. In my opinion, the nature of the antinomies of practical reason is essentially different from that of the antinomies of theoretical reason.

³Kant and Gregor (1998).

⁴Kant and Abbott (1898, 25).

Why does Kant need a different approach? Because what ethics first examines is the relation between reason and the will, and Kant not only wishes to keep reason free of restraint from experience but also to cast off the restriction to sense experience, which requires that practical reason be differentiated from theoretical reason. This point confirms theoretical reason's demand for sense experience as well as practical reason's demand for autonomy from experience. When expounding on theoretical reason, Kant raises the question of "how a priori synthetic judgments are possible" in order to seek the universal, necessary, objective validity of knowledge, and he demands that we distinguish this from subjective empirical habits or judgments of perception. When expounding on practical reason, he also wishes to have universal, necessary, objective validity for objective moral laws, and he demands that we distinguish this from any sort of mere prudent concern with experience. In epistemology, he presupposes the empirical existence of a priori synthetic judgments (e.g., in mathematics and physics), and raises the question of their conditions of possibility. In ethics, he affirms that freedom in the form of a universal necessary moral law which, although transcendental, is abundantly manifest in our experience of morality, and he seeks to understand *its* conditions of possibility. Therefore, he wishes to prove its nature and manifestation. Thus while Kant pursues a transcendental universal principle in the domain of empirical appearances, he also sees that this principle shares common ground with the principle of morality. If we put Kant's works on epistemology and ethics side by side, an interesting symmetry becomes evident:

In epistemology, we have thematic progress from the *Prolegomena to Any Future Metaphysics* (1783) to the *Critique of Pure Reason* (1781, 1787) to the *Metaphysical Foundations of Natural Science* (1786) and finally to the unfinished *Metaphysical Foundations of Natural Science*. In ethics, we have a parallel development from the *Groundwork of the Metaphysics of Morals* (1785) to the *Critique of Practical Reason* (1788) to *The Metaphysics of Morals* (1797) and finally to *Anthropology from a Pragmatic Point of View* (1798).

This summary shows the development of Kant's philosophy from the abstract to the particular. The first two books in both categories concern the fundamental principles of transcendental or critical philosophy, while the second pair of books concern the application of these fundamental principles to daily life. For instance, *The Metaphysics of Morals* expounds on the application of universal moral laws "to deal objectively with the particular nature of man as known only by experience, in order to show in it the consequences of these universal moral principles."⁵ The work is an analysis of practical reason as well as a medium for empirical abstractions, and is comparable to the *Metaphysical Foundations of Natural Science*, which concerns the theory of science, including expositions on natural law and psychology that make the book not "pure." The same point applies to the *Anthropology from a Pragmatic Point of View*, which deals with particular empirical content involving such topics as the differences among nations and individuals. Thus the first two books on ethics

⁵Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 5.

establish universal necessary transcendental moral laws, and together with the first two books on epistemology they form the essential works of Kant's critical philosophy.

The *Groundwork of the Metaphysics of Morals* is more or less comparable to the *Prolegomena to Any Future Metaphysics*, and is written mainly in an analytic style, proceeding from moral experience in daily life to its transcendental premises. The *Critique of Practical Reason*, on the other hand, is comparable to the *Critique of Pure Reason*, and is written in a synthetic style, proceeding from analysis of transcendental principles. The *Groundwork of the Metaphysics of Morals* has received more attention than the *Critique of Practical Reason* for the reason that it contains contents that are more commonplace and diverse (contrary to the reception of the *Prolegomena* and the *Critique of Pure Reason*). Some philosophers, including Schopenhauer and John Silber, regard the *Critique of Practical Reason* as inferior by far to the *Groundwork of the Metaphysics of Morals*. However, this view makes no sense, because apart from its lacking an explication of the thought that "man is an end in himself," the content and structure of the *Critique of Practical Reason* is more meticulous and precise than that of the *Groundwork of the Metaphysics of Morals*. In this chapter, our discussion will be mainly based on the *Critique of Practical Reason*, with some references to the *Groundwork of the Metaphysics of Morals*.

We have now brought out the contrast between Kant's two writing styles. As to the content, Kant's critique of ethics, like that of epistemology, is directed at the dual tradition of rationalism and empiricism. However, while in his epistemology Kant emphasizes especially the criticism of rationalism, the critique of ethics principally focuses on empiricism. Kant maintains that, unlike the circumstance that epistemology faces, in ethics, empiricism—which "cuts up at the roots the morality of intentions" and destroys everything that most distinguishes morality—is the greatest threat and eliminates the moral characteristics that mark morality. Besides, even rationalistic ethics with its faith in God eventually leads to experience.⁶ This is why he demands that we draw a clear line to exclude any empirical approach to ethics. As a result, as Kant states, "the first question here then is whether pure reason of itself alone suffices to determine the will, or whether it can be a ground of determination only as dependent on empirical conditions."⁷ In other words, the first task of a thorough inquiry is to examine the question whether experience or reason is the fundamental ground of morality.

The *Groundwork of the Metaphysics of Morals* categorizes the moral theories of empiricism and rationalism into empirical principles dedicated to eudaimonia and rational principles dedicated to perfection. In the *Critique of Practical Reason*, Kant further classifies these according to different material principles of morality. The table below exhaustively demonstrates all possible cases of material principles of morality.⁸

⁶Kant and Abbott (1898, 93).

⁷Ibid., 143.

⁸Ibid., 181–182.

SUBJECTIVE
EXTERNAL
Education (Montaigne)
Civil Constitution (Mandeville)
INTERNAL
Physical sensations (Epicurus)
Moral feeling (Hutcheson)
OBJECTIVE
INTERNAL
Perfection (Wolff and the Stoics)
EXTERNAL
Will of God (Crucius and other theological moralists)

Kant explains that the subjective theories “are all empirical and evidently incapable of furnishing the universal principle of morality.”⁹ The reason is that they are determined either by external norms, education, or government; or by innate human nature, instinctive needs, or physiological desires such as those for happiness or the removal of pain; or by particular moral feelings (e.g., the Englishmen Shaftesbury and Hutcheson hold that man has an innate sixth sense, a disinterested moral sense and also a sense of beauty, which can immediately discern and judge good and evil no less than beauty and ugliness). To Kant, these doctrines more or less either directly or indirectly attribute moral principles to experience, which has the unintended effect of making these principles (even the moral feelings mentioned above are mere experiences of the senses) subjective and arbitrary rather than universal, necessary, and objectively valid.

On the other hand, the objective theories are based on rationalism, which to Kant means that while they demand an objective universality from ethics in the form of “perfection,” they cannot actually determine what they would have to do in order to be practical principles. Moral perfection, when used to determine morality, reduces to a meaningless, empty tautology.

Generally speaking, “perfection” refers to the fulfillment or achievement of an end, though as an internal quality of human beings it should refer to the perfection of talent or skill.¹⁰ However, “talents and the improvement of them, because they contribute to the advantages of life; or the will of God, if agreement with it be taken as the object of the will, without any antecedent independent practical principle, can

⁹Ibid., 182.

¹⁰There is a lot of shifting in different periods of Kant’s thoughts concerning the relation between perfection and morality. In the pre-critical period, he combines the Wolffian school and the British aesthetical doctrine of moral sense, and proposes that perfection means doing one’s best. As a moral principle, perfection becomes a form. After 1770, Kant replaces perfection with self-legislation and rejects the doctrine of moral sense. In the *Groundwork of the Metaphysics of Morals*, perfection, as heteronomy, becomes an empty tautology, while in the *Critique of Practical Reason*, perfection is listed among the principles of happiness and criticized. In *The Metaphysics of Morals*, however, when expounding on the perfection of moral practice, Kant connects it with morality again.

be motives only by reason of the happiness expected therefrom.”¹¹ In other words, perfection is reduced to empirical happiness, even if the will of God is treated as a moral principle. It is for the sake of a blessing that man worships God.

In a nutshell, Kant holds that the objective principles of morality upheld by rationalism eventually reduce to the subjective happiness of empiricism. Therefore he need only criticize empiricism, in particular, empirical eudaimonism. Epicurus, who is warmly commended in the *Critique of Pure Reason*, becomes the major target of Kant’s second *Critique*. Yet Epicurus is merely a convenient target that Kant sets up for the sake of argument, while his real intention is to attack French materialism, which is a more prominent modern proponent of eudaimonism. In the *Lectures on Ethics*, Kant also presents a table similar to the one we just examined. On that table, Helvétius, a major representative of French materialism in ethical theory, occupies the place of Epicurus, which indicates that Epicurus is a mere cover for Kant’s real object of criticism, which is French materialism. This is the real situation of philosophical struggle at the time.

French materialism begins from sensualism, holding that good and evil are fundamentally happiness and pain, which are materially based on feelings. It is human nature to avoid pain and seek happiness, our supposedly universal interest. Human beings commit evil deeds because such deeds are advantageous. Here, the phrase “human beings” refers to individuals. Morality thus reduces to individual interest. D’Holbach states that “it is the essence of man to love himself; to tend to his own conservation; to seek to render his existence happy: thus interest, or the desire of happiness, is the only real motive of all his actions.”¹² Morality is thus nothing more than people’s interrelated common interests. For Helvétius, “the same interest which influences the judgment we form of actions [...] makes us consider them as virtuous, vicious, or allowable.”¹³ He says that “whatever disinterested love we may affect to have, without interest to love virtue, there is no virtue.”¹⁴ French materialism holds that social and public interests, which are based on individual interests, are the source of moral principles. These materialists call on people to renounce the fabrications of religion and build up an ethical science on the ground of enlightened self-interest. Self-interest is natural and material, resembling the material content and experiential forms of evidence used in the natural sciences. Helvétius claims that one should “imitate the method of experimental physics to establish ethics.”¹⁵

French materialists attempt to ground ethics on the receptivity of sense organs, and proceed from notions such as pain, happiness, interest to establish moral principles. This is the exposition of the moral theory of empirical eudaimonism.

¹¹Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 183.

¹²*The System of Nature*, vol 1, chap 15. Marx Engels Internet Archive 1994.

¹³Helvétius (1970).

¹⁴Helvétius (1969).

¹⁵Helvétius, *De L’esprit: Or, Essays On the Mind and Its Several Faculties*.

Kant opposes this theory with the argument that happiness does not have objective criteria.

No matter what sort of happiness, be it low or high, sensuous or rational, joy or mere pleasant feeling, these conceptions of happiness are arbitrary one and all. “The same man may return unread an instructive book which he cannot again obtain, in order not to miss a hunt; he may depart in the midst of a fine speech, in order not to be late for dinner; he may leave a rational conversation, such as he otherwise values highly, to take his place at the gaming-table; he may even repulse a poor man whom he at other times takes pleasure in benefiting, because he has only just enough money in his pocket to pay for his admission to the theatre.”¹⁶ Therefore, “it is every man’s own special feeling of pleasure and pain that decides in what he is to place his happiness.”¹⁷ That which one person regards as happiness might be a pain to another. Everyone and every historical time has its divergent interpretation of happiness, which is determined by contingent empirical conditions. There cannot be universal, necessary, objective content or common criteria.

Kant further points out that happiness is essentially an animal will to live, or a human nature that avoids pain and seeks happiness. What eudaemonism promotes is, in fact, a human being’s animal nature. Even higher-level happiness and pleasure are fundamentally built on the empirical ground of natural sensibility and animal nature. Therefore, instinct is a more reliable guide to happiness than is reason. That is why we often see that those who work hard are actually not as happy and joyous as those who muddle away their days. There is simply no objective universal validity in the pursuit of happiness, which therefore cannot be a universal, necessary, moral principle and cannot establish any moral law. Kant thinks that any sort of happiness, regardless of its source (pleasure, talent, health, wealth, power, and so on), has nothing to do with morality. Talent, virtue, and happiness have their values that are independent of external values, but they are not the moral good.

Since moral principles that derive from experience cannot be universal, necessary moral laws, Kant claims that only the universal legislative form itself, which is universal law, is the supreme principle of morality. The legislative form is the true principle of morality and calls upon us to reject all empirical qualities and sensible content. Kant explains that “a will which can have its law in nothing but the mere legislative form of the maxim is a free will [...] a free will must find its principle of determination in the law, and yet independently of the matter of the law. But, besides the matter of the law, nothing is contained in it except the legislative form. It is the legislative form, then, contained in the maxim, which can alone constitute a principle of determination of the [free] will.”¹⁸ Kant’s argument on this point revolves around the refutation of empirical eudaemonism. If we can set nuance aside, this refutation can be summarized in a table:

¹⁶Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 153.

¹⁷*Ibid.*, 157.

¹⁸*Ibid.*, 163.

Eudaimonism: subjective maxim—empirical—happiness—material—human nature—hypothetical imperatives—desires—effect—instrument—heteronomy—necessary causality—the world of phenomena.

Kant: objective law—transcendental—morality—legislative form—reason—categorical imperative—obligation—motive—purpose—autonomy—free will—noumena.

Empirical eudaimonism reduces morality to the pursuit of happiness, and regards it as human nature. Kant, on the other hand, argues that such a view, which resorts to human nature, be it natural or social, innate or acquired, cannot establish universal necessary moral laws. These are possible only by resorting to pure reason and transcending human nature. Everyone has a different idea of happiness, but moral laws are properly valid for any rational being. They take the form of categorical imperatives that every rational being is unconditionally compelled to obey. This makes morality fundamentally different from hypothetical imperatives, which are based on individual interests or happiness, and which are always conditional and relative. Kant argues that “if the action were good merely as a means to something else, then the imperative is hypothetical; if it is represented as good in itself, hence necessary, as the principle of the will, in a will that in itself accords with reason, then it is categorical.”¹⁹ He illustrates his point with the observation that we often tell someone to work hard and live frugally so that he will not suffer poverty in old age, or we might do this or that good deed because we want to be praised or profit from it. In such cases, the principle of our deed is a merely hypothetical imperative of the conditional “if . . . , then” form. Only a principle of action that does not mix with empirical desires, feelings, or wishes as its premise or condition can be the unconditional, categorical imperative of pure practical reason. A hypothetical imperative is subjectively determined, and one can refuse to obey it without falling into any inconsistency. For instance, we might perversely but not inconsistently prefer to be poor in old age than to live frugally when young, or we could demur from the profit held out by the performance of a certain act and quite consistently not do it. Therefore, these principles are conditional and relative, whereas a properly moral principle must be an unconditional imperative that demands compliance. Even if no one actually obeys the imperative, it is nonetheless a moral principle with objective, universal validity. Kant holds that the categorical imperative has this power because it does not arise from sense experience, or from considerations of individual happiness, but from pure reason. It is the practical power of pure reason.

Practical reason, which is the ground of moral laws, is not an abstract principle or law in a cognitive sense, but relates to the will and action on which our daily actions are dependent, rather than the understanding or knowledge. Hence, Kant often identifies practical reason with the will. For Kant, will is a rational power because it is based on reason. It is different from the blind and mysterious but actually animalistic will to live that Schopenhauer develops into a cosmic being. Kant conceives of will as a super-biological quality. His Copernican Revolution in

¹⁹Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 25.

ethics shifts the moral ground from external empirical objects to the will of the transcendental subject. In the beginning of Chap. 1 of the *Groundwork of the Metaphysics of Morals*, Kant states that “there is nothing it is possible to think of anywhere in the world, or indeed anything at all outside it, that can be held to be good without limitation, excepting only a good will.”²⁰ So what is this “good will”? Simply, the absolute obedience to moral laws that originates from pure reason.

Kant believes that the essence of ethics can be grasped only by an investigation of the moral determinations that express the form of good will.

In order to understand good will, we must discuss the notion of obligation. This notion contains the concept of good will and stands in sharp contrast to the natural desires and interests of eudaemonism. Obligation requires that one do what ought to be done, that is, to obey the categorical imperative. A good will is a will that acts from duty and obligation. However, if an action is done merely to accord with an obligation, then that will cannot be called good. For instance, if not from a consideration of his duty but rather merely that of his own long-term interest, a shopkeeper refrains from deceiving his customers, then although his action is *in accordance with* obligation, it is not a moral act. Preserving one’s life is an obligation, but it is also a natural need. Most people cherish life for the latter reason, which deprives their action of moral significance. Or again, should pain and disaster render life so burdensome that one would rather die, yet one still carries on with a strong will instead of committing suicide, this action really was performed for the sake of obligation and not just in accordance with obligation. Therefore it has moral value. To be kind to other people out of compassion (love) or to do good deeds for some ulterior purpose or in the expectation of a good result are all cases of actions not done for the sake of obligation, and therefore cannot be counted as moral actions.

Evidently, moral obligation is not only distinct from self-interest, but is even in opposition to it, which makes obligation something truly sublime. Moral laws can move us only because we possess a rational will that can be motivated to act from the mere form of a categorical imperative. That same rational will obliges us to restrain, suppress, and overcome our merely biological existence, including our wishes and happiness. Kant states that “everything in nature works in accordance with laws. Only a rational being has the faculty to act in accordance with the representation of laws, i.e., in accordance with principles, or a will.”²¹ The origin of morality does not lie in human nature, i.e., love or hate or happiness. On the contrary, morality differentiates rational human existence from the survival instinct or pleasure principle of the animal because it often requires a voluntary sacrifice of love, hate, happiness, or even life itself; disregards interests and results; and refuses to submit to natural needs, desires, or wishes. The sacrifice of our sensuous being for the sake of our rational nature is admirable and honorable.

We make this sacrifice neither for spiritual reputation, pleasure, or satisfaction, as the French materialists claim, nor for God’s blessing or reward, as theologians

²⁰Ibid., 7.

²¹Ibid., 61.

and rationalists believe. It is simply to obey the moral law that categorically ought to be obeyed. Empirical human emotions, interests, desires, purposes, and concern for results must all be abandoned.

What Kant takes pains to make salient is the formal features of such moral action. This is the keystone of his ethics. Kant confesses that Rousseau taught him to respect the ordinary man. In fact, morality does not depend on any profound knowledge, but simply on the will that restrains selfish desires and wishes. To Kant, the fact that man can voluntarily constrain himself, that there are certain things he simply will not do, is the very essence and vital expression of our rational will. Animals do not have such a will, while gods do not need one, having no desires that need to be constrained. Only the dutiful acts of a sensuous human being demonstrate this will.

Such action also fully proves the practical power that pure reason possesses. Morality is not an illusion, but is a reality that human beings abide by daily. "It is itself a duty to have such a metaphysics, and every human being also has it within himself, though in general only in an obscure way."²²

Kant holds that ordinary man unknowingly uses metaphysical criteria for making decisions in everyday life. Although Kant denies there is an organ of moral sense, nonetheless he sees the human capacity to discern and fulfill our obligations as a proof of his argument.²³ This attitude is actually rather close to the doctrine of the inner sense, with the difference that what the doctrine of the inner sense attributes to an innate conscience Kant attributes to supersensible reason. It is not individuality, conscience, instinct, human nature, or natural feelings, but self-consciousness, universality, and objective reason that Kant emphasizes. In contrast to eudaimonism, he comprehends more accurately, if perhaps also more abstractly, the formal distinction between morality and non-morality, which becomes the basis of all his reasoning. In the last part on methodology (which is in fact a theory of moral education), from the conclusion of the *Critique of Practical Reason*, Kant once again highlights this point:

Yet virtue is here worth so much only because it costs so much, not because it brings any profit. All the admiration, and even the endeavour to resemble this character, rest wholly on the purity of the moral principle, which can only be strikingly shown by removing from the springs of action everything that men may regard as part of happiness. Morality, then, must have the more power over the human heart the more purely it is exhibited.²⁴

[Morality] infinitely elevates my worth as an intelligence by my personality, in which the moral law reveals to me a life independent of animality and even of the whole sensible world, at least so far as may be inferred from the destination assigned to my existence by this law, a destination not restricted to conditions and limits of this life, but reaching into the infinite.²⁵

²²*The Metaphysics of Morals*. Preface to "The Metaphysical Elements of Ethics".

²³See *Critique of Practical Reason*.

²⁴Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 367.

²⁵*Ibid.*, 377.

8.2 Universal Legislative Forms

What does Kant mean by formal moral principles, the moral laws, and the categorical imperative? He stipulated a basic rule, which he called the “Fundamental Law of the Pure Practical Reason,” which states: “Act so that the maxim of your will can always at the same time hold good as a principle of universal legislation.”²⁶ In the *Groundwork of the Metaphysics of Morals*, Kant formulates this rule in simpler language: “What kind of law can it be, whose representation, without even taking account of the effect expected from it, must determine the will, so that it can be called good absolutely and without limitation? Since I have robbed the will of every impulse that could have arisen from the obedience to any law, there is nothing left over except the universal lawfulness of the action in general which alone is to serve the will as its principle, i.e., I ought never to conduct myself except so that I could also will that my maxim become a universal law.”²⁷ “This principle is therefore also its supreme law: ‘Act always in accordance with that maxim whose universality as law you can at the same time will.’”²⁸

The “maxim” these passages refer to requires that the empirical content of properly moral decisions must have such a form as can make the maxim or rule of our action universally binding on any rational agent. Just as any instance of logical reasoning must be in accordance with the forms of formal logic (e.g., syllogism) so as to guarantee the validity of the reasoning, so must moral conclusions be in accordance with the legislative forms to guarantee their validity.

Therefore, the moral law and the categorical imperative demand that our empirical decisions and maxims have universal validity. Kant always employs transcendental forms to regulate empirical content, and in so doing the universal moral laws become legislative forms. To Kant, whether a man’s action is moral or not depends on whether its principle or maxim can consistently become a universal principle binding on all rational agents. In the *Groundwork of the Metaphysics of Morals*, he elaborates on this point with several examples. Before presenting his examples, Kant paraphrases the principle mentioned above: “So act as if the maxim of your action were to become through your will a universal law of nature.”²⁹ In the first example, Kant asks if, when from misery and despair a man decides to commit suicide, that decision is moral. Kant believes that the answer depends on whether the maxim of his action could become a universal law of nature, which Kant believes is not possible. “One soon sees that a nature whose law it was to destroy life through the same sensation whose vocation it is to impel the furtherance of life would contradict itself, and thus could not subsist as nature; hence that maxim

²⁶Ibid., 377.

²⁷Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 15.

²⁸Ibid., 44.

²⁹Ibid., 31.

could not possibly obtain as a universal law of nature, and consequently it entirely contradicts the supreme principle of all duty.”³⁰

In the second example, Kant asks if, when a person in financial distress makes promises with the intention of not keeping them, his action can be right. It cannot be, he says, for “it could never be valid as a universal law of nature and still agree with itself, but rather it would necessarily contradict itself.”³¹ The action is immoral because the promises are lies, and if everybody lied to escape distress, the very fabric of rational action would be fatally compromised for all. The third example is about a person who prefers to indulge his appetites rather than trouble himself to develop his natural talents. The fourth example is about a person who sees poor people struggling in great hardship and refuses to help them even though he could. All these maxims of action are immoral because they cannot become universal laws of nature. Although it is possible, in the third example, to assume a natural law, that is, to allow the wasting of natural talent, Kant believes that a rational being would necessarily not wish to have such a law. The fourth example does not negate human existence, but it would be self-contradictory were it to become a universal law of nature. It is quite possible that the person who refuses to help others might someday need help himself. The universal form of his own maxim to withhold assistance from others would thus lead to his own distress.

Elucidating these four examples has become an occasion for long-winded arguments among Kant’s commentators. A much disputed question is whether the universal consistency Kant insists on is truly self-contradictory in the sense of purely formal logic. Obviously, universalizing the maxims of the first and the third examples does not lead to a formal contradiction. However, if these maxims are not purely formal logical contradictions, does that mean something empirical has been added? Let us illustrate with one of the most debated examples: Kant’s second example about insincere promises. The utilitarian John Stuart Mill argued that since “the trustworthiness of human assertion ... [is] the principal support of all present social well-being [...] we feel that the violation, for a present advantage, of a rule of such transcendent expediency, is not expedient.”³² In other words, to lie for the sake of immediate interest is immoral, because it is not in accordance with the fundamental interests of society. Such utilitarianism is actually the same thing as the moral view of eudaimonism, which of course is the opposite of Kant’s view.

Kant believes that it is wrong to lie, because if such a maxim were to become a universal law of nature, it would be self-contradictory, inasmuch as one promises something one has no intention of doing. However, is that truly a logical contradiction? Obviously, it is not. Just as with the other examples, the second does not truly lead to a formal contradiction. Kant in fact unconsciously brings in a principle of psychology and teleology. For instance, why is the failure to develop one’s

³⁰Ibid., 38–9.

³¹Ibid., 39.

³²John Stuart Mill, *Utilitarianism*. British utilitarianism as represented by Jeremy Bentham and Mill is a British version of the eudaimonism of French materialism.

natural talent or a decision to commit suicide immoral? Kant is not explicit about this question, which in fact depends on a material principle of teleology (see Chap. 10). That the moral law of universal legislation itself is paraphrased as a “universal law of nature” also contains the same issue. Kant repeatedly emphasizes that the ground of obligation “is to be sought not in the nature of the human being or the circumstances of the world in which he is placed, but a priori solely in concepts of pure reason,”³³ and demands that it be distinguished from any empirical principle. However, he fails to establish this conclusion philosophically and must fail because it cannot be done. Kant’s moral law is said to be transcendental and beyond the laws of empirical nature, but as soon as it touches on social phenomena, he inevitably sneaks in determinations of a non-formal, substantial, even empirical nature.

So these four examples have caused all sorts of trouble for Kant’s commentators, who have offered all sorts of explanations, all of which are, in my opinion, either self-contradictory or otherwise inconsistent. In my opinion, the significance of these four examples lies in the inconsistency they reveal in Kant’s idea of moral law. The *Critique of Practical Reason*, being even more abstrusely theoretical, is more obscure and its contradictions better hidden than in the *Groundwork of the Metaphysics of Morals*, which is delivered in relatively simple language. In addition, Kant regards the four examples as obligations toward others and oneself, and as complete and incomplete obligations. Complete obligations, such as not to lie and not to commit suicide, are phrased in the negation; while incomplete obligations, such as developing one’s talent and helping others, are affirmatively phrased. To put it in a modern idiom, the former is a strong command, while the latter is a soft command. Obligations toward others refers to lying to others and helping others, while obligations toward oneself refers to suicide and the development of one’s natural talents. Kant also categorizes hypothetical imperatives and categorical imperatives into questions, skills and rules, wise advice, and moral commands, etc. All these are categories of forms, which are rather complicated and tedious, and of little account. Kant intends to emphasize “the determination of the will” in his theory of moral principles. Not just the form but the motive must admit of universalization. To say that Kant’s ethics is a doctrine of motivation rather than of consequences is not to say that he assumes that morality requires a good nature, which is just the sort of material principle that he forbids in moral theory. What Kant emphasizes is the *form* of motivation, the form of the maxim, which must be universal. Morality resides neither in actual utilitarian consequences, nor in admirable motives like love for others or the worship of God. It is true that this purely formal doctrine of motivation is rather empty, and some scholars regard universalizability as a merely necessary but not sufficient condition of morality. This law alone obviously cannot resolve the problem. Therefore Kant posits a second law, which in fact becomes the pivot of his ethics.

³³Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 3.

8.3 The Human Being as the End

The second version of the categorical imperative states, “Act so that you use humanity, as much in your own person as in the person of every other, always at the same time as end and never merely as means.”³⁴ To Kant, human beings “are objective ends,” which he explains as:

...things whose existence in itself is an end, and specifically an end such that no other end can be set in place of it, to which it should do service merely as means, because without this nothing at all of absolute worth would be encountered anywhere; but if all worth were conditioned, hence contingent, then for reason no supreme practical principle could anywhere be encountered.

If, then, there is supposed to be a supreme practical principle, and in regard to the human will a categorical imperative, then it must be such from the representation of that which, being necessarily an end for everyone, because it is an end in itself, constitutes an objective principle of the will, hence can serve as a universal practical law. The ground of this principle is: Rational nature exists as end in itself.³⁵

He argues that there is an objective ground for a rational person to obey the categorical imperative because good will does not regulate itself according to any subjective ends, which presuppose the natural proclivity of the agent in order to have value—a value that would be entirely relative. Good will is regulated solely by objective ends with absolute value. The a priori synthetic relation between the categorical imperative and the will of a rational being makes obligation possible.

Kant originally postulates only one moral law, then deduces the second version of his categorical imperative from the first. He also expounds on the relation between these two formulations, puzzling over whether they are mutually consistent. This part of the discussion is extremely musty and has always provoked a lot of abstruse debate. I do not want to get entangled in subtleties because the important point is that Kant’s moral law, however abstract and formalistic, must finally revolve around the human being. The most concrete and intelligible form of the categorical imperative is implemented in the principle of “the human being as the end.” As a result, the human being provides a ground for the categorical imperative and the moral law. In fact, Kant argues that as a sensuous being, a human being has only a relative value; but, as a rational being, a human being is an end in itself. Therefore, “the human being as the end” is the transcendental principle that has universal validity applicable to any empirical condition, and is the clearest form of the moral law.

Precisely because human beings, as ends in themselves, are all equal, the universal legislation and universal validity demanded by the categorical imperative are possible, though this also implies that we have moral obligations toward others but none toward animals or gods. Kant again cites the fourth example from his first version of the categorical imperative to explain why acts such as suicide, lying,

³⁴Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 46–47.

³⁵*Ibid.*, 47.

wasting one's talents, and not helping others violate the principle of the human being as an end in itself. One uses oneself (in the case of suicide) or others (in the case of lying and cheating) merely as means. Commodities, he says, have a price, while a human being has a dignity that is beyond any price regardless of our use to others. As a natural being, the human being is not superior to the other animals; but as a rational being, the human being has a dignity beyond all price.³⁶ The worth of a human being cannot be estimated in terms of interest or utility. No material wealth or treasure is comparable to the existence of a human being, even if the former is sometimes more useful. The utilitarian John Stuart Mill believes that it is right to persecute and slaughter barbarians because the goal of that violence is progressive, while the means is only used to serve a noble end. Kant also touches on this topic: "There are plausible enough arguments for the use of violence on the grounds that it is in the best interest of the world as whole. [...] But all these supposedly good intentions cannot wash away the stain of injustice in the means used for them."³⁷ For Kant, the use of violence for a noble goal is immoral because it is not in accordance with the principle of the human being as an end in itself. Evidently, when Kant states that the human being is the end, he is not thinking like a utilitarian, and still proceeds from the abstract regulation of the pure reason.

Nevertheless, the significance of this proposition in Kant's ethics lies precisely in its *not* being "pure," but in presenting the demands and trends in a particular society and reflecting the age of the French Revolution. Kant demands independence, freedom, and equality from the old order, raising the banner of pure reason and the human being as an end in itself. The ruling class of his time treated the people as worthless animals, mere tools, waging wars for no cause, and slaughtering the innocent for trivial personal reasons or for sport. Kant sighed with pity and sorely regretted that "many rulers treat their objects as if they were merely an element of natural order."³⁸ That is, as if they were not members of the kingdom of ends, and might instead be used as mere means to achieve the ruler's desires. It is under such historical circumstances that Kant presents the doctrine of the human being as an end. This doctrine has the substantial content of human rights and democracy, which we shall discuss in detail in the next chapter on Kant's political views.³⁹

The moral law can be expressed in at least two ways. The first states that one must act so that one's action can become a principle of universal legislation. This principle is the premise of ethical action, and as that premise it is an objective principle beyond ethical action. The second states that one must act only on maxims that have the form of universal legislation, that "your determination makes your action become an action that can form universal legislation." This principle belongs

³⁶*The Metaphysics of Morals*, "the Metaphysical Elements of the Doctrine of Virtue," §11.

³⁷*Ibid.*, §62.

³⁸"Perpetual Peace."

³⁹It should be noted that Kant carries these abstract principles of ethics over to some particular experiences, such as pedagogy. See Kant, "On Pedagogy."

to ethics itself instead of being beyond it, and is subjective. Kant sets forth no strict distinction between these two meanings or statements. However, with regard to his basic doctrine of treating the moral law as superhuman pure reason, it can be said that he is inclined to favor the first formulation. In the same way, the doctrine of the human being as an end in itself also has two meanings, depending on whether we refer to individuals or to humanity as a whole. In his ethical works, Kant obviously refers to the human being in the second sense, although as an implicit historical concept, the first meaning is in fact more important (see Chap. 10).

Consequently, a contradiction between the two formulations of his moral law arises, that is, between the first meaning of the first law and the second meaning of the second law. On the one hand, the essential feature of the moral law is pure practical reason, which is indifferent to the contingent existence of human beings and demands unconditional obedience, and which makes the individual the means of realizing reason's moral law. On the other hand, that moral law is said to demand that the human being must always be treated as an end in itself. A one-sided emphasis on certain aspects of the two formulations of the moral law has caused some scholars to regard Kant as a militarist and authoritarian who advocates absolute obedience, while others see him as a libertarian and individualist who champions independence and human dignity.⁴⁰

However, Kant himself attempts to employ a third formulation of the categorical imperative to unite these two aspects.

8.4 The Autonomy of the Will

According to the third formulation, the categorical imperative is "the idea of the will of every rational being as a will-giving universal law."⁴¹ This is Kant's famous "autonomy of the will." Moral agents legislate for themselves. The passive formula "I ought to act in such and such a way" turns into the conscious thought that "I determine to act in such and such a way." Kant explains:

That in the order of ends, man (and with him every rational being) is an end in himself, that is, that he can never be used merely as a means by any (not even by God) without being at the same time an end also himself, that therefore human being in our person must be holy to ourselves, this follows now of itself because he is the subject of the moral law, in other words, of that which is holy in itself [...] For this moral law is founded on the autonomy of his will, as a free will which by its universal laws must necessarily be able to agree with that to which it is to submit itself.⁴²

⁴⁰Modern scholarship has also come up with similar interpretations of Rousseau as either authoritarian or libertarian.

⁴¹Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 45.

⁴²Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 332.

In the “Principles of Pure Practical Reason,” the first chapter of Book I of the *Critique of Practical Reason*, Kant sets forth four theorems that are not deduced from the empirical, or from happiness, matter, or heteronomy; that is, they come from affirmative moral laws to the transcendental, obligatory, formal, and autonomous, and thus reach the summit of Kant’s ethical principles.

The term “autonomy” contrasts with “heteronomy.” Heteronomy implies that the will is determined by other factors such as those Kant listed in the beginning of the chapter as material incentives: circumstances, happiness, conscience (inner sense), divine will, and so on. For Kant, all these motives belong to heteronomy, which renders the action of the will obedient to external factors, rather than to autonomy, which legislates to itself, and such motives are therefore without moral value. For instance, conscience, which proceeds from a particular moral feeling, depends on sensibility to discern, judge, and regulate morality, and ultimately reduces morality to satisfaction, pleasure, and happiness. Therefore it cannot be autonomous, but rather heteronomous.

Kant argues that a person’s autonomous will is neither a slave to desires (animal nature), nor an instrument of the gods; it is neither driven by pleasure, happiness, and desire, nor controlled by divine will, fate, and conscience. A human being is neither a mere thing nor a god, but a master who obeys its own legislation. The moral law arises from absolute obedience as well as self-legislation. It is universally valid because it treats human beings as ends in themselves. This is the autonomy of the will, that is, moral freedom.

Kant explicitly states that the three formulations of the moral law are identical and that they all point at the same center from different directions. The center is the concept of freedom. All the analyses and arguments Kant sets forth about the moral law culminate in the concept of freedom, which, in Kant’s ethics, is the complement to the concept of necessity in his epistemology. Reason legislates for nature, laying down the law of necessity, and reason legislates in human freedom and moral action. Freedom is the manifestation of pure reason in moral action.

As a supersensible power of reason, the moral law is a universal, necessary, categorical imperative and its essence is freedom (the first formulation). The human being is the end rather than means. As a rational being, the human being is free (the second formulation); while the autonomy of the will (the third formulation) is the direct manifestation of freedom. “The concept of freedom is the key to the definition of autonomy of the will.”⁴³ The *Groundwork of the Metaphysics of Morals* employs an analytic method that is illustrated by reflections on everyday moral experience and eventually reaches the concept of freedom; while the *Critique of Practical Reason*, which is written in a synthetic method, proceeds from abstract principles and concludes that the concept of freedom is “the keystone of the whole building” in the system of pure reason and the ground for the concepts of the immortality of the soul and the existence of God.⁴⁴

⁴³Kant, and Mary J. Gregor, *Groundwork of the Metaphysics of Morals*, 94.

⁴⁴See the preface to the *Critique of Practical Reason*.

We have seen in the previous two chapters that freedom in theoretical reason is an unreachable idea on the far side of human cognition. It cannot be proved by the experience of the senses. The natural phenomenon of the human being as a sensuous being is entirely subordinate in the chain of necessary causality that is without any trace of freedom. On the other hand, just as Kant argued in the antinomy of freedom and necessity, this does not altogether eliminate the concept of freedom or exclude its noumenal reality, which remains possible although problematic and scientifically incapable of demonstration. Now, in the *Critique of Practical Reason*, in the moral domain cut off from empirical desire and all sensible elements, freedom emerges as the practical moral autonomy of the will. “Here first is explained the enigma of the critical philosophy, viz.: how we deny objective reality to the supersensible use of the categories in speculation and yet admit this reality with respect to the objects of pure practical reason.”⁴⁵

Kant affirms the objective reality of freedom in the moral law, which he could not have done in the domain of theoretical reason. However, this freedom is not abstracted or deduced from empirical facts of conduct. From empirical facts only necessary causality can be abstracted or deduced. The empirical facts of moral **conduct can only prove** the reality of freedom.

Freedom does not belong solely to transcendental reason, which is irrelevant to everyday human life. We see freedom in action when we observe real, everyday moral conduct, even though, as an empirical perception, this experience is not a scientific proof of free will. It is in good will—people’s actions in absolute obedience to the moral law—that freedom manifests its supreme dignity. On the one hand, then, freedom is the source of the categorical imperative and the ground and premise of the moral law, while on the other hand, obedience to the moral law expresses a freedom that would be entirely unknown to us apart from moral action.

Kant in effect makes freedom an effective cause in the world of appearances; it is a “causality by means of a law which cannot be reduced to any physical law of the sensible world.”⁴⁶ Causality is originally a category of epistemology. A causality that is unrestricted by experience is a meaningless, empty concept in the theory of knowledge, as we saw in previous chapters. However, such a concept has great importance in the practical sphere. As *causa noumenon*, freedom has practical reality. “The notion of a being that has freedom of the will is the notion of a *causa noumenon*.”⁴⁷ This freedom is unrestricted by experience yet can act on reality. The category of causality, which is applicable only to appearances in epistemology, is applicable to noumena in ethics. This is a *causa noumenon* of objects of non-knowledge, that is, the cause of human freedom which is beyond the limitation of causality, i.e., autonomy of the will in morality. In the whole system of critical philosophy, this is the reason why morality is superior to knowledge, practical

⁴⁵Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 128.

⁴⁶*Ibid.*, 198.

⁴⁷*Ibid.*, 205.

reason is superior to theoretical reason, unknowable noumena can act upon appearances, and a free human as a rational being (as a noumenon) is superior to a human as a being of nature. The superiority of morality to knowledge and of noumena to appearance lies in people's freedom of the will as expressed in their actions, their conscious decisions, and choices. It is also the case for that which is beyond causality, that "he who knows the impracticable nature of the times and yet will be doing in them," in order to conform to the demand of reason. This is a very important thought in Kant's critical philosophy, which not only anticipates Fichte's use of the ego as an agent to establish the non-ego but also Hegel's emphasis on the idea directing the world process, and influences the entire future of ethical thought.

Just as the basic concepts in the *Critique of Pure Reason* have multiple layers of meaning, the basic concepts here, especially those of the will and freedom, have at least two meanings. In *The Metaphysics of Morals*, Kant explicitly sets forth two meanings of "the will." One is *Wille*, referring to practical reason per se; the other is *Willkür*, referring to the self-conscious will of action. The former is the will of universal legislation, the latter is the will of individual conduct. The former cannot exist without the latter. Legislation without the law being carried out would be empty; and without the will of pure practical reason, individual choice loses moral significance. However, in the *Critique of Practical Reason* and the *Groundwork of the Metaphysics of Morals*, Kant did not make a strict distinction, and the two meanings are often confused.

The term "freedom" also has a twofold meaning, referring to the moral law as a whole as well as to the conduct of an individual will.⁴⁸ In the *Critique of Pure Reason*, the term "freedom" already has these two meanings. On the one hand, as an unknowable thing in itself it is beyond natural causality (the negative meaning); on the other hand, as a noumenon superior to appearance, it becomes a free causality, a *causa noumenon*. These two aspects are also evident in the *Critique of Practical Reason* and the *Groundwork of the Metaphysics of Morals*. As the freedom of the moral law, Kant underlines its transcendence of natural causality, while as the freedom of individual conduct, he underlines its spontaneity, i.e., it can be found in the natural causality of experience. In other words, its efficacy is as a *causa noumenon*. The freedom of the moral law is practical reason per se, which is a mere form with no relation to sensuous experience, while the freedom of individual action is a spontaneity capable of action in the world of sensuous appearance, even though its essence lies beyond those appearances. True autonomy of the will requires that transcendental, universal, abstract principles be expressed in empirical individual action, where there can be autonomy of the will. When the two aspects are discussed together, the freedom or autonomy of the will is a transcendental practical capacity (i.e., the moral law of universal form) possessed by pure reason, which categorically and necessarily legislates for itself in individual action.

⁴⁸See Lewis White Beck, *A Commentary on Kant's Critique of Practical Reason*.

It is evident that while Kant treats freedom—moral law—as supersensible pure reason, nevertheless ethics must be implemented in the human world of sensuous appearances. If human beings were divine, then all actions would be “right” or “good” and there would not be any question of “ought.” That “ought” refers to the necessity of obedience to the categorical imperative and the carrying out of obligations. It precisely explains that the human being, who as a being belonging to the sensible world, “ought to” (“must”) carry out the order of the noumenal world, hence moral problems arise. As discussed above, morality originates with freedom (reason), but “it is morality that first discovers to us the notion of freedom.”⁴⁹ The universal and the individual, the transcendental and the empirical, and reason and sensibility are completely separated in theoretical reason, but are always intermingled in practical reason. Kant argues that pure reason itself has practical power, yet practice must rely on the sensuous experience of the individual who alone endows that pure practical reason and its freedom with objective reality. This is the fundamental reason why there are two different meanings for the concept of freedom and why their usages necessarily mingle. In his epistemology, Kant emphasizes that transcendental categories must not be separate from experience, yet he eventually enters into dialectical illusions that are beyond experience. In his ethics, Kant emphasizes that the moral law must be separate from experience, yet he looks for the expression of that morality in the action of empirical, sensuous, individual deeds. Only after Fichte, Schelling, and Hegel is this profound conflict in Kant finally resolved after the fashion of idealism, to which topic we shall return in the next chapter.

It must be noted that as Kant understands it, freedom does not imply an empirical spontaneity in the actual world. Actions, as empirical objects of theoretical reason, are just as conditioned by natural causality as anything in nature, without any trace of freedom, just as the French materialists emphasized. For them, all human actions are mechanically and necessarily conditioned by the law of causality, with no room for freedom. D’Holbach argues that a person who is thrown out of the window acts in no different a manner than if he voluntarily jumps out.

The falling is the same in both cases and no less necessary for the intervention of a voluntary choice. Kant thinks that such a view inevitably leads to the conclusion that all moral and legal laws are useless. One may as well reprimand a stone that fell and wounded a person as reprimand someone’s immoral choice. Criminals could excuse their crimes by pleading that they were acting under the inexorable compulsion of natural causality. Since all immoral or criminal actions would necessarily be determined by circumstance, conditions, personality, habits, and so on, no one would be responsible for their actions and there would be no ground for censure and punishment.

The reason why Kant proposes his own theory is to denounce the moral view of mechanical materialism. To him, as empirical objects of knowledge, all actions

⁴⁹Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 164.

indeed have causes and are carried out in time in full conformity with the law of causality. However, there is always the further question as to whether or not the agent, as a rational subject, obeyed the moral law in his action. When a person is in his right mind and acts with full consciousness, the action is autonomous and free. He can choose to do it or not, and can choose to do it in this or that way. Although a cause can be found in his final decision, there is freedom for him while he makes the decision and choice. He can choose to abide by the moral law or not. Hence he is morally responsible for his action, which is up to him, regardless of circumstances or pressure from external or internal conditions. “He judges, therefore, that he can do a certain thing because he is conscious that he ought, and he recognizes that he is free.”⁵⁰

A human being is different from a machine no less than he is different from a natural animal. In not being blindly or mechanically governed by the law of causality, our actions are decided and chosen with consciousness and will. As a sensuous being in the world of appearances, human beings are necessarily subject to the conditions of time, and their actions are merely parts of the mechanical system of nature, in conformity with the law of causality.

However, as a noumenal rational being, we are aware of our independence from all such natural conditions and we are capable of self-legislating rationality. Since morality is superior to knowledge, as the noumenon is to appearance, freedom, as a cause, can interfere in nature. As Kant says, I *can* because I *ought to*. “Can” means that I can act in the empirical world, while “ought” refers to my freedom of choice. The freedom Kant emphasizes is entirely devoid of content and meaning in terms of empirical psychology. Empirical psychology and consciousness are governed by natural causality in time, and entirely different from transcendental freedom, which is beyond both time and laws of causality. This freedom is the supreme principle of Kant’s doctrine of morality.

8.5 “Kant Only Talked About the Good Will”

Although as Kant himself admits, in his proposed solution for reconciling appearance and noumenon, or necessity and freedom, “great difficulties present themselves which seem to render such a combination impracticable.”⁵¹ However, he claims that there is no better solution. The ideas of moral law and obligation built upon such a conception of freedom, which is entirely separated from experience and natural causality, are not only a bit mystical, but also lack particular content. Although Hegel says that “Kant’s philosophy is sublime inasmuch as it asserts the conformity of duty and reason,”⁵² he nevertheless sharply criticizes Kant’s ethics

⁵⁰Ibid., 165.

⁵¹Ibid., 271.

⁵²Hegel, Allen W. Wood, and Hugh Barr Nisbet, *Elements of the Philosophy of Right*, 163.

on this ground. Hegel acknowledges that Kant made freedom of reason the ground for the moral law; that it is “a great advance when the principle is established that freedom is the ultimate pivot on which man turns; it is the highest point, which cannot be impressed by anything at all, so that man can accept nothing as authority insofar as it is directed against his freedom.”⁵³ However, “even if it is stated that it is concrete in itself, there is the further consideration that this freedom is at first only the negative of everything else; no bond, nothing external, lays me under an obligation. It is to this extent indeterminate; it is the identity of the will with itself, its at-homeness with itself. But what is the content of this law? Here we at once come back to the lack of content. For the sole form of this principle is nothing more or less than agreement with itself, universality.”⁵⁴

Hegel calls Kant’s ethics “empty formalism” because it supplies no criterion for deciding whether or not a given act is morally obligatory.⁵⁵ He regards the universality of the categorical imperative as without content and ridicules it, saying that “if there is no such thing as property, then it is not respected.”⁵⁶ Hegel attempts to translate Kant’s idea of morality from the timeless sphere of pure practical reason into the historical world of social experience. He idealistically matches Kant’s transcendental noumenon, freedom, and form to empirical phenomenon, necessity, and content; and under the logical process of the idealistic, absolute idea, he connects and unites the regulation of Kant’s transcendental principle of morality, which is beyond time, with empirical ethical phenomena such as family, civil society, nation, etc., which are within time. Hegel abandoned the moral characteristics which Kant firmly insisted on. He only considered ethical morality from its historical aspect, and turned Kant’s internal moral spirit into external ethical norms. Hegel’s critique of Kant from his idealistic point of view is superior to many later critics who often merely quibble over whether Kant is a formalist or not. In fact, Kant is not merely a formalist in ethical theory. In *The Metaphysics of Morals*, he specifically presents particular explanations and definitions concerning what is right or moral.

The main point of Kant’s formalism is that his basic definition of moral law is not dependent on social and historical conditions. What is indeed “formalistic” about Kant’s theory is that his basic definition of the moral law is utterly isolated from social and historical conditions. However, that does not imply that Kant is ignorant of facts, for example, the relativity of ethics in different cultures. Such works as the *Anthropology from a Pragmatic Point of View* prove that Kant, who sets great store by experience and is familiar with history, is well aware of these facts. It is because he wishes to emphasize the grave question of anthropological ontology—the conscious capacity of human nature—that he separates the universal

⁵³Hegel, E. S. Haldane and Frances H. Simson, *Hegel's Lectures on the History of Philosophy*.

⁵⁴Ibid.

⁵⁵Hegel, Allen W. Wood, and Hugh Barr Nisbet, *Elements of the Philosophy of Right*.

⁵⁶Hegel, E. S. Haldane and Frances H. Simson, *Hegel's Lectures on the History of Philosophy*, 461.

form from concrete social circumstances and the empirical conditions of time and space.

The morality of different historical times is often quite different, yet when individuals are in conflict with the collective interest, every class or group demands, for the interest of the whole, that individual members sacrifice their private interests for the greater good.

Revolutionaries are willing to risk death to accomplish their goal, and would rather die than submit. Fascists and religious extremists also instill in their followers the moral teaching “die for the righteous cause,” and many loyal followers have sacrificed their lives for this teaching.

It is true that Kant’s universal legislative form would indeed be empty if it were merely an external norm without any particular historical effectiveness. However, Kant’s contribution and the significance of his ethics are found precisely in his having raised, in however formalistic a way, the question of the cultural-psychological structure of universal moral necessity. This structure, as a historical sediment of culture, specifically belongs to the human being. The structure manifests itself in the forms of intuition and the categories of understanding, as well as in consciousness of the moral law. However, Hegel, Marx, and later Marxists have neglected this important aspect. As I pointed out in our discussion of epistemology, Hegel and Marx fail to understand that what Kant proposed is the universal capacity of human nature, i.e., the cultural-psychological structure, and he continues this project in what he says about “pure form” in his ethics.

In all these cases, what Kant proposed is the solidification of reason, that is, the absolute government of reason over sensibility. Anthropological ontology acknowledges Kant’s great contribution, but also holds that these psychological structures are not a transcendental reason but rather the accumulation and sedimentation of experience over the long history of human beings. In other words, the empirical turns into the transcendental, history constructs reason, and psychology becomes ontology. The sedimentation of social experience constitutes the inner psychological substance of humankind, corresponding to the external techno-social substance that is constituted by human history.

Hegel regards Kant’s moral law as empty formalism, but merely breaking away from specific content is itself a certain content. Marx and Engels comment that Kant “made the materially motivated determinations of the will of the French bourgeoisie into pure self-determinations of ‘freedom of the will’, of the will in and for itself, of the human will, and so converted it into purely ideological conceptual determinations and moral postulates.”⁵⁷ So dignified are the moral laws, categorical imperatives, and freedom of the will in Kant’s mind that they are indeed an abstract German version of the will of the French bourgeois revolution. For instance, the idea that the human being is an end in itself, which is the heart of Kant’s ethics, is

⁵⁷*The German Ideology*. Marx Engels Internet Archive 1994.

not a psychological form, but represents a Germanization of Rousseau's thought. Hegel also points out that:

Even Rousseau represented the absolute to be found in freedom; Kant has the same principle, but taken rather from the theoretic side. [...] France possesses the sense of actuality, of promptitude; because in that country conception passes more immediately into action, men have there applied themselves more practically to the affairs of actuality. [...] In Germany the same principle asserted the rights of consciousness on its own account, but it has been worked out in a merely theoretic way. We have commotions of every kind within us and around us, but through them all the German head quietly keeps its nightcap on and silently carries on its operations beneath it.⁵⁸

The French had a political revolution while the Germans had a philosophical revolution. Rousseau's freedom and will are directly connected with human feelings and emotions, while Kant's freedom and will are an entirely super-human pure reason, with a nevertheless healthy ideality and universality. If we compare Rousseau's *Social Contract* with Kant's *Critique of Practical Reason*, we see clearly the transformation and distinctive characters of the two nations.

In the *Social Contract*, Rousseau underscores the people's right to resist tyranny, and demands a republic based on a social contract and terms of full equality. "Each of us puts his person and all his power in common under the supreme direction of the general will."⁵⁹ And "what man loses by the social contract is his natural liberty and an unlimited right to everything he tries to get and succeeds in getting; what he gains is civil liberty and the proprietorship of all he possesses." Over and above all that we acquire from the civil state, he says, we must add moral liberty, "which alone makes him truly master of himself; for the mere impulse of appetite is slavery, while obedience to a law which we prescribe to ourselves is liberty."⁶⁰ The people first legislate, then obey laws they themselves prescribe.

Rousseau's basic ideas about the opposition to servitude and the demand for equality are the genuine background and inner significance of Kant's ideas of universal legislation, the human being as an end in itself, and the autonomy of the will. In France, however, both the materialists, who advocated sensual eudaimonism, and Rousseau, who championed the conscience of the natural man, eventually reduced moral questions to political issues in the bitter class struggle of the time. Just as Plekhanov discerned, morality for them "passed entirely into politics."⁶¹ In Germany the opposite was true, "the impotent German burghers did not get any further than 'good will.' Kant was satisfied with 'good will' alone, even if it remained entirely without result [...] Kant's good will fully corresponds to the impotence, depression and wretchedness of the German burghers."⁶²

⁵⁸Hegel, E. S. Haldane and Frances H. Simson, *Hegel's Lectures On the History of Philosophy*, 425.

⁵⁹Rousseau and Gourevitch (1997).

⁶⁰Ibid., 54.

⁶¹Plekhanov (1994).

⁶²*The German Ideology*. Marx Engels Internet Archive 1994.

Rousseau does not subordinate morality to politics; on the contrary, politics becomes a part of morality. Rousseau’s general will (a political conception) becomes the universal legislative form (a moral idea), and Rousseau’s sovereign principle of free citizenship become the autonomy of the will.⁶³ Marx comments that “the condition of Germany at the end of the [eighteenth] century is completely reflected in Kant’s *Critique of Practical Reason*.”⁶⁴ As the forerunner of political revolution in France and Germany, Kant’s philosophy was “the German theory of the French Revolution.” The opposite of Marx’s view might actually be true; that is, precisely because of its underdevelopment, depravity, and impotence, the revolutionary reality that is charged with blood, violence, and disgrace can be overlooked or even retrospectively sublimated and purified in the minds of outstanding people and in moral theories that are full of ideals, light, and sublimity.

In a letter to Kant thanking him for sending a copy of his *Religion within the Boundaries of Mere Reason*, J. G. C. Kiesewetter wrote that “a system of duties and of various rights (for example, the right of property) is so fraught with difficulties, not successfully solved by any previous system, that everyone is truly anxious to see your system of morality appear, and all the more so just now, since the French Revolution has stimulated a mass of such questions anew. I believe that there are many interesting things to be said about the rationality of the basic principles on which the French Republic bases itself, if only it were prudent to write about such things.” Indeed, after published *Religion within the Boundaries of Mere Reason*, Kant wrote a series of important treatises including “The End of All Things,” “Perpetual Peace,” “The Conflict of the Faculties,” and *The Metaphysics of Morals*. These works show that Kant’s philosophical revolution is the sublime quintessence of the rational principles of the French Revolution. Despite the fact that Kant wrote his moral philosophy before the Revolution, he had not cut himself off from reality.

8.6 The Concepts of Good and Evil and Moral Feeling

If we were to say that “truth” (that the object is in conformity with knowledge) is the question that Kant discusses in epistemology, that is, in the *Critique of Pure Reason*, then “the good” (the moral law in conformity with actions) is the topic of Kant’s ethics, that is, the *Critique of Practical Reason*. The moral law is merely supersensible pure form, and when it involves actions in reality, the question of good and evil arises. This is why Kant states that, as concepts, good and evil are the objects of practical reason. The term “object” here does not mean natural things or causality in time and space, but rather “the idea of an object as an effect possible to

⁶³In his later treatises on politics and rights, Kant expressed these ideas of Rousseau’s in a mild reformist tone. See the next chapter. Both the *Groundwork of the Metaphysics of Morals* and the *Critique of Practical Reason* were written before the French Revolution.

⁶⁴*The German Ideology*. Marx Engels Internet Archive 1994.

be produced through freedom ... [and] only the relation of the will to the action by which the object or its opposite would be realized.”⁶⁵ In other words, good and evil are effects brought about by freedom in determining human action, where the “object” means action per se and its effect. Here the question arises as to where the concepts of good and evil come from.

Kant believes that these concepts cannot be derived from experience, but can only arise from transcendental reason and the moral law.

First comes the moral law, then concepts of good and evil, and this order cannot be reversed. Kant argues that “the concept of good and evil must not be determined before the moral law (which seems as if it must be the foundation), but only after it and by means of it.”⁶⁶ Additionally, “we should have found that it is not the concept of good as an object that determines the moral law and makes it possible, but that, on the contrary, it is the moral law that first determines the concept of good and makes it possible, so far as it deserves the name of good absolutely.”⁶⁷ To suppose that the concept of good determined the moral law would reduce that law to empirical eudaimonism, where good and evil are associated with the sense experience of happiness and pain. “The philosopher who thought himself obliged to make a feeling of pleasure the foundation of his practical judgments would call that good which is a means to the pleasant, and evil, what is a cause of unpleasantness and pain.”⁶⁸

Hence, good and evil are not merely happiness (pleasure) or misfortune (pain). The concepts of good and evil apply first all to action, referring to the fact whether or not an action as an object (an actual object), that manifests the moral law. This is the thesis that Kant argues over and over again in his ethics, and illustrates with the example of the ancient Greek Stoic “who in the severest paroxysms of gout cried out: ‘Pain, however thou tormentest me, I will never admit that thou art an evil (*kakov, malum*): he was right. A bad thing it certainly was, and his cry betrayed that; but that any evil attached to him thereby, this he had no reason whatever to admit, for pain did not in the least diminish the worth of his person, but only that of his condition. If he had been conscious of a single lie, it would have lowered his pride, but pain served only to raise it, when he was conscious that he had not deserved it by any unrighteous action by which he had rendered himself worthy of punishment.”⁶⁹

For Kant, a human being, as a sensible and actual existence, needs to look out for misfortune and take care of happiness for the sake of his natural existence and development. It is also necessary that his reason carefully examines the conditions of misfortune and happiness.

⁶⁵Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 209.

⁶⁶*Ibid.*, 271.

⁶⁷*Ibid.*, 219.

⁶⁸*Ibid.*, 211.

⁶⁹*Ibid.*, 214.

However, a human being is more than a biological being, and the distinction between human beings and animals, as between the freedom of the will and the determination by natural causality, lie precisely in the question of whether the will determines human action to obey the moral law or follows natural need or pleasure and pain. Kant argues:

Man is a being who, as belonging to the world of sense, has wants, and so far his reason has an office which it cannot refuse, namely, to attend to the interest of his sensible nature, and to form practical maxims, even with a view to the happiness of this life, and if possible even to that of a future. But he is not so completely an animal as to be indifferent to what reason says on its own account, and to use it merely as an instrument for the satisfaction of his wants as a sensible being. For the possession of reason would not raise his worth above that of the brutes, if it is to serve him only for the same purpose that instinct serves in them; it would in that case be only a particular method which nature had employed to equip man for the same ends for which it has qualified brutes, without qualifying him for any higher purpose. No doubt once this arrangement of nature has been made for him he requires reason in order to take into consideration his weal and woe, but besides this he possesses it for a higher purpose also, namely, not only to take into consideration what is good or evil in itself, about which only pure reason, uninfluenced by any sensible interest, can judge, but also to distinguish this estimate thoroughly from the former and to make it the supreme condition thereof.⁷⁰

I quote this long passage not only because its unusual clarity serves well in place of my own tedious explanation, but also because it raises the question of the *summum bonum* and the conflict between our obedience to the moral law and the pursuit of happiness, which will be the topic of the next chapter. Kant sees the distinction between good and evil on the one hand, and the natural weal and woe of the animal on the other, as confirming human beings' essential difference from the beasts. It is evident that good and evil are not natural attributes revealed in sense experience. Good means obedience to the moral law, while evil means the maxims of action that are deliberately chosen in violation of the moral law. Kant explains that "the proposition: Man is bad, can only mean: He is conscious of the moral law, and yet has adopted into his maxim (occasional) deviation therefrom. He is by nature bad is equivalent to saying: This holds of him considered as a species; not as if such a quality could be inferred from the specific conception of man (that of man in general) (for then it would be necessary)."⁷¹

Evil is an individual propensity against society. We shall have occasion to return to this statement in the next chapter when we discuss Kant's view of history. What should be noted here is that Kant stresses that morality and good actions are irrelevant to happiness and pleasure, even to the point of deprecating the latter so as to render the former all the more glorious. Chinese Neo-Confucians, who advocate maintaining the heavenly principles and eradicating human desires, also believe that the good of the heavenly principles is irrelevant or even antagonistic to sensible happiness or desire. This view, in its psychological form, is rather similar to Kant's

⁷⁰Ibid., 216.

⁷¹Ibid., 400.

view. However, the society, historical time, and specific social class content of the two views are entirely different. Chinese Neo-Confucianism identifies the heavenly principles (the moral law) with a Confucian ethical code, especially the three cardinal guides and five constant virtues, and the social norms of feudalism constitute the specific content of the good and the heavenly principles; whereas Kant's philosophy places freedom, equality, and human rights at the heart of the moral law.⁷²

Kant's philosophy exhibits the German idiosyncrasy that inclines him to attack the eudaimonism and empiricism of French materialism while seeking a compromise with mysticism. He holds that mysticism "proposes to provide for the moral concepts actual intuitions, which, however, are not sensible (intuitions of an invisible Kingdom of God), and thus plunges into the transcendent." Nevertheless, when compared to empiricism, which "cuts up at the roots the morality of intentions," such mysticism "is quite reconcilable with the purity and sublimity of the moral law."⁷³

In his epistemology Kant employs an "idealism of form (transcendental)" in distinction to an "idealism of matter." In his ethics he also resorts to a "rationalism of form" to mark his distinction from the "rationalism of matter." In both cases, Kant raises the banner of reason against empiricism. Notwithstanding the similarity of the two approaches, in his epistemology Kant proceeds from sensibility to concepts of the understanding, and finally to reason, while in his ethics he proceeds from reason (the moral law, that is, freedom) to concepts (good and evil) and finally to sensibility in the form of moral feelings. When the moral law is directed to specific objects, it determines the meaning and content of the concepts of good and evil; and when it affects people's empirical, subjective mental states, it becomes moral feeling. Just as Kant holds that good and evil cannot precede the moral law, but rather the reverse, so he emphasizes that moral feeling cannot precede the moral law, but rather the reverse. And as he distinguishes good and evil from pleasure and pain, Kant also distinguishes moral feeling from other feelings such as compassion and conscience that would seem rather specious as moral feelings.

Kant holds that our love, hatred, and all other impulses are based on feelings and are nothing but self-interest. This self-interest in turn can be categorized into "self-love," "arrogance," etc. Kant believes that these cannot possibly be moral feelings. "There is here in the subject no antecedent feeling tending to morality."⁷⁴ In other words, moral feeling attempts to restrain such sentiments as self-love and arrogance. Only with these sentiments restrained can the positive moral feelings of reason emerge. Such a feeling, he says, "may also be called a feeling of respect for the moral law."⁷⁵ This feeling, arising from the recognition that the objective moral

⁷²See my "Essay on Neo-Confucianism," *Chinese Social Science*, vol. 1, 1982 for a comparison between Neo-Confucianism and Kant's philosophy.

⁷³Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 404.

⁷⁴*Ibid.*, 239.

⁷⁵*Ibid.*, 239.

law is superior to subjective impulse, is based on rational judgment and arouses a feeling of respect. Moral feeling arises from neither an innate inner sense, nor from conscience or natural desire, but only from the influence and effect of the moral law on our mental state.

Therefore, this moral feeling of “respect” is not at all the same as happiness. On the contrary, it comes with a bit of pain because the feeling of respect implies a sense of inferiority before the moral law, and requires the suppression of self-interest. On the other hand, awareness of the sublime moral law towering above oneself and above one’s animal nature induces feelings of admiration and astonishment, while restraining self-interest in deference to the moral law conveys a sense of pride in one’s being able to rise above the world. There are unhappy, painful feelings due to the suppression of self-interest, yet also proud, noble feelings because one is able to achieve such a suppression. Kant holds that these two psychological factors, negative and positive, constitute the features of moral feeling, which is not a matter of natural likes and dislikes but a conscious, rational feeling. Contrary to empiricism, which regards intelligence as the slave of feelings, Kant maintains that reason rather than desire governs our moral actions, and that reason rather than human nature is the source and origin of morality. Therefore, it can be said that the moral feeling is an emotional product of reason’s overcoming the naturalness of human nature, and morality’s overcoming desire. To French materialists, human nature is naturality.

A god would have no need of moral feeling. Only in the human heart is moral feeling required to motivate obedience to the moral law. The moral feeling of respect, characterized by dignity, also only applies to human beings and not to mere things. Things can be admired because of their magnificence or magnitude, and human beings can also excite such feelings as admiration, fear, and love because of our talent, knowledge, courage, happiness, and wealth. But what arouses the moral feeling of respect is only our moral character. As Kant says:

A man also may be an object to me of love, fear, or admiration, even to astonishment, and yet not be an object of respect. His jocose humour, his courage and strength, his power from the rank he has amongst others, may inspire me with sentiments of this kind, but still inner respect for him is wanting. Fontenelle says, “I bow before a great man, but my mind does not bow.” I would add, before an humble plain man, in whom I perceive uprightness of character in a higher degree than I am conscious of in myself—my mind bows whether I choose it or not, and though I bear my head never so high that he may not forget my superior rank. Why is this? Because his example exhibits to me a law that humbles my self-conceit when I compare it with my conduct: a law, the practicability of obedience to which I see proved by fact before my eyes.⁷⁶

Kant points out that even without any outward sign of respect, “we cannot help feeling it inwardly.”⁷⁷ It is because the moral feeling of respect arises from the sublimity of the moral law, the categorical imperative, and duty. Kant sings the praises of the idea of duty:

⁷⁶Ibid., 241.

⁷⁷Ibid.

Thou sublime and mighty name that dost embrace nothing charming or insinuating, but requirest submission, and yet seekest not to move the will by threatening aught that would arouse natural aversion or terror, but merely holdest forth a law which of itself finds entrance into the mind, [...] a law before which all inclinations are dumb, even though they secretly counterwork it; what origin is there worthy of thee? [...] It can be nothing less than a power which elevates man above himself (as a part of the world of sense), [...] This power is nothing but personality, that is, freedom and independence on the mechanism of nature.⁷⁸

These infectious lines, rare in Kant's abstract and dry critical philosophy,⁷⁹ betray his contempt for powerful aristocrats and his longing for freedom and independence, and they reflect the spirit of the age of revolution, even if the emotion expressed in these lines is cut off from particular social content. It is said that in his lectures on ethics, the audience was moved to tears by Kant's exposition on the moral law and moral feeling. The *Critique of Practical Reason* was published a year before the tumultuous unfolding of the revolutionary reality in France in 1789.

The colossal contribution Kant made in ethics is his unrelenting insistence that morality is not rooted in happiness, pleasure, or self-interest, but rather solely in the categorical imperative, which transcends empirical sensibility. Human action is obliged to obey the categorical imperative. As stated earlier, this view reveals morality as a social totality demanding, regulating, and commanding the consciousness of the individual. The power of morality shines all the brighter when it is in conflict with happiness, pleasure, and private interest. This thought of Kant's is very profound because it reveals the essential character of morality. From the viewpoint of cultural anthropology and folklore, taboo can be seen as the moral law of primitive society. The well-known anthropologist Richard Leakey holds that the key for the evolution from ape to human is the sharing of food and work.⁸⁰ The Chinese sage Xunzi also said the same thing about the difference between human beings and animals, that *li* (rite) was invented to mediate differences among people and to reinforce sharing.⁸¹ Is not *li* an early form of ethical morality that demands self-control in the service of "returning to the rites"? From the perspective of child

⁷⁸Ibid., 257.

⁷⁹Kemp Smith compared the two critiques and commented that "in the *Critique of Pure Reason* Kant is meticulously scrupulous in testing the validity of each link in his argument. Constantly he retraces his steps; and in many of his chief problems he halts between competing solutions. Kant's sceptical spirit is awake, and it refuses to cease from its questionings. In the *Critique of Practical Reason*, on the other hand, there is an austere simplicity of argument, which advances, without looking to right or left, from a few simple principles direct to their ultimate consequences" (Smith 1930).

⁸⁰See Leakey and Lewin (1977).

⁸¹Xunzi: "How did ritual principle arise? I say that men are born with desires which, if not satisfied, cannot but lead men to seek to satisfy them. If in seeking to satisfy their desires men observe no measure and apportion things without limits, then it would be impossible for them not to contend over the means to satisfy their desires" ("Discourse on Ritual Principles," trans. John Knoblock).

psychology, obedience to social orders (which are universal and rational) restrains natural desires (which are individual and sensible), while not being dominated by appetitive desires is the beginning of the cultivation of the moral will and moral feeling. Both forms of discipline gain support from empirical facts. Certainly this topic is also related to issues of ethical absolutism and relativism, to which we shall direct our attention in the next chapter.

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Chapter 9

Ethics: II. Views on Religion, Politics, and History



9.1 The Antinomies of Practical Reason and the Summum Bonum

Kant sees the moral law as a categorical imperative not because we are rational beings but because we are sensible, biological beings who need practical reason to restrain natural desire. On the other hand, since it is human nature to pursue happiness and satisfy natural desires, it is also our duty to look after our own well-being. Practical reason does not demand from us that we cast happiness aside. The resolution of this contradiction is the gist of the Dialectic of Pure Practical Reason.

In epistemology, theoretical reason cannot transcend experience without falling into dialectical illusions and antinomies, even if such an effort of transcendence is an inevitable tendency of our minds. In ethics, practical reason as the moral law must not be jumbled up with experience, as such a confusion results in another sort of antimony in the domain of practice; even though it is once again inevitable that something transcendent (the moral law) should cast a shadow over experience, for in no other way can it have any meaning in concrete, empirical everyday life. The antimony of happiness and virtue arises because the moral law and practical reason must apply to a sensuous, natural being. Kant attempts to use the concept of summum bonum to resolve this antimony. Certainly, the term “happiness” refers to an existential state of physical and mental pleasure relative to the human being’s sensuous nature.

Theoretical reason requires purely rational ideas to regulate the pursuit of unconditional totality, and in the same way, practical reason requires a rational idea of the summum bonum (highest good) to regulate its own pursuit of totality. This summum bonum, the supreme and unconditional good, includes virtue and happiness. Virtue only becomes the “highest good” when it is combined with happiness. But this is only one of its aspects, it is not the summum bonum. The summum bonum must include an unconditional totality that takes happiness into account. This combination,

the totality of virtue and happiness, is the highest end of ethics and of every finite rational being.

Practical reason demands the unity of morality and happiness, even though experience is not able to ensure their necessary connection. The relation between morality and happiness is neither a priori analytic nor posteriori synthetic. If it were analytic, it would be a logical identity, in which case the injunction to virtue would be no different than an injunction to happiness, which is not at all the case. If their connection were synthetic and a posteriori, that is, in accordance with the law of causality, it would depend on empirical regularity and could not be established as universal or necessary. The Stoics and Epicureans of ancient Greece represent two distinctive views on the relation of morality to happiness. The Stoics held that virtue is the good itself and happiness is merely the subject consciously doing virtuous deeds. Consequently they defined virtue as the *summum bonum*. The Epicureans saw happiness (pleasure) as the *summum bonum*, while virtue was merely a means to attain happiness. Both schools saw virtue and happiness as either the same or causally related, and Kant faults both schools.

In the previous chapter we explained Kant's opposition to the Epicureans' method of proceeding from empirical principles to deduce morality from happiness. On the other hand, Kant also rejects the effort to deduce happiness from morality, because happiness happens in accordance with objective laws of causality, which are entirely different from the moral law. The moral law cannot interfere with the coming and going of happiness. As Kant points out, experience gives abundant evidence that virtue and happiness often diverge rather than going hand in hand. The virtuous are not necessarily happy, while happy people can be wicked.

Therefore, on the one hand, unlike the Epicureans, Kant holds that morality cannot be based on happiness; on the other hand, unlike the Stoics, he believes that happiness is not a necessary product of morality. Morality and happiness simply have no inevitable connection in empirical reality, and to think that they do, or must, merely leads to antinomy:

Consequently either the desire of happiness must be the motive to maxims of virtue, or the maxim of virtue must be the efficient cause of happiness. The first is absolutely impossible, because (as was proved in the Analytic) maxims that place the determining principle of the will in the desire of personal happiness are not moral at all, and no virtue can be founded on them. But the second is also impossible, because the practical connection of causes and effects in the world, as the result of the determination of the will, does not depend upon the moral dispositions of the will, but on the knowledge of the law of nature and the physical power to use them for one's purposes; consequently we cannot expect in the world by the most punctilious observance of the moral laws any necessary connection of happiness with virtue adequate to the *summum bonum*.¹

To the French materialism, as Plekhanov commented, "the new morality reinstated the flesh, reinstated the rights of the passions, and made society responsible for the misfortunes of its members [...] to set up the Kingdom of Heaven here on

¹Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 304.

Earth. Therein lay its revolutionary side.”² For Kant, the opposite is true. Morality has nothing to do with happiness, and does not establish the kingdom of heaven on earth, but raises happiness up to heaven.

Kant was faithful to the purity of the moral law, but he was not able to evade the question of pursuing worldly happiness in this life. We have seen in the previous chapter that Kant used the development of one’s talents and the extension of help to others as examples of moral duty. This point is made all the more prominent and clear when compared to his procedure in *The Metaphysics of Morals*, where he argues using additional empirical materials. In the *Anthropology from a Pragmatic Point of View*, Kant proposes the “physical good” as a natural good (as opposed to the moral good, that is, good will). This approach smuggles the moral principle of matter into the pure form of the moral law, which Kant calls the anthropological principle of happiness. In other words, it is both the goal of human natural existence to develop our talents and to help others, and a good in itself as well. Hence, there are two kinds of the good for Kant. One of these is limited to form, i.e., the moral law and the moral good, which arises from pure reason and constitutes the heart of Kant’s ethics; the other is material, i.e., happiness, about which Kant does not say as much as we might wish, though his most useful discussion comes in his views on human history. Most of Kant’s commentators overlook or ignore this latter aspect. However, from the point of view of the history of philosophy, it has been rather important. It is precisely this aspect that turns Kant’s antimony into Hegel’s profound historical dialectic and turns subjective illusion into objective logic. We shall return to this point later.

Near the end of the *Critique of Pure Reason*, in the section entitled “The Ideal of the Highest Good as a Determining Ground of the Ultimate End of Pure Reason,” Kant states that “all the interests of my reason, speculative as well as practical, combine in the three following questions: What can I know? What ought I to do? What may I hope?”³ The first question is merely speculative, the second purely practical, and the third both practical and theoretical. The first is a question of epistemology, the second one of ethics, while the third belongs to religion. Kant admits that “all hoping is directed to happiness.”⁴ Ethics does not aim at happiness, however, and “it is only when religion is added that there also comes in the hope of participating some day in happiness in proportion as we have endeavoured to be not unworthy of it.”⁵ This is why in the *Critique of Practical Reason* the summum bonum, which is the unity of virtue and happiness, becomes the final settling place of Kant’s ethics and points toward religion. The concept of the summum bonum, however, is not the heart of Kant’s ethics, as is maintained by John Silber.⁶ In fact,

²*Essays on the History of Materialism*. Marx Engels Internet Archive 1994.

³Kant, and Kemp Smith, *Critique of Pure Reason*, A805/B833.

⁴*Ibid.*, A805/B833.

⁵Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 329.

⁶See Silber (1963).

the heart of Kant's ethics is the moral law. While the concept of the summum bonum is ultimately of religious significance, it seems to me that its importance lies in its exposing the conflict in Kant's ethics and in the whole development of his thought, a conflict that is inevitable when trying to coordinate or combine the supersensible realm of pure reason with sensible human activities. Kant's solution to the conflict is to return to faith and religion.

Hegel, however, finds a historical solution.

Kant maintains that the relation between virtue and happiness is neither a posteriori synthetic, nor a priori analytic. Their relation can only be found in the a priori synthetic summum bonum. In the *Critique of Pure Reason*, he proposed the distinction between noumena and appearances to resolve the antimony of freedom and necessity. Kant again employs this method to resolve the antimony between virtue and happiness. That happiness cannot produce virtue, and that virtue cannot produce happiness is true only relative to empirical causality in the sensible world. However, it is possible for virtue to produce happiness in the noumenal order of the supersensible world. "As I am not only justified in thinking that I exist also as a noumenon in a world of the understanding, but even have in the moral law a purely intellectual determining principle of my causality (in the sensible world), it is not impossible that morality of mind should have a connection as cause with happiness (as an effect in the sensible world) if not immediate yet mediate (viz., through an intelligent author of nature), and moreover necessary."⁷ Such unity is rare in the sensible world, and only in the supersensible world of the understanding can the unity be considered necessary. In setting forth the so-called postulates of practical reason, namely, the immortality of the soul and the existence of God, Kant emphasizes once again that practical reason is superior to theoretical reason. These postulates, he says, are the necessary postulates for the realization of the summum bonum.

Kant holds that a human being's moral action presupposes the freedom of the will, that holiness presupposes the immortality of the soul, and that the attainment of the summum bonum presupposes the existence of God. Consequently, what is banished by theoretical reason is invited back again by practical reason. Kant maintains that freedom, immortality, and God are necessary for practical faith in human action. The possibility of these postulates "no human intelligence will ever fathom, but the truth of which, on the other hand, no sophistry will ever wrest from the conviction even of the commonest man."⁸ Kant's frequent resort to the convictions of the common people is actually a return to religion. Illusory ideas that cannot be proved in theory become moral premises in order to enjoy objective reality in practice. Although Kant is aware that such faith cannot be knowledge, he is convinced that it is based on a veritable "need" that is no less compulsive than scientific knowledge. As Kant himself puts it: "That it is only in an endless progress

⁷Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 305.

⁸Ibid., 336.

that we can attain perfect accordance with the moral law, is of the greatest use, not merely for the present purpose of supplementing the impotence of speculative reason, but also with respect to religion.”⁹

The postulate of the immortality of the soul is necessary for moral perfection,¹⁰ whereas the postulate of the existence of God is required to unite virtue and happiness. Only virtue can give us the happiness we deserve, and such happiness can only be received from the hand of God. While the existence of God is the cause of our obtaining the happiness that is commensurate with our virtue. Originally, ethics dwelt solely in the moral law and rejected the question of happiness. Only religion gives us the hope that some day we may have the happiness that virtue has made us worthy of. But since this happiness is often unattainable in this life, its reality depends on the reality of the kingdom of heaven in the future. Therefore, all these beliefs require faith in God. The unity of virtue and happiness, since it can neither be realized in the finite sensible world nor proved by theoretical reason, can only be entrusted to the summum bonum, while the guarantee of the summum bonum depends entirely on the existence of God. Therefore this postulate is a necessary condition for the possibility of the summum bonum. Kant explains that “faith demanded by practical reason can be called hypothesis.”¹¹ The existence of God becomes a “faith of pure practical reason.” Kant thus ends his critique of practical reason and enters the realm of religion. He claims that “in this manner, the moral laws lead through the conception of the summum bonum as the object and final end of pure practical reason to religion.”¹² Kant argues that “ethics issues, then, inevitably in religion by extending itself to the idea of an Omnipotent Moral Lawgiver, in whose will, that is the end of the creation, which at the same time can and ought to be likewise mankind’s chief end.”¹³ Both Kant and Hegel raise Christian doctrines high. After comparing the doctrines of Christianity with the

⁹Ibid., 318.

¹⁰The summum bonum is the unity of virtue and happiness. In order to achieve the summum bonum, the highest good of virtue must be first achieved, that is, one must pursue moral perfection first of all. However, morality cannot be exhausted and must endlessly progress, while we human beings are mortal. Therefore, only with the faith that our character can and will continue forever can the perfect unity of the individual will and the moral law be achieved. Kant explains that “he may hope for a further unbroken continuance of the same, however long his existence may last, even beyond this life, and thus he may hope, not indeed here, nor in any imaginable point of his future existence, but only in the endlessness of his duration” (*Critique of Practical Reason*). Some commentators criticize Kant for speaking of reality and infinite progress in the same breath, since such reality can never actually be realized. Others attempt to save Kant by resorting to ideas about mathematical infinity (see S.Körner’s *Kant*). Kant’s definition is actually rather clear, that it is “an idea that can be contained only in an endless progress and its totality, and consequently is never fully attained by a creature” (Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 320).

¹¹“What Does It Mean to Orient Oneself in Thinking?” II.

¹²Kant, and Thomas Kingsmill Abbott, *Kant’s Critique of Practical Reason and Other Works on the Theory of Ethics*, 328.

¹³*Religion within the Boundaries of Mere Reason*.

ideas of the Greek schools, Kant believes that Christianity is the superior morality, with a higher level of holiness than the prudence of the Epicureans or the wisdom of the Stoics.¹⁴ In the *Critique of Pure Reason*, Kant expounded on the distinction among knowledge, faith, and opinion, while in the *Lectures on Logic*, he also stated that to know is to judge something and hold it to be true with certainty, to opine is to judge something incompletely, while to believe is to accept something without a subjective necessity according to logical concepts, therefore it has subjective binding force.

Hegel goes further. As an absolute idealist he is not content with Kant's doctrine of morality-religion, which has only a subjective binding force, nor is he content with the hypothetical nature of Kant's whole treatment of the summum bonum. Hegel argues that it is totally unrealistic for Kant to resort to the concept of summum bonum to resolve the conflict between moral form and natural desire. "[The postulate] allows the conflict to remain as it is all the time, and expresses only in the abstract that the reconciliation ought to come about. [...] God is to him, therefore, only a faith, a belief, which is only subjectively and not absolutely true."¹⁵ Hegel maintains that Kant's postulate "contradicts the fact that morality really consists in reverence for the law simply for its own sake."¹⁶ In fact, what Hegel opposed is not that Kant advocates religious faith, but rather that he does not go further, but merely attempts to establish the existence of God as a reasonable matter of subjective faith. Hegel holds that the existence of God, instead of lingering in the realm of subjective belief, has genuine objective reality. Hegel compares Jacobi with Kant, commenting that even though, as a way to regulate God, the question of what God is cannot be answered with the infinite, universal, and undetermined; and even though it is empty and futile to worship, with an undetermined immediacy (i.e., faith), an unknowable God, "to know God is the only end of Religion."¹⁷ Hegel's religious as well as political views are more conservative than those of Kant. His God, as absolute idea, is not the object of a subjective faith, but rather the master of all objective things in the world. After having exposed the internal conflict of Kant's moral law and the postulated existence of God, Hegel criticizes from an idealistic point of view all that Kant accomplished.¹⁸

¹⁴Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*.

¹⁵Hegel et al. (1996).

¹⁶Ibid., 614.

¹⁷Ibid., 73.

¹⁸Hegel is also a Lutheran and opposed to idolatry and superstition. His mock question of whether or not a mouse that nibbled on the host should be seen as having received the sacrament is well-known. Nevertheless, he appears to be more religious than Kant.

9.2 Religious Views

Now we shift from Kant's postulate of the existence of God in ethics to his main views on religion. Let us commence with some precautions. Although Kant sees freedom, the immortality of the soul, and the existence of God as the three postulates of practical reason, the question of freedom is rather different from that of immortality or divine existence. As pointed out in the previous chapter, freedom and the moral law are two sides of the same coin. Freedom is the transcendental ground of the moral law. But faith in God is not a presupposition of the moral law. The summum bonum and our longing for happiness in heavenly paradise cannot be the cause that impels us to do virtuous deeds. After all, the moral law and faith in God are two different things. Kant explains time and again that "the Christian principle of morality itself is not theological (so as to be heteronomy), but is autonomy of pure practical reason, since it does not make the knowledge of God and His will the foundation of these laws."¹⁹ Even faith in God cannot be an external order imposed on people; it is only because religion can promote morality in a way that is consistent with the voluntary determination of reason that divine commands are not the "arbitrary ordinances of a foreign will and contingent in themselves, but [are] essential laws of every freedom of the will in itself, which, nevertheless, must be regarded as commands of the Supreme Being."²⁰ Thus, on the one hand, Kant meets reality halfway, adopting a compromised attitude toward religion; on the other hand, he identifies religion with morality and attempts to revise and improve conventional Christianity. Religion was a sensitive political issue in Europe at that time, and the bourgeoisie's resistance to feudalism mostly began with religion. Kant consciously emphasizes that "the main point of the enlightenment" lies "primarily in religious matters."²¹ This attitude forms a critical backdrop to his critical philosophy.

F. Paulsen comments: "Indeed, one may in a certain sense regard Kant as the finisher of what Luther had begun."²² Luther's reformation replaced an external church with an inner faith, while Kant went further, replacing traditional Christian precepts with pure moral law. To Kant, faith in God is based on consciousness of morality, rather than the moral law being based on faith in God. Kant firmly refutes traditional schools of theology, insisting that the only possible theology is a moral one.

I maintain that all attempts to employ reason in theology in any merely speculative manner are altogether fruitless and by their very nature null and void, and that the principles of its employments in the study of nature do not lead to any theology whatsoever. Consequently,

¹⁹Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 328.

²⁰Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 328.

²¹"What is Enlightenment?".

²²Paulsen (1902, 7).

the only theology of reason which is possible is that which is based upon moral laws or seeks guidance from them.²³

Reason cannot find God anywhere else but in moral action. This moral theology is not a theological ethics, because theological ethics must first of all have the existence of God as the premise of morality, while moral theology “is a conviction of the existence of a supreme being— a conviction which bases itself on moral laws.”²⁴ The moral law does not need the guarantee of religion and the existence of God, whereas the sole evidence or proof of the reasonableness of religion and God rests on the moral law. People in the Middle Ages believed that the good was the will of God, and they were required to believe in and obey an external authority (God) that was beyond even moral consciousness. Kant attacks this view. The God who punishes and rewards the believer in the traditional view obviously clashes with the autonomy of the will that Kant emphasizes. Although Kant postulates the existence of God, this God is merely an embodiment of morality: “If ethics recognise in the Holiness of its Law an object of the greatest veneration, it doth farther, when on the immediate desire to possess something by means of an action, in the same way as the law is always an object of reverence.”²⁵ In his later years Kant made this point repeatedly:

So that mankind neither requires the idea of any Superior Person to enable him to investigate his duty, nor does he need any incentive or spring to its execution other than the law itself.²⁶

This is not by any means to say that man is entitled, and still less that he is bound, to believe in, as real, any such Supreme Being, answering to the idea, to which conscience inevitably points; for the idea is given him not objectively by speculative reason, but subjectively only, by practical reason obliging itself to act conformably to this representation.²⁷

One cannot provide objective reality for any theoretical idea, or prove it, except for the idea of freedom, because this is the condition of the moral law, whose reality is an axiom. The reality of the idea God can only be proved by means of this idea, and hence only with a practical purpose, i.e., to act as if there is a God, and hence only for this purpose.²⁸

God is not a being outside me, but merely a thought in me. God is self-positing moral-practical reason.²⁹

In the *Critique of Practical Reason*, he states that “two things fill the mind with ever new and increasing admiration and awe, the oftener and the more steadily we reflect on them: the starry heavens above and the moral law within.” This line is also carved on Kant’s tombstone. The sublime causality of ideas in nature directing

²³Kant, and Kemp Smith, *Critique of Pure Reason*, A636/B664.

²⁴Ibid, A632/B660.

²⁵Kant and Sempé (1838).

²⁶Ibid.

²⁷Kant and Calderwood (1871).

²⁸Kant, J. Michael Young, *Lectures on Logic*, 591.

²⁹Kant and Förster (1993).

ideas (see next chapter) and the sublimity of the moral law in the heart of man are the greatest objects of Kant's reverence, they are indeed the "God" that Kant holds in reverent awe.

Although morality and religion become two sides of the same coin in Kant's theory (i.e., morality is religion, and religion is morality), he knows from personal feeling that religion cannot be entirely identified with morality. Religion has a particular feeling and power of its own that morality does not possess.³⁰ Kant did not develop this thought in his philosophical system, but it is no accident that he never entirely repudiates religious faith.

Indeed, he wishes to defend it as a subjective need. He states that: "I believe that a possible union of Christianity with the purest practical reason is possible."³¹ Although Kant theoretically identifies religion with morality, he still retains its independent value in practice. Yet despite the fact that he acknowledges this independence, he nonetheless demands religion's reform. Unlike the French materialists, he does not attempt to overthrow religion with a merry laugh or an angry curse. On the other hand, he demands the reform of some basic religious doctrines and proposes a religion of reason. Since God is merely the moral law felt in the human heart, supernatural mysteries such as miracles, revelations, and blessings can neither prove the existence of God, nor have any moral value, and should not be believed or promulgated.

Kant holds that Christian doctrines such as the Trinity, Resurrection, and final judgment go beyond the reasonable bounds of faith. He argues: "The resurrection and ascension [...] cannot come within the sphere of a religion within the bounds of reason [...] The hypothesis of the spiritualism of Intelligence is much more consonant to reason. Here the body lies neglected in the dust, while the living person still survives. The soul of the man, stripped of its sensuous appendages, can be wafted to the realms of celestial beatitude, without being present locally in any part of space's illimitable expanse."³² In other words, the Resurrection is not to be credited and immortality only belongs to the soul. The Last Judgment is also impossible, terrible, and an irreducible transcendent mystery. Kant comments on the mysticism of the Chinese sage Laozi, who he thinks believed that the highest good was in nothingness, which strove "in dark rooms with eyes closed to experience and contemplate nihility."³³ The human being is swollen by the abyss of gods, however; timeless means endless. Christianity sets great store by the notion of original sin, but Kant holds that "whatever the origin of the moral evil of humanity may be, assuredly, of all representations, the most improper and inept is that whereby its propagation over the race is figured as if it descended to us by inheritance from our first parents."³⁴ As to the Trinity, Kant argues that insofar as moral practice is concerned there is no

³⁰J. Webb, *Kant's Philosophy of Religion*.

³¹Letter to C. F. Staudlin, May 4, 1973, Kant and Zweig (1986).

³²*Religion within the Boundaries of Mere Reason*.

³³*End of All Things*.

³⁴*Religion within the Boundaries of Mere Reason*, book 1.

difference between believing in a three- or ten-fold godhead. The Bible should be stripped of its cloak of mystery and read from a moral point of view in order to reveal its rational significance and universal validity.

Kant firmly rejects all mysticism as something beyond the scope of the moral law and reasonable faith. He states that to elevate faith over morality is superstition rather than religion. If virtue requires the worship of God, then God becomes an idol and religion becomes blind worship. Pure moral faith is something higher, more mature, and more reasonable than faith in the church. The church is a useful means of religious education for a human being in its infancy, though it is no longer necessary, and even becomes an obstacle when this human being has reached maturity. When people conform with morality merely to find favor (as they suppose) with God, morality is ruined. Kant admires the pedagogic method that does not merely teach children religious rites,³⁵ and opposes the situation in which theology lords it over philosophy, though time and again he raises the question of whether philosophy, traditionally religion's ancillary, should perhaps carry the torch and walk ahead of its former master.³⁶

Kant defines what he thinks are the reasonable regulations for religion in terms of the four categories of quantity, quality, relation, and modality. For instance, the category of quality emphasizes pure morality, which is non-superstitious or ecstatic; and the category of relation emphasizes the freedom of members of the church, which should be a voluntary and long-lasting spiritual union. The church should be an institution of ethical morality, rather than a compulsive force of blind obedience. Kant argues: "When to the worship of God is allotted the foremost place to which virtue is postponed, then is such deity an idol [...] Religion is now idolatry."³⁷ Supposedly, Kant never attended church during his life, detested religious rituals, and advocated a theory that was very different from the interests of the Christian doctrine, church, and theology of his time. He was eventually reprimanded by the authorities, and his works on the religion of reason were banned from publication.³⁸ Evidently, philosophical discussion of religion brought about his political suppression.

It is clear that Kant indeed raised the banner of moral religion, opposing deism, anthropomorphism, the existence of God as a metaphysical substance, and the imposition of the church on people in order to subject them to its absolute authority. He advocated a turn from the external authority of the church to an inner faith, and from traditional religious doctrines to the moral law. According to Kant's moral

³⁵See Kant's letter to Christian Heinrich Wolke, March 23, 1776.

³⁶See "Conflict of the Faculties" and "Perpetual Peace."

³⁷*Religion Within the Bounds of Mere Reason*, book 3, V.

³⁸Kant received a cabinet order from Frederick William II, which stated that "our most high person has long observed with great displeasure how you misuse your philosophy to distort and disparage many of the cardinal and basic teachings of the Holy Scripture and Christianity [...] We demand that you give at once a most conscientious account of yourself [...] Failing this, you must expect unpleasant measures for your continuing obstinacy." The pressure was so great that Kant had to suspend his teaching on religious issues.

philosophy, human beings are free. They are ends in themselves and never merely a means, not even for God, and they properly obey only a moral law that they themselves have legislated. Responding to the call of the French Revolution, Kant's religious and ethical views demonstrated his break from the church and the theology that controlled minds in Europe for a very long time.

On the other hand, Kant also opposed atheism and pantheism, the latter being a theory that identified God with nature, as in Spinoza. Kant once stated that attempting to use prayer to influence God is immoral, and that the truly faithful would not even affirm the existence of God. However, why should one pray if one is not sure of the existence of God? If religion is merely the same thing as morality, why does one need religion at all? Obviously, Kant did not actually and fully equate religion and morality. Religion is above morality and concerns questions such as "What can I hope?" as well as the anticipated unity of virtue and happiness in the summum bonum. Kant thinks that, without an organized albeit reasonable form of religion, people would turn to superstition or become atheists.³⁹ It is indeed for the sake of resisting atheism that Kant preserves moral religion within the bounds of reason. While French materialism adamantly cast down religion, Kant retained faith in the God that he practically equated with the moral law. This is why Kant's philosophy, although censured by the Catholic church, is welcomed by the Protestant church. Zeller once commented that for fifty years Kant's philosophy was championed by most German theologians. It is also for this reason that in the period of Restoration after the fall of Napoleon, Kant's doctrine was extolled, as it seemed to elevate a tenuous, even teetering church that had been severely blasted by French materialism.

Paulsen comments that Kant's morality "is nothing but the translation of this Christianity from the religious language to the language of reflection: in place of God we have pure reason, instead of the ten commandments the moral law, and in place of heaven the intelligible world."⁴⁰ First religion was turned into morality, then morality was turned into religion.

Therefore it seems appropriate to cite Marx's criticism of Martin Luther, which also applies to Kant:

Luther, we grant, overcame bondage out of devotion by replacing it by bondage out of conviction. He shattered faith in authority because he restored the authority of faith. He turned priests into laymen because he turned laymen into priests. He freed man from outer religiosity because he made religiosity the inner man. He freed the body from chains because he enchained the heart.⁴¹

What is important today is the former aspect of Kant's doctrine. In the *Critique of Pure Reason*, the "Supreme Being" is merely a regulative ideal of theoretical reason, while in the *Critique of Practical Reason*, this supreme being is in effect the moral law itself. Both are practical attitudes that promote human action, and are

³⁹See "What Does it Mean to Orient Oneself in Thinking?" II.

⁴⁰Paulsen (1902, 339).

⁴¹Marx (1994).

necessary requirements without being proved by experience.⁴² In science, the postulate of the Supreme Being is an incentive for us to investigate nature without respite, while in moral theory it is a merely practical postulate that rationalizes the unity of virtue and happiness. Without this postulate, knowledge and ethics alike would be inconceivable and unachievable.

There is, therefore, science on the one hand, and religion on the other; and the morality of legislative form and the summum bonum as the unity of virtue and happiness. The summum bonum, as the moral ideal should not have a need for happiness, while the moral law itself is the categorical imperative; the happiness of the human being, as a sensuous being, cannot be easily be dismissed, because it is human nature to hope for happiness. Hence, morality must completely dismiss happiness on the one hand, and the highest concept of morality, the summum bonum, must contain happiness on the other. This is a striking contradiction, and its origin is in its wanting of the power of material practice.

Kant's view of religion is intimately associated with his political views. Religion is the link between philosophy and politics in his time, and Kant's political views can be seen as the genuine content and actual interpretation of his religious and philosophical ideas.

9.3 Views on Right and Politics

Kant was an ardent observer of the French Revolution, and even after many Germans became disappointed by it he remained faithful to the enlightened ideals he thought the Revolution embodied. Some called him "the last Jacobin." However, as mentioned in Chap. 1, Kant was actually not a radical revolutionary Jacobin but a reformist who demanded reform of the undeveloped German condition. Kant's very abstract moral theory is also expressed in his political stance, and the true significance of his philosophy cannot be grasped without understanding his political views. Kant not only wrote many political treatises, but also devoted the opening of the first part of *The Metaphysics of Morals* to the theory of law and politics. He entitled his theory of the law a "political ethics," and regarded a transcendental principle of politics as universally necessary. Kant held that it was not the law that should adapt to politics, but rather politics to law. Not, of course, any particular laws, but rather the essential conditions for any properly valid positive law, which is the moral law itself. The moral theory is about duty to oneself, while the theory of law is about duty to others.

Kant holds that law is the outer casing of morality, the "universal necessity" in social and political life, which makes the theory of law an essential part of Kant's ethics. The moral theory is about duty to oneself, while the theory of law is about duty to others. Kant maintains that moral law is internal and self-conscious, while

⁴²See W. H. Walsh, *Kant's Moral Theology*.

positive law is external and compulsory. Morality involves motives, while law only concerns external action regardless of intention. For example, it is immoral for me to not take other people's freedom into consideration, even though such neglect is permitted by law.

The theory of law becomes a part of ethics because it relates to freedom. Morality is affirmative, promoting people's action, while law is negative, restricting people's conduct. Nevertheless, this restriction and compulsion expands the scope of rational freedom. Kant holds that compulsion is entirely consistent with freedom, because people voluntarily give up their unrestricted freedom to obey the law of the general will, which is not arbitrarily determined by a monarch or any individual. Only in this way can the individual obtain true freedom, as well as security against others. In other words, it is reasonable to submit to law for the sake of attaining greater freedom.⁴³ Kant explains, "it is not to be said that the individual in the State has sacrificed a part of his inborn external Freedom for a particular purpose; but he has abandoned his wild lawless Freedom wholly, in order to find all his proper Freedom again entire and undiminished, but in the form of a regulated order of dependence, that is, in a Civil state regulated by laws of Right. This relation of Dependence thus arises out of his own regulative law-giving Will."⁴⁴ Consequently, "Strict Right may be also represented as the possibility of a universal reciprocal Compulsion in harmony with the Freedom of all according to universal Laws."⁴⁵ Kant's philosophy of law and political views are designed to establish a political system that allows for peaceful coexistence between individual freedom and the freedom of others.

Like Hobbes and Rousseau, Kant thinks that there is no genuine freedom in the primitive state of nature, and that only when everybody gives up a certain amount of that primitive freedom to unite voluntarily under the law can the individual attain true freedom.⁴⁶ Where Kant differs from Hobbes and Rousseau is that he does not think it took a historical contract to unify people into the first society that had positive law. Kant holds that human beings have always been social and involved in some form of social organization. The state and law must be based on a transcendental principle of reason, while experience is of no use. The general principle of the Law of Right is "that Freedom of mine which may coexist with the freedom of all others according to a universal Law."⁴⁷ In other words, we must restrict some of our freedom in order to really secure a complete freedom. Although this

⁴³Kant also developed this idea in his theory of education: "It is of chief importance to observe that discipline be not slavish, but that the child always feel his freedom, in such a manner, however, that he does not hinder the freedom of others" (*Lecture-notes on Pedagogy*).

⁴⁴Kant and Hastie (1887).

⁴⁵*Ibid.*, 47.

⁴⁶Rousseau takes over Hobbes's theory and regards Hobbes as a great philosopher. He agrees with Hobbes, who opposes the effort to beautify primitive society. Since human beings have only self-preservatory instincts, society at the very beginning must have been as Hobbes described.

⁴⁷*The Philosophy of Law: An Exposition of the Fundamental Principles of Jurisprudence as the Science of Right*.

restriction flows from people's voluntary self-legislation, it is not a social contract, but rather a transcendental principle and an idea of pure practical reason.

The idea of a contract as the base for a political system of sovereign citizens, which is not a fact but is rather the "general will" consisting of the will of individuals, cannot be proved by history but only be seen as an idea of reason.⁴⁸ Kant explicitly defines Rousseau's vague concept of the "general will" as the will of reason rather than the will of the majority. Its universal necessity also comes from reason rather than experience, while the goal of this unification cannot be merely that of happiness. Every one has their own conception of happiness, while freedom and equality have a truly universal appeal. Kant points out that since people can be happy in a country that has very little freedom, it is evident that freedom does not come from happiness. It must have an origin of its own in reason.

Hegel devotes much effort to developing Kant's view on freedom, proposing that the state is based on reason rather than social contract, and that it represents a certain stage in the development of the idea. Hegel maintains that "it is the rational destiny of human beings to live within a state," and "since the state is objective spirit, it is only through being a member of the state that the individual himself has objectivity, truth, and ethical life."⁴⁹ Kant initiated the transformation of social-contract thought as we find it in Hobbes, Locke, and Rousseau into a doctrine of reason transcending the individual, but Hegel is the one who truly develops this theory. On the one hand, this theory has a stronger historical spirit than that of Rousseau because it abandons naive ideas regarding the origin of the state as a product of individual contract and insists that the state is a necessary stage of development; on the other hand, however, he replaces the unequivocal individualism of Locke with an obscure totalism emphasizing centralized power. From this point of view, Hegel's view is certainly favorable to militarism and it served the Prussian state. Hegel's philosophy of law is the necessary deduction of a philosophical system that substantializes self-consciousness.⁵⁰

Kant's view is different in several ways from Hegel's. Kant emphasizes the human being as an end in itself, and this valorizes individualism and the Enlightenment, while Hegel's absolute spirit leads to totalitarianism and a retreat from the Enlightenment emphasis on external ethical norms. In Kant, what is prominent is his ideal, while in Hegel it is reality. Kant defends rather than

⁴⁸"On the Common saying."

⁴⁹Hegel et al. (1991).

⁵⁰In Kant's later years, Romantic trends swept across Europe, with Fichte and Hegel on one side (although Hegel was not subjectively inclined toward Romanticism), and Herder, who was against the universal law of history, and Jacobi, who set great store by intuition, on the other.

The Enlightenment, in which Kant fervently believed, was banished from stage of thought. Kant was standing at a turning point of ideas. Rousseau's general will and the rejection of the division of legislative, executive, and judicial powers can lead to romanticism as well as to totalitarianism. It can be said that Locke was the true representative of liberalism and individualism.

abandons the doctrine of innate human rights. He maintains that “the civil condition, regarded merely as a rightful condition, is based a priori on the following principles:

1. The freedom of every member of the society as a human being.
2. His equality with every other as a subject.
3. The independence of every member of a commonwealth as a citizen.”⁵¹

Kant sets great store by Rousseau’s democratic idea and firmly advocates it. He opposes feudal privilege and absolute monarchy,⁵² no less than enlightened autocracy, or even the rule of a wise monarch who loves the people as his or her own children. Kant believes that such forms of rule actually abolish freedom. He is against any form of institution in which one person legislates while the people have no rights. He adamantly champions parliamentarism, and advocates Rousseau’s ideas of freedom as obedience to one’s own legislation and the equality of all citizens. Even in his lectures on geography, Kant spends more time discussing such enduring phenomena as production, customs, trade, commerce, and population than he does on power struggles among the nations. All these inclinations demonstrate the enlightened aspect of Kant’s thought and his opposition to the ideas of the ancient feudal system.

Kant was indeed a reformer. Through his view that an individual is free only through obedience to the law, Kant reveals his tendency ultimately to conform with his society’s status quo while tinkering with details of reform. He says, “any resistance to the supreme legislative power, any incitement to have the subjects’ dissatisfaction become active, any insurrection that breaks out in rebellion, is the highest and most punishable crime within a commonwealth, because it destroys its foundation. And this prohibition is unconditional so that even if that power or its agent, the head of state, has gone so far as to violate the original contract,” the people do not have the right to rebel.⁵³ Kant also warns against confusing a republican constitution with democracy. The former is a form of sovereignty while the latter is a form of government.

Depending on the relationship between the mode of administration with the sovereign legislative power, the government is either democratic or despotic. Kant believes that the form of sovereignty is the most important element; the form of sovereignty is monarchical, aristocratic, or democratic depending on whether power lies in the hands of a single individual, a minority, or the majority. He advocates republican parliamentarism, but republican government can coexist with monarchy so long as an open-minded monarch is willing to respect a constitution that

⁵¹“On the Common Saying,” II.

⁵²Kant states that “Hobbes is of the opposite opinion. According to him a head of state has no obligation to the people by the contract and cannot do a citizen any wrong (he may make what arrangements he wants about him). This proposition would be quite correct if a wrong were taken to mean an injury that gives the injured party a coercive right against the one who wronged him; but stated so generally, the proposition is appalling” (“On the Common Saying”).

⁵³“On the Common Saying,” II.

embodies the general will. It is best, however, to separate the legislative from the executive power, and Kant believe that “a state may exercise a republican rule, even though by its present constitution it has a despotic sovereignty.”⁵⁴ He thinks that democracy is necessarily despotic because it guarantees the general will, which it sacrifices to the will of a mere majority. In sum, Kant’s political views oppose feudalism and firmly advocate parliamentarism. He is a reformer rather than a revolutionary, “making an effort to let evolution take the place of revolution.” His basic demand is for the separation of powers (*trias politica*) and the people’s sovereignty, while his basic political line is to vigorously advocate progressive reform and oppose revolutionary violence. Therefore, Kant defends rather than rejects the present order, but demands reform. He wrote an essay that in its title asked the question “In What Order Alone Can Progress toward the Better Be Expected?” The answer, he says, “is not by the movement of things from bottom to top, but from top to bottom.”⁵⁵ Hence, Kant rests his hope on education.

The autonomy of will celebrated in Kant’s ethical theory finds its fullest implementation in the law of right and in politics: freedom of speech instead of freedom of rebellion; freedom of passive resistance instead of freedom of active revolt; freedom of peaceful vote instead of freedom of violent revolution. As a subject, one must obey, while as an intellectual one should enjoy the freedom to critique. It seems to us that all of these ideas of Kant can cause no alarm, and are probably healthier than revolutionary ideas. This also applies to his idea of equality. Kant acknowledges that the “thoroughgoing equality of individuals within a state, as its subjects, is quite consistent with the greatest inequality in terms of the quantity and degree of their possessions, whether in physical or mental superiority over others or in external goods and in rights generally (of which there can be many) relatively to others.”⁵⁶

Political equality does not require or even necessarily advance economic equality. In his theory of citizenship, he distinguishes active and passive forms. Active citizens are not economically dependent on others; they are independent and therefore they enjoy the rights of citizens in politics. Passive citizens, such as hired labourers, servants, women, apprentices, private tutors, and serfs, are exploited and oppressed, and because they “depend on others for their living and protection,” they cannot express their true wishes and are therefore “unable to have citizen independence.”⁵⁷ Independence, freedom, and equality are the terms of the Enlightenment and still bear the mark of that time. Modern political equality was achieved only after a long struggle and gradual social development. Kant’s ethical thesis that the human being is an end in itself was also realized only after a long

⁵⁴“Perpetual Peace.”

⁵⁵“The Conflict of the Faculties.”

⁵⁶“On the Common Saying”.

⁵⁷The French Constitution of 1791 also defined active and passive citizens, following the definitions of 1789. It gives the active citizen the right to vote, though only citizens who paid a certain amount of direct tax to the state could have this right. Hired labourers were excluded.

historical struggle. Kant states that “an illegitimate child comes into the world outside of the law which properly regulates marriage, and it is thus born beyond the pale or constitutional protection of the law. Such a child is introduced, as it were, like prohibited goods, into the commonwealth, and as it has no legal right to existence in this way, its destruction might also be ignored;”⁵⁸ He further maintains that a person can become a mere instrument at the disposal of another person (the state or another citizen). The idea of the human being as an end in itself was the midwife of modern capitalism, which put into practice the idea that a human being is indeed a commodity, while the idea that a human being may be treated as a mere instrument was fully developed only in capitalistic society. Such is the irony of history. However, compared to feudalism, capitalistic society has indeed made rapid progress.

There are more ideas in Kant’s theory of the law of right, such as his distinction between ownership (property) as noumenon (legal approbation of the citizen society) and mere empirical possession as phenomenon; and his doctrine of punishment as the retaliation a criminal brings on himself for his misdeed (because punishment can never be used merely as a means to promote some other good for the criminal himself or for civil society. It must always be inflicted upon him only because he has committed a crime. For a human being can never be treated merely as a means to the purposes of another person). All these ideas influenced Hegel’s later thought. Kant lived in the tempestuous years on the eve of French Revolution, absorbing Rousseau’s progressive ideas and translating the political theories of the revolutionary bourgeoisie into a moral system of reform. These doctrines of positive law and politics are deductions from Kant’s abstract transcendental moral system and supply what concrete historical content this transcendental system enjoys.

9.4 Views on History

Kant’s ethics is not only intimately related to his religious and politics views but also to his views on history, while his view of history is the culmination of his political thought.

In the *Critique of Pure Reason*, as mentioned earlier, Kant raised three questions, namely, “What can I know? What ought I to do? What I may hope?” In his advanced years, Kant added another question, “What is the human being?” Kant states that “metaphysics answers the first question, morals the second, religion the third, and anthropology the fourth. Fundamentally, however, we could reckon all of this as anthropology, because the first three questions relate to the last one.”⁵⁹ Although he had lectured on this topic for twenty years, and the *Anthropology from*

⁵⁸Kant and Reiss (1991, 150).

⁵⁹Kant, J. Michael Young, *Lectures on Logic*, 538.

a Pragmatic Point of View, which was published in his late years, contains mainly general remarks on psychology, there is not much internal connection with his views on history.

Nevertheless, it is noteworthy that Kant made a transition from natural science to ethics, and that his works on ethics, aesthetics, and teleology (in the third *Critique*) were written at the same time that he wrote treatises on politics, history, and religion.

This fact reveals that Kant was contemplating from every aspect various problems concerning the human being. Among these problems is the problem of anthropological history.⁶⁰ This question is no longer concerned with abstract forms of epistemology and ethics. It contains some important ideas that were missing from the three *Critiques* that were vigorously promulgated later by Hegel. In my view, the relation and importance of these ideas to Kant's whole system of philosophy are noteworthy. Kant answered his question about the human being in terms of the universal, necessary capacity of human nature (i.e., a cultural-psychological structure), and then, with the question of what is the human being, went further to connect these thoughts to human history. At this point, however, Kant encountered the impassable rift and conflict between the transcendental and the empirical. Some scholars regard Kant's view on history as a fourth *Critique*. To Kant, however, there was not and could not possibly be a fourth *Critique*, which would have destroyed the carefully wrought architectonic of his system.

Nevertheless, his view of history is remarkable.

This view is mainly presented in his treatise *Idea for a Universal History from a Cosmopolitan Perspective* (1784). In this work, Kant philosophically examines the progress of world history and argues for an idea of historical development that inevitably moves toward a beautiful society that, after a long and tortuous history of conflict, sacrifice, and struggle, arises and gives full play to all human talents. Such a society will be a society of sovereign citizens with a bright prospect for harmonious, happy, free civil life and international perpetual peace. This treatise abounds with an optimistic Enlightenment spirit, and still exudes invigorating power today. It is noteworthy that, in the treatise, Kant develops a view that is contradictory to the view he had repeatedly taken since his first work.

Kant expressly points out that human progress and the development of civilization are accomplished through the play of conflicting material and economical interests. He says:

Human beings have an inclination to associate with one another because in such a condition they feel themselves to be more human, that is to say, more in a position to develop their natural predispositions. But they also have a strong tendency to isolate themselves, because they encounter in themselves the unsocial trait that predisposes them to want to direct

⁶⁰Frederick P. Van de Pitte holds that teleology is more important than reason in Kant's system, that it is the incentive power and pivot of Kant's philosophy, and is certainly inseparable from anthropology. Human fate and morality is the end, while theoretical reason is merely a means, and that, therefore, anthropology is the true ground of Kant's philosophy. See *Kant as Philosophical Anthropologist* (1971).

everything only to their own ends and hence to expect to encounter resistance everywhere, just as they know that they themselves tend to resist others. It is this resistance that awakens all human powers and causes human beings to overcome their tendency to idleness and, driven by lust for honor, power, or property, to establish a position for themselves among their fellows, whom they can neither endure nor do without. Here the first true steps are taken from brutishness to culture, which consists, actually, in the social worth of human beings. And here all of the talents are gradually developed, taste is formed, and, even, through continual enlightenment, the beginning of a foundation is laid for a manner of thinking which is able, over time, to transform the primitive natural predisposition for moral discernment into definite practical principles and, in this way, to ultimately transform an agreement to society that initially had been pathologically coerced into a moral whole. Without those characteristics of unsociability, which are indeed quite unattractive in themselves, and which give rise to the resistance that each person necessarily encounters in his selfish presumptuousness, human beings would live the arcadian life of shepherds, in full harmony, contentment, and mutual love. But all human talents would thus lie eternally dormant, and human beings, as good-natured as the sheep that they put out to pasture, would thus give their own lives hardly more worth than that of their domesticated animals. They would fail to fill the void with regard to the purpose for which they, as rational nature, were created. For this reason one should thank nature for their quarrelsomeness, for their jealously competitive vanity, and for their insatiable appetite for property and even for power! Without these all of the excellent natural human predispositions would lie in eternal slumber, undeveloped. Humans desire harmony, but nature knows better what is good for their species: it wills discord.⁶¹

Kant's ethics revolve around human beings and he proposes that the human being is an end in itself. In this treatise, he expressly poses the grave question of what the human being is.

Certainly, his conception of the human being is neither the natural man of Rousseau nor the individual of a primitive society. Rousseau began with natural man, whereas Kant begins with civilized man. However, this civilized man does not belong to a particular empirical group or class, but is instead the transcendental self of the critical philosophy. This transcendental self is a human being who transcends biology. Kant maintains that human beings manifest a transcendental sociality that inclines people to associate with one another, as well as an unsociality that inclines individuals to pursue their different desires and wishes. This unsociality is the origin of so-called evil.

Evil does not refer to natural human desire but rather to the willfulness that pursues individual interests to the extent of violating universal legislation. The thesis that human nature (the individual) is evil is to be understood in these terms.⁶² However, this kind of evil propels the development of history and the progress of the human being, and gives free rein to human intelligence and skill in their competition and struggle with one other. Kant illustrates his view by using the example of trees in a forest: every tree needs other trees, since each, in seeking to take air and sunlight from the others, must strive upward. It thereby realizes a

⁶¹“Idea for a Universal History from a Cosmopolitan Perspective.”

⁶²This quasi-mystical doctrine that human nature is evil is common to the Christian doctrine of original sin of and to Freud's psychology. This is a topic that is well worth further investigation.

beautiful, upright stature, while those trees that live in isolated freedom grow stunted and twisted. On the one hand, therefore, the human being's natural talent can develop fully only among others, rather than in the isolated individual. While on the other hand, talent develops only in competition with others. Agreeing with Adam Smith, Kant acknowledges that competition is the basis of society and drives the progress of civilization; a civil society is a competitive society.⁶³ The society Kant envisions is a capitalistic society, though at the time, Kant could not have foreseen a truly industrial society, and his civic society remains based on agriculture. His idea, however, anticipates the demand of the newly emerging bourgeoisie and the characteristics of free competition in the bourgeois class. He celebrates the coming of this social system and is full of optimism for its future.

Hegel also views evil as individual and subjective, and argues that "in that finite sphere man pursues ends of his own and draws from himself the material of his conduct. While he pursues these aims to the uttermost, while his knowledge and his will seek himself, his own narrow self apart from the universal, he is evil; and his evil is to be subjective."⁶⁴ That evil drives historical development is a well-known view of Hegel's, and one that Engels greatly admired. It can be said that Hegel developed these ideas from Kant, and that their actual ground is the emerging bourgeoisie social system of free competition.

Kant states: "The history of nature begins therefore with the good, for it is the work of God. The history of freedom begins with evil, for it is the work of the human being."⁶⁵ Starting with the good means that, by nature, the human being gradually turns from evil to the good in a progressive movement; while beginning with evil means the awakening of reason, which entices individuals to leave the innocent life in Eden as described in the Bible and to begin to make their own choices and to struggle for private interests, bringing suffering, fear, and worry "for the individual, who looks only to himself in the exercise of his freedom."⁶⁶ This is why the history of freedom begins with evil, which produces historical plays full of stupidity, ignorance, and emptiness. There seems to be no rational plan; however, a law of reason is implicitly at work since, as Kant says, "this epoch also saw the beginning of human inequality, that abundant source of so much evil but also of

⁶³“The greatest problem for the human race, to the solution of which Nature drives man, is the achievement of a universal civic society which administers law among men.

The highest purpose of Nature, which is the development of all the capacities which can be achieved by mankind, is attainable only in society, and more specifically in the society with the greatest freedom. Such a society is one in which there is mutual opposition among the members, together with the most exact definition of freedom and fixing of its limits so that it may be consistent with the freedom of others. Nature demands that humankind should itself achieve this goal like all its other destined goals. Thus a society in which freedom under external laws is associated in the highest degree with irresistible power, i.e., a perfectly just civic constitution” (“Idea for a Universal History from a Cosmopolitan Point of View”). This argument can be read in reference to Kant's political views, and there is an obvious relation between them.

⁶⁴Hegel, *Encyclopaedia of the Philosophical Science: Logic*, §24.

⁶⁵Nisbet (1991).

⁶⁶Ibid.

everything good.”⁶⁷ The consequence of our activity is usually not what we expect. We wish for harmony but end up with war and hostility; we pursue happiness and brave hardships and dangers, yet life is so short and happiness hard to find.

Besides, war brings tremendous damage and crime. Kant states that “we have to admit that the greatest evils which oppress civilised nations are the result of war.”⁶⁸ But war is often a necessary means of progress. Kant believes that: “So long as human culture remains at its present stage, war is therefore an indispensable means of advancing it further.”⁶⁹ In the *Critique of Judgment*, he explicitly states that “though war is an undesigned enterprise of men [...] yet is it [perhaps] a deep-hidden and designed enterprise of supreme wisdom.”⁷⁰ Underneath the ignorant, chaotic veneer of human activity, law and purpose are visible.

Although people complain about present conditions, they do not really want to go back to a primitive state. Kant emphasizes renovation and the progress of science, culture, education, and the political system, and holds that the general trend of history is toward an ideal political system that has a constitutional republic within and perpetual peace without, and that is the externalization of human morality. Since nature endows human beings with reason, it must have the purpose of realizing this reason, which is why the trend of history is a movement toward ever greater rationality. Kant explains that: “The history of mankind can be seen, in the large, as the realization of Nature’s secret plan to bring forth a perfectly constituted state as the only condition in which the capacities of mankind can be fully developed, and also bring forth that external relation among states which is perfectly adequate to this end.”⁷¹ On the other hand, “this task of establishing a universal and lasting peace is not just a part of the theory of right within the limits of pure reason, but its entire ultimate purpose.”⁷² This perpetual peace cannot be achieved by one nation’s conquering others and in that way uniting the world. (“No State Shall by Force Interfere with the Constitution or Government of Another State”⁷³ is one of Kant’s main theses.) Instead, the goal of perpetual peace requires establishing a republican political system internally in each nation (“The Civil Constitution of Every State Should Be Republican”⁷⁴), and a rational regime of international law to regulate relations among these states. A republican political system and an enlightened citizenry within the separate countries are the premises of international perpetual peace. With that structure in place, people would be

⁶⁷Ibid., 230.

⁶⁸Ibid., 231.

⁶⁹Ibid., 232.

⁷⁰Kant, and J. H. Bernard, *Critique of Judgment*, 239.

⁷¹“Idea for a Universal History from a Cosmopolitan Point of View.”

⁷²Kant and Reiss (1991, 174).

⁷³“Perpetual Peace” (1795–1796).

⁷⁴Ibid.

unwilling to go to war.⁷⁵ Meanwhile, the economic interests of international trade would oblige countries to foster peace (although not from moral motives). Even if war were imminent, countries would try to mediate and seek a peaceful alliance to prevent it since the foreign policies of a country are related to its domestic policies. We have to say that these views were extraordinary two hundred years ago.

Kant's view of history begins with "unsocial sociality" and ends with "perpetual peace." In other words, it begins with "evil" and ends with "good." Empirical history confirms the human being's moral substance, while the fully moral person becomes the final end of human history.

Most importantly, Kant differs from most moralists by maintaining that this end is obtained not through individual moral cultivation but by the progress of history and a reformed political system that allows morality to gradually achieve perfection. The individual's selfish pursuit of happiness is merely a means for achieving this great goal, which infinitely exceeds the selfish individuals who inadvertently bring it about. The progress of history cannot be measured by happiness.

Nevertheless, a wide gap exists between Kant's view of history and his formalistic moral theory. Morality is noumenal, while history is phenomenal, although in the *Critique of Judgment* (see next chapter), Kant attempts to link the two by defining the ultimate end of nature as the cultural and moral man, and by communicating natural causality, which progresses in time, as non-temporal morality in the idea of teleology. While Kant raised questions concerning the contradictions and the unity of morality and politics,⁷⁶ he did not explicitly deal with the relation between morality and history, which rendered those contradiction all the more evident. The republican political system that Kant hoped for and anticipated cannot be established by morality alone. On the contrary, morality can only fully develop under a good political system.⁷⁷ Nor is legal conduct determined by morality, but actually often repays good with evil, allowing an immoral person to nevertheless be a perfectly law-abiding citizen. The realization of perpetual peace is nevertheless a moral duty, even though it depends on historical developments that are beyond the good will of any one person. History progresses toward morality. But as an unknowable noumenon, morality is on the far shore that natural causality can never reach. Pure reason is the good and freedom, but its realization has to pass through evil. In "Perpetual Peace," Kant dwells on the positive effect of war and "nature's

⁷⁵"On the other hand, in a constitution which is not republican, and under which the subjects are not citizens, a declaration of war is the easiest thing in the world to decide upon, because war does not require of the ruler, who is the proprietor and not a member of the state, the least sacrifice of the pleasures of his table, the chase, his country houses, his court functions, and the like. He may, therefore, resolve on war as on a pleasure party for the most trivial reasons, and with perfect indifference leave the justification which decency requires to the diplomatic corps who are ever ready to provide it." Ibid.

⁷⁶"Perpetual peace, which is in this case desired not merely as a physical good, but rather also as a condition that arises from the recognition of duty" ("Perpetual Peace").

⁷⁷"So that a good national constitution cannot be expected to arise from morality, but, rather, quite the opposite, a people's good moral condition is to be expected only under a good constitution" ("Perpetual Peace").

clever plan,” while the so dignified and absolute moral law has no actual effect on history. What affects reality is the opposite of morality—evil.

Kant emphasizes historical progress and believes that the human being cannot and would not want to return to the primitive state. His estimation of human civilization and the future is full of optimistic faith. “The destiny of the human race as a whole is incessant progress,”⁷⁸ he says, and that “this course represents a pregression from worse to better for the species as a whole.”⁷⁹ On the other hand, these bright prospects are teleological ideas that cannot be empirically established. “Here, therefore, is a proposition valid for the most rigorous theory, in spite of all skeptics, and not just a well-meaning and practically commendable proposition: the human race has always been in progress toward the better and will continue to be so henceforth.”⁸⁰

Kant’s view of history, as he himself admits, is a merely teleological idea that cannot be proved by experience. So are his ideas of “the perpetual existence of the human race” and of “nature’s secret plan,” as well as his conviction that “the question of progress cannot be directly solved by experience.”⁸¹ Kant stresses that the possibility of the earth being crushed by other planets cannot be excluded from empirical science, nor can experience prove whether our society is progressing or regressing. Therefore, all these views of history we have discussed are, like the existence of God and the immortality of the soul, not objective laws but merely subjective ideas that cannot be empirically proved.

Kant believes that morality is superior to history and that, ultimately, history is rationally subordinated to morality. While he emphasizes the independence, sublimity, and absoluteness of morality as the capacity of human nature, he cannot make his moral theory and his vision of history go hand in hand together philosophically. Kant’s three *Critiques* concentrate on the universal, necessary, transcendental capacity of human nature, while his many treatises on history, politics, and anthropology focus on empirical description and elucidation. The relation between these two categories of writings is intricate, particularly the connection between the internal capacity of human nature and the external experience of history, which is not dealt with thoroughly and philosophically.

Kant’s view of history is based on human beings, rather than the individual and history, that is, on empirical fact rather than transcendental principle. He stresses conflict and war, which are consequences of economic interests, modes of production, and the private possession of land (Kant applies this theory to interpret Cain’s murdering Abel in the Bible). These empirical causes drive the development of the human race and the progress of civilization to their appointed goal of

⁷⁸Kant and Hans Siegbert Reiss, “Review of Herder, *Ideas for the Philosophy of the History of Mankind*,” *Kant: Political Writings*, 220.

⁷⁹*Ibid.*, 220.

⁸⁰Kant, Allen W. Wood, and George Di Giovanni, “The Conflict of the Faculties,” *Religion and Rational Theology*, 250.

⁸¹*Ibid.*

morality and autonomy, which he believes to have their conformity in law, and eventually to reach moral reality. However, here also lies the root of conflict, and even contradiction, in Kant's overall philosophical view. He emphasizes that all of these are merely regulative, teleological ideas of history's great goal and purpose to encourage people, say, to struggle for perpetual peace. But they are definitely not scientific knowledge. And yet, Kant nevertheless wishes to become the Newton of history, and that would mean breaking out of his system of critical philosophy, discarding transcendental reason, and proceeding from empirical anthropology. Kant certainly could not go that far. Kant's view of teleology is very important (see next section), because it focuses on the historical resolution of the question "What is the human being?" It is regrettable that Kant said he would not bury his head among old parchments in the archives. He did not investigate history in the meticulous manner that he did natural science. His view of history contains many important ideas which regrettably did not form a systematic philosophy. However, systemization was brought about by Hegel, whose idealism objectivized Kant's subjective ideas.

As pointed out earlier, French materialism began from enlightened bourgeois individualism, emphasizing that the ground of morality, politics, and history is individual sensible happiness and taking the promotion of individual happiness as the measure of historical progress. These thinkers demanded that history be explained and regulated solely in terms of natural causality. In contrast, Kant raised the banner of supersensuous reason as the moral law and the human being as subordinate to this universal reason, which is quite distant from the rationality championed by the Enlightenment. Moral views based on the individual (such as those of Locke, Rousseau, and the French materialists) are revised on the supposedly more rational basis of what is, in fact, a rather obscure idea of ideal totality. The sensible and particular individual disappears into the non-individual, even anti-individual "transcendental" rationality. A supersensuous reason, rather than the sensuous human individual, becomes the subject of world history.

As in the case of epistemology, the turn that Kant commenced was completed idealistically by Hegel. Hegel turned Kant's moral laws and the faculty of pure practical reason into the absolute idea, and gave Kant's moral "ought" an ontological construal that made these imperatives a force of historical movement. All these changes are contrary to Kant's original intention. Nature (causality), which in Kant is opposed to reason, is made to merge with reason and become an externalized element of its historical movement. To Hegel, what is important is not to prove the necessity of an unattainable "perpetual peace," rather, it is to prove the historical necessity (rationality) of the present ethical and civil society and its state. To Hegel, morality is abstract and meaningless unless it is actualized in social behavior and the culture and law of a specific historical period. Reason is the basis not only of freedom, but also of nature and nature's causality. Hegel therefore brushed aside Kant's formal theory of morality, as well as his ideas of the human being as an end in itself and the ideal of perpetual peace, and brought ethics into his dialectics of historical logic. Contrary to Kant, Hegel considered the basis of the movement of world history as superior to morality. Instead of subordinating history

to morality, morality is subordinated to history.⁸² This view dispenses with moral forms and the independent significance and absolute value of the psychology of the will. Consequently, human freedom does not depend on the choice of the will but on knowledge of necessity (the law of causality) and obedience. To Hegel, Kant's conception of freedom was abstract and empty, and bereft of historical reality. Hegel maintained that true freedom had to overcome everything partial, arbitrary, and contingent in this merely subjective will.

Kant emphasizes that man is an end in himself, and his view of history contains a hint of the individual as a mere instrument of history. In the *Critique of Judgment*, Kant mentions the analogy between an organism and a society, where every individual member is an end as well as an instrument, and where "each should be determined as regards place and function by means of the Idea of the whole."⁸³ This seems to imply that individual members are determined by the society as a whole, yet Kant fundamentally supports individualism. By contrast, Hegel regards the individual as an instrument of reason and understands morality from the perspective of the full development of human history. Kant rejects natural causality in morality, while Hegel turns back to causality, which nonetheless is not the natural causality of French materialism based on individual sense experience but rather a historical causality based on a rational idea of the completed totality of the real.

From Kant to Hegel, German idealism completed its negation of French materialism in the ethical domain. However, this negation is not a regression but a spiral progression. Classical German idealism replaced the individual sensibility of French materialism with a rational idea of totality, which was an important development in the history of philosophy as well as in political thought. The so-called rational totality is actually the social existence of human beings that have transcended biological species. Kant saw reason as the form of subjective morality, while Hegel saw it as the form of objective history; however, for both, reason was obviously not the same as the biological nature and individuality of the older materialism, which simply equated human rationality with our biological human nature. Therefore, as in their epistemology, so in their thought concerning human nature and history; Kant and Hegel stood on the opposite side of French materialism and occupied a higher level in the spiral development of history. They idealistically emphasized human beings' sociality, that is, our non-individual, non-natural

⁸²Hegel argues that "the history of the world moves on a higher level than that proper to morality. [...] The demands and accomplishments of the absolute and final aim of Spirit, the working of Providence, lie above the obligations, responsibilities, and liabilities which are incumbent on the individuals in regard to their morality. [...] The deeds of the great men who are the individuals of world history thus appear justified not only in their intrinsic, unconscious significance but also from the point of view of world history. It is irrelevant and inappropriate from that point of view to raise moral claims against world-historical acts and agents. They stand outside of morality. [...] World history (if it wanted to) could on principle altogether ignore the sphere of morality and its often mentioned difference with politics. It could not only refrain from moral judgments—its principles and the necessary relations of actions to them already are the judgment—but leave individuals entirely out of view and unmentioned." *The Philosophy of History*.

⁸³Kant, and J. H. Bernard, *Critique of Judgment*, 301.

characteristics. Hence the ethical domain cannot be regulated and explained by some natural quality (e.g., happiness) or natural law (e.g., mechanics), but must be regulated and explained by social and historical laws. To Hegel, the logic of absolute spirit fulfills these tasks.

That is how individualism, liberalism, and the Enlightenment thought of the British and French bourgeoisie and their idea of the social contract turned into historicism and totalitarianism, with transcendental reason as their banner. This is an important turning point in thought, and Kant stands on its very pivot point. He is the link between the past and the future, with its thought thoroughly interwoven into his ideas on ethics, politics, and history.

We have to return once again to the center of Kant's philosophy—the question of the thing in itself. As we discussed in Chap. 7, Kant introduced a whole series of “unknowables” in epistemology, even expressing his conviction that the ultimate origin, essence, and ground of knowledge is unknowable. The same thing happened in his practical thought. The origin, essence, and ground of the moral law and of freedom, that is, the questions of why the human being is free and why there should be morality are also unknowable. He states time and again:

The ground of the difficulty of comprehending the possibility of the categorical imperative, i.e., of the moral law, is very great: the imperative is a synthetical proposition a priori; and as we felt so much difficulty in comprehending the possibility of this kind of proposition in speculative metaphysics, we may presume the difficulty will be no less in the practical.⁸⁴

But how the hypothesis itself comes to be possible, is what no human reason can comprehend.⁸⁵

But reason would indeed overstep all bounds and limits were she to undertake an explanation, how pure reason can be spontaneous and self-practical?—a problem perfectly identical with this one, to explain how freedom of will is possible.⁸⁶

To explain this, I say, how reason can be thus practical, is quite beyond the reach and grasp of all human thought, and the labour and toil bestowed on any such inquiry is fruitless, and thrown away.⁸⁷

That it cannot make comprehensible the absolute necessity of an unconditioned practical law, which unconditional necessity the categorical imperative must have.⁸⁸

It cannot be further explained how this consciousness of the moral law, or, what is the same thing, of freedom, is possible.⁸⁹

⁸⁴Kant and Semple (1886).

⁸⁵Ibid., 75.

⁸⁶Ibid., 73.

⁸⁷Ibid., 75.

⁸⁸Ibid., 77–78.

⁸⁹Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 46.

For as to the question how a law can be directly and of itself a determining principle of the will (which is the essence of morality), this is, for human reason, an insoluble problem and identical with the question: how a free will is possible.⁹⁰

Corresponding with his epistemology, when manifested in ethics, Kant's philosophy still retains its essential feature of unknowability. The unknowability of the moral law, that is, the impossibility of scientifically or philosophically explaining why freedom and indeed pure reason itself should exist is a good rather than a bad thing.⁹¹ To put it briefly, the nature of pure reason as the common ground of knowledge and ethics is unknowable. That is to say, the questions of what pure reason really is, how it comes about or how it is possible, and why there should be pure reason are unanswerable. Comparing theoretical and practical reason, Kant states: "He who has been able to convince himself of the truth of the positions occurring in the Analytic will take pleasure in such comparisons; for they justly suggest the expectation that we may perhaps some day be able to discern the unity of the whole faculty of reason (theoretical as well as practical) and be able to derive all from one principle."⁹²

It has been remarked that "pure reason is seen as practical, while the relationship between pure reason and practical reason yet remains an uncomprehensible mystery."⁹³ It has also been suggested that, to Kant, the "one principle" is reason or pure reason.⁹⁴ However, it seems to me that Kant did not have this idea in mind. What he meant was that reason or pure reason is unknowable. He wished that some day he might discover the secret of reason, although he knew this was not really possible.

The crux of Kant's philosophy is the supreme position of transcendental reason, which determines both human knowledge and the moral law. In epistemology, the transcendental self, in the form of consciousness, becomes a legislator to nature, which makes knowledge possible; while in ethics the transcendental self, as rational existence, constitutes the ground of the categorical imperatives in moral action. The transcendental self is originally an unknowable X (the thing in itself), though its root is in pure reason. As mentioned earlier, this reason is neither that of earlier

⁹⁰Ibid., 74.

⁹¹"When with all the effort of our reason we have only a very obscure and doubtful view into the future, when the Governor of the world allows us only to conjecture his existence and his majesty, not to behold them or prove them clearly; and on the other hand, the moral law within us, without promising or threatening anything with certainty, demands of us disinterested respect; and only when this respect has become active and dominant, does it allow us by means of it a prospect into the world of the supersensible, and then only with weak glances: all this being so, there is room for true moral disposition, immediately devoted to the law, and a rational creature can become worthy of sharing in the summum bonum that corresponds to the worth of his person and not merely to his actions" (Kant, *Critique of Practical Reason*, 150).

⁹²Kant, and Thomas Kingsmill Abbott, *Kant's Critique of Practical Reason and Other Works on the Theory of Ethics*, 93.

⁹³"Kant and Hegel on Practical Reason," in *Hegel's History of Philosophy* (1972).

⁹⁴See Lewis White Beck, *A Commentary on Kant's Critique of Practical Reason*.

Enlightenment thought nor that of the old rationalism. This unique pure reason is the banner that Kant, first and above all, raised in his philosophy.

Immediately after him, Hegel used this conception of reason as noumenon to deduce and unify everything in the world. Reason controls, masters, and comprehends everything. Indeed, it *is* everything. However, the puzzle of what exactly this reason is has always been shrouded in the thick mist of idealism. It inexplicably contains everything—laws, truth, essence, actions, thoughts, unity, and so on. It is the subject as well as the object. From time to time, in a series of confused explications, one or another of these interpretations becomes more prominent than the rest, and acquires a mystical aura. Schopenhauer had already commented on the multiple meanings Kant implied in his use of the term “reason.” Recently, Brand Blanshard revisited the question and listed several of the meanings of the term in his *Reason and Analysis*.⁹⁵

In my view, the term “reason” in classical German philosophy since Kant basically refers to the social noumenon of the abstract human being. To the German philosophers, “self” as well as “reason” have the sense of a sociality that surpasses individual nature. The idea that the noumenon is superior to the phenomenon, that ethics and religion are superior to science and knowledge, and the unknowable thing in itself all refer in an abstract, idealistic manner to the human being as a social rather than a natural existence, and underscore human spontaneity. In epistemology Kant emphasized the spontaneity of cognition (transcendental apperception), while in ethics he emphasized spontaneous action (autonomy of the will). To Hegel, spontaneity appears in the idealistic form of his dialectic as the unity of the subject and object, which replaces the God of the Middle Ages and governs the world in its stead. Hegel united sensibility, understanding, the moral law, and the unknowable thing in itself in his Absolute Idea, which is the dialectical unity of the subject and object based on the development of the whole of history, from which he deduced everything material and spiritual. In this way, the unknowable thing in itself and even pure reason are reduced to an idealistically mystified human history. Kant’s human being who is an end in himself is no longer the individual natural being, nor society as a whole, but instead becomes nothing less than the totality of human history.

The puzzle can to some extent be clarified by comparing Kant’s view of history with Hegel’s. Kant states, “Each, according to his own inclination, follows his own purpose, often in opposition to others; yet each individual and people, as if following some guiding thread, go toward a natural but to each of them unknown goal; all work toward furthering it, even if they would set little store by it if they did know it.”⁹⁶ This refers to “nature’s secret plan,” which we discussed earlier. Hegel develops this thought of Kant’s, turning Kant’s subjective idea into an objective idea of what he calls spirit. He says:

⁹⁵Brand Blanshard, *Reason and Analysis*, 1.

⁹⁶Kant and Behler (1986).

It is the particular which exhausts itself in the struggle and part of which is destroyed. But the universal results precisely from this struggle, from the destruction of the particular. It is not the general Idea that involves itself in opposition and combat and exposes itself to danger; it remains in the background, untouched and uninjured. This may be called the cunning of Reason – that it sets the passions to work for itself [...] The particular in most cases is too trifling as compared with the universal; the individuals are sacrificed and abandoned.⁹⁷

Those manifestations of vitality on the part of individuals and peoples in which they seek and satisfy their own purposes are, at the same time, the means and tools of a higher and broader purpose of which they know nothing, which they realize unconsciously [...] that Reason governs the world and has consequently governed its history. [...]

This connection implies that human actions in history produce additional results, beyond their immediate purpose and attainment, beyond their immediate knowledge and desire.

They gratify their own interests; but something more is thereby accomplished, which is latent in the action though not present in their consciousness and not included in their design.⁹⁸

For Hegel, reason is itself the absolute spirit. It realizes itself by means of human desires and conflicts of interests in the progress of history. Marx and Engels set great store by Hegel's view. In *Capital*, when discussing how human beings use labor to realize their purpose, Marx quotes in a footnote the following paragraph from Hegel:

Reason is just as cunning as she is powerful. Her cunning consists principally in her mediating activity, which, by causing objects to act and re-act on each other in accordance with their own nature, in this way, without any direct interference in the process, carries out reason's intentions.⁹⁹

Engels comments:

Men make their own history, whatever its outcome may be, in that each person follows his own consciously desired end [...] But, on the one hand, we have seen that the many individual wills active in history for the most part produce results quite other than those intended—often quite the opposite.

The philosophy of history, particularly as represented by Hegel, recognizes that the ostensible and also the really operating impetus of men who act in history are by no means the ultimate causes of historical events; that behind these impetus are other impetus, which have to be discovered. But it does not seek these powers in history itself, it imports them rather from outside, from philosophical ideology, into history.¹⁰⁰

⁹⁷Hegel (1953).

⁹⁸Ibid.

⁹⁹Engels (1994b).

¹⁰⁰Ludwig Feuerbach and the End of Classical German Philosophy. Marx Engels Internet Archive 1994.

9.5 “The Good Is Understood to Be Man’s Practice”

Kant shifted the key of historical progress from the individual to the human being, turning from subjective consciousness to the objective divine will (nature’s secret plan). Receiving Kant’s legacy, Hegel established the soul of his dialectic with a grand historical sense of the human being as a totality. Nevertheless, his thought lacked a substantial material ground.

Feuerbach criticized Hegel from the perspective of sensible reality, but his thought lacks a view of history as totality. We discussed (Chap. 5) how Feuerbach attempted to replace the universality of reason as conceived by Kant and Hegel with the universality of individual sensibility, but his thought remains stuck in a passive perception of French materialism, i.e., within the bounds of individual animality (which does not have historical universality), hence sensibility cannot be comprehended as practice—as the spontaneity of the subject. Hence, he fails to criticize Hegel from a historical point of view (subjective practical activity as a totality). Marx carefully evaluated Hegel’s view of history, which he criticized from the materialistic standpoint of human practice, as seeing everything upside down. Marx stressed that the investigation of historical development should proceed from human society itself, instead of in an ideological and external manner. Whether it is the concept of abstract reason and the transcendental self, or the postulate of the absolute idea and the human being as an end, these must all be taken up from the perspective of historically specific social life, and especially the contradiction between productive forces and relations of production, and between the economic base and the cultural superstructure.

Some animals also have a highly organized social life and engage in collective activities; however, because they lack the essential base of making and using tools they cannot establish a society like that of human beings and they lack social consciousness as well as language. That is why human society differs from the natural man that Hobbes and Rousseau conceived, no less than from the life of any animal species. It is precisely because human beings make and use tools that they take a merely animal form of sociality and develop it into the organization of human society, developing both language and social consciousness. From then on, the laws of society rather than laws of biological nature control the development of the human being. “The mode of production of material life conditions the general process of social, political and intellectual life”;¹⁰¹ “Mankind must first of all eat, drink, have shelter and clothing, before it can pursue politics, science, art, religion ... [and] the production of the immediate material means of subsistence and consequently the degree of economic development attained by a given people or during a given epoch form the foundation upon which the state institutions, the legal conceptions, art, and

¹⁰¹*Contribution to the Critique of Political Economy*. Marx Engels Internet Archive 1994.

even ideas on the religion, of the people concerned have been evolved.”¹⁰² The masses shoulder the responsibilities of material production and are the subject of social practice. “All social life is essentially **practical**.”¹⁰³

Marxism sees social production as the basic practical activities that fundamentally drive the progress of history and the development of an epoch. Only from the fundamental viewpoint of practical philosophy can the puzzle of reason in classical German philosophy be exposed and criticized. Therefore, social practice is not only the fundamental ground of knowledge but also that of ethics, morality, politics, and history. Our criticism of Kant’s epistemology in previous chapters is made from this standpoint, and so will be our criticism of Kant’s ethics. In his *Philosophical Notebooks* Lenin quotes a passage from Hegel’s works:

This determinateness, which is contained in the Notion, and is equal to it, and includes within itself the demand of the individual external actuality, is the Good. It appears with the dignity of absoluteness, because it is the totality of the Notion within itself—the objective in the form simultaneously of free unity and subjectivity.¹⁰⁴

And he comments:

The essence: The “good is a “demand of external actuality,” i.e., by the “good” is understood man’s practice = the demand (1) also of external actuality (2).¹⁰⁵

And another paragraph from Hegel:

Presupposed to it (the Good) is the objective world, in the presupposition of which the subjectivity and finitude of the Good consists and which, as being other, pursues its own course; and in it even the realisation of the Good is exposed to obstacles, and may even be made impossible.¹⁰⁶

Then Lenin remarks:

The “objective world” “pursues its own course,” and man’s practice, confronted by this objective world, encounters “obstacles in the realisation” of the End, even “impossibility.”¹⁰⁷

The good depends neither on Kant’s otherworldly pure reason, nor on Hegel’s absolute idea, but solely on practice. This good is the essential historical nature of human social practice as a totality. In other words, social practice itself (the basis of human existence and development) is the good and all other goods derive from it. Therefore, social practice (e.g., production), which preserves the society and promotes historical development, is also the origin of morality. Based on this view, the historically sedimented crystallization of rational human nature is the subjective psychological vehicle of the good. Morality is always historically specific and

¹⁰²Engels (1994a).

¹⁰³“Theses on Feuerbach.” Marx Engels Internet Archive 1994.

¹⁰⁴*Philosophical Notebooks*. Marx Engels Internet Archive 1994.

¹⁰⁵Ibid.

¹⁰⁶Ibid.

¹⁰⁷Ibid.

contextualized by historical development, and its laws, demands, and commands are historical and particular. Such seemingly idiosyncratic features as greed and the desire for power are abstractly regarded as evil from a moral viewpoint, but must be analyzed and evaluated in the context of their objective historical situation.

Kant and Hegel both saw that evil was often a driving force of history, and that what is seen abstractly as morally evil may not always be so when we consider history as a whole. When the bourgeoisie and its representatives were pursuing their desire for power, they were often seen as evil from a moral point of view. However, seen from another perspective they drove the progress of history. This is a kind of “antinomy of history.”¹⁰⁸ The ruling class often condemns the rebels opposed to the old system as evil and praises abstract moral teachings as good.

However, many moral theories attempt to pose the question of whether human nature is good or evil from a perspective that supposedly transcends history, though that is a mistake; for any explanation of the struggle and development of human history and good and evil must be based on the conflicts and developments arising from material production.

Marx discovered the material history of the development of human society independently of individual subjective will, and set great store on historical events and the objective basis of human behavior, impartially examining the causal relationship of history and reality. He also emphasized human spontaneity. The great difference between the causality of history and the causality of nature is the result of human spontaneity, consciousness, and purpose. On the one hand, then, historical progress is as objective and independent of subjective will as the causality of nature is, while on the other hand, human beings are free because their purposeful activity depends on their thought. Some human activities may suffer temporary failures or setbacks, but taken all together these activities create history and give the idea of the moral good what objective positive value it has.

Marx writes: “World history would indeed be very easy to make, if the struggle were taken up only on condition of infallibly favorable chances.”¹⁰⁹ We should not be dissuaded by temporary success or failure, but stand fast on the basis of the whole overall trend of social development, and keep up the ethical spirit of “dare to fight, and dare to win,” which is the ethical principle of historical materialism.

It is also the case with the relation between the whole and the individual. However much we emphasize the individual as an end, and the freedom and development of individuality, human beings are nonetheless governed by objective history, and it would be impossible—as impossible as trying to get oneself off the ground by grasping one’s own hair—to completely surpass history and to break from historical time. In the kingdom of freedom—before the arrival of Communism—the development of human beings as a race and the development of the individual are sometimes locked in hostile conflict. It is often necessary to sacrifice the individual for the sake of the development of human beings. Morality is the attitude and action

¹⁰⁸See my essay “A Reevaluation of Confucius,” *Chinese Social Sciences*, 2 (1980).

¹⁰⁹Letter to Kugelmann, April 17, 1871. Marx Engels Internet Archive 1994.

that accepts this truth and is dedicated to promoting historical development. Referring to the economist David Ricardo, Marx said:

He wants production for the sake of production and this with good reason. To assert, as sentimental opponents of Ricardo’s did, that production as such is not the object, is to forget that production for its own sake means nothing but the development of human productive forces, in other words the development of the richness of human nature as an end in itself. To oppose the welfare of the individual to this end, as Sismondi does, is to assert that the development of the species must be arrested in order to safeguard the welfare of the individual, so that, for instance, no war may be waged in which at all events some individuals perish. [...] Apart from the barrenness of such edifying reflections, they reveal a failure to understand the fact that, although at first the development of the capacities of the human species takes place at the cost of the majority of human individuals and even classes, in the end it breaks through this contradiction and coincides with the development of the individual; the higher development of individuality is thus only achieved by a historical process during which individuals are sacrificed for the interests of the species in the human kingdom, as in the animal and plant kingdoms, always assert themselves at the cost of the interests of individuals.”¹¹⁰

This view is almost identical with what Kant expressed in his writings on the philosophy of history.

It is blind submission to see the individual’s voluntary sacrifice as a means for the sake of the kingdom of freedom—the realization of Communism—and it is illusory to prattle on about ideas such as the human being as an end and individual freedom without seeing objective historical progress. Only after having comprehended the whole process of human social development can human actions be rightly understood and freedom historically and concretely realized. Kant’s thoughts on the autonomy of the will and the human being as an end in itself will not have subjective ethical power or profound historical content in any other way than on the ground of historical materialism.

9.6 Kantianism in Social Theory

In Chap. 4, we briefly touched on the Kantian inclination that characterized the theory of causality in the natural sciences in the 1930s, and we shall now deal with the same trend in social theory. However, this domain is so vast, the issues so complicated, and the theoretical schools and their representatives so numerous that we can make only a rough sketch. Lacking dialectical unity between subjective human spontaneity and objective historicity, various schools of philosophy, assuming different metaphysical positions, often exaggerated one aspect and blocked out others. Hegel mainly emphasized the objective nature of morality, and knowledge of and conformity with laws of necessity, while Kant emphasized subjective responsibility and free choice, because the human being is not a spiritual

¹¹⁰*Theories of Surplus Value*. Marx Engels Internet Archive 1994.

machine. Hegel emphasized logic and causality, while Kant emphasized will and freedom. If we were to say that Kant's ethics was an idealistic subjectivism, then Hegel's dialectics tended toward vulgar objectivism (although Hegel is not a fatalist, and stresses individual activity and will).

European historicists in the latter nineteenth century treated morality as the subject of folklore and sociology. This method was actually derived from Hegel's objectivism, though not necessarily as a direct development from Hegel, whom in fact these theorists often criticized from a positivistic point of view. They stressed the origin of morality from a causal nexus that served a particular social and historical condition, and turned Hegel's somewhat mystical view of history into a relativistic positivism that eventually evolved into an increasingly popular moral relativism.

Moral relativism and the doctrine of cultural types, such as in the work of Ruth Benedict, held that there are no universal, necessary moral norms or laws. Different nations and cultures have their diverse moral norms, which are actually relatively reasonable. But there is no question of better or worse norms in an absolute sense. Primitive tribes practiced headhunting, people in the Middle Ages practiced asceticism, and we moderns adopt different norms for sexual behavior. All these diverse norms and practices serve their distinctive social life and order, and have their historical particularity in accordance with reason. This school was, on the one hand, progressive in its political view; it protected the cultures and moral values of small and weak ethnic groups and resisted colonialism (though it was not without its reactionary tendency). Their theoretical doctrines were, however, rather shallow. They reduced morality to folklore, overlooked common subjective features of moral behavior, showed no regard for **the formal meanings** of the heritage of universal moral norms as an accomplishment of human history, dismissed the very idea of human nature, and attached no importance to free choice and spontaneity, which have always been important elements in modern philosophical moral theory.

Contrary to Hegel, Schopenhauer and Nietzsche developed Kant's subjectivism, whether in terms of a blind will to live or a Dionysian spirit as the determinate force of history. Nietzsche said that his spirit was Schopenhauer's will and also Kant's faith. They turned Kant's practical reason and absolute imperative into something totally irrational. Existentialism opposed materialism's treatment of human beings as things, emphasized free choice and self-reliance, and opposed determinism, insisting that human beings are free and that subjectivity is essential.

Nevertheless, they abandoned objective historical determination, consequently their theories led either to mere idle talk or rash action. However, let us review some of the main trends of moral theory that are more directly derived from Kant's thought.

With Jeremy Bentham and John Stuart Mill, the empirical eudaimonism to which Kant was opposed became the major school, dominating the field of sociology and ethics for a long time (particularly in Britain and the United States) under the name of utilitarianism with its motto of the greatest good for the greatest number. Mill held that happiness is the measure of morality: "The doctrine that the basis of morals is utility, or the greatest happiness principle, holds that actions are

right in proportion as they tend to promote happiness, wrong in proportion as they tend to produce the reverse of happiness. By ‘happiness’ is meant pleasure and the absence of pain.”¹¹¹ Nevertheless, Mill eventually ended up with social feelings (i.e., conscience) as the impetus of moral action and the basis of moral theory, turning the objective interest of French materialism into subjective feelings.

This turn to subjective idealism is even more pronounced in the school of human relations. Ralph Barton Perry held that things “derive value from their being desired, and possess value in proportion as they are desired.”¹¹² Additionally, “It is not to be argued from the fact that whenever values are found they stand in relation to the finding of them. It is to be argued only from the fact that whenever values are found they stand in relation to some desire or interest, the present finding being itself entirely negligible.”¹¹³ In other words, moral value and the good do not belong to things in themselves, but rather have a relation to human desires, needs, wishes, pleasures, and happiness, that is, an association with our subjective wishes. Thus is the question of moral good and evil in the social domain reduced to empirical psychology.

Modern Western ethics began its career by opposing psychologism. G. E. Moore was the first to propose the good as an indefinable objective quality. That is to say, the good cannot be defined by other things. Just as the quality “yellow” cannot be defined but only shown in perceptually intuited examples, so the good can only be directly intuited and not conceptually defined in independent terms. However, this intuitive good is not a natural quality and cannot be confirmed by mathematical analysis or empirical induction. We are left with nothing but an indefinable intuition, which seems to reduce the approach to the inner moral sense theory of Shaftesbury that Kant already criticized. What Moore began passed through the hands of A. J. Ayer, I. A. Richards, C. L. Stevenson, and R. M. Hare in the 1940s, when analytic moral theory was all the rage in philosophy, though it was already showing signs of decline. Its characteristic is to make a detailed analysis of moral language, emphasizing its formal difference from scientific language. Language has different uses and functions. One of them is the statement, which is appropriate for scientific and everyday use, while another is the imperative, commanding action, which is the logical form of moral language. The latter use is meaningful but not descriptive, effective yet not descriptive; it expresses a feeling or attitude, a command, a demand, a persuasion, a comment, an encouragement.

This approach divided into emotionalism (Stevenson), intuitionism (Ross, Prichard), and the doctrine of imperatives (Hare). Some of these philosophers regard the good as an objective quality, while others consider it a subjective attitude, but their general inclination is to stress the distinction between knowledge (science) and action (ethics). Therefore, it can be said that they actually return to Hume. Meanwhile, because their theory is not an empirical psychology, they can

¹¹¹Mill (2002).

¹¹²Perry (1912).

¹¹³Ibid., 335.

also be seen as having returned to Kant. Hare, who thinks that the consistency and universality of moral language regardless of content can be a moral standard, shares some of Kant's convictions, though while his method appears impartial and precise, it is really rather shallow. If Bentham and Mill restored French eudaimonism, then capitalistic moral theory since Moore is a revival of Kantianism, the most profound expression of which is in the work of John Rawls.

Wittgenstein's thought is more profound than all the theories mentioned above. He distinguished the empirical moral level (relative values) of everyday life from that of transcendental absolute value, maintaining that only the latter was the proper object of ethics. Transcendental absolute value is unspeakable and difficult to fathom, and is a sort of mystery unrestrained by social history. Indeed, for Wittgenstein the very existence of the world and life was mysterious. This conviction of Wittgenstein's exposes a problem, namely, that morality with its long history certainly appears to have some sort of human universality, yet also seems transcendent and mysterious. Ethical relativism disregards this absoluteness among its relativities, despite the fact that human beings have been drawing increasingly close to one another in accordance with an objective historical progress. The world increasingly becomes smaller, and cultures are increasingly merging. This is also the case with morality. The diverse lifestyles of the world's peoples are gradually assimilating in response to the objective developmental history of material civilization. This process of assimilation accumulates and preserves the material legacy of human civilization as a whole. Could it be possible that no accumulated and preserved spiritual norms and principles are common to human beings? Indeed, as we have pointed out in a previous chapter, moral norms and standards are always marked with the historical particularity of time and class, and keep pace with changes in society. There is no abstract universal morality, certainly not in terms of content. But while the particular content of morality can be diverse, it can also have a common or at least similar universal form, and this form is more than a superficial similarity of language.

Kant's imperatives, e.g., against lying, suicide, laziness, and selfishness, have been passed on for many generations and in many societies despite historically particular differences of social class. They seem to enjoy a kind of universality, but what kind? I believe it involves cultural-psychological structure. Although Kant and his commentators stress the non-psychological, transcendental metaphysical nature of morality (see Chap. 8), the psychology they have in mind is **empirical content** involving motives, pleasure, desires, wishes, and feelings; while in **the forms of cultural psychology**, we pay closer attention to moral norms as the structure of the will, and the sedimentation of reason as the important form of continuity. It might be possible that an individual experience of the permanence and absolute value of this cultural-psychological form was what Wittgenstein felt as a mystery. It might also be possible that it is the formally universal categorical imperative that Kant had in mind—that is, the subjective cultural construction of the will and the historical sedimentation of reason—which is the proper understanding of human nature and the meaning of the slogan that the human being makes itself.

The social theories of the working class movement also manifest the influence of Kantianism in the nineteenth century. Neo-Kantianism had become an ideological trend ever since the 1870s, when Otto Liebmann shouted his slogan, “Back to Kant!” This return to Kant was mainly effective in reviving Kant’s epistemology, as for example in the theories of Hermann Helmholtz and Hermann Cohen. Cohen regarded Kant as the true founder of German socialism, and thought that the categorical imperative could be realized only in a socialistic society that had eliminated exploitation and valued the human being as an end and never as a mere means. The leaders of the Second International also thought that a Social Democratic Party would fulfill Kant’s ethical ideal. They saw socialism as the moral ideal and exploitation as a moral evil. Max Adler, a representative of the Austrian school of Marxism, viewed Kant’s philosophy as the origin of modern socialism, and regarded socialism as a moral teaching whose first lessons concerned the need for an economic program that expressed the moral law.

These thinkers and their movements drew revolutionary nourishment from Kant’s conception of faith. Eduard Bernstein, one of the representatives of the Second International, argued that “Social Democracy needs a Kant to judge the received judgment and subject it to the most trenchant criticism, to show where its apparent materialism is the highest and therefore most easily misleading ideology, and to show contempt for the ideal and the magnifying of material factors until they become omnipotent forces of evolution is a self-deception.”¹¹⁴ He found that “the level of economic development reached today leaves ideological and especially ethical factors greater scope for independent activity than was formerly the case.”¹¹⁵ While he would not, as he says, “make the victory of socialism depend on its ‘immanent economic necessity.’ On the contrary, I hold that it is neither possible nor necessary to give the victory of socialism a purely materialistic basis.”¹¹⁶

Kautsky and Plekhanov criticized Bernstein’s theory and developed a fatalistic objectivism. They maintained that the moral ideals and feelings of the proletariat “have nothing do to with scientific socialism.” Kautsky argued that “scientific socialism...is the scientific examination of the laws of the development and movement of the social organism [...] Thus even with Marx occasionally in his scientific research there breaks through the influence of a moral ideal. But he always endeavors rightly to banish it where he can. Because the moral ideal becomes a source of error in science, when it takes it on itself to point out its aims.

Science has only to do with the recognition of the necessary.”¹¹⁷ However, this at times exaggerated scientific emphasis often slides into positivism. Kautsky claimed that he was not good at philosophy, and wanted to replace Marxism with Darwinism. He resorted to the “social instinct” of animals to explain human

¹¹⁴*The Preconditions for Socialism and the Tasks of Social Democracy* (Cambridge: Cambridge University Press, 1993), 209.

¹¹⁵*Ibid.*, 19–20.

¹¹⁶*Ibid.*

¹¹⁷Kautsky and Askew (1909).

morality. Kautsky wrote that herd animals already have feelings, volition, and actions that are entirely identical with the moral feelings, volition, and actions that humankind is acknowledged to possess.¹¹⁸ Criticizing Kant, he inquired about where the sense of duty that drives hens and chimpanzees to risk their own lives to protect their young and the sense of duty that impels the stallion to fight with the wolf in wilderness in protection of its herd come from.¹¹⁹ Kautsky held that the sense of duty springs from “social instinct.” He thus completely eliminated the essential feature of human morality, which is conscious autonomy, and turned it into an instinct also possessed by animals. Despite the pretense of a critical appropriation of Kantianism, this scientific doctrine of social instinct actually regresses to the philosophical state before Kant. Although human morality may possibly have a biological, evolutionary origin, the conscious action of the subject’s will is very different from animal instinct. It is cultivated and formed by history (in terms of the human being as a whole) and education (in terms of the individual), rather than being the product of natural evolution.

The connection between Kantian ethics and concrete reality can seem remote, and its complicated history in later philosophy may seem confusing. In terms of the questions they raised and their specific doctrines, many of these theories have not surpassed the scope of Kant’s philosophy. Therefore, in my view, Kant’s ethics no less than his epistemology remains valuable for our time. The problem is that while his work can lead to valuable new theories such as that of Rawls, the theory of the will, and moralism, it can also reinforce the grave defects of subjectivism in some lines of Marxist social thought, including the effort to set Marx in opposition to Engels, or to regard Marx’s theory as a structuralist, pluralistic, or subjective dialectics of practice while dismissing the doctrine of Engels as evolutionary positivism and economic determinism. The early Marx becomes the antagonist of the later Marx who is denigrated as a positivist, and is unlike the early Marx, who was truly a materialist dialectician and humanitarian. These interpretations propose a Marx who was opposed to Engels’ historical determinism,¹²⁰ in the belief that it would defeat revolutionary activity and make a mockery of freedom to emphasize the determination of history through the internal conflicts of the modes of production. The human being itself would be overlooked, replaced by ideas of mechanism, fatalism, and positivism rather than dialectical materialism. However, what these critics dismiss as dialectics is, as a matter of fact, the practical activity of criticism. Worst of all, they do not objectively analyze and strictly define this critical activity. As a result, for all their practical activity, they overlooked the requirement that criticism be soundly based on an analysis of social production. Accordingly, dialectics becomes a mere subjectivism.

¹¹⁸Kautsky, *Historical Materialism* [trans. Cannot locate the quot].

¹¹⁹Ibid., vol. 1, book 3, Chap. 9 [trans. Cannot locate the quot].

¹²⁰The American socialist Alvin W. Gouldner went even further, proposing new interpretations of two doctrines of Marxism, one the determinism of scientific Marxism, the other the critical Marxism of the theory of practice, with Engels the founder of the former, and Marx the latter.

Some schools of the theory of practice hold that “practice” refers to to all critical activities, i.e., dialectics. They stress individualism rather than the progress of material life, without investigating the origin of human alienation from the perspective of historical practice. They instead subjectively demand individual freedom and liberation, substitute cultural criticism for material practice, and emphasize the superiority of ideology over realistic economic reform. This trend of individualism, voluntarism, and anti-historicism, from Lukacs¹²¹ to Marcuse and Sartre,¹²² was all the rage for a time in the sixties and seventies of the twentieth century. It shared features with the student movement of the time, which was a violent resistance against the alienating phenomena of capitalistic rule in the twentieth century, as well as a romantic protest against the then galloping development of scientific knowledge. Advocates of these theories ignored the fact that human practice must first of all be a productive activity in a certain social context. Only from this practical foundation could the rest spring up. Therefore, one ought to first scientifically examine the objective causality of this foundation. However, such an examination is exactly the historical materialism which is loathed most of all by proponents of the “theory of practice.” Such are the circumstances abroad. At home [in China], the left-leaning trend of thought, from the late 1950s to the Cultural Revolution, reached its highest form, with slogans such as “The more we dare, the more the land will yield” (which was popular during the Great Leap Forward in 1958) and “Revolution erupts from the depths of the soul” (popular during the

¹²¹Lukacs himself acknowledged the subjectivistic errors he made in his early years (see his Introduction to *History and Class Consciousness*, 1967). His erroneous theory is nonetheless revered as a classic by many people, and there are indeed many important and well-founded arguments in his great work. In my opinion, it is the late Lukacs, the author of the *Ontology of Social Being*, who is most worthy of attention and study. People criticize him for turning back to the “normative” line of Marx-Engels-Lenin in this book. But I think that he rightly stresses the making of tools and physical labor, and raises some important questions concerning the value of use and purpose. These views, which are completely different from his early emphasis on subjectivity, testify that this extraordinary thinker reached his final philosophical conclusion only after long years of accumulating personal experience. Interestingly, while the discussions in my book on the importance of making tools and productive labor, anthropological ontology, and the ontology of social being have much in common with the views of late Lukacs (although I was not acquainted with Lukacs’s later works at the time of writing), there are many differences too. For instance, the question I raise concerning subjective cultural and psychological structure and historical sedimentation. I leave it to interested readers to analyze the similarities and differences between us.

¹²²In the *Critique of Dialectical Reason*, Sartre states that “if we do not wish the dialectic to become a divine law again, a metaphysical fate, it must proceed from individuals and not from some kind of supra-individual ensemble.” Here, dialectic is equated with an “essential intuition of individual practice,” the “individual objectivize itself in creating life,” and so on. Although he proposes to replace “rigid, non-individual, and inhuman” Marxism with “the particular is history and *praxis* is dialectics,” the richness and particularity of human existence vanishes from his account, which actually converges on the capitalistic thesis of Karl Popper. In *The Poverty of Historicism* and *The Open Society and Its Enemies*, Popper opposes Marx’s historical determinism, stresses that there is no determined historical laws to which human beings must conform, and says that Marx’s criticism of capitalism is merely a moral criticism.

Cultural Revolution), and all sort of views, theories, and actions that laid emphasis on cultural criticism, class consciousness, spiritual pursuit, and morality. All these ideas are rather close to Marxist trends of thought in the West. Therefore one cannot be surprised when Western scholars compare Mao's doctrine developed in his late years with that of Antonio Gramsci, despite the differences of their social conditions, or that some Western Marxists highly praise our Cultural Revolution. Their general theoretical tendencies are comparable and display the same subjective moral fantasy that is a sort of distorted Kantianism.

Western Marxism stresses totality, and focuses on a thorough criticism and negation of modern capitalistic society. Some people hold that the critique of daily life is the key to the reformation of society, while they also hold that ideas take precedence, and that cultural revolution and theoretical criticism are more important than economic reform. These people, when talking philosophy, are fond of employing the term *praxis* to refer to all human activities. It is precisely because of this, as I have repeatedly pointed out, that we must refer to the making and use of tools to define the basic meaning of practice, so as to unify the theory of practice with historical materialism.

I think that this was Engels' contribution. Marx proceeded from philosophy to historical materialism, whereas Engels reached the same destination from the study of economics.¹²³ It is not surprising that their theoretical bent should differ since their dispositions, characters, academic training, interests, and talents were very different. However, it would be inconsistent with historical truth if the differences were exaggerated, because they agreed with each other in their historical materialism. Engels contributed much theoretical thought that Marx praised.

Engels later defined practice as "experiment and industry," and even wrote the essay on "The Part Played by Labour in the Transition from Ape to Man." For this reason I would say that the basic concept of Marxist philosophy is practice rather than *praxis*, for the unity of the theory of practice and historical materialism is found nowhere else (see Chap. 5). Some Western Marxists separate Marx from Engels, and the early Marx from the later Marx. However, these interpretations isolate the theory of practice from historical materialism. This bitter lesson should all the more be borne in the Chinese mind, that historical materialism is the theory of practice and that these two philosophical ideas must not be severed. What would be the consequence of such a severance? A theory of practice deprived of historical materialism often turns into subjective voluntarism. We hold dear the theory of practice in China, and the Great Leap Forward of 1958 was indeed great practice. However, the Leap was against historical law and caused the death of thousands and thousands of innocent people. A philosophical proposal that appears far removed from reality can actually be a matter of people's life and death. The Cultural Revolution is another tragic instance of this same point.

Kautsky's Darwinism, Plekhanov's French materialism, and the Western Marxism of the present day have their various approaches to Marxism, but to one

¹²³See A. Cornu, *Karl Marx et Friedrich Engels*, vol. 1.

degree or another they all bluntly oppose the objective history of society to the free activities of subjective practice that they expect to purposefully and consciously change the world. None of them have made any investigation of the complex dialectical relationship between the objective progress of history, which is independent of the subjective will of human beings, and the millions of individuals who freely create history.

From the point of view of objective progress, all human activities belong to the category of causality and have their specific necessity. Nevertheless, from a subjective point of view, it is only by fully realizing morality that we can effectively and consciously comprehend and reform the world. The choices one makes can be predicted and explained by the law of causality.

However, it is no less important to remember that with moral discipline the agent has the freedom to purposefully and consciously obey or resist what causality determines. Accordingly, **human beings actively create their history and take moral responsibility** for their choices and decisions.

Kant raised the contradictory relationship between the subject and the object, and stressed the absolute value of subjective morality as the central theme of his ethics. Seen from the point of view of Marxist philosophy, a society is not merely an object but also a subject, and not merely a subject but also an object. Hence, neither thoroughgoing objectivism nor subjectivism are correct, nor is it right to oppose historical materialism to a theory of practice that emphasizes the subject's spontaneous activities. While history has its contingencies (necessity without contingency would be an inexplicable mystery), in surveying its totality, particularly from the perspective of economic development, an objective progress can be discerned. To discuss practice in isolation from historical progress is to indulge in empty talk and exalt a merely empirical psychology, as if psychology rather than economy (modes and relations of production) were the impetus of history. Historical materialism unveils the objective history of society, in particular, that of economic development. Bringing in the psychological dimension of subjective activity does not diminish but rather deepens its significance, since only on this foundation can freedom and necessity, and subjective activity and objective history be unified. Freedom would no longer be Kant's causality transcending moral will, nor Hegel's absolute knowledge of causal necessity. Only self-conscious action charged with historical responsibility is true ethical freedom, and that is what Marx emphasizes as the unity of subjective spontaneity and historical objectivity, of the revolutionary and the scientific, and of lofty inspiration and hard-headed practicality.

Kant deserves praise for an a priori cultural-psychological form of the sedimentation of reason that is universal, sublime, and absolute. His moral theory is rooted in actual history, and shows his awareness of history's largest vistas. The tragedies inflicted by subjectivism, moralism, and voluntarism (in China, at least) ought to be reasonably evaluated. Earlier I posed the question of whether we should have Kant or Hegel. I hold that, after having dispelled these subjectivistic trends, we still need Kantian ethics and the universality and idealism they promote. This universality and idealism are based on experience and are applicable and knowable,

rather than being mere transcendental illusions or a utopianism of the Absolute Idea. The universals of Kant's proposed republic, which is based on sensible experience, respect for the individual, human rights, and the ideal of world peace, are more important than Hegel's notion, which he proposed, of the Prussian state as the absolute realization of history.

A question that deserves further discussion is what we should make of the way in which German philosophy after Kant and Goethe—from Fichte, Schelling, and Hegel to Nietzsche, Weber, Heidegger, and Schmitt, and including various schools of romanticism that were glorious for a time—while having made great achievements, has also taken an anti-rational path of madness in the course of Germany's transformation from undeveloped, weak, and scattered states to a unified, strong, and prosperous nation. Hitler's ascendance and his nationwide support (including that of a great many of the intelligentsia, such as Heidegger, Heisenberg, and Schmitt) were not accidental. I think it is a grave lesson to be learned from the history of German philosophy. By contrast to these post-Kantian developments, Kant's ethics and political philosophy are healthier in their emphases on engaging with empirical epistemology and promoting the freedom of the individual and the humane ideal of perpetual peace. These thoughts should be carried forward on the ground of the theory of practice, namely, anthropological, historical ontology.¹²⁴

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¹²⁴The theory of practice, or historical materialism, has its scientific aspect in general sociology, when it examines issues concerning forces of production, relations of production, economic base and superstructure, and the state, culture, and family. Corresponding to the theory of practice is the philosophical aspect of historical materialism, that is, the advancement of epistemology, ethics, and aesthetics, including the theory of techno-social structure (the objective aspect of anthropological subjectivity) and cultural-psychological structure (the subjective aspect of anthropological subjectivity) with the principles of historical materialism running through them.

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Chapter 10

Aesthetics and Teleology



10.1 Critique of Judgment

Epistemology (truth) and ethics (good) constitute the two main aspects of Kant's philosophy. The former deals with the phenomena of natural causality, while the later deals with the noumena of free will. Phenomena and noumena are, in fact, necessity and freedom, and knowledge and morality in Kant's philosophy, and constantly engage in confrontation. While theoretical reason (cognition) is unable to reach the moral realm, practical reason (ethics) can act in the cognitive realm. Kant is compelled to seek a mediation between the two branches of his system in order to elucidate their interaction. The search for this medium forms the capstone of the critical philosophy. In Chap. 9, we mentioned his declaration that "Two things fill the mind with ever new and increasing admiration and awe, the more often and steadily we reflect upon them: the starry heavens above me and the moral law within me." Nevertheless, the unification of the realms of nature and freedom are only first explained in the *Critique of Judgment*.

Kant states in the introduction to the *Critique of Judgment* that: "Here, then, I end my whole critical undertaking."¹ Compared to the abundant scholarship on the first two *Critiques*, very few studies have appeared on the third *Critique*, despite its importance to the whole system of Kant's philosophy. Mediating between Rousseau and Hegel, the heart, the starting point, and indeed the foundation of the whole system of Kant's philosophy is the social man, though his account differs from that of Rousseau, Spinoza, French materialism, and all the more from the ideas of the medieval period. Kant's idea of social man also differs from that of Hegel, who submerges the individual human being in a system of absolute idealism. Kant's human has sociality (albeit abstract) as its transcendental essence, even while remaining a natural, sensuous individual (see Chap. 9). In Kant's epistemology, precisely because human beings have such an existence, they possess only a sen-

¹Kant, and J. H. Bernard, *Critique of Judgment*, 6.

suous, not an intellectual, intuition. This raises the fundamental question about where the universal necessity of knowledge comes from. Similarly, in Kant's ethics, precisely because the human being is such a sensuous being, it is not angelic but on the contrary driven by desire, which raises the fundamental question of the human's obligation to obey moral laws. What Kant discussed in dealing with the problem of the relation between reason and the senses is, in fact, the relation between totality and the individual, or, in other words, society (universal necessity) and nature (the sensible individual). When Kant undertakes to mediate the blunt opposition between cognition and morality, what he actually intends to do is resolve this critical relation. The first two *Critiques* and especially the question of their relation to each other puts this problem at the forefront, compelling Kant to write the third *Critique*. In this work, the central position of the human being is more saliently and profoundly presented. The answer to the question "What is the human being?" which Kant proposed in his later years, is to be found in this book.

The ultimate approach to resolving the confrontation between nature and society, cognition and morality, and sense and reason, and finally to unify them all is to discern a transition between them and locate a bridge to effect their mediation. The transition from the first to the second term in each case is a historical development process from the natural to the moral human being. This bridge or medium for the unification of these opposites is the power of judgment.

Judgment is not an autonomous faculty. Unlike understanding, it is not a source of concepts; and unlike reason, it provides no ideas. It is merely a psychological function that seeks a relation between the universal and the particular. Kant further distinguishes two kinds of judgment. One of these is explained in the *Critique of Pure Reason*, and is a faculty that judges whether a particular thing falls under a given universal law or not. Kant calls this determinant judgment. He often remarks that making such judgments is a sort of innate capacity that can only be cultivated, not taught. One often sees learned scholars who have a thorough understanding of abstract universal laws (which can be taught), yet are incapable of applying them to particular circumstances and judging whether such and such a thing falls under such and such a law. That means they lack determinant judgment. Determinant judgment can be trained and cultivated through practice with examples.²

The other sort of judgment is called reflective judgment. The particulars in this case are determined and the task of judgment is to seek out the universal. This is the sort of judgment involved in an aesthetic judgment of beauty or in a teleological judgment of purpose. Reflective judgment does not judge particular cases on the ground of universal concepts or laws; instead, it moves from particular cases and feelings in search of the universal. The difference between reflective and determinant judgments is also the difference between aesthetic taste or feeling and scientific cognition.³ Reflective judgment is a natural endowment and training is of little help. Kant states, "the power of judgment is of two kinds: the determinative or the

²Kant, and Thomas Kingsmill Abbott, *Critique of Pure Reason*, A134/B173.

³This belongs to the discussion on imagery thinking, which I discuss later.

reflective power of judgment. The former goes from the universal to the particular, the second from the particular to the universal. The latter has only subjective validity, for the universal to which it proceeds from the particular is only empirical universality—a mere analogue of the logical.”⁴ Kant believes that reflective judgment can communicate understanding (i.e., knowledge) and reason (i.e., morality). It possesses qualities of understanding as well as those of reason, yet is identical with neither.

At the beginning of the *Critique of Judgment*, he explains the importance of this book in his philosophy by summarizing his whole system:

Now even if an immeasurable gulf is fixed between the sensible realm of the concept of nature and the supersensible realm of the concept of freedom, so that no transition is possible from the first to the second (by means of the theoretical use of reason), just as if they were two different worlds of which the first could have no influence upon the second, yet the second is meant to have an influence upon the first. The concept of freedom is meant to actualise in the world of sense the purpose proposed by its laws, and consequently nature must be so thought that the conformity to law of its form, at least harmonises with the possibility of the purposes to be effected in it according to laws of freedom.—There must, therefore, be a ground of the unity of the supersensible, which lies at the ground of nature, with that which the concept of freedom practically contains; and the concept of this ground, although it does not attain either theoretically or practically to a knowledge of the same, and hence has no peculiar realm, nevertheless makes possible the transition from the mode of thought according to the principles of the one to that according to the principles of the other.⁵

The *Critique of Pure Reason* investigates transcendental categories and principles of understanding, including their constitutive and regulative functions, while the *Critique of Practical Reason* investigates transcendental principles of reason in practice, that is, moral laws. So what transcendental principles of reflective judgment does the *Critique of Judgment* intend to investigate? Kant’s answer is the formal purposiveness of nature.

This transcendental concept of a purposiveness of nature is neither a natural concept nor a concept of freedom, because it ascribes nothing to the object (of nature), but only represents the peculiar way in which we must proceed in reflection upon the objects of nature in reference to a thoroughly connected experience, and is consequently a subjective principle (maxim) of the judgment.⁶

Moreover:

Although, therefore, the understanding can determine nothing a priori in respect of objects, it must, in order to trace out these empirical so-called laws, place at the ground of all reflection upon objects an a priori principle, viz. that a cognizable order of nature is possible in accordance with these laws.⁷

⁴Kant, and J. Michael Young, *Lectures on Logic*, 625.

⁵Kant, and J. H. Bernard, *Critique of Judgment*, 12.

⁶*Ibid.*, 20.

⁷*Ibid.*, 21.

Nature would merely be an infinite quantitative accumulation of objects linked by mechanical causality if we had to rely solely on the categories of understanding to cognize nature. To fully understand nature we need to grasp the internal relation among its parts, and between its parts and the whole. This requires grasping an interaction among causalities. Causes not only determine effects, they are also determined by effects, and to grasp this interrelation we require the idea of a purpose. The concept of the purposiveness of nature is indispensable in order to comprehend the nature of living things, animals and plants, and to grasp the whole natural world as an organic system. However, the purposiveness of nature, appreciating nature as an organic system, cannot be established by empirical evidence. Formal purposiveness is not an objective quality of natural objects; instead, it is a subjective transcendental principle that we must adopt as a prerequisite for cognizing nature. This formal purposiveness of nature is not a principle that belongs to nature itself, nor a sort of moral law that determines human actions, but rather a requisite regulative principle for investigating nature and unifying experience. It belongs neither to understanding (knowledge), nor to reason (morality), but is merely a transcendental principle of reflective judgment. Considered as the transcendental regulative principle mediating between knowledge and morality, the formal purposiveness of nature mediates between phenomena and noumena, or between the nature cognized in science and the moral laws of practice. Kant holds that, in aesthetics and arts, phenomena (nature) reveal that the noumenal significance of nature is to serve the moral perfection of the human being; and beauty becomes what he calls the symbol of morality, whereas in nature, the whole of nature is for the existence of the moral human.

Kant distinguishes four types of teleological judgment. First, formal and subjective judgment, such as aesthetic judgment; second, formal and objective judgment, such as certain mathematical propositions, e.g., circles in contrast to triangles; third, material and subjective judgment, such as the various goals a person might have; fourth, material and objective judgment, which concerns the purpose of nature. He also distinguishes between internal and external purpose. External purpose is a thing's purposive relation to something else lying external to it, while internal purpose is of the thing itself and its own ends. This internal purpose is both cause and effect, an organic relation of parts and wholes, where all the parts are interdependent, and mutually relate as cause and effect. This is the purpose characteristic of organized beings, living systems that constantly adjust themselves to maintain their adaptation to their environment. A work of fine art also possesses this internal, non-mechanical purpose.

With the term "purpose," Kant refers mainly to internal purpose or what he calls an organized being, an organic system. Hence, among the four categories of teleological judgment, the first and fourth, namely, the subjective purpose of aesthetic judgment and the objective purpose of organized beings, make the link between sensuous nature and rational freedom. Kant therefore divides his *Critique of Judgment* into two parts, namely, a Critique of Aesthetic Judgment and a Critique of Teleological Judgment. The first part on aesthetic judgment deals with the forms of objects that have the power to stimulate our cognitive faculties and arouse a

certain purposive pleasure. However, this purposiveness of the beautiful is without any specific objective purpose. Kant calls it formal or subjective purpose. The second main division of the third *Critique* concerns purposive judgment applied to the structure and existence of naturally organized beings (animals and plants). This is an objective purposiveness. So the first sort of judgment, corresponding to the first main division of the work, concerns an aesthetic (emotional) presentation of purposiveness.⁸ The second sort is a logical (conceptual) presentation of purposiveness in naturally organized (living) beings. To describe something in nature as objectively purposive does not mean that the object itself does indeed have a purpose of its own or in itself. The description is regulative and methodological. We consider the thing *as if* it had a purpose, and relentlessly pursue an understanding of the mutual causality of its parts. Nor is subjective purposiveness similar to the subjective judgment of perception in epistemology. It concerns merely individual subjective feelings, though it demands a certain universal necessity for such feelings, which Kant believes possess a peculiar universality that does not involve any concept or the existence of objective purposes, but only the form of objects and subjective feelings (pleasant or unpleasant). Such reflective judgment is aesthetic judgment.

The critique of aesthetic judgment, the theme of the first part of the *Critique of Judgment*, explicates the middle link among the three psychological functions of understanding, feeling, and the will, and forms the bridge between the first two *Critiques*. This part of the book also has its own relatively independent content and value. In it, Kant raises and resolves a series of fundamental questions concerning philosophical aesthetics. Although Kant's appreciation of specific works of fine art might not be very insightful,⁹ his theory nevertheless surpasses that of more fastidious connoisseurs in its capacity to accurately comprehend the formal features of aesthetic experience. The *Critique of Judgment* has been influential in modern European literary criticism, and has become a very important work in philosophical aesthetics, surpassing even Hegel's *Philosophy of Fine Art*.

⁸Kant originally was opposed to using the term "aesthetic" for matters of taste (Baumgarten first used the term in this sense). For reference, see the *Critique of Pure Reason*, first edition. In the second edition he has acquiesced to this use, with the reservation that it is partially transcendental and partially psychological. At the time of writing the *Critique of Judgment*, Kant wholeheartedly adopted this use.

⁹The works of art referred to in the *Critique of Judgment* are rather ordinary. This weakness of Kant's has been ridiculed by many latecomers. Some have remarked that Kant showed the wisdom of self-knowledge when he declined the invitation to lecture on poetics at the University of Berlin. However, this sort of remark is quite one-sided.

10.2 Analytic of the Beautiful

One of the essential characteristics of Kant's philosophy is to analyze very precisely those features of empirical experience that direct our attention to the essential problems. For example, in epistemology, Kant considers our experience of geometry and the historical accomplishment of Newton's three laws of motion, and poses his famous question about the possibility of synthetic judgments a priori. In ethics, he begins with the empirical features of moral action, especially its difference from action in pursuit of happiness, and discovers pure practical reason. And now in aesthetics, Kant begins with pleasure or aesthetic feeling and proceeds to his intricate and insightful analysis of the beautiful. There are many psychological elements in Kant's philosophical system and all the more so in his analysis of aesthetic judgment. While he stresses the difference between his analytic of the beautiful and empirical psychology, nonetheless his analysis is in large part a theory of aesthetic psychology.

What Kant calls aesthetic judgment is what we more commonly call appreciation, appraisal, or taste. He says, "the judgment of taste is aesthetical."¹⁰ Since he also thinks that such judgments do, in a complicated way, involve the understanding and its categories, he thinks it is appropriate to analyze judgments of beauty through the four categories of understanding that he articulated in his epistemology, namely, quantity, quality, relation, and modality.

Accordingly, he divides his analytic of taste, or judgments of beauty, into four moments. The first moment is quality, and its principle states: "Taste is the faculty of judging of an object or a method of representing it by an entirely disinterested satisfaction or dissatisfaction. The object of such satisfaction is called beautiful."¹¹ The second moment of a judgment of beauty is quantity: "The beautiful is that which pleases universally, without a concept."¹² The third moment is relation: "Beauty is the form of the purposiveness of an object, so far as this is perceived in it without any representation of a purpose."¹³ The fourth moment is modality: "The beautiful is that which without any concept is cognized as the object of a necessary satisfaction."¹⁴

The first moment of quality mainly distinguishes aesthetic satisfaction from other kinds. Kant emphasizes the difference between aesthetic satisfaction in the judgment of taste from the satisfaction that arises from the gratification of animal desires and appetites, such as for food and drink. Aesthetic satisfaction also differs from the spiritual satisfaction one feels after having done a good deed, which depends on moral principles. Both physiological and moral satisfactions are connected with the existence of an object, whereas aesthetic satisfaction is related to the

¹⁰Kant, and J. H. Bernard, *Critique of Judgment*, 37.

¹¹Ibid., 45.

¹²Ibid., 54.

¹³Ibid., 73.

¹⁴Ibid., 77.

form of an object. One takes satisfaction in the mere perceived form of an object, rather than its actual existence. Thus Kant holds that aesthetic feeling and judgment transcend all interests, including moral and physiological ones. Aesthetic pleasure is a disinterested and free pleasure in the mere form of an object. For instance, the pleasure one feels in appreciating a work of art is fundamentally different from the pleasure one might feel in actually possessing it. Only the former is properly aesthetic pleasure. In the same way, arts that give pleasure by satisfying appetitive desires (such as cooking) differ from the fine arts, which are a source of genuinely aesthetic pleasure.

According to Kant's philosophy, only a person who is both sensuous and rational can enjoy aesthetic pleasure. Therefore, it is evident that this pleasure expresses the existential nature of man as a unity of sensuality and reason. Since an aesthetic judgment involves the form of an object, with its sensual pleasure aroused by this form and not induced by rational volition of the subject, these judgments must be associated with some sensible object. On the other hand, as the aesthetic judgment relates solely to the appearance or sensible form of an object and has nothing to do with its actual existence, it does not depend on a connection with subjective desire, but appeals uniquely to the rationality of the subject. Aesthetic feeling is therefore a sensible pleasure related to reason. Kant explains:

The Pleasant, the Beautiful, and the Good, designate then, three different relations of representations to the feeling of pleasure and pain, in reference to which we distinguish from each other objects or methods of representing them. [...] Pleasantness concerns irrational animals also; but beauty only concerns men, i.e. animal, but still rational, beings—not merely *quâ* rational (e.g., spirits), but *quâ* animal also; and the good concerns every rational being in general.¹⁵

An object of inclination, and one that is proposed to our desire by a law of reason, leave us no freedom in forming for ourselves anywhere an object of pleasure.¹⁶

Appetitive pleasure and moral good are determined and imposed by the existence of an object, whether the objects of eating or drinking or of moral actions, and the existence of a subject, whether the biological existence of a sensuous being or the moral action of a rational being.

Aesthetic pleasure involves only the form of an object, and presupposes the subject's rational capacity for disinterested freedom.¹⁷ That is to say, the aesthetic judgment of taste relates solely to the form of the object and not to its actual existence. What Kant expounds in the analytic of the beautiful is in fact the

¹⁵Ibid., §5, 44.

¹⁶Ibid.

¹⁷This is why some scholars hold that Kant's aesthetic judgment is not a judgment about any object, but merely about some subjective feelings (see H. W. Cassier, *A Commentary on Kant's Critique of Judgment*); or that the object of taste is merely a grammatical object rather than an object for taste to judge (see S. T. Petock, *Kant, Beauty and the Object of Taste*). These criticisms are not justified, because aesthetic pleasure arises from a coordination between imagination and understanding, which must be engendered by the form of an external object.

fundamental question concerning human beings and nature that we touched on at the beginning of this book. Since this question arises from the unity-in-opposition of human beings and nature, or reason as the internal subject and nature as the external object of the senses, in this respect his treatment of the question belongs both to the theory of aesthetics and to general philosophy.

The structure of the first two *Critiques* is in accordance with the order of categories listed in the *Analytic*, starting with the category of quantity and moving on to that of quality. In the third *Critique*, however, Kant immediately engages with the category of quality. Commentaries have not adequately elucidated the reason why Kant takes this approach. It seems to me that the importance of the question itself demands Kant to uncharacteristically break with his usual approach. Fundamentally, it is also because of this reason that the *Critique of Judgment* has been more influential than Hegel's *Philosophy of Fine Art*. Nonetheless, Kant's undertaking to unify human beings and nature, reason and senses, morality and cognition within the confines of conventional aesthetics is not feasible. We will return to this discussion later.

The second moment of quantity is mainly an explanation of why beauty can universally arouse pleasure without relying on concepts. Aesthetic judgments of taste demand universal validity no less than cognitive judgments do. However, the universal validity of a logical cognition is objective, whereas that of the judgment of taste is subjective. This radically distinguishes a properly aesthetic judgment of taste from a subjective taste of sensible experience, which commands no universal validity. For instance, you might prefer apples to pears while I prefer pears to apples. Our diverse tastes do not cause dispute and people typically do not demand agreement on such matters. No one would require your preference in such cases to be universally valid. However, that does not hold for a properly aesthetic judgment of taste. A judgment of beauty demands the same universal validity as cognitive judgments of truth do. No rational argument can be made concerning the taste of food, whereas there is good and bad aesthetic taste (although still without the possibility of rational argument). Although aesthetic taste is singular ("In respect of logical quantity all judgments of taste are singular judgments."¹⁸), it has a special sort of universality ("The judgment of taste carries with it an aesthetical quantity of universality, i.e., of validity for everyone."¹⁹). This is why Kant calls aesthetic taste *judgment*, and this usage represents a singular development in the history of philosophical aesthetics.

The crucial question in regard to taste concerns which of the two, judging the object or feeling the pleasure, comes first. Does judgment arise from pleasure, or vice versa? Kant states that "the solution of this question is the key to the *Critique of Taste*."²⁰ If judgment arises from pleasure, then the judgment would only be individual, empirical, and biological, and the feeling of pleasure would depend on

¹⁸Kant, and J. H. Bernard, *Critique of Judgment*, §8, 49.

¹⁹Ibid.

²⁰Ibid., §9, 51.

the disposition of our organs. For instance, to regard an object as delicious and in that sense “tasty” is not an aesthetic judgment of taste since it concerns nothing but a sensuous pleasure arising from the gratification of appetite. Only a judgment capable of arousing pleasure universally, for all, can be called an aesthetic judgment. Aesthetic universality arises only from judgment, because pleasure, as a subjective psychological feeling, cannot guarantee universality.

The universality of aesthetic judgment does, however, differ from logical judgment in not depending solely on concepts. For instance, when a person feels beauty (e.g., in perceiving a flower), he makes an aesthetic judgment, “this flower is beautiful.” This judgment appears to resemble a logical judgment, as if he cognizes beauty as an objective quality of the flower, applies a concept of the understanding, and demands that others agree with him, just as one would in the case of cognitive judgment. However, such a demand is out of place. Aesthetic judgment concerns a merely subjective pleasure rather than logical knowledge. You cannot compel another person to feel that the flower is beautiful. Even if you try to persuade him with a detailed description, or even if he agrees with your opinion, it is still up to him to feel the beauty or not. It is evident that one cannot persuade another person to feel beauty by means of reason. Therefore, although an aesthetic judgment demands universality, the universality of everyone’s judging the flower to be beautiful is fundamentally different from the universality of objective cognition in a logical judgment. Logical knowledge is purely a function of the understanding, and is determined by concepts, whereas aesthetic judgment, although demanding universal validity, **remains a subjective feeling not determined by concepts.** Aesthetic judgment cannot be described as the mere application of concepts, but rather involves the coordination of many psychological functions. Kant explains, “the judgment is called aesthetic just because its determining ground is not a concept, but the feeling (of internal sense) of that harmony in the play of the mental powers, so far as it can be felt in sensation.”²¹ Additionally, “the cognitive powers, which are involved by this representation, are here in free play, because no determinate concept limits them to a particular rule of cognition. Hence, the state of mind in this representation must be a feeling of the free play of the representative powers in a given representation with reference to a cognition in general.”²² In other words, aesthetic judgment differs from logical judgment in that the latter employs definitive categories of understanding to confine and regulate the imagination and to make it comply with a concept in order to produce the abstract knowledge of understanding.

In aesthetic judgment, imagination and understanding are in a harmonious and free play.

Their free play transcends sensibility yet cannot be separated from it, and moves toward concepts, yet without attaining to a definitive concept. This is the cause of the special pleasure of beauty, such that “only where the Imagination in its freedom

²¹Ibid., §15, 65.

²²Ibid., §9, 52.

awakens the understanding, and is put by it into regular play without the aid of concepts, does the representation communicate itself not as a thought but as an internal feeling of a purposive state of the mind.”²³ It is evident that, as Kant describes it, aesthetic pleasure is a product of our mental powers (chiefly imagination and understanding) when they enter into the mutual relation of a free and harmonious state of mind. In this case, the relation between these two powers is not rigid, but rather it is in an uncertain, wavering, almost oscillating movement. The particular meaning of the so-called reflective judgment is found here. It is precisely for this reason that aesthetic pleasure differs from any other sensuous pleasure, which does not contain a judgment, as well as from any conceptual knowledge, since this kind of knowledge is not reflective judgment. The statement “This flower is fragrant” is a judgment of the sense organs; the statement “This flower is beautiful” is an aesthetic judgment of taste; and the statement “This flower is a plant” is a logical judgment and is objectively universal. In other words, the first statement concerns sensuous pleasure, the second aesthetic taste, and the third logical cognition.

I mentioned that the “quality” of aesthetic taste is, as Kant says, “without interest, yet it gives pleasure,” while the quantity is “without concept, yet it has universality.” Generally speaking, the feeling of pleasure is always connected with our interests, while universality is connected with a concept. However, aesthetics is precisely the opposite in both cases. Thus it reveals the particularity of the psychological states involved. If it can be said that “quality” reveals the relation between human beings and nature, then “quantity” reveals the psychological aspect of the same relation. The former is more of a purely philosophical matter, while the latter is psychological. We therefore have to ask about the mental powers that aesthetic judgments require. Their particularity constitutes the heart and soul of the creation and appreciation of fine art. Ancient Chinese literary theory also held that the relation between imagination and understanding in fine art is an uncertain and free play. For instance, *The Poetics of Cang Lang* tells us that in appreciating fine writing we must “grasp a passage without clinging to a too literal interpretation, nor following a too logical sequence of things of events.” The thought that lies behind Chinese literary theory is the same as that of Kant. Later on, this question becomes one of imagery thinking (artistic creation) and aesthetic feeling (artistic appreciation), and certainly reaches to the essence of art and literature.

The third moment of the analytic of taste is “relation.” Purpose or purposiveness is either external, such as some utilitarian function, or internal, such as moral good. As I said earlier, aesthetic judgments do not deal with any particular purpose, but only with what Kant calls merely formal purposiveness, so-called purposiveness without a purpose or purposive form without purpose, since it has nothing to do with the pleasure that arises from morality, utility, and desire, nor does it have any logical conceptual activity. It is nonetheless not a specific objective purpose, but a subjective purposiveness. On the other hand, with respect to aesthetics, as the free

²³Ibid., §40, 138.

play of imagination and understanding towards an uncertain concept, Kant gives the example of a horse. A horse that is strong and fit, with all its parts organically interdependent, may give one an impression of a certain objective purpose to its existence. This thought is not an aesthetic judgment of taste, however, for the animal really is fit for human use. There is nothing merely formal about its purposiveness, and this is not a case of purposiveness without a purpose. On the other hand, looking at a flower, one does not need to be a biologist in order to perceive that apart from the organic function of its various parts, the flower also arouses a pleasant feeling as if it were meant to be looked at and aesthetically enjoyed, even though, of course, it would be impossible to objectively confirm that it was produced for such a purpose. In such a case, Kant says that the pleasure arises from the harmonious free play between the external form of the flower and our mental powers. This is purposiveness without purpose, or aesthetic purposiveness.

The purposiveness of an aesthetic judgment is subjective and without any particular objective purpose. Kant explains:

An object, or a state of mind, or even an action, is called purposive, although its possibility does not necessarily presuppose the representation of a purpose [...] There can be, then, purposiveness without purpose, so far as we do not place the causes of this form in a will, but yet can only make the explanation of its possibility intelligible to ourselves by deriving it from a will. Again, we are not always forced to regard what we observe (in respect of its possibility) from the point of view of reason. Thus we can at least observe a purposiveness according to form, without basing it on a purpose.²⁴

Philosophically, purpose is distinct from purposiveness without purpose, since the latter refers to a whole organized being whose mutually interdependent parts are not subordinate to any particular external purpose. It forms a unique relation, and in fact is a unique form of unity between human beings and nature, as I will discuss more fully later on.

The terms “disinterested” and “without concept” are of the utmost importance in characterizing aesthetic psychology. British empiricists before Kant touched on these topics in their discussion of taste,²⁵ and Kant builds on their work, which he raises to a higher philosophical level by emphasizing purposiveness without purpose as the central theme of the analytic of the beautiful. It is also in this third moment of his analysis that Kant poses the question of the ideal of beauty, which we will be in a better position to explain when we turn later to his discussion of mechanism and teleology.

The fourth moment of the analytic of taste is modality. We understand that a judgment of beauty is neither a purely logical nor an empirical judgment but rather, as Kant says, a “judgment that has no definite law of understanding” despite laying

²⁴Ibid., §10, 55–6.

²⁵In *The History of Western Aesthetics*, Zhu Guanqian writes, “Kant’s arguments, taken severally, are mostly already inherited from his predecessors. Let us take a few examples, the argument Kant makes on beauty that it does not involve desire, concepts, or morality, was definitively stated by St. Thomas in the middle ages. Britain HutcheSon and Mendelssohn also held the same view.” For further reference, see Stonitz (1960).

a claim to being universally valid. How is that possible? Such a judgment must in some way be necessary, yet this necessity comes from neither concepts nor experience. Kant eventually explains that it arises from a transcendental faculty of common sense. He explains: “It is only under the presupposition that there is a common sense (by which we do not understand an external sense, but the effect resulting from the free play of our cognitive powers)—it is only under this presupposition, I say, that the judgment of taste can be laid down.”²⁶

Kant’s postulation of this transcendental common sense relies on people tending to feel the same way about the thing, but the real basis for the subjective necessity of judgments of taste is the association that Kant conceives between this transcendental common sense and the collective reason of human beings, which he identifies with sociality. Here is his explanation:

Under the *sensus communis* [common sense] we must include the Idea of a communal sense, i.e., of a faculty of judgment, which in its reflection takes account (a priori) of the mode of representation of all other men in thought; in order as it were to compare its judgment with the collective reason of humanity, and thus to escape the illusion arising from the private conditions that could be so easily taken for objective, which would injuriously affect the judgment.²⁷

Additionally:

Empirically an interest in the beautiful arises only in society. If we admit the impulse to society as natural to man, and his fitness for it, and his propension towards it, i.e. sociability, as a requisite for man as a being destined for society, and so as a property belonging to humanity, we cannot escape from regarding taste as a faculty for judging everything in respect of which we can communicate our feeling to all other men, and so as a means of furthering that which every one’s natural inclination desires.²⁸

Kant illustrates aesthetic common sense with the example of a person on a deserted island, who, he thinks, would not adorn himself or his surroundings merely for his own sake. Here, at the crossroads of aesthetic feeling and psychological form, Kant discovers the intersection between psychology and society, sensibility and morality, and indeed between human beings and nature. This “common sense” he refers to is not physiological but social. Evidently the concept of sociability is somewhat more informative than the concept of transcendental sociability that Kant postulates in his philosophy of history. It is not just a transcendental idea but also sensible, and the sensible is always connected with human beings, though in this case it is also a transcendental idea (the human being’s sociability) that demands the expression of the human being’s sociability in sensuous material, namely, the beautiful object. Kant’s theory of human nature **diverges greatly from that of the French materialists, as well as from Hegel’s thought, which tends to obliterate everything individual and sensuous. Kant seeks instead to unify nature and human beings, sensuality and rationality, in the concrete individual.** This is an

²⁶Kant, and J. H. Bernard, *Critique of Judgment*, §20, 75.

²⁷*Ibid.*, §40, 136.

²⁸*Ibid.*, §41, 139.

important point. In attributing the source of aesthetic pleasure to sociality he takes a step beyond his predecessors.

From the viewpoint of the history of aesthetics, Kant's analytic of beauty, like his analyses in epistemology and ethics, reflects, on the one hand, his disagreement with British empiricism, for which aesthetic feeling is pleasure; and on the other hand, his disagreement with continental rationalism and its contention that beauty requires a judgment of "perfection," which was the view held by Wolff and Baumgarten.²⁹ As always, Kant attempts to reconcile these two positions. Aesthetic judgment becomes a bridge between epistemology and ethics. The two ends of this bridge are his chapters on the Analytic of the Beautiful and the Analytic of the Sublime, complemented by two further sections on Beauty in Form and Beauty as a Symbol of Morality. They make up the two steps of the whole transition. Namely, a transition within the transition on the transitional bridge, which is intricately presented in Kant's aesthetics as a transition from the beautiful to the sublime, from pure beauty to dependent beauty, and from formal beauty to artistic beauty. To follow this transition, we now must turn to his analysis of judgments of the sublime.

10.3 Analytic of the Sublime

Sublimity is an aesthetic phenomenon. Violent storms, raging torrents, vast deserts, turbulent waves, forlorn ruins—a very peculiar psychology is at work in such experiences. There is pain, yet pleasure, pleasure, yet pain. From Longinus in antiquity to Boileau in the seventeenth century, discussions of the sublime mainly concern literary style. In the eighteenth century, British philosophers began to use the word "sublime" to describe natural objects, but their descriptions and analyses remained empirical and psychological. For instance, Edmund Burke holds that the feeling of the sublime contains fear, while others claim that this feeling is one of elevation following suppression. Kant raises these seemingly empirical descriptions to a philosophical height, arguing that the sublime is a singular aesthetic phenomenon.³⁰ His theory attracted great attention and had significant influence on fine art, in part due to the fact that the work was published at the time when European Romanticism was budding. Kant holds that the characteristic of the sublime is formlessness. He describes objects that are irregular, unconfined, rough, bleak, and that exhibit an infinite expansiveness (such as the starry sky, great ocean waves, or craggy mountain vastness) as the mathematical sublime. In another appearance, the sublime exhibits an unassailable power of force. "Bold, overhanging, and as it were

²⁹Wolff claims that his philosophy deals only with human beings' higher capacities and most distinctive concepts. He holds that aesthetics belongs to sensibility, which is common to human beings and other animals, and therefore excludes it from philosophy. Baumgarten holds that aesthetics deals with sensible perfection, and his theory fills the blank left by Wolff's dismissal of aesthetics.

³⁰See Kant, *Critique of Judgment*.

threatening, rocks; clouds piled up in the sky, moving with lightning flashes and thunder peals; volcanoes in all their violence of destruction; hurricanes with their track of devastation; the boundless ocean in a state of tumult; the lofty waterfall of a mighty river, and such like.”³¹ This is the dynamical sublime. These two kinds of sublime are essentially the same and their division is due to Kant’s fondness for architectonic dichotomies.

Kant holds that the mathematical sublime is due to the massive expanse or extent of a natural object that surpasses the capacity of imagination, thereby arousing in the subject a demand for a rational idea in order to wholly comprehend the object. However, the rational idea does not have determinate content, being simply an indeterminate form of subjective purposiveness. Therefore its application is properly an aesthetic judgment. In the case of the dynamical sublime, the conflict among aesthetic feelings is all the more salient. On the one hand, imagination is too weak to adapt to a natural object, so great is its dynamic power; consequently, the subject feels fear. Yet the imagination demands a rational idea to comprehend and dominate the object, and the initial feeling of fear transforms into pleasure at the realization of one’s own dignity and courage. Beauty is a harmonious play between imagination and understanding that produces a relatively calm and quiet aesthetic feeling, with quality as the most prominent category. Whereas the sublime is a confrontation between imagination and reason, which produces a feeling, manifesting rational ideas in sensibility and expressing the power of morality and practical reason, that is somewhat violent and whose most prominent category is quantity.

Kant states:

The irresistibility of its might, while making us recognise our own [physical] impotence, considered as beings of nature, discloses to us a faculty of judging independently of, and a superiority over, nature [...] Thus, humanity in our person remains unhumiliated, though the individual might have to submit to this dominion. In this way nature is not judged to be sublime in our aesthetical judgments, in so far as it excites fear; but because it calls up that power in us (which is not nature) of regarding as small the things about which we are solicitous (goods, health, and life), and of regarding its might (to which we are no doubt subjected in respect of these things), as nevertheless without any dominion over us and our personality to which we must bow where our highest fundamental propositions, and their assertion or abandonment, are concerned. Therefore nature is here called sublime merely because it elevates the Imagination to a presentation of those cases in which the mind can make felt the proper sublimity of its destination, in comparison with nature itself.³²

The natural world has magnitude and might, as for example in some enormous and powerful natural object which, acting upon the imagination, awakens the spiritual power of the human being to a confrontation. Moral power mentally overcomes the object and thereby arouses pleasure. Therefore, the pleasure comes from the subject’s rejoicing over his own rational power and dignity, which produces the aesthetic feeling of sublimity. Although capable of destroying a natural human being, who is subject to natural forces, nature cannot dominate its reason or

³¹Kant, and J. H. Bernard, *Critique of Judgment*, §28, 110.

³²*Ibid.*, §28, 101.

its spirit, which, on the contrary, overcome these challenges of nature. The sense of the sublime is exactly the feeling the subject experiences in the struggle between his moral power and natural forces. However, this feeling is yet to become genuine moral feeling (see Chap. 8), it is still a formal aesthetic judgment about a natural object. Natural forces (whether magnitude or might) only present their formless forms (irregular mass or unregulated power), which, while threatening, are at the same time fascinating; and our response remains aesthetic rather than moral (for instance, when a person looks at a storm rather than being in a storm), and therefore still belongs to the aesthetic realm. It is still a subjective purposive form rather than a moral action. Nonetheless, aesthetic feeling and judgment do, in this case, approach moral feeling and judgment. When Kant turns from the analysis of the beautiful to the analysis of the sublime, his thought still lingers on the mediating ground of aesthetic judgment, although his exposition has in fact already advanced beyond this point, having advanced from the free activities of our cognitive powers (imagination and understanding) towards incomparably sublime moral ideas; hence from objective objects to subjective spirit and from nature to human beings. Now the human being is no longer merely a natural, sensuous individual, but rather a social, rational power of moral action.

The aesthetic experience of the sublime inspires a multitude of cultivated or spiritual thoughts and feelings due to its involvement with a rational idea. "Thus the wide ocean, agitated by the storm, cannot be called sublime. Its aspect is horrible; and the mind must be already filled with manifold ideas if it is to be determined by such an intuition to a feeling itself sublime, as it is incited to abandon sensibility and to busy itself with ideas that involve higher purposiveness."³³ Moreover, "without development of moral ideas, that which we, prepared by culture, call sublime presents itself to the uneducated man merely as terrible."³⁴ In order to appreciate the sublime, to arouse aesthetic feelings toward the wilderness, the starry sky, or a great storm, the subject needs to have been prepared through a high level of moral cultivation. To appreciate the beautiful it suffices to give attention to the form of an object, while the appreciation of the sublime requires awakening rational ideas; in other words, it requires the moral power of a spiritual subject to respond to a formless object that is not at all in accordance with formal beauty. Therefore, the sublime is more subjective than the beautiful. Beauty depends on certain features of objective form, whereas the objective formlessness of the sublime, which lacks the demarcated form of beauty, awakens subjective reason. What the subject feels in the formless form of an object is no longer objective nature but rather the subjective spirit itself, which reconciles the antagonism of object and subject, cognition and ethics, nature and human beings.

³³Ibid., §23, 84.

³⁴Ibid., §29, 105.

Kant believes that sublimity is evoked solely by scenes in nature.³⁵ However, his real thought is that the proper object of these feelings is the human spirit itself. It is evident that for Kant the true object of feelings of both beauty and the sublime is our own mind. This stance diverges from the one he held in the first *Critique*, where he took the more usual line that beauty and sublimity were natural qualities and relations of the object.³⁶ This divergence is not, however, a regression in Kant's thought, but rather a progression. Kant has become aware of the relation between the beautiful, the sublime, and the human being, although his presentation is, of course, thoroughly idealistic.

Like the analytic of the beautiful, the analytic of the sublime begins from descriptions of psychological phenomena and moves toward philosophical idealism. To Kant, neither sublimity nor beauty enjoy an objective existence, they are subjective effects in subjective consciousness and, while implicitly tinged with objective sociality, remain thoroughly subjective.

10.4 The Ideal of Beauty, Aesthetic Ideas, and Fine Art

The transition from the beautiful to the sublime is a transition from cognition to ethics in the aesthetical realm, while the move from free to dependent beauty is another mode of this same transition. Before discussing the sublime, Kant first distinguishes free and dependent beauty. He illustrates free beauty with examples such as flowers, birds, seashells, decorative wallpaper, and musical fantasies without themes or words.³⁷ These are pure formal beauty. The examples demonstrate Kant's conception of the standard of beauty and meet the requirements he proposed in the analytic of the beautiful, such as disinterestedness and purposiveness without purpose.

It would seem natural to assume that free beauty is Kant's ideal. However, the reverse is the case. He holds that the ideal of beauty is not this free beauty, but rather the dependent form. The expression of dependent beauty requires the use of concepts and contains cognizable content that mobilize concepts of the understanding and ideas of purpose. The beauty of practically any of the works of art familiar to and discussed by Kant possesses this dependent beauty, which presupposes some purpose for the object and in accordance with which it is produced. Therefore, it has moral and even objective social content. For instance, the beautiful form of the human body or of a horse is an example of dependent beauty because its physical structure evokes some idea of objective purpose. The pleasure such objects

³⁵Kant does cite man-made pyramids as an example of the mathematically sublime, because his intention is to demonstrate the massiveness of natural objects. Therefore there is no contradiction.

³⁶See *Universal Natural History and Theory of Heaven*, and *Observations on the Feeling of the Beautiful and Sublime*.

³⁷Kant, and J. H. Bernard, *Critique of Judgment*, §16, 66.

arouse is not simply aesthetic, but also intellectual or moral pleasure. This is what Kant describes as “the unification of taste with reason, i.e., of the beautiful with the good.”³⁸

He believes that such unification is not only harmless but also beneficial to aesthetic culture. If an object is considered simply in respect of its form, then the subject forms an aesthetic judgment of free beauty, whereas if the purpose of an object is taken into account, the judgment would concern dependent beauty. The same object is often appreciated from these two perspectives, and may arouse quite varied aesthetic feelings. An object can be appreciated simply as a pure form, that is, in respect of its lines and composition (free beauty); it can also be appreciated in respect of its content (dependent beauty), though Kant regards the dependent variety as the ideal of beauty.

In the *Critique of Pure Reason*, the ideal that Kant referred to was the image of a rational idea. This ideal and rational ideas are inseparable. In the *Critique of Judgment*, Kant also states that “idea properly means a rational concept, and ideal the representation of an individual being regarded as adequate to an idea.”³⁹ A rational idea can be expressed neither through sensibility nor concepts of understanding, but rather only through individual images of the ideal of beauty, which can be said to be the supreme manifestation of an indeterminate rational idea.

The ideal of beauty must be distinguished from any empirical idea of the merely normal.

Such empirical conceptions, which refer to a common standard within a certain range of experience, are basically a mean:

The imagination can, in all probability, actually though unconsciously let one image glide into another, and thus by the concurrence of several of the same kind come by an average, which serves as the common standard of all. Every one has seen a thousand full-grown men. Now if you wish to judge of their normal size, estimating it by means of comparison, the imagination (as I think) allows a great number of images (perhaps the whole thousand) to fall on one another. If I am allowed to apply here the analogy of optical presentation, it is in the space where most of them are combined and inside the contour, where the place is illuminated with the most vivid colours, that the average size is cognisable; which, both in height and breadth, is equally far removed from the extreme bounds of the greatest and smallest stature. And this is the stature of a beautiful man.⁴⁰

Our [Chinese] ancients set the same standard for a beautiful man, that he is so perfect that he would be too tall if he were one inch taller, and he would be too short if he were one inch shorter. The empirical, aesthetic idea of the norm is the definitive rule for the image attained through imagination. For instance, different ethnic groups and different ages have different conceptions of beauty. Such differing conceptions do not involve any moral idea, but are entirely an empirical paradigm. However, the ideal of beauty is different from this empirical norm, since it presents a rational idea in an individual, even if the idea is vague and

³⁸Ibid., §16, 67.

³⁹Ibid., §17, 69.

⁴⁰Ibid., §17, 71.

indeterminate. Since the ideal of beauty requires the presentation of rational ideas, human beings alone are qualified for the task. Flowers, landscapes, and even works of fine art are not qualified to become the ideal of beauty.

I have discussed in previous chapters how rational ideas do not fall within the scope of natural causality or constitute objects of scientific knowledge, since they are moral entities beyond empirical scope. Kant repeatedly states that “the ideal [...] we can only expect in the human figure. [...] To make its connexion with all which our reason unites with the morally good in the idea of the highest purposiveness [...] a judgment in accordance with an ideal of beauty is not a mere judgment of taste.”⁴¹ In other words, it is no longer free beauty, or pure aesthetics, but a judgment of taste that is intellectual as well. Before proceeding to the discussion of art, Kant sets aside a chapter to discuss the intellectual interest in the beautiful. He says that “it is not merely the form of the product of nature which pleases [someone], but its very presence pleases him.”⁴² In this way, “the mind cannot ponder upon the beauty of nature without finding itself at the same time interested therein. But this interest is akin to moral, and he who takes such an interest in the beauties of nature can do so only in so far as he previously has firmly established his interest in the morally good.”⁴³ Kant keenly observes that the aesthetic pleasure that arises from the appreciation of nature is not merely an aesthetic feeling for the form, and the beauty of nature is not limited to formal beauty, but is also an intellectual feeling toward the presence of nature, i.e., admiration for the objective existence of the purposiveness of nature.

This appreciation of the objective purposive existence of nature goes beyond subjective aesthetic form to approach the objective purposive existence of nature, which is the bridge leading to moral being. Kant’s intention in writing the *Critique of Judgment* is to find a link between sensible nature (Newton’s natural causality) and supersensible nature, that is, morality (Rousseau’s human freedom). The mediating link is aesthetic judgment (subjective purposiveness), which Kant eventually calls a subjective analogy of morality. The categories of understanding become sensible illustrations by means of schemata so as to become knowledge, while moral ideas find sensuous illustrations by means of aesthetic “symbols.” Kant explains that “taste is at bottom a faculty for judging of the sensible illustration of moral ideas (by means of a certain analogy involved in our reflection upon both these).”⁴⁴ Natural objects become analogues of certain rational ideas and are thereby received with a feeling of beauty.

Accordingly, Kant sets down his well-known definition of beauty as a symbol of morality.⁴⁵ For instance, white is a symbol of the moral idea of purity. Our ancient [Chinese] arts also made pine trees, chrysanthemum, bamboo, and wintersweet into

⁴¹Ibid., §17, 72–3.

⁴²Ibid., §42, 141.

⁴³Ibid., 143.

⁴⁴Ibid., §60, 202.

⁴⁵Ibid., §59, 196.

symbols of the noble character of the perfected person, a practice that coincidentally corresponds to Kant's theory.

To Kant, here lies also the essence of art. Art is dependent rather than free beauty.

Accordingly, art is not merely a beautiful presentation but transmits reason and presents the ideal of beauty in a form expressing purposiveness without purpose. Kant explains the ideal of beauty in the analytic of the beautiful, but proposes the concept of aesthetic ideas in the discussion of artistic creation. These two concepts are in fact one thing, where the ideal of beauty is conceived from the perspective of appreciation and judgments of taste, and aesthetic ideas come into the theory when Kant tries to understand the psychology of creation and artistic genius. Both are moments in the transition to morality. Kant elaborates on this point: "By an aesthetic idea I understand that representation of the imagination which occasions much thought, without, however, any definite thought, i.e., any concept, being capable of being adequate to it; it consequently cannot be completely compassed and made intelligible by language."⁴⁶ Additionally: "The imagination is here creative, and it brings the faculty of intellectual ideas (reason) into movement; i.e., a movement, occasioned by a representation, towards more thought (though belonging, no doubt, to the concept of the object) than can be grasped in the representation or made clear."⁴⁷

Thus, these aesthetic ideas are capable of exhibiting infinite content in a finite image. These are called ideas because they exceed both what can be empirically experienced and, indeed, the categories of the understanding altogether. They point instead toward the moral world beyond experience and natural causality. However, an aesthetic idea is not a pure idea of reason, because it does not separate the individual and totality, or imagination (sensibility) and understanding. It represents the infinite (reason) in a finite image (sensibility) that cannot be expressed or explained by any determinate concepts. Ordinary rational ideas, although they are beyond experience, are nonetheless determinate concepts, whereas aesthetic ideas are different.

There is no end to their message. In other words, aesthetic ideas cannot be fully expressed by any determinate concept. Chinese art and literary criticism emphasizes doctrines such as: "There is an end to the words, but no end to their message"; "Leave no trace of effort, just as the antelope sleeps dangling from a tree by its antlers for fear of leaving footprint for hunters"; "The flavor is beyond salt and vinegar"; "The idea is conceived before it is written down, and the meaning of words is to be found outside of the text"; and "The image is bigger than the idea."⁴⁸

⁴⁶Ibid., §49, 156.

⁴⁷Ibid., §49, 158.

⁴⁸In the art of language (literature), we can cite theories of multi-interpretation and the inexplicability of mythology, and the belief that the *Book of Songs* cannot be exhausted by exegesis. In other forms of art, such as music, this characteristic is even more prominent.

Kant believes that fine art succeeds when it presents rational ideas that are beyond experience, such as free will, immortality of the soul, and the existence of God, in empirical images, such as those of death, love, and tranquility, in order to create through fine art a “second nature” that does not appear to be a product of our artifice (though we know that it is). In other words, its purpose is not revealed directly, it is a form of purposiveness without purpose, just as in the case of nature. Therefore, it arouses aesthetic feeling. Consequently, aesthetic feelings refer to the purposive interest of understanding, which is different from appreciating the merely formal beauty of nature, and they belong properly to the realm of fine art. Kant explains:

Such representations of the imagination we may call ideas, partly because they at least strive after something which lies beyond the bounds of experience, and so seek to approximate to a presentation of concepts of reason (intellectual ideas), thus giving to the latter the appearance of objective reality—but especially because no concept can be fully adequate to them as internal intuitions. The poet ventures to realize for sense rational ideas of invisible beings, the kingdom of the blessed, hell, eternity, creation, etc.; or even if he deals with things of which there are examples in experience—e.g. death, envy and all vices, also love, fame, and the like—he tries, by means of imagination, which emulates the play of reason in its quest after a maximum, to go beyond the limits of experience and to present them to sense with a completeness of which there is no example in nature. It is, properly speaking, in the art of the poet, that the faculty of aesthetical Ideas can manifest itself in its full standard. But this faculty, considered in itself, is properly only a talent (of the imagination).⁴⁹

This is not to dress rational ideas up in imaginary garments. On the contrary, it is the image that approaches the idea however vaguely. This is where artistic creation differs from scientific thinking. Kant calls it “genius.” He believes that science does not require genius, that only artistic creation does.⁵⁰ Because science is intellectual understanding guided by categories and principles it can be taught and learned. Anyone who follows its laws and principles can attain some scientific achievement. But art, as the presentation of the aesthetic ideal, does not have laws, but proceeds as if “following laws though there is no law.” It has purposiveness without purpose, cannot be taught or learned, and is entirely without fixed laws or principles. It is simply the artist himself who finds the aesthetic idea, grasps and presents that which

⁴⁹Kant, and J. H. Bernard, *Critique of Judgment*, §49, 157–8.

⁵⁰In the lectures of his later years, Kant expands on the account of genius. He distinguishes invention from discovery, maintaining that the talent for invention is genius, explaining that this name of “genius” “is attributed only to an artist, consequently to one who knows how to make something, not to him who merely stores information and knows about many things. It is also not attributed to an artist who merely imitates, but it is attributed to one who has been inspired to create something original in his work; finally, it is attributed to this artist only when his creation is exemplary, that is, when it is worthy to be imitated as an example.” He adds that “the proper field for a genius is the imagination, because imagination is creative, and just because it is less subject to the coercion of rules than other faculties, it is more capable of originality.” “But the genius is a man not only of wide range of mind but also of intensive intellectual greatness, who is epoch-making in everything he undertakes (like Newton and Leibniz).” Kant (2006).

has the content of rational ideas yet cannot be cognized and represented by concepts, and thus creates the ideal beauty of fine art. His work is at once classical and original.

Inimitable originality and classical universality are the two characteristics of genius in the fine arts. Ideas of pure reason, although scientifically unprovable, can be contemplated and talked about, whereas aesthetic ideas can only be felt and imagined (see Chaps. 6 and 7). It is the accomplishment of genius in the fine arts to make a sensible presentation of the “supersensible substrate.” Therefore, Kant’s conception of genius is different from the extraordinary and mysterious genius emphasized by the Romantics. He mainly refers to a method without paradigm. In creating the aesthetic form of purposiveness without purpose, the artistry of genius expresses moral ideas, which is a unique psychological function of artistic creation. Kant also believes that taste is more important than genius. “If, then, in the conflict of these two properties in a product something must be sacrificed, it should be rather on the side of genius.”⁵¹ His reason is that taste involves the form that makes the beautiful beautiful, whereas genius mainly involves the content of ideas. Without the former, that is, lacking aesthetic form, a work of fine art could not exist, while without the latter, such a work would still be possible, albeit mediocre and without vital force and spirit. Furthermore, although Kant holds that genius is not simply the same as artistic skill, the cultivation of such skills nevertheless trains and harnesses genius in order that it may bring forth a work of fine art.

Since the production of fine art has a purpose and requires rational ideas to attain a tasteful aesthetic form, fine art cannot be a purely aesthetic activity. But the creation of fine art is neither scientific cognition nor technology, since both require definite purposes and serve definite external purposes. Instead, the creation of fine art is undertaken solely for the pleasure of cognitive free play, which is purposive despite being without purpose.

On the one hand, aesthetically, the purpose of art does not lie within itself, its integrity itself is its purpose. On the other hand, fine art does indeed have the function or purpose of promoting the human being. In this sense, it obeys an external purpose even though the beauty of fine art remains grounded in the presentation of purposiveness without any particular purpose. It is not a formal free beauty, yet depends on the achievement of dependent beauty.⁵² A work of fine art is necessarily formed after nature, without evincing any trace of artificiality; yet its content must belong to morality (rational ideas) while its form is aesthetic (purposiveness without purpose). Thus does fine art express the unity-in-opposition of nature and human beings, law and freedom, aesthetic feeling and reason, taste and genius, judgment and imagination. To Kant, freedom is the essential feature of fine art and indeed all aesthetics. His terms such as “free play of imagination and understanding” and “purposiveness without purpose” underline the distinction of

⁵¹Kant, and J. H. Bernard, *Critique of Judgment*, 206.

⁵²The categories of fine art and the aesthetic are by no means identical, but they do overlap. Some works of fine art have no aesthetic value, while some objects of beauty are not works of fine art. Therefore, aesthetics cannot simply be equated with the philosophy of art.

aesthetic activities from all other human activities and psychological functions, including science, technology, and morality. Establishing these concepts is the main task in the analytic of the beautiful. The ancient Chinese also discussed art and literature in much the same vein as Kant did, especially with respect to what he says about artistic and aesthetic psychology, but the Chinese literati did not elevate the discussion to a philosophical level.

In order to meet the architectonic requirements of his philosophical system, Kant proceeds from his analytic of aesthetic judgment to a dialectic of aesthetic judgment, where he sets forth the antinomy of taste. On the one hand, taste is not based on concepts, otherwise any controversy that might arise concerning beauty could be resolved in principle by an appropriate proof (thesis). On the other hand, however, taste seems to be somehow based on concepts, for otherwise we would have no right to demand others' agreement with our judgment (antithesis). Empirical aesthetics rejects concepts, advocating that beauty lies in sensual pleasure, while idealistic aesthetics holds that beauty lies in a perfection that presupposes a concept and its presentation in sensible cognition. The former regards aesthetics as purely subjective and the latter regards it as purely objective, but for precisely that reason neither can resolve the antinomy of taste. Kant's resolution is rather simple. The concept referred to in the thesis is a determinate logical concept, while the concept referred to in the antithesis is a vague concept related by imagination. Accordingly, both sides are in a way right, and aesthetics is neither mere subjective pleasure nor an objective cognition through a concept. The full solution of the antinomy requires reference to a supersensible world, as I will discuss further below.⁵³

This antinomy of taste is far less important than the antinomies in the first two *Critiques* for the sense of paradox that this antinomy creates is not strong. A more profound paradox arises from the contradiction between free and dependent beauty, between the beautiful and the sublime, between aesthetics and fine art, and between taste and genius, namely, the contradiction between form and representation. On the one hand, what makes the beautiful beautiful is disinterested purposiveness without purpose. These are the essential features of free beauty and the aesthetic judgment of taste. On the other hand, dependent beauty, the sublime, and fine art and genius genuinely possess higher aesthetic significance and value because they involve purposes, rational ideas, and moral content, and because they enable the transition from nature (sensitivity) to morality (reason). Kant's aesthetics concludes with this unfulfilled endeavor to reconcile the oppositions between formalism and representationalism.

The formalistic and representationalist aspects of Kant's aesthetics had significant influence on later generations, and both aspects have their successors. Kant's

⁵³“The antinomies force us against our will to look beyond the sensible and to seek in the supersensible the point of union for all our a priori faculties; because no other expedient is left to make our reason harmonious with itself.” “The subjective principle, viz. the indefinite idea of the supersensible in us, can only be put forward as the sole key to the puzzle of this faculty whose sources are hidden from us: it can be made no further intelligible” (Kant, *Critique of Judgment*, §57, 187).

formalism becomes the forefather of various modern formalisms with such well-known slogans as “art for art’s sake,” “significant form” and “psychical distance.” His representationalism is the forerunner of trends of Romanticism and anti-rationalism. In the nineteenth century, Schelling, Hegel, and the ferocious movement of Romanticism promoted the infinite idea as a leading characteristic of art, and discussions of the sublime and genius became central. On the other hand, Johann Friedrich Herbart, Robert Zimmermann, and Eduard Hanslick developed Kant’s formalism, reducing beauty to the relation and play of lines and sounds. Aesthetic theories of the twentieth century continue both lines of thought. Representationalism developed into theories concerning anti-rational sexual desire (Freud), experience (Dewey), and the collective unconscious (Jung), and fine art entirely lost its aesthetic quality and meaning. Aesthetic formalism was advocated by Bullough with his concept of psychical distance, Charles Bell, and Robert Fry with his idea of significant form. In these accounts, aesthetics reduces to a theory of fine art. Formalism has been the more prominent of the two trends in modern times and this is perhaps the most lasting legacy of Kant’s aesthetics.

We see, then, that Kant’s aesthetics raises a series of important questions, from aesthetic psychology to artistic creation, from the analytic of the beautiful to the aesthetic idea, from the psychological characteristics of the sublime to beauty as the symbol of morality, the important idea of analogy,⁵⁴ and his idea of the priority of form over sensuous qualities like color.⁵⁵ All of these are indeed central concerns of aesthetics and the philosophy of fine art, and explain why such a dry, abstract book has become exceptionally influential in the history of aesthetics and among so many different schools of art and literary theory.

10.5 Organized Beings

Aesthetic judgment concerns a merely subjective purposiveness. When comparing art with nature, Kant points out that art is after all an artificial product, its purposive form created by human beings. But this is not the case with the beauty of nature

⁵⁴Analogy as a psychological function particular to human beings has yet to be fully studied and evaluated. In my opinion, the free, creative capacity of non-logical deduction and of non-empirical induction is closely linked with analogy. It is not found in either machines or (non-human) animals, but only in daily human life, including the use of language, scientific knowledge, and, in particular, in artistic creation. Analogy is not simply a connection between concepts. It is associated with many psychological capacities, such as emotion and imagination. Human language allows for tremendous solidification and improvement in what analogy can accomplish in the domain of thought no less than in practice. It is also for this reason that simile is an aesthetic element in literature and one of the earliest literary techniques.

⁵⁵Kant believes that the pleasure of colors depends on the senses, whereas that of lines does not. Therefore, the line truly has aesthetic value. This remark is indeed insightful, and can be compared with characteristics of Chinese art. Hegel, on the other hand, only focuses on colors (see Hegel’s *Philosophy of Fine Art*).

because, as he says, “the beauty of nature, i.e., its connexion with the free play of our cognitive faculties in apprehending and judging of its appearance, can be regarded as a kind of objective purposiveness of nature in its whole [content] as a system of which man is a member.”⁵⁶ In considering natural beauty, we begin with the appreciation of its mere form, but eventually pass on to the admiration of its objective purposiveness. Therefore, in the beginning of Part Two of the *Critique of Judgment*, the Critique of Teleological Judgment, Kant states that “in the very necessity of that which is purposive, and is constituted just as if it were designedly intended for our use—but at the same time seems to belong originally to the being of things without any reference to our use—lies the ground of our great admiration of nature.”⁵⁷ General opinion holds that the two parts of the *Critique of Judgment* are mutually exclusive, but, in fact, Kant attempts to connect and relate them. The point of intersection comes when the beauty of nature is finally seen as the symbol of morality and morality is understood as the final purpose of nature, that is, when nature is seen as purposively approaching the moral human being. Nature has the moral human as its final purpose.

I have pointed out that Kant divides purposiveness into two kinds: relative or external purposiveness, and internal purposiveness. The former refers to a thing that exists for the sake of another, such as the old teleology that held that the purpose of the existence of a mouse is for a cat to eat, or that plants and animals exist for the benefit of human beings. Kant was opposed to this sort of teleology;⁵⁸ instead, he emphasized the internal purposiveness of nature. An example of this purposiveness is the organized being of plants and animals.

Kant had already proposed in an earlier work that living nature is non-mechanical and cannot be explained by the mechanical causality of Newton’s laws. In the *Universal Natural History and Theory of the Heavens*, he states that the tiny caterpillar is more complicated and difficult to understand than the solar system. Thirty years later, after having studied the adaptation of plants and animals, Kant not only maintained his older view but also believed that another Newton would never arise to explain organic life by mechanical laws because organic phenomena can be illuminated only in a way that is entirely different from mechanical causality. Living, organized beings are just what Kant describes when he says that “a thing exists as a natural purpose, if it is both cause and effect of itself.”⁵⁹ A living organized being, as a representative of natural purpose, is just the case.

An organized being has three features. First, its parts can only exist through their reference to the whole. “For a thing to be a natural purpose in the first place it is requisite that its parts (as regards their being and their form) are only possible

⁵⁶Kant, and J. H. Bernard, *Critique of Judgment*, §67, 227.

⁵⁷*Ibid.*, §62, 209–10.

⁵⁸*Ibid.*, §63, 215.

⁵⁹*Ibid.*, §64, 217.

through their reference to the whole.”⁶⁰ For instance, if a hand is chopped off from the body, it is no longer a hand. Second, every part is reciprocally a cause and an effect, a means and an end for others. “Its parts should so combine in the unity of a whole that they are reciprocally cause and effect of each other’s form.”⁶¹ Third, it has a self-organizing function and can reproduce itself. This is the most important of the three features because human artifacts, for example, a watch, also have the first two features, but definitely not the third, according to which for a living thing “its parts are all organs reciprocally producing each other. [...] Only a product of such a kind can be called a natural purpose, and this because it is an organized and self-organizing being.”⁶² Accordingly it is capable of developing and reproducing on its own, unlike artifacts, which have to be designed and produced by others. That is why it differs from a watch, which has the casuality of mechanical movement and the requirement of an external designer and maker. Kant illustrates with the example of a tree, which produces foliage that both depends on it and also reproduces its own species form. “While the leaves are products of the tree they also in turn give support to it.”⁶³ Therefore, the whole, as a unified system, is more than the mere sum of its parts, but actually produces those parts. This is important.

Mechanical laws concern action and reaction but do not assume the whole as a purpose and therefore cannot explain the reciprocal relation between parts and whole in organized beings, where the parts depend on the whole for their existence. Kant believes that it is useful to adopt a teleological view of the whole when we study natural phenomena and attempt to reveal the secrets of nature. We do not ask why waves (inorganic things) persistently beat the shore because such a puzzle is a metaphysical question without scientific value, whereas to ask why bird’s wings (organic things) are located or shaped as they are, or why some parts of plants or animals are structured in such and such a way, that is, to inquire after their purpose, is a useful, even indispensable guide in science for advancing its investigations.

Kant explains that organized beings “first afford objective reality to the concept of a purpose of nature, as distinguished from a practical purpose; and so they give to the science of nature the basis for a teleology.”⁶⁴ This confirms that mere mechanical laws will not suffice for a full scientific account of nature, and have to be supplemented by a teleological principle.

However, such a teleological principle is not derived from experience, nor can it be discovered in nature. Kant emphasizes in the *Critique of Pure Reason* that “the whole” is an idea that simply cannot be proven by experience. The whole, as a way to comprehend organized being, is also a kind of subjective rational idea. The teleology of the whole is a sort of analogy, using Kant’s term, a regulative rather

⁶⁰Ibid., §65, 219.

⁶¹Ibid.

⁶²Ibid., 220.

⁶³Ibid., §64, 218.

⁶⁴Ibid., §65, 222.

than a constitutive principle (see Chap. 6), a transcendental principle of reflection rather than a determinant judgment.⁶⁵

10.6 Antinomy of Mechanics and Teleology

We come finally to Kant's antinomy of teleological judgment:

The first maxim of judgment is the thesis: All production of material things and their forms must be judged to be possible according to merely mechanical laws.

The second maxim is the antithesis: Some products of material nature cannot be judged to be possible according to merely mechanical laws. (To judge them requires quite a different law of causality, namely, that of final causes.)

If these regulative principles of investigation are converted into constitutive principles of the possibility of objects, they will run thus:

Thesis: All production of material things is possible according to merely mechanical laws.
 Antithesis: Some production of material things is not possible according to merely mechanical laws.⁶⁶

In his review of some of the ideas about teleology in the history of philosophy, Kant calls the view that treats the final causes of nature as unintentional the idealism of natural purposes, and the view that treats natural purposes as intentional the realism of natural purposes. Epicurus, Democritus, and Spinoza belong to the former group, while Aristotle's hylozoism and theistic creationism belong to the latter. Kant believes that philosophers like Epicurus use the laws of motion in their attempt to explain everything in nature, whereas Spinoza holds that the infinite totality of nature as a whole necessarily determines everything within nature; purposiveness thus becomes either natural contingency (Epicurus) or natural fatalism (Spinoza). The former is identified with lifeless matter, while the latter with an immaterial God, and purpose is either identified with natural causality or natural necessity, and is in fact still conceived mechanically. On the other hand, hylozoism and theism cannot find any proof to support their ideas. Kant believes that the phenomena of life bluntly contradict the inertia that is an essential characteristic of matter. On the other hand, it is nonsense to enroll a living God as designer and maker. Are natural things, for instance, colorful flowers and symmetrical snowflakes, really made deliberately by nature or God for our amusement? Kant cannot bring himself to agree with the realism of final causes. This review of earlier ideas is supposed to accentuate the antinomy of teleological judgment. Mechanism and

⁶⁵Kant's letter to K. L. Reinhold, 28 Dec. 1787: "So now I recognize three parts of philosophy, each of which has its a priori principles, which can be enumerated and for which one can delimit precisely the knowledge that may be based on them: theoretical philosophy, teleology, and practical philosophy, of which the second is, to be sure, the least rich in a priori grounds of determination." Kant and Zweig (1986).

⁶⁶Kant, and J. H. Bernard, *Critique of Judgment*, §70, 243.

theism see the final causes of nature as principles of objective reality, but since mechanics and purpose are incompatible, only one or the other can be true. Therein lies the antinomy. The final outcome would force us to choose either mechanism, hylozoism, or theism, although none of these alternatives are seriously viable.

Kant believes that the antinomy can be easily solved if it is treated as a question of judgment, for the thesis and antithesis are compatible if each is regarded as a merely regulative principle. We can use both maxims at the same time to guide us in discussion and investigation. On the one hand, all that the thesis implies when understood regulatively is that, as Kant says, “I must always reflect upon [phenomena] according to the principle of the mere mechanism of nature, and consequently investigate this as far as I can; because unless this lies at the basis of investigation, there can be no proper knowledge of nature at all.”⁶⁷ Such an engagement would not hinder our accordance with the antithesis in thinking of nature as a whole, when it is appropriate to let thought be regulated by the principle of final causes. This does not mean the maxim of mechanism is invalid; on the contrary, we are told “to follow it as far as we can.”⁶⁸ Kant thus affirms that nature has only a mechanical causality, that all its secrets can be examined and revealed by means of mechanical laws of causality, that there are no truly final causes in natural things and in nature as a whole. As a principle of reflective judgment, teleology can only guide us subjectively and cannot lead to genuine scientific knowledge. **Principles of teleology merely render things comprehensible to thinking, rather than determining an object of empirical knowledge, which always depends on making them cognizable (see Chaps. 6 and 7 for distinctions between thought and cognition). In order to know things, we need to resort to mechanical laws of causality.**

Mechanism and teleology are therefore two subjective points of view that can be applied at the same time without contradiction. In investigating a thing, we can consider it as having some purpose, while at the same time we expect that purpose ultimately to give way to a mechanical explanation. Kant repeatedly states that the principle of teleology cannot be used as an objective constitutive principle, but merely as a subjective regulative one, which does not exclude the mechanical principle (which can itself be regulative as well as constitutive). For instance, to say that the purpose of the heart is to circulate the blood is a merely regulative principle useful to cardiac research, but it cannot explain what makes the heart beat. The relation between the heartbeat and blood circulation remains a mechanical one.

Kant astutely observes that, on the one hand, it is difficult, even impossible, to explain organized beings by mechanical laws, while on the other hand a supersensible purposive principle cannot be established by any possible experience. As a result, Kant has to locate it in a subjective realm as a regulative principle of reflective judgment. Thus, on the one hand, he maintains that organized beings cannot be explained by mechanics and we must resort to teleology, while on the

⁶⁷Ibid.

⁶⁸Ibid.

other hand, teleology is a mere regulative principle that cannot explain the particular features of organized beings, for which there is no alternative to mechanism.

Debate on this issue still swirls in the discipline of natural science, in particular, in biology. One school, under the influence of modern industrial technology and cybernetics, maintains that all of the phenomena of life can eventually be explained in terms of physics and chemistry, and accuses their opponents of hylozoism and mysticism, while the other side criticizes mechanism as overly reductive. Are they not rehashing the question Kant posed two hundred years ago?⁶⁹ The origin and essential characteristics of life remain controversial in modern natural science.

Kant's regulative version of natural teleology is one possible line to take in this debate, while structuralism offers another, as do cybernetics and the theory of self-organizing systems. For instance, there are feedback theory, self-organizing theory, and the theory of the whole being more than the sum of its parts. However, the right approach and answer to the question still await the strenuous effort of biologists. The composition of organic life from the inorganic is a stronghold to thoroughly refute all mystic teleology. As to which approach would be the best remains unknown and must await further research.

From the mechanical movement of matter to the phenomena of life to social phenomena, each level has its distinct quality. It is impossible to reduce the higher level to a lower level.

However, that does not tell us precisely what quality of the higher level is responsible for this resistance to reduction. Obviously, it is not some mysterious purpose, but we can at least hope that it can be found in a singular formal structure of materials on the lower level. Therefore, reductionism in science is actually **the healthier option**, and has made far more extensive progress than anti-reductionism, to say nothing of theories of a mysterious vital force.

Differences in structure can produce a qualitative difference—for instance, some particular structures in a living body have self-adjusting mechanisms—and is a subject that deserves further research from the perspectives of both philosophy and science. Kant's design in replacing objective constitutive teleology with a regulative principle of method is in fact to raise this issue. Just as aesthetic judgment has its independent contents and questions concerning, for instance, aesthetic psychology, artistic creation, the ideal of beauty, and the appropriate classification of the fine arts, so teleological judgment also has its independent contents and questions concerning, for instance, the characteristics of organized beings and the theory of evolution.

⁶⁹If Erwin Schrödinger's book *What is Life?* can be seen as representative of the first trend, explaining biological and physiological phenomena in terms of biology, then Bohr's complementarity principle can be said to represent the latter trend. Bohr (2011). He states further that "as long as for practical or epistemological reasons one speak of life, such teleological terms will be used in complementing the terminology of molecular biology. This circumstance, however, does not imply any limitation in the application to biology of the well-established principles of atomic physics." *Atomic Physics and Human Knowledge*, 26. This view is indeed very close to that of Kant's.

10.7 Human Beings as the Final End of Nature

Kant is certainly interested in scientific research, but it was not with a view to investigating scientific problems that he wrote the *Critique of Judgment*. Rather, his plan was to find a way of mediating between cognition and morality, or nature and human beings, in other words, between the topics of the first two *Critiques*. Aesthetic judgment and the merely formal purposiveness of nature are associated with subjective aesthetic pleasure, while teleology and the objective purposiveness of nature are associated with human beings and rational moral freedom.

Kant opposes teleological investigations of nature that dismiss mechanism because “when we lose ourselves with this way of explanation in the transcendent, whither natural knowledge cannot follow, reason is seduced into poetical extravagance, which it is its peculiar destination to avoid.”⁷⁰ On the other hand, “in the rational investigation of the possibility of natural forms through their causes, purposiveness shows itself quite undeniably as the reference to a different kind of causality—to do this must make reason fantastic, and send it wandering among chimeras of unthinkable natural faculties; just as a mere teleological mode of explanation which takes no account of natural mechanism makes it visionary.”⁷¹ To ask why a thing exists raises the question of purpose. However, it is not possible to find an explanation within nature itself. This holds for non-organized beings no less than for the organized, and indeed for nature as a whole.

The reason that organized beings seem to exemplify natural teleology lies in the way their organic constitution seems to evince a plan or design, and while nature as a whole is not an organized being, teleology is in this case a sort of analogy, and the orderly organization and evolution of nature can be said to hint at (rather than prove) a supersensible rational being at its ground. In the *Critique of Pure Reason*, Kant mentioned the abstract possibility of a rational intuition unattainable by human beings. This supra-empirical hypothesis belongs on the other shore of ontology, which is non-empirical and scientifically indemonstrable. In the *Critique of Judgment*, Kant again maintains that mechanism and teleology could be unified in a rational intuition unattainable by human beings. In other words, natural beings and organic laws could perhaps be said to belong to the unknowable supersensible world where mechanism and teleology become one thing, and where the cause of the world might finally find an explanation. The proposal implies that, from the viewpoint of teleology, nature could, hypothetically, have an artificer. Such a teleological hypothesis would no longer be a merely regulative principle for discovery, for it postulates the real existence of a supersensible substrate of nature. Kant explains:

We can in no way prove the impossibility of the production of organised natural products by the mere mechanism of nature, because we cannot see into the first inner ground of the

⁷⁰Kant, and J. H. Bernard, *Critique of Judgment*, §78, 259.

⁷¹*Ibid.*, 260.

infinite multiplicity of the particular laws of nature, which are contingent for us since they are only empirically known; and so we cannot arrive at the inner all-sufficient principle of the possibility of a nature (a principle which lies in the supersensible).⁷²

We cannot otherwise think and make comprehensible the purposiveness which must lie at the bottom of our cognition of the internal possibility of many natural things, than by representing it and the world in general as a product of an intelligent cause, [a God].⁷³

All these possibilities are still within the subjective scope of reflective rather than constitutive judgment. Kant asks:

Does it prove that there is such an intelligent Being? No. [...] Objectively we cannot therefore lay down the proposition, there is an intelligent original Being; but only subjectively, for the use of our judgment in its reflection upon the purposes in nature, which can be thought according to no other principle than that of a designing causality of a highest cause.⁷⁴

At this point, Kant's philosophy does indeed exhibit a vague mystical inclination that leans toward fideism. It is precisely this that constitutes the transition from cognition to morality.

When Kant emphasizes objective natural purpose, his focus is not simply on organized beings. Rather, he uses organized beings to reinforce his thesis that there is an important if difficult question to be raised concerning the reason for the very existence of nature. From inorganic substance to the phenomena of life to human beings, nature unfolds as if it had a purpose, and this is indeed Kant's focus. Does it make sense to assume an ultimate purpose of nature?

Kant believes that the great variety of life and its seemingly ingenious and reasonable arrangement would be meaningless and without purpose were it not for the existence of human beings. "Without man the whole creation would be a mere waste, in vain, and without final purpose."⁷⁵ Human beings are the ultimate purpose of nature's ceaseless creation. Kant points out that reference to the human being here does not refer to our cognition. The world does not become meaningful in becoming the object of human contemplation. Nor does that reference to the human being refer to our happiness. Each individual takes a subjective view of happiness, which is not the ultimate purpose of the creation of the world. This idea is in the vein of Chinese sage Laozi, who said that "nature is unkind, it treats all things like straw dogs." Nature grants no more special favor to human happiness than to the good of other animals, and the many natural disasters that all living things, human beings not excepted, amply demonstrate that point.

When Kant says that human beings are the ultimate purpose of nature as a whole, he is referring to the so-called cultural-moral human. To propose this being as the ultimate purpose of nature has several layers of meaning. First, the cultural human being implies that human beings are able to shake off the restrictions of

⁷²Ibid., §71, 235.

⁷³Ibid., §75, 247.

⁷⁴Ibid., 246–7.

⁷⁵Ibid., §86, 293.

natural desire and rise above them. Human beings are also able to utilize technology in accordance with free will in order to realize their own purposes.

Therefore, human beings are a cultural phenomenon. “The production of the aptitude of a rational being for arbitrary purposes in general (consequently in his freedom) is culture. Therefore, culture alone can be the ultimate purpose which we have cause for ascribing to nature in respect to the human race (not man’s earthly happiness or the fact that he is the chief instrument of instituting order and harmony in irrational nature external to himself).”⁷⁶

However, not every culture has conditions that are conducive to its becoming the ultimate purpose of nature; a culture can only become this ultimate purpose through the promotion of morality. We have touched on this point when discussing Kant’s view of history, when we saw that for him struggles among individuals and wars among nations are the hidden means by which nature presses our culture and talents to reach their highest point, and moves human beings forward toward their obscure purpose. For instance, although the arts and sciences are, as Rousseau said, unable to improve human morality, they do make human society more cultivated and individuals more civilized. These arts and sciences release us “from the tyranny of sense-perception, and thus prepare men for a lordship, in which reason alone shall have authority; whilst the evils with which we are visited, partly by nature, partly by the intolerant selfishness of men, summon, strengthen, and harden the powers of the soul not to submit to them, and so make us feel an aptitude for higher purposes, which lies hidden in us.”⁷⁷ This is how culture can promote human spiritual nature and thereby contribute to the elevation of rational and moral power.

Kant sees the value and purpose of life not as residing in happiness, but rather in action, and not in being a link in the chain of nature, “but in the freedom of his faculty of desire—i.e., a good will—...[by which] alone his being can have an absolute worth, and in reference to which the being of the world can have a final purpose.”⁷⁸ In other words, the ultimate purpose of nature is a morally autonomous human being, when the “human being is seen as final reality.” Only the man who obeys moral laws is endowed with the supersensible capacity for freedom.

The human being, as this unconditional moral agent, is the ultimate purpose and destination of phenomenal nature, and only as a result of this are such questions as why the world exists at all and what is its purpose laid to rest through the hypothesis of a noumenal supersensible substrate because it is itself the purpose, the noumenon, the supersensible substrate. Accordingly, the abyss between the two shores, phenomena and noumena, is bridged. Thus we arrive at the conclusion of Kant’s teleology, which is also the conclusion of Kant’s whole philosophical system. The natural causality championed by Newton and the moral autonomy and dignity championed by Rousseau are finally unified and made consistent.

⁷⁶Ibid., §83, 281.

⁷⁷Ibid., 284.

⁷⁸Ibid., §86, 293.

Kant's teleology is not scientific, for it provides no objective principle or cognition. On the other hand, neither is it theological. It is, he thinks, erroneous to suppose that theology could be deduced from teleology or, as he puts it, "physico-theology is a misunderstood physical teleology."⁷⁹ On the other hand, when discussing various views of teleology in the history of philosophy, Kant favors theism, which he considers to be more refined than other views. He is also in sympathy with natural theology, believing that it can be a useful preliminary to moral theology, though no more than a prelude. Kant is opposed to theological morality but advocates moral theology. His use of the term "theology" implicitly refers to the social domain, while science refer strictly to nature.

Reason as the essence of the human being is the supersensible ground of morality. The unknowable world of noumena is the foundation for Kant's moral theology, while a regulative, methodological teleology forms the bridge that unites the phenomenal world with moral theology. Hence, as he says, "the existence of rational beings under moral laws can therefore alone be thought as the final purpose of the being of the world."⁸⁰ Consequently, "we must assume a moral World-Cause (an Author of the world), in order to set before ourselves a final purpose consistently with the moral law; and in so far as the latter is necessary, so far (i.e., in the same degree and on the same ground) the former also must be necessarily assumed; i.e., we must admit that there is a God."⁸¹ Here Kant acknowledges a moral legislator beyond the world, and this is Kant's moral god.⁸² The god that is deduced from moral teleology is entirely different from the god deduced from natural teleology, which Kant utterly dismisses.

In the *Critique of Practical Reason*, Kant treated the existence of God as a necessary hypothesis uniting virtue and happiness. In the *Critique of Judgment* the same hypothesis is again found to be necessary. The argument in the earlier work tended toward the objective, while in the later work teleology is treated as a merely

⁷⁹Ibid., §85, 292.

⁸⁰Ibid., §87, 300.

⁸¹Ibid., 301.

⁸²Kant argues in "Perpetual Peace" that "the concept of intervention or concurrence (*concursum*) in producing an effect in the world of sense must be given up, though it is quite usual in the schools. [...] We fall into this self-contradiction, for example, when we say that next to God it was the physician who cured the ill, as if God had been his helper. For *causa solitaria non iuvat*; God is the author of the physician and all his medicines, and if we insist on ascending to the highest but theoretically inconceivable first cause, the effect must be ascribed entirely to Him. Or we can ascribe it entirely to the physician, so far as we consider the occurrence as explicable in a chain of causes under the order of nature. But besides being self-contradictory, such a mode of thought brings an end to all definite principles in judging an effect. In a morally practical point of view, however, which is directed exclusively to the supersensuous, the concept of the divine *concursum* is quite suitable and even necessary. We find this, for instance, in the belief that God will compensate for our own lack of justice, provided our intention was genuine; that He will do so by means that are inconceivable to us, and that therefore we should not relent in our endeavor after the good. But it is self-evident that no one should try to explain a good action (as an event in the world) as a result of this *concursum*, for this would be a vain theoretical knowledge of the supersensuous and therefore absurd."

reflective judgment and God becomes a thoroughly subjective hypothesis—a subjective need of human beings. **The God of the *Critique of Judgment* diverges greatly from the God of the *Critique of Pure Reason* as well as the *Critique of Practical Reason*.** Its introduction serves neither cognition (a regulative principle for discovering nature), nor the supreme good (happiness commensurate with virtue), but rather action, “simply in a subjective point of view for religion, i.e., the practical or moral use of our reason.”⁸³ In the *Critique of Practical Reason*, God finally and straightforwardly loses objective quality and becomes the hypothetical object of merely subjective belief. Kant’s system of critical philosophy starts with his refutation of the traditional proofs of God’s existence, though he nevertheless eventually ends up with the necessity of the existence of God as a subjective faith. Some readers think that Kant finally abandons the idea of God by making God into the subjective moral ideal. To put it in Kant’s own terms, it is subjectively necessary to believe in God in order to meet a need of morality—practical reason. Voltaire, who always ridicules and rebukes the church and organized religion also said that if God did not exist it would be necessary to invent him. In the time of the French Revolution, the radical Robespierre also attempted to create a god for the people to worship. His reason was the same as Voltaire’s, namely, to provide people with something that they supposedly need for unified moral action. Dostoyevsky also expresses the thought in his novels that if there were no God people would have no scruples and everything would be permitted.

These examples all illustrate that, in the end, belief in God is needed to order society, and to organize, mobilize, control, restrain and regulate action by means of a subjective faith and an object of worship. The various forms of theism in world history, with their ideas of God and the creation of the world, indirectly and fundamentally contribute to this purpose. The assumption of Kant’s moral theology, that there is a god that cannot be proved yet must be believed in, effectively eradicates some of the illusions theism has promoted while also straightforwardly revealing the underlying problem.

Kant wrote the *Critique of Judgment* in an effort to mediate between cognition and ethics, or nature and human beings. In the end, however, he has to return to God’s embrace. Kant was unable to substantially advance the unification of nature and human beings. His discussion of teleology did not touch on the use of tools, which makes his argument rather inadequate; nor did he return to the thesis of the human being legislating for nature, which was at the center of his epistemology. What is emphasized in this third *Critique* is the subjective activity of social practice, and especially the idea that a morally autonomous human being is the very purpose of nature. However, it is not teleology, but rather a mechanical process of the evolution of species and the contingent survival of the fittest that produced the human race. Yet with freedom extended by the making and using of tools, human beings break through the evolutionary law of biological species and step onto a

⁸³Kant, and J. H. Bernard, *Critique of Judgment*, 335.

unique path of endless development. This is the essence of the doctrine that nature evolves toward human beings.

Nature evolving toward human beings is a profound philosophical thesis, and it is also the essential character of aesthetics, since the unity of opposites between nature and human beings is historically sedimented in the phenomena of aesthetic psychology. It is this specific sensible achievement that marks the differences between human beings and other animals, manifesting both nature's humanization and human beings' naturalization. From the perspective of a materialistic theory of practice, there is no need for teleology in order to mediate between cognition and ethics, nature and human beings, or society and the individual. All that is needed is aesthetics. Among truth, the good, and the beautiful, the historical interaction between truth and the good is a function of the unity between them, which is provided by the beautiful. **The question of the beautiful is not merely one of the appreciation of works of fine art and artistic creation. It is instead a question that concerns the humanization of nature, and is a fundamental philosophical and historical problem.** This is the reason why aesthetics is about more than merely art or the psychology of creation and appreciation.

Kant noticed this problem, but satisfied himself with a subjective, idealistic solution, treating aesthetics as subjective purposive form. Since this solution cannot advance the humanization of nature, he is compelled to bring up the rear with the analytic of teleological judgment.⁸⁴ However, Kant's aesthetic views are of greater philosophical value than his views about teleology.

Kant's subjective, idealistic aesthetics was picked up and revised by Schiller in a more objective tone. Schiller's revision also proceeds from the philosophical thesis of reconciling nature and human beings, or sensibility and reason, and is not limited to narrowly aesthetic or artistic questions, but is deeply engaged with social and even political content. Where Kant solved his problem of the unity of human beings and nature with his idea of subjective aesthetic purposiveness, Schiller replaces Kant's solution with a unity of sensuous and rational impulses:

Now from this source issue for man two opposite exigencies, the two fundamental laws of sensuous-rational nature. The first has for its object absolute reality; it must make a world of what is only form, manifest all that in it is only a force. The second law has for its object absolute formality; it must destroy in him all that is only world, and carry out harmony in all changes. In other terms, he must manifest all that is internal, and give form to all that is external.⁸⁵

Additionally:

This twofold labour or task, which consists in making the necessary pass into reality in us and in making out of us reality subject to the law of necessity, is urged upon us as a duty by

⁸⁴Originally, the *Critique of Judgment* was limited to questions of aesthetics. Kant wrote the part about teleological judgment as an appendix. In the first edition, most of the critique of teleology, from section 76 on, was under the subheading "Appendix." The subheading was removed in the second edition.

⁸⁵Schiller (2005).

two opposing forces, which are justly styled impulses or instincts, because they impel us to realise their object.⁸⁶

In other words, rational form (moral man) should acquire sensible content so as to become a concrete, historical reality, while the heterogeneous world of sense (nature) should acquire rational form so as to make it obedient to human necessity. In Schiller's hands, the interaction and transformation of nature and human beings becomes something quite realistic.

Unfortunately, Schiller insists on following Kant in expecting aesthetic education to elevate the natural human being to the moral human being. Therefore, in spite of his effort in bring Kant's idea into real life and society, Schiller does not grasp the material practices of real life and society. His attempt to replace the practices that would actually be required to transform the world with aesthetic education belongs to idealism.

Hegel, regarded a substantial absolute idea as the end of everything, with nature and the human being unified in the historical progress of spirit, which ceaselessly rises upward. Organized beings in nature are a mere link in the developing series of the absolute idea, and the profound relationship between nature and human beings occupies little space in Hegel's aesthetic theory.

The beautiful is the sensible manifestation of the idea. Hegel focuses only on how spirit and idea are historically realized, while nature is mere material for this spiritual history. If it can be said that the dialectic of history as totality is Hegel's strength, his weakness is to submerge individuality and sensibility. On the other hand, Kant preserves the Enlightenment's promotion of individuality and sensibility. The divergence is most prominent in their aesthetics, because historical totality is always superior to the individual, as is reason to sensibility, while as a historical achievement, totality and reason have to become sedimented and preserved in the life of the sensuous individual. Therein lies the profound significance of aesthetic phenomena.

Hegel's aesthetics is different from that of Kant and Schiller in being mainly a theory of art. His aesthetics is a speculative work of the history of art, or perhaps an art-historical work of speculative philosophy. Kant's aesthetics is entirely different. Goethe admired Kant very much, and felt that he himself was engaged in the same pursuit. But it is no accident that Goethe is rather displeased with Hegel.⁸⁷ Goethe's very realistic concern with sensible nature inevitably leads him to severe criticism of Hegel's speculative philosophy, which holds sensible reality in contempt and even gobbles it up in a rationalistic system.

It is Feuerbach more than Hegel who genuinely inherits the aesthetic doctrines of Kant and Schiller and their endeavor to unify nature and human beings. Feuerbach restores the due position of sensibility, to which he looks for the unification of nature and human beings. He states, "Art presents the truth by means of the sensuous"—Properly understood and expressed, this means that art presents the

⁸⁶Ibid., 38.

⁸⁷See the *Conversations of Goethe* by Johann Peter Eckerman, also my discussion in Chap. 1.

truth of the sensuous.”⁸⁸ However, Feuerbach believes that the truth of the sensuous is an empty “love” because it has not yet acquired historical particularity, and is instead a rather abstract thing that is cut off from its time and society. As Luxun remarked, “Love is possible only when one lives a real life.” Real life practice always has all sorts of historically particular content. Feuerbach sees only the sensuous man and is blind to the practical man. However, the practical man is not merely a sensuous man of nature but also a man engaged in utterly realistic activities. That is to say, he is a man who lives in a historically particular society at a historically particular moment in time. Feuerbach is not aware of these nuances, nor does he apprehend the practical ground on which the unity of nature and human beings is historically realized. This is why Chernyshevsky, Feuerbach’s Russian successor, was also unable to launch a thorough criticism of classical German idealistic aesthetics, whose founder was none other than Kant.⁸⁹

10.8 “Man also Produces in Accordance with the Laws of Beauty”

Kant’s doctrines that nature evolves towards human beings, and that the ultimate purpose of nature is the moral and cultural self-production of an autonomous human being show nature in the service of human practice. Laws of nature ultimately serve human purposes and, by means of practice, human beings can control nature and make it serve these purposes. Kant’s exposition seems to mean that nature as a whole can only have meaning and value insofar as it advances the highest purposes of human beings. However, what he actually implies is that human beings make use of nature’s causality to realize purposes that are not given in mere nature itself. The reciprocal, interdependent, co-penetrating relationship between the human subject and the natural object (nature) are an outcome of a long-term historical practice of human beings’ transformation of the world.

Now we have to return to “the mysterious stuff” that leads Kant’s philosophy to fideism. As I have pointed out, in the *Critique of Pure Reason* Kant often mentions an intuitive intellect or intellectual intuition unavailable to human beings. Human understanding and sensuous intuition are fundamentally isolated. Understanding

⁸⁸Feuerbach (1972).

⁸⁹Chernyshevsky’s doctrine, that beauty is life, has not awakened any response in western aesthetics, but has been more influential than any other western theories in Chinese aesthetics and in theories of art and literature, particularly since the 1950s. His widespread influence in China is due to the need of the then revolutionary arts and life outlook. Chernyshevsky uses the term “life” to refer to life and life force. It also contains the aspect of social life, but its essential meaning is abstract anthropologism, and even its biological aspect. In China, this layer of essential meaning of the term has been lost, and what has been stressed is social life and its the class content (such as the examples Chernyshevsky uses to illustrate the beautiful: the beauty of a young aristocratic lady and that of a peasant woman).

comes from the subject, which is universal yet empty, while intuition comes from the sensible object, which is particular yet passive. These two must be connected or there is no cognition. This is one of the basic propositions in Kant’s epistemology. However, he repeatedly states that the possibility of their unity should not be excluded, which seems to imply the real possibility of an intuitive intellect or intellectual intuition that unites reason and sensibility, the universal and the particular, thought and being, into one. To intellectual intuition, noumena and phenomena are indistinguishable, and nothing that exists is flatly unknowable, as Kant said of the thing in itself. Kant is actually trying to solve this problem in all three *Critiques*, in what he says concerning the intelligible world and the unity of mechanism and teleology in a supersensible substrate.

What exactly is the problem? It seems evident that Kant’s attraction to the possibility of intuitive intellect or intellectual intuition is what leads him toward fideism. If this attraction were removed, it would then become evident that what really concerns him is the possible identity of thought and being. Kant’s dualism, with its central concept of the thing in itself, severs this identity if the thing in itself is unknowable, cognition cannot be transformed into being and the identity of thought and being would seem to require the mysticism of Kant’s intelligible world as the only condition under which they might finally become one. Then possibility would be actuality, the universal would be the particular, reason would be sensibility, noumena would be phenomena, what “ought to be” would really be so, and teleology and mechanism would be made fully consistent. Thought would not only cognize being, but actually create it. These ideas have a markedly mystical aura.

Fichte takes over from Kant the concept of intellectual intuition in order to rebuild speculative metaphysics. Schelling goes even further with his “identity philosophy,” developed directly from Kant’s conceptions of organized being in nature and intuitive intellect.⁹⁰ While Hegel develops his thought of the “concrete universal” as the absolute idea that finally overcomes all contradictions. Hegel writes, “the highest truth, truth as such, is the resolution of the highest opposition and contradiction. In it validity and power are swept away from the opposition between freedom and necessity, between spirit and nature, between knowledge and its object, between law and impulse, between opposition and contradiction as such, whatever forms they may take. Their validity and power as opposition and contradiction is gone.”⁹¹ With Hegel, the thesis of an identity between thought and being is developed into a dialectic of reciprocal, transformable historical links, and acquires a profound significance. Henceforth, the unity of thought and being

⁹⁰“It is by means of such an intuition that we first bring forth the intelligence, as it were, entirely out of itself; by such an intuition, therefore, that we also first resolve the entire [the supreme] problem of transcendental philosophy [...] the intuition itself; and, to judge beforehand, it can be no other than the intuition of art” (Schelling, *System of Transcendental Idealism*, 218). The mystical understanding of intuition, proposed by Schelling, was developed by Schopenhauer, Nietzsche, Dilthey, and the school of phenomenology. For further discussion, see Georg Lukacs, *The Destruction of Reason*.

⁹¹Hegel (1998).

becomes a grave theme and indeed the essence of classical German philosophy. Nevertheless, this unity is in the spirit of idealism, and everything concrete and particular that it promised disappears in the absolute unity of this idealistic metaphysics.

Marx turns the question of the unity of thought and being in classical German philosophy upside down and presents a materialistic answer. He undertakes his investigation of the community between thought and being, spirit and material, from the perspective of material practice. This practice turns consciousness and purposes into actuality by relying on objective laws of nature and transforms thought into being in a way that changes nature. Lenin remarks, “Man’s consciousness not only reflects the objective world, but creates it.”⁹² Human activities are conscious and purposeful. Human beings use their knowledge of the laws of nature to realize their purposes, while those purposes in turn arise from nature and are constrained by it. The important point, however, lies in the idea that “purposes unite with objectivity through means,” thereby producing effects whose significance goes far beyond the finite ends that individuals may pursue. Lenin quotes Hegel’s argument: “To that extent the means are higher than the finite ends of external usefulness: the plough is more honorable than those immediate enjoyments which are procured by it, and serve as ends. The instrument is preserved, while the immediate enjoyments pass away. In his tools man possesses power over external nature. Although as regards his ends, he frequently is subjected to it.”⁹³ Lenin repeatedly points out “the germs of historical materialism in Hegel.”⁹⁴

In the social practice of generation after generation, human beings have created a civilization that is by far more important than the mere natural existence of their species. Originally, human beings began to make and use tools to sustain their existence by conforming to and exploiting the laws of nature, but because their purposes unite with objectivity through the means they have constructed, human beings achieved an indelible historical result that reached beyond the particular existential purposes that were operating at the origin. The external material aspect of this achievement is scientific civilization, from the primitive stone tool to modern industry. This is what I have been calling the aspect of techno-social structure. **The inner psychological aspect of the achievement is the formal structure that internalizes, condenses, and sediments in intelligence, the will, and aesthetic feeling. This is what I have named the aspect of cultural-psychological structure.** Its materialized forms are the sciences and arts of all different ages and societies. Individual life and the subjective purpose of survival are finite and obey nature, whereas human history, that is, social practice and its achievements, transcend nature and are everlasting.

In Kant’s theory, the unity of thought and being is realized in the intelligent world, while in Hegel’s theory, its realization is the absolute idea. These idealistic

⁹²Lenin (1994).

⁹³Ibid.

⁹⁴Ibid.

theories inevitably opened the door to mysticism, fideism, teleology, religion, and God. For Marx the unity of thought and being is thought historically, materialistically, as the achievement of the humanization of nature. His theory is a profound historical materialism and theory of practice, and points toward the aesthetic realm.

The humanization of nature is not the work of gods, or God, or any church, but rather of the history of practice of millions of people in collective society. Not only does external nature serve the human world, the human being as a natural, physical being transcends animal instinct and attains its distinctive social form in society. As a result, a series of extra-biological attributes spring up from the ground of natural human existence. Aesthetic feeling and the problems and opportunities of aesthetic culture address these extra-biological needs and enjoyments. In the same way that extra-biological limbs (tools) introduce profound new dimensions in epistemology, language, and thought, the extra-biological structure of fully human morality and rational autonomy also emerges. All of these results are peculiar to human beings, distinguished from the social products and social character of other animals.

Human nature is thus the unity of biological and extra-biological attributes. The extra-biological attributes of rational cognition and moral autonomy express a kind of rationalization of sensuous existence, while in aesthetic culture these extra-biological innovations become sedimented in that same sensuous nature and gradually change it. Nevertheless, all these manifestations exhibit the supremacy of extra-biological attributes over natural sensuous existence. An exception, however, is aesthetic culture, where the extra-biological attributes dissolve into, become sedimented, and profoundly change human sensuous nature. Its essence is a pleasurable sense of freedom and its effects range across all culture and even ordinary daily life.⁹⁵ Food no longer merely satisfies hunger, but transforms into the delicacies of the gourmet. Sex no longer merely guarantees the reproduction of the species but becomes an expression of love.⁹⁶ In our need for travel and arts, reason permeates sensibility, as the individual becomes historical and nature is socialized. It is in the sensibility yet beyond sensibility, it is in forms (nature) yet beyond the forms. This is the profound significance of nature's humanization as the ground of beauty. A totality, or society, and reason penetrate deeply into the nature and sensibility of the individual human being. Marx points out that while the standpoint of the old materialism was civil society, "the standpoint of the new is human society, or social humanity."⁹⁷ Marx's materialism is different from older versions in its ideal of human liberation. Liberation is not confined merely to economic and political demands, but extends to all kinds of alienating conditions, while beauty is the opposite of all alienation. When Schiller proposes "the impulse of play" as the key to aesthetic and artistic culture, he foresees Marx's thought. Human beings

⁹⁵See John Dewey, *Art as Experience*.

⁹⁶In his *Conjectural Beginning of Human History*, Kant also mentions this point as if to make a guess at the answer, writing that "from merely sensual to spiritual attractions, from mere animal desire gradually to love, and along with this from the feeling of the merely agreeable, to a taste for beauty, at first only for beauty in man but at length for beauty in nature as well."

⁹⁷*Theses on Feuerbach*. Marx Engels Internet Archive 1994.

acquire genuine freedom only in aesthetic play, engaged in creative works and social practice.

From this aesthetic perspective, I think that the usual sequence—Kant–Hegel–Marx—which has been prevalent for some time now cannot be entirely right. Instead, the sequence should be: Kant–Schiller–Marx. The common thought that runs through the three of them is their emphasis on sensibility. They analyze the unity between sensibility and reason without ignoring the natural functions of sensibility, which are to shape, cultivate, and transform material existence. Clinging to sensibility means not breaking away from the concrete reality of individual life and its historical particularity. For Kant, however, sensibility is mere abstract psychology, while for Schiller sensibility is abstract humanity. He sought the unity of human beings and nature, or sensibility and reason, in aesthetic education, which he expected to elevate the natural human being to its destined moral autonomy. Schiller’s doctrine does, however, remain an idealistic utopia due to his inadequate historical view.

Marx analyzes the problem of liberation and autonomy from the perspectives of labor, practice, and social production, which allows him to place Schiller’s “aesthetic education” on the firm ground of historical materialism. This is the direction in which to look for the fundamental solution, and it is why Marxist aesthetics does not begin from consciousness or even from the fine arts, but rather from social practice and the philosophical question of the humanization of nature. Marx’s conception of this humanization has been erroneously interpreted in many scholarly works, which have misread him as referring merely to consciousness or the fine arts.

However, Marxist aesthetics is most fundamentally about labor, that is, material production. In other words, it is about the essential social practice of human beings.⁹⁸ For Marx, “society is the complete unity of man with nature,” and “the whole of what is called world history is nothing more than the creation of man through human labor, and the development of nature for man.”⁹⁹ He also argues that “industry is the real historical relationship of nature, and hence of natural science, to man. If it is then conceived as the exoteric revelation of man’s essential powers, the human essence of nature or the natural essence of man can also be understood.”¹⁰⁰

He means that through industry and the sciences, human beings cognize and transform nature, overcoming the opposition between human beings and nature through particular historical and social practices. This is not a mechanical theory of cultural evolution, nor is it a mystical teleology. It is a theory of practice and the materialistic unity of thought and being, which is the correct answer to the question of the unity of human beings and nature. In the course of long historical social

⁹⁸Works of art or natural objects that solicit human emotions are merely reflections of the humanization of nature.

⁹⁹Marx (1994a).

¹⁰⁰Ibid.

practice, human purposes become an objective force and nature becomes humanized. Human beings win control over nature, and nature becomes “human’s inorganic body,”¹⁰¹ whereas the human becomes master who controls and governs nature. Nature and human beings, truth and the good, sensibility and reason, laws and purposes, and necessity and freedom all finally become so many unified opposites. It is only in Marx’s theory that this unity is fully realized. Truth and the good, laws and purposes, truly penetrate into each other and blend with each other. Reason sediments in sensibility, content sediments in form, and natural forms are transformed into the free forms of beauty, which is thus the fundamental ground on which to achieve the final unity of all these opposites.¹⁰² Aesthetics as a whole embraces the unity of subjective psychology and the sedimentation of structure in social history, as manifested in synthetic psychological functions, including perception, understanding, imagination, and emotions, and in different arrangements and collaborations among the various elements of aesthetic experience and artistic styles.¹⁰³

While the exact form of this thought may eventually be expressed in the language of science and the DNA’s double helix, let us for the time being rely on the language of classical philosophy, and say that beauty is the unity of truth and the good manifest as free sensible form in objective nature; and that aesthetics is the unity of truth and the good manifest as the free experience of subjective psychology in vision, hearing, and imagination.¹⁰⁴ Formal beauty is the harmonious state of unity among the formerly contradictory, while the fundamental ground for the sublime lies neither in nature nor in the individual human soul (as Kant said), but rather in social practice. Great works of fine art have often sought to characterize the sublime in representations of the fierce struggle of people with ideals and integrity, and of the multitude marching forward without hesitation, as those behind take up the position of those who fall in front, a dauntless, heroic self-sacrifice. When nature has been historically subdued by human social practice,¹⁰⁵ the sublime in

¹⁰¹Ibid.

¹⁰²For further discussion, see my *Essays on Aesthetics: Three Theses of Aesthetics*. (Shanghai: Art and Literature Publishing House, 1980).

¹⁰³For further discussion, see my *Essays on Aesthetics: Between the Imaginary and the Actual, the Hidden and the Visible*.

¹⁰⁴Kant holds that the free play between imagination and understanding, which results in aethetical pleasure, is unknowable. This requires him to introduce the mystical concept of formal purposiveness to solve the problem. Modern psychology has not yet scientifically elucidated the problem, though we may hope that in the future it will do so.

¹⁰⁵The words “subdue” and “transform” are not used in a narrow or plain sense. They do not mean that human beings directly transform the object. On the contrary, sublime natural objects are often landscapes or natural elements that are untouched by human beings. For instance, the starry sky, vast expanses of wilderness, the ocean or a volcano. Therefore the expressions “to subdue” and “to transform” refer, to certain extent, to nature as a whole at a certain historical stage of human development. The wilderness or a volcano or storm can become objects of appreciation only when they no longer threaten to devastate human society. The more sophisticated a civilization, the more capable it is of appreciating the sublime. In a primitive society at a low stage of social

nature no longer expresses a merely passive observation that arouses passion. The source of this sublimity is neither nature itself nor the individual human soul but the power and achievement of social practice. This objective sociality is the essence of beauty, whether as beautiful form or the sublime, and artistic beauty is its expression.

The objectivity of beauty and its unity with subjective aesthetic pleasure can be seen in all its wonderful diversity, from creative human activities expressing the unity of purposiveness and conformity to natural law, to artistic enjoyment and the disinterested appreciation of nature. If we look forward to the eventual abolition of class struggle, exploitation, and oppression, the purpose of human labor is no longer mere subsistence, nor is human effort dominated by the forces of alienation or forced into the narrow confines of a competitive pursuit of food, power, status, wealth, and vanity. We can expect that as human beings gradually shake off their dependence on monotonous forms of labor, work and other practical activities can be expected to exhibit human creativity and individual richness and beauty in abundance.

The scientific significance of the conception of the human being as an end in itself will also be expressed in a fundamental transformation. Social wealth will no longer depend on the hours that people work but rather the hours in which they enjoy free play. Artistic, scientific, and other creative work will become the index of social development, while we might also look forward to discovering wholly new human powers and potentials. “Free time—which is both idle time and time for higher activity—has naturally transformed its possessor into a different subject, and he then enters into the direct production process as this different subject. This process is then both discipline, as regards the human being in the process of becoming, and, at the same time, practice, experimental science, and materially creative and objectifying science.”¹⁰⁶

Only a small priestly elite in primitive society and the intellectual class in capitalist society have been able to enjoy free time, a high status, and a significant role in social life. In future societies, these can be expected to become the usual conditions of social labor. Communism will finally be realized only when these conditions become the universal, or at least the predominant working conditions in society. Living a jolly life with a full belly is not Communism. As Marx observed long ago, Communism is a realm of freedom that is distinct from the prehistoric realm of necessity. Its historical realization will not only liberate human beings from poverty and all alienating conditions; it will also liberate the individual from the confines of social class and the demand that he make of himself no more than a mere appendage to the harsh conditions of an immature means of production. This liberation from alienation in all its aspects will become an objective trend in the

development, landscapes and other natural objects often become objects of fear, worship, mystification, and anthropomorphism, rather than being sublime in the aesthetic sense.

¹⁰⁶Marx (1994b).

development of human society and economy, while the ideal of beauty will become an object of joyful striving for the great majority, if not indeed for all human beings.

The unified ground of objective beauty and subjective aesthetic consciousness that Kant attributes to a “supersensible substrate” is more realistically and materialistically comprehended as the victory of the unity of human beings with nature. This is the true significance of the concept that nature evolves toward human beings, and it is the product of society as well as of history. Beauty and subjective aesthetic feeling no less than stone tools and modern industry express the ideal pursued in the humanization of nature, which is an internal transformation of both nature and humankind. Civilization will set the standard for individual psychology, and beauty and the fine arts will set the standard for industry and civilization. The nature of beauty and that of essence and destiny of human being are thus intimately related. Human nature is neither the result of mere biological evolution nor the mysterious transcendence of pure reason, but rather the outcome of concrete historical practice, and so is the nature of beauty.

The nature of beauty indicates the production of human practice in the world. Marx states, “An animal forms only in accordance with the standard and the need of the species to which it belongs, whilst man knows how to produce in accordance with the standard of every species, and knows how to apply everywhere the inherent standard to the object. Man therefore also forms objects in accordance with the laws of beauty.”¹⁰⁷ As we have seen, Kant and Schiller also discuss the unity of human beings with nature, although they lack historical materialism’s resources for explaining how this unification can actually come to fruition in the evolution of nature toward human beings and the reciprocal humanization of nature. This is why they are unable to present a correct exposition of the nature of beauty.

The rapid development of modern science and technology have made automatic and computerized production increasingly widespread, as machines replace the functions of human beings. Science and technology are no longer mere extensions of our limbs but also of our brains; they are not mere helpers, but take over important functions in material production.

Under these circumstances, the pessimistic thought that perhaps human beings are dominated by technology has also become widespread, with new theories advocating the replacement of historical materialism with a psychological analysis that is also (supposedly) a theory of revolution, and that promises liberation from the “hegemony of reason” characteristic of modern industrial technology. The materialism of consumption, as well as loneliness, melancholy, boredom, anxiety, and feelings of purposelessness and fear are also on the rise, and find a reflection in modern art.

People seldom find spiritual sustenance in religion anymore, while advanced technology has even estranged people from the loving human relationships and reciprocal caring they used to enjoy in the workplace and in daily life. People fall into all kinds of alienated conditions. All aspects of life—the workplace and private

¹⁰⁷*Economic and Philosophic Manuscripts of 1844*. Marx Engels Internet Archive 1994.

life, production and consumption, desire and enjoyment, need and consciousness, emotion and thought—seem to be alienated, manipulated, and dominated by technology, which has replaced the alienation of pre-capitalist society that enslaved people in hegemonic structures of power mystified by an idolatrous religion. The old question Rousseau posed (the antagonism of civilization, science, and morality) is raised again and again by Heidegger, Sartre, and Marcuse.

The old question of the relationship between human beings and nature also finds a new form that emphasizes the tension between society and the individual.¹⁰⁸ As discussed in the previous chapter, the individual consciousness that was submerged by Hegel's totalizing idealism ferociously raises its head anew, and is rapidly growing under modern living conditions. The significance of the individual is increasingly prominent. Under modern conditions, the individual acutely feels his irreducible singularity and demands liberation from the impersonal conditions of a social totality that eliminates the significance of the individual and replaces it with a mystified form of individuality driven by an obsession with consumption.

All these well-discussed theses of existentialism and Marcuse's conception of one-dimensional man are a call for liberation from the alienating power of modern scientific technology. They are also an expression of the philosophical contradiction that has severed human beings and nature, no less than individuals and society, under modern capitalism.

However, the contradiction should be attributed to class exploitation and ruling social conditions, rather than to the rapid growth of scientific technology and material prosperity. Martin Buber emphasized the relation "I-thou" over "me-it" as the truest form of human existence. Ancient Chinese teachings, including the idea of the human being as an integral part of nature and the harmonious *dao* of daily life, not only confirm that the truth of human existence lies not in the relation between the individual and God, but rather in the human relationship to the actual world and in the harmony of human beings and nature. Of course this was an ideal that emerged in China's ancient agricultural society of small-scale production.¹⁰⁹

The alienation emphasized by the existentialist philosophers arises from the indifferent interpersonal relationships that dominate the present stage of highly developed capitalist society. Liberation from alienation, a search for the true value of life, and the richness of individual existence become a demand. Living beings originally had no singular, unduplicable character, and it was only with the advance of material society that individuals became aware of their own singularity, which means that this individuality is not in conflict with society but is rather one of its chief products. The true significance of individuality is to be found in an enriched sociality.

¹⁰⁸In the "Speculative Beginning of Human History," Kant optimistically raises this question of the conflict between sociality (civilization) and naturality (instinct, animality). For instance, naturality enables human beings to demand marriage and reproduction upon reaching a certain age, while social civilization demands postponing the deadline.

¹⁰⁹For further discussion, see my essays on the history of ancient Chinese thought.

Modern philosophy expresses the epochal thesis that the human being and nature, the individual and society, must be unified. As the pace of advance quickens, individual singularity, richness and diversity, which were first exhibited by fine art, can be expected to find their fullest development in all aspects of social life and the fullest potential of individuality can be expected to become a leading characteristic of future society.

In a bold, inspiring remark, Marx stated:

Communism as the positive transcendence of private property as human self-estrangement, and therefore as the real appropriation of the human essence by and for man; Communism therefore as the complete return of man to himself as a social (i.e., human) being – a return accomplished consciously and embracing the entire wealth of previous development. This Communism, as fully developed naturalism, equals humanism, and as fully developed humanism equals naturalism; it is the genuine resolution of the conflict between man and nature and between man and man – the true resolution of the strife between existence and essence, between objectification and self-confirmation, between freedom and necessity, between the individual and the species. Communism is the riddle of history solved, and it knows itself to be this solution.... Natural science will in time incorporate into itself the science of man, just as the science of man will incorporate into itself natural science: there will be one science.¹¹⁰

The terms “human essence” and “humanism” should be taken as referring to particular social and historical qualities that have potential in nature yet transcend nature in their historical realization. This is not the old theories of human essence and humanism, which were reductive and abstract.¹¹¹ Only on the ground of a historical materialist understanding of the naturalization of human beings and the humanization of nature can these questions find a satisfying theoretical answer. This answer is found nowhere else than in future society, which Marx and Engels optimistically yet also realistically describe as “an association in which the free development of each is the condition for the free development of all.”¹¹²

Human beings are on the way from the realm of necessity to the realm of freedom, which is the world of the beautiful. The historical realization of this great goal depends on the elimination of exploitation and oppression in all forms, wiping out their influence and residues in economy, politics, technology, psychology, and ideology. Beauty is realized only through historical practice. The whole history of human beings confirms that a beautiful world is attainable, although only after much suffering and hardship.

I conclude this book by returning to Kant’s grand question, “What is the human being?” His first three questions—What can I know? What should I do? What can I hope for?—are eventually summed up in the final question, namely, what is the human being? As we have seen, Kant pursued this question from epistemological,

¹¹⁰Marx (1994c).

¹¹¹Including Herbert Marcuse’s theory. In opposing the natural to the social, Marcuse fails to see that the important aspect, in regard to the historical achievement of the human being, is a sociality that is sedimented in nature and forms the basis for the unity of society with nature.

¹¹²*The Communist Manifesto*, Marx Engels Internet Archive 1994.

ethical, and aesthetic perspectives, seeking his answer in the cultural-psychological structure of universal necessary human mental powers, which he regarded as the main attribute and backbone of human nature. However, the answer to the question of how universal necessary human functions are possible is attributed to pure reason, which in fact does not solve the problem. The question of what the human being is still remains a puzzle. Therefore, it is left to anthropo-historical ontology—which advocates that “experience turns into transcendence, history constructs reason, psychology becomes ontology”—to continue further investigation.

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Postscript

Since I was originally trained in the fields of aesthetics and the history of Chinese thought, I ought to give a brief account as to why I set out to write this book.

I was greatly interested in Kant's philosophy in my early years but never intended to launch into a study of it. In 1972, when I was undergoing training at the Cadre School in Minggang (a town in Henan province in central China), it was possible for me to sneak a look at a book in the few spare moments that were left to us, and I used this opportunity several times to read the *Critique of Pure Reason*, which I had brought with me by stealth. In the autumn of the same year, after having been dismissed from the Cadre School, I was left with nothing to do in my intellectual field because the swaggering Gang of Four had us all under their will. After Yao Wenyuan, one of the Gang of Four, became influential and promoted "the struggle between Confucianism and Legalism," I could not continue my research either in aesthetics or on the history of Chinese thought. All I could do to vent my discontent was to keep to myself away from political issues and busy myself with writing this book. However, I had to work in fits and starts because I suffered from liver and heart diseases. I finally completed the book around the time of the Tangshan earthquake in 1976. There is a distinct sort of pleasure in writing while crouched under a bed during a rumbling earthquake!

In the time of the tyranny of the Gang of Four, so many difficulties had to be faced that one could not get hold of even the most common books for reference. Therefore I had to do without the necessary bibliography. In those days of hardship, some comrades offered encouragement, others helped to borrow books for me. To your lofty friendship and great kindness, I extend the profound gratitude of a heart loyal and pure.

The preparation of this book required many years, but the actual research and writing were rather hurried, which accounts for many slips in regard to content,

wording, and argument. My writing style was obviously infected by the redundant, dry, and obscure style of the *Critique of Pure Reason*. Important themes were overlooked or underdeveloped, which I hope to remedy as I have occasion to revise and expand the work. Monographs on Kant's philosophy are very few in China, and it appears that even in the international literature no one has given a reading of Kant from the perspective of the theory of practice. This book intends to raise some questions to serve as a modest spur to further insights.

Beijing, October 1976

Postscript to the Second Edition

Thirty thousand copies of the first edition of this book were printed. Wow, I mused at the time, I won't have a chance to correct all the errors in my book for ten years! Surprisingly, the book sold out very quickly, and now it is going into a second edition. In addition to many enthusiastic letters from young readers, I also noticed that scholarly essays of rather professional quality, though not on Kant's philosophy, were quoting and repeating some statements from my book in academic journals such as *Chinese Social Science*. Honestly, I was rather pleased in my heart, even though I was not acquainted with these authors. Not that I thought this book merited so much attention, but these responses could be seen as a suitable reply to others who tried their best to make troubles for the book. As Luxun said, the malicious are artful, and sometimes their art is effective.

I have many a time in my life fallen victim to small acts of malice, rumors, and endless tedious difficulties deliberately instigated by people who abuse their power. Although these things were indeed "small," I nonetheless often felt suffocated. This ill fate proved unescapable even in later years. Therefore, I take the occasion of the second edition of this book to voice a couple of unseemly words, in order first of all to breathe freely for a while and warm myself, and secondly to let younger readers who support and care for me know that academic life can be full of twists and turns and that one can expect to be pestered by non-academic demons and monsters. However, a line that Marx quoted has been for me like a magic amulet, and is useful to bear in mind: Stick to your own path, and let others do the talking.

I remember chatting about scholarly publications with an American professor who was amazed that in China so many copies of a philosophical book could be printed. Surely he forgot that we have a huge population. Nonetheless, 30,000 copies is still an amazing number, and it led me to recall Engels' statement that even in a time when the whole society was given over to superficial pragmatism, the German working class retained their interest in theory and became the successors of classical German philosophy. I believe that the Chinese of the present day, particularly the younger generation, maintain their enthusiasm for theory and their interest in philosophy. This is noteworthy and meritorious. Only when there is a

strong desire to learn and for theoretical discussion can one transcend vulgarity; cultivate a forward-looking mind; prepare for the future; and serve the people, the homeland, and the cause of socialism with a clear mind.

I recall that it was also because of my steadfast interest in theoretical knowledge during the Cultural Revolution that I started to write this book. Many times comrades have inquired as to the circumstances of my writing at that time in our recent history. These circumstances were briefly mentioned in the postscript to the first edition, and I would like to add a few more details.

As I explained in the original postscript, I was seeking refuge in writing this book. Time should not be wasted, and as it was not permissible to do research in my own field, I took advantage of the trend for criticizing Lin Biao, Confucius, and transcendentalism to study Kant. I had heard that some general had taken the *Critique of Pure Reason* with him to read while he was campaigning. When I was sent to the Cadre School, I had to minimize my luggage, and in my choice of a book to accompany me I followed the model of the general. "This book is not too heavy," I thought, "but difficult enough to be time-consuming reading." Perhaps in hard times like that, one should read some difficult books.

After having returned from the Cadre School in 1972, I began to write a book on Kant with the notes I had taken. At that time, I was convinced that Jiang Qing and his collaborators would surely fall, but did not dare to think that it would happen as soon as it did. Therefore I didn't plan to have my book published in the near future. Since I was not working for publication, I did not feel obliged to be in unison with the politically correct views of the time. Besides, very few treatises on Kant were to be seen in China after the Liberation, and our Marxists had long ago pronounced a caricatured negative interpretation of Kant's philosophy. Others regarded Kant's philosophy as ingenious, albeit mysterious and abstruse beyond human comprehension. All these phenomena spurred me to produce a book that would, in simple language, comprehensively introduce the reader to Kant's philosophy. Another motive for my writing was an attempt to change the oblivious indifference to Kant in our academies.

Unfortunately, my German was not good. Twice I had attempted to learn German, first when I was studying at Beijing University in the 1950s, and then after having left the university. However, all I could do with the little German I had was to rely on a dictionary to read a bit of Engels. Later on, I lost even that little bit of German. The same thing happened with my Russian. Therefore I had to rely on English translations. I was also aware that "a nobleman's mansion is deep like the sea, inaccessible to the common man," and knew that the multitude of books on Kant in German, French, English, and other languages would reach to the roof and cause cows hitched to their carts to perspire. To adequately canvass and absorb all this research would consume the rest of my life. On the other hand, however, I enjoyed the work so much that I did not mind if I had to spend my whole life studying Kant. I had heard that one needed half a life to truly understand even one of Kant's books, or even one of the questions of one of his books.

Aren't there already enough treatises on the *Critique of Pure Reason*? Those books are probably the bona fide monographs on Kant, and their authors the bona fide experts.

I intended neither to write a monograph nor to be an expert. I could not have succeeded even if I had tried, nor did I wish to. My aim was to fill in a gap in the field. It seemed to me that no one had done the work required to introduce Kant, and I thought I could share what little knowledge I had acquired to contribute an elementary introduction. That was all I had in mind. In my original draft of the postscript to the first edition, I said that I was just an amateur giving a guest performance, but my editor comrade thought this line was a mere formality and deleted it. In fact, I wasn't affecting humbleness but expressing a fact.

Another impetus urged me to give this guest performance. I was deeply immersed in Marxist philosophy at the time and couldn't bear to see Marxism ravaged beyond recognition. I wanted to connect the study of Kant's philosophy with that of Marxism because, on the one hand, Marxism evolved from Kant and Hegel, while on the other hand, I was convinced that Kant's philosophy should remain an influence in shaping thought in contemporary scientific and cultural fields. Hence, it seemed worthwhile to inquire into how to criticize and learn from Kant's philosophy, how to combine it with modern natural science and theoretical questions we learned from Western philosophy, and how to preserve and develop Marxist philosophy. Of course no one book could resolve all these questions, but I thought at the time that it would have far-reaching significance if some words of mine were able to attract people's attention and induce them to pursue the questions further.

I could see that the study of Marxist philosophy, both at home and abroad, was dominated by subjectivism, the theory of the will, and ethical theories. These theories differed from each other because of their diverse social and class backgrounds and diverse class bases, but they all had this common inclination. Under the banners of "revolutionary critique of culture" and "spontaneous class consciousness," Marxism was turned into a theory that championed impetuous action. That is why I tirelessly emphasized themes of practice; the defining practice as the making and use of tools; historical materialism; and the criticism of Western Marxism.

Shouldn't we give further thought to the theoretical level of the slogan of the Great Leap Forward: "the more we dare, the more the land will yield"; and the slogan of the Cultural Revolution: "revolution erupts from the depths of the soul"? Did not dialectics teach us that there are two sides to everything, that even eating watermelon is practice, that philosophy is nothing but struggle and revolution? I contemplated these questions by means of a discourse on Kant's philosophy, and ventured to express something of my own opinion while respecting the boundary of objectivity. Consequently, although the introduction to Kant's philosophy occupies more space in the book than my commentary does, my purpose in writing the book was to communicate the latter.

It was beyond my imagination that, barely a year after I sent the manuscript to a publisher, a discussion in China epitomized in the slogan “practice is the sole criterion for testing truth” would dramatically highlight the importance of practice in Marxist philosophy. I reserved my opinion as to the academic value of the discussion, for instance, whether some people truly understood such basic concepts as practice, truth, and criterion. But the discussion itself was of secondary importance. What was significant was the political influence and liberating effect on thought of the discussion. This far-reaching significance went well beyond anything a book like mine might dream of achieving.

My book has many limitations. I confessed to them in the postscript to the first edition and wished to revise and expand them here. However, after I sent out the manuscript in the autumn of 1976, I resumed my research on aesthetics and the history of Chinese thought, and did not find time to touch the colossal monster of Kant. While an old pursuit was neglected, new knowledge was not acquired. That remains the case to this day. Naturally, while I was in the United States I was able to read books, including books on Kant by the “grand masters” in Hong Kong and Taiwan. I have also had the opportunity in the United States to discuss with Chinese and non-Chinese scholars, who either read or didn’t read my book. They all seem to acknowledge that my “guest performance” was credible. That is why I have agreed to reprint the book. I have also sincerely asked Chinese professors who read German well and are experts in classical German philosophy for advice concerning revision, though I heard nothing back from them. However, I know very well that, as I said in the postscript to the first edition, the book is marred by many slips in regard to content, wording, and argument, and perhaps there are additional errors as well. It is solely due to the want of time and strength that the introductory part of the book is still in its original state, and the promise I made in the postscript to the first edition remains unfulfilled. For that I owe the reader an apology.

Once in New York City I told a well-known Chinese professor that a doctoral student at Harvard University wished to translate my book into German. He remarked that an English translation would be better, and that I should leave the introductory part as it is and revise the commentary. He considered my commentary overly sketchy, and especially disapproved of my dismissal of Western Marxism. He was certainly not alone in this opinion. But I didn’t revise the commentary much for the second edition for two reasons. First, I do indeed have many thoughts that I would like to have an occasion to voice, but as these thoughts are irrelevant to Kant’s philosophy, I have to exercise self-restraint lest a minor issue take precedence over a major one. After all, this book is about Kant, and irrelevant remarks should find their own proper place.

Second, I still maintain the correctness of all the criticisms I made in the book, including those of Western Marxism. I did not entirely dismiss Western Marxism, and I freely concede that Western Marxists have done a lot to expose modern Western capitalism and to raise valuable questions about human nature. However, I still think that the essence of their definition, interpretation, and elaboration of the idea of practice remains embroiled in subjectivism.

However, I did make some revisions and supplements to my commentary. The main change is that in the first edition I stressed the meaning of practice as the making and using of tools in order to emphasize the Marxist theory that material production is the basis of social existence and cultural activity. I still hold the same conviction, though I have come to think that attention to spiritual civilization should also find a central place in Marxist philosophy. Marxism is not just a philosophy of revolution, but also a philosophy of construction. A philosophical account of the construction of a spiritual civilization cannot avoid questions concerning what I have called the cultural-psychological structure, as well as the critique of cultural heritage, the sedimentation of history, human nature, subjectivity, and so on. Marxist philosophy is indispensable in the search for answers to all these questions. Furthermore, Marxist philosophy itself would be advanced by treating these questions, including criticizing various erroneous theories presented by disciplines in the humanities, and taking up some of the important achievements of modern natural science and social science. In this respect, the questions raised in Kant's philosophy are still a valuable reference. I proposed this opinion in the first edition, for instance in the discussion of Piaget's theory. In this edition, I hope the point is all the more clear and prominent. It may seem hackneyed these days to talk about building a spiritual civilization. However, doing so is by no means an easy task. On the contrary, it is an extremely difficult and complicated project to truly comprehend its grave significance in philosophy, and to accurately relate it to the developing direction of both contemporary science and society.

I am pleased to learn that many people in China have begun to acknowledge and study Piaget, while others have started to study Western Marxism. Some comrades focus on the philosophy of science, including the work of Karl Popper, Thomas Kuhn, Imre Lakatos, and Marx Wartofsky. There are also a few who have noticed Michael Polanyi. All these texts have changed their view of Kant's philosophy. Certainly many worthwhile opinions and debates have been overlooked, and some aspects, problems, and representatives of new trends, including cultural anthropology, hermeneutics, ordinary language philosophy, Derrida, Levi-Strauss, Habermas, and others have been neglected. But all in all, we have made much progress. I am confident that more and better works on Kant's philosophy as well as on the other questions, philosophers, and theories mentioned in my book will appear in good time.

I look forward to this future with joyful expectation. I took on what others ought to have done, and now it is time for me to conclude this guest performance. Some day, if time allows, I would be more than happy to again take up questions concerning Kant and other questions that I have raised in this book.

In the original postscript to the first edition I quoted a poem by Gong Zizhen. I decided to omit it after hearing the wise advice of a kind-hearted comrade. Ever since childhood I had been fond of some of Gong's seven-character quatrains, and the one I had originally intended to cite was one of my favorites. I thought that perhaps I could finally include it in the new preface, but then, after further hesitation, I decided I had better not, because it would certainly provoke some people's

contempt and invite further trouble for myself. I will have another occasion some day. Instead, allow me to conclude with two different poems by Gong:

A moment, neither of missing someone nor lost in Zen meditation, Dreaming of returning, tears trickle down my cheeks.

The floral patterns are tranquil on the vase, the smoke of incense in the burner has dispersed, Seeking my original heart of six and twenty years.

Ghosts wailed in dark night when the ancients first made written characters, Sorrows gather in the people who learn to read and write.

I am neither fearful of ghosts nor sorrowful,

Yet the flame glows a phantom green when by my oil lamp I amend the sacred scroll.

Beijing, September 1983

Postscript to the Sixth, Thirtieth Anniversary Edition

The manuscript of *A New Approach to Kant* was completed in October 1976, published by the People's Publishing House in March 1979, and reprinted in 1984. The third edition was issued by Anhui Arts and Literature Publishing House in 1994. In 1994, the San Min Book Company in Taipei published a fourth edition, and in 2003, the Press of the Tianjin Academy of Social Sciences published the fifth edition. This edition, which will be published by SDX Joint Publishing Company, is now the sixth. Counting on my fingers, I realized that it has been thirty years since I completed the manuscript.

I would have liked to take the opportunity to revise the book each time when it was reprinted. As I said in the postscript to the second edition, I preferred always to leave my introductory part untouched but to add or delete from the commentary. I have followed this course in each new edition. This book was written at a time when it was believed that philosophy was essentially epistemology and that was the most important aspect of Kantian studies, and that is why I devoted most my energy to the first *Critique*, which occupies five of the ten chapters of the book. Unfortunately, since completing the book I have not continued to pursue epistemology, so I have left most of the introduction and commentary relating to the first *Critique* in its original form with only a few deletions. The sections on aesthetics and Kant's life also remain the same. The sections on ethics, politics, and the philosophy of history, however, have been significantly revised in both interpretation and style. For instance, my treatment of the notion of the thing in itself as well as the question of whether we should accord greater importance to Kant or to Hegel have been modified to clarify the basis of my preference for Kant's way of dealing with these problems. However, nothing in these revisions contradicts the anthropological ontology I laid out in the first edition, with its ground in practice and my emphasis on the importance of making and using of tools, while the thesis of cultural-psychological structure has been made more salient. Nonetheless, since it is a republication, excessive revision would be inappropriate. So I have tried to preserve the book's original state. As I said in the preface to the Taiwan edition, it is always best to preserve the old look and acknowledge the law of the mutual

causation of all action. I was confident that readers could penetrate to the situation of the time when I wrote the book.

Zhou Liquan, a colleague in the Division of Philosophy at the Chinese Academy of Social Sciences, told me that a scholarly work in the humanities that has circulated for twenty years has indeed done well. I have always carried this remark in my heart and made it the goal of my struggle. However, it is beyond my expectation that a book written during the Cultural Revolution could survive for thirty years and be reprinted in a sixth edition today. Pirate editions are also common in both Taiwan and mainland China. This phenomenon, which actually proves that the sales have been fair, pleases me very much. Alas, as time hurtles past, the mind and body are both declining day by day. I am already past seventy-six, and can no longer bend over a desk for uninterrupted hours. This is probably the last opportunity I will have to revise the book. I would have liked to be more meticulous and thorough, including standardizing the footnotes. But as one who is advanced in years, I have been unable to do work equal to my ambition.

Kant was convivial and fond of parties and conversation. But I lack such social skills, and rarely take the initiative to connect with the world. Looking back on the solitude in which this book was originally written, the scenes, while still vivid, seem to be from another life. The climate of the time, the ways of life, social circumstances, academic environment, and ideas and thought of China today are entirely different from my former days. My mind remains in that monotonous and lonesome mood that has little changed in so many decades, particularly in these last fifteen years of living abroad. Thus were the years whiled away, and if there remains something of that regretful melancholy, it must simply be my personality. In the Postscript to the second edition I quoted two poems by Gong Zizhen as a conclusion. This time I want to conclude with two of my favorite lines, because they seem to be appropriate both to myself and to my book.

I moan about the swift change of morning into evening, and groan about the endless toil of human life (Tao Qian).

To investigate nothingness to apprehend things, to knock on solitude to find a soul mate (Lu Ji).

Boulder, Colorado, July 2006

Appendix

Advancing Along with Marx and Kant

Interview with Shu Wei, editor of the sixth, thirtieth anniversary edition.

Shu: Since completing the manuscript of *A New Approach to Kant* in 1976, and its publication in 1979, the most significant revision you did was for the revised edition of 1984, which was published by the People's Press. You also revised some of the wording for later editions. However, the revision you made to the sixth, thirtieth anniversary edition seems to be more extensive. What was the focus of your revision this time?

Li: My aim was to highlight Kant's last question, "What is the human being?" and to emphasize defining what I describe as the cultural-psychological structure as the main feature and backbone of human nature, as what makes human beings human beings. No one has ever given an answer to the question of what the human being is, and the concept of "human nature" has been employed in an extremely vague and confused fashion. I myself find the definition I gave in this new edition very important, even if there remains more to say on the vast topic of human nature. The most significant changes are in Chap. 9, where I more explicitly express my admiration for Kant's argument on the "revolution of farewell," freedom of speech, progressive reformation, republican government, and perpetual peace. I also bring up again the old question of who we should more greatly esteem, Kant or Hegel, discuss the so-called Back to Kant movement, and develop my conviction that Kant's thought, striving for universality and ideality from an anthropological perspective, is a more vital and lasting contribution than anything Hegel did, and remains superior to present trends concerning radical individualism and suspicion of universality.

I said in the postscript to the second edition of 1983 that I could not and did not want to be a Kant expert. I did not intend to produce a monograph on Kant when I wrote the book, but rather merely to intimate something of my own philosophy by means of associating Kant with Marx. This revision also tries to make this intention clear. Nevertheless, this is a book on Kant, and I should not devote too much space to my own thoughts. Fortunately, I've had the opportunity to write several other books.

Shu: While the theme of the book is Kant's philosophy, you present an overall interpretation of classical German philosophy, particularly emphasizing your understanding of the central theme running through from Kant and Hegel to Marx, which had a great impact in the academy in the 1980s. I remember that Xie Xialing, of Fudan University in Shanghai, continued your line of thought in his book *Kant's Sublation of Ontology* (1987). He analyzed Kant's doctrine of "self," proposing a distinction between the "me" and "I," and emphasizing the relevance of Marxist historical materialism to Kant's philosophy. At the same time, many young scholars of the 1980s vehemently criticized you for suppressing and even revoking the sensuous "me" with your historical and anthropological, practical "I." How do you see that debate now?

Li: The doctrine of "I" and "me" in *A New Approach to Kant* is in fact the same as the one I developed in my book *Historical Ontology*, namely, that the human being has developed from a condition in which the individual exists for the whole society to one in which the whole society exists for the individual, that is, for the advancement of individuality. Emphasizing the latter aspect and negating the former would be unhistorical, while emphasizing the former and negating the later would be anti-historical. Liberalism, with its theory of natural right, mainly stresses the existence of the whole for the sake of the individual. Such a one-sided view is unhistorical. Communitarianism emphasizes the existence of the individual for the whole, which can be described as an anti-modern trend in China, and therefore I call it anti-historical (it is otherwise in the West).

In the *Communist Manifesto*, Marx said, "the free development of each is the condition for the free development of all." He also said that "the higher development of individuality is thus only achieved by a historical process during which individuals are sacrificed for the interests of the species in the human kingdom [...] because these interests of the species coincide only with the interests of certain individuals, and it is this coincidence which constitutes the strength of these privileged individuals" (*Theory of Surplus Value*). Kant stated that "a universal cosmopolitan condition, which Nature has as her ultimate purpose, will come into being as the womb wherein all the original capacities of the human race can develop." He also pointed out that this ultimate purpose could only be actualized through the socialization of the non-social, as well as through opposition, struggle, war, vanity, greed, desire for power, and the sacrifice of the individual ("me"), which could only be a long historical process. In this regard, Kant, Hegel, and Marx shared the same view, with the difference that Hegel and Marx regarded the historical movement as an irrefutable objective law, while Kant regarded it as a teleological idea that could inspire people but could not be an object of scientific knowledge. Comparing all these views closely convinced me that Kant was right. Regrettably, I didn't expand on this important point in the latest edition.

Shu: German idealism commencing with Kant represents a summit in the development of modern philosophy, while the publication of *A New Approach to Kant* in the 1980s represents the depth of thought concerning questions of modernity in the Chinese academy. Meanwhile, in the last thirty years, European and American academics have shown increasing interest in the study of Kant and

Hegel. The phenomenon seems to be an effort to return to German idealism as a suitable context for a thorough examination of questions concerning modernity. The approach of European and American scholars in recent years even seems to echo your own thought thirty years ago. How do you see this trend?

Li: I'd like to elaborate on this topic. I am indeed very pleased to see that the approach of Western Kant scholarship in recent years is quite close to mine in *A New Approach to Kant* from thirty years ago. This approach turns from the traditional emphasis on Kant's transcendental doctrine, individualism, rationalism, and the first and second *Critiques* to an emphasis on Kant's empiricism, collectivism, sensualism, the third *Critique*, and Kant's views on politics, history, and religion. In other words, it is a shift to an interpretation of Kant that emphasizes his anthropology and philosophy of history.

Some years ago, I read two books written by eminent Kant scholars, *Kant on Freedom, Law, and Happiness* by Paul Guyer, and *Kant's Ethical Thought* by Allen Wood. I was surprised to see that the subtitle of one section in Wood's book is called "Kant's Historical Materialism." He states that "Kant's theory of history is proto-Marxist" (245), and thinks that while Kant did not develop ideas of class struggle and the abolition of private ownership and state, Kant understands, with Marx, the basis of history as the development of people's socially productive powers, their collective capacities to produce their means of subsistence in distinctive ways that vary with historical conditions. Throughout history these capacities change and grow, and human history therefore passes through different stages, which correspond to the dominant mode of productive activity. Along with Marx, Kant also views history as a scene not only of conflict and strife but of deepening inequality and oppression. And as in Marx's theory of history, the root of this conflict is a struggle between groups of people with antagonistic economic interests, where the different groups represent different stages in human beings' economic development (244).

Allen Wood, who also wrote *Karl Marx*, is certainly sympathetic to Marxism. Paul Guyer is not affected by personal favor, yet he is also unsatisfied with the traditional approach to Kant's ethics, which depends on the *Groundwork of the Metaphysics of Morals* and the *Critique of Practical Reason*, and attends almost exclusively to reason, the individual, and the categorical imperative while overlooking Kant's massive discussion of sense experience. In the beginning of his book *Kant on Freedom, Law, and Happiness*, Guyer straightaway quotes Kant's words that reason is merely instrumental, stressing that despite the acknowledged centrality of the categorical imperative, nevertheless morality, freedom, and happiness are intimately connected with human beings and are by no means secondary or subordinate. At the end of the book, he stresses again that "the possibility of freedom must be not only accessible to human reason through the consciousness of the moral law but also palpable to human sensibility through the experience of nature, artistic genius, and human history."¹ Many of the interpretations in the

¹Guyer (2000).

books by Wood and Guyer are consistent with the opinions I presented in *A New Approach to Kant*, including the idea that universal necessity is objective sociality, that reason arises through the advance of society rather than abiding in an immutable transcendental domain, or in other words that the empirical turns into the transcendental, and history constructs reason. They also agree with the emphasis I placed on aesthetics, sensible feeling, and the philosophy of history.

At the outset of modernization two hundred years ago it was indeed necessary to shake off the religion of the Middle Ages and the reign of theology, in order to build up the morality of modern society. Kant offered sacrifices to the idol of pure reason that took the place of God, resisted pre-modern authority with the theory of an autonomous free will, and broke out a new path for the freedom of the individual as demanded by modernity. However, ever since Nietzsche declaimed the death of God, the ugly features of modernity are exposed daily, and liberalism and individualism have opened the door to post-modern nihilism.

Despite the fact that many Kant scholars are still entangled in trivial debates concerning the transcendental, the individual, and reason, a philosophical turn is nonetheless inevitable. In his *Lectures on the History of Moral Philosophy*, John Rawls argues that Kant's Kingdom of Ends is the perpetual peace of republican alliances, while Guyer believes that Kant's conception of the *summum bonum* refers to the happiness of humanity rather than the happiness of the individual. Roger Sullivan argues that "because the moral law appears to us as sacred as if it were God's will, reverence for that law, Kant wrote, leads us to religion, which he defined as the performance of our duties as conscientiously as if they were divine commands." I stated in the postscript to the first edition of my book that God in the third *Critique* is merely human subjective belief, and that everything Kant says there concerning God revolves around the human being and especially the fundamental issue of its future.

All these thoughts lead to an answer to the question of the human being in terms of a perspective at once historical and anthropological that is philosophically oriented toward the human future. In my discussion of Kant's philosophy of history, I pointed out that the historical course may seem disorderly from the perspective of the individual, even though from the perspective of the totality, a slow, regular progress can be discerned. This is Kant's "secret plan of nature." He thought that "the greatest problem for the human species, the solution for which nature compels him to seek, is that of attaining a civil society which can administer justice universally." The result would be that "perpetual peace" in an alliance of republican states. Kant also believed that commercialism and capital interests rather than individual morality would be the impetus for the elimination of war and the realization of that perpetual peace he dreamed of.

All these thoughts can be directly related to our contemporary reality. Therefore it is evident that the new approach—which proceeds from the transcendental to the empirical; from the individual to the human race; and from pure reason, which is irrelevant to experience and human happiness to the human being as noumenon; historical progress; world peace; and collective happiness (first of all the happiness of material conditions)—would naturally diverge from that of traditional Kantian

scholarship. The anthropological perspective I proposed thirty years ago in *A New Approach to Kant*, which emphasizes Marx's humanization of nature and proposes the idea of the using and making of tools to explain "how knowledge is possible, is one such new approach."

Shu: In recently years, Hegelian studies in Europe and the United States give particular attention to Hegel's continuation of Kant's philosophical questions. For instance, Robert Pippin and Terry Pinkard, influential figures in Hegelian studies, stress the comprehension of Kant's transcendental apperception and the self-consciousness in order to grasp the crucial question of Hegel's idealism. Their emphasis agrees with your discourse on self-consciousness, which is doubtless the key chapter of your book. You raised the question of subjectivity in this chapter, and elaborated on the arguments around the issue of subjectivity.

The "Copernican turn" of modern thought promotes the status of the human being as the subject, yet it also conspicuously displays the confrontation between human beings and nature, as well as the profound tensions and confused struggles of the modern world. For instance, you pointed out the fractured state of relations between nature and freedom, the antinomy of historical progress and ethical ideals, and the confrontation between interest and morality. Seen against this backdrop of thought, your "philosophy of construction," and your thesis that we ought to unite science and morality, material civilization and spiritual culture, collective universality and the potential of the individual, as well as your treatment of the question that you emphasized as the true meaning of Kant's philosophy in this revised edition, namely, "What is the human being?" all direct our attention to the fundamental cultural and moral import of Kant's philosophy. All these arguments should be revisited and deserve careful consideration.

Chinese academics have always regarded classical German philosophy as an important field of study, even though in the last ten years, the social sciences, especially economics, and varieties of post-modern thought have tended to prevail, while the study of classical German philosophy has come to seem less important, good mainly as a dependable "bowl of rice" for a small number of experts. It is no longer the focus of universal interest in the Chinese academy. Would I be wrong to assume that in this revised edition you want to reaffirm the value of classical German philosophy?

Li: I have stressed that I'm not a Kant expert. Kant could never have been my "rice bowl." Because I'm not restrained in that respect, I could speak my mind more freely. I believe that the tradition of Kant–Hegel–Marx, which raised the question concerning the fate of the human being (including the individual), stands on more solid ground and is more important than the questions and arguments presented by later generations, including the academic stars of the present. Last year, I said somewhere that Foucault and Derrida are hardly comparable to Marx, not to mention Kant. The universality Kant pursued, due to its formalism of transcendental reason, and lacking the realistic material foundation of the existence and development of the human being, turns into Hegel's concrete universal, which he pursued in his conception of the absolute idea, even to the point of regarding the Kingdom of Prussia as the summit of ethical culture. Contemporary globalization

could be read as a new, genuine basis for the universality Kant pursued. This idea of a cosmopolitan civil society under the rule of law and with the free development of individual genius could be a future ideal for the whole world.

It was on the basis of this vision of historical progress that I proposed the antinomy of history and ethics, which is a continuation of the tradition of Kant–Hegel–Marx, including even that question about the “I” and the “me.” But I combined it with elements from Chinese tradition and supplied two further points. First, the art of measure. In the tragic course of the antinomy, I emphasized the imperative to comprehend changing standards in different historical stages and levels, in order to deal with issues concerning efficiency, fairness, liberty, constraint, economic development, environmental degradation, and so on. Second, Kant blends harmoniously with the Chinese tradition of “the supreme accomplishes virtue,” as both emphasize the autonomous, absolute value of morality. This view is different from Hegel and Marx, who were ethical relativists and attributed morality to history. Consequently, my return to Kant through the mediation of our Chinese tradition extends a new dignity to the individual “me.”

My revision takes aim at the post-modern ideological trend, which seems to me to be destroying everything. Nevertheless, I don’t agree with Western conservatism, which rejects the Enlightenment and declaims a return to the classical thought of Plato, nor do I side with the Chinese classicists, who advocate the three cardinal virtues and indulge in nostalgia for the past. I still believe in my constructive approach to a philosophy of construction. We should strive for a bright future for the human being and the free individual, and the best hope for that is to maintain the priority of rationality that was the theme of the Enlightenment, and combine it with elements of Chinese tradition purged of its ills and given an appropriate historical attitude. That is what I mean by the phrase “the perspective of the human being, the insight of the Chinese.”

Shu: Your admiration for classical German philosophy, with its theme of the cultural-moral human being, raises many further questions. For instance, the approach of Kant’s moral theology and religion of reason seems to have had a profound influence on New Confucians in Taiwan and Hong Kong (e.g., Mou Zongsan). Mou sets great store by Kant’s philosophy, and speaks often of the metaphysics of morality, the supremacy of morality, and so on. He equates “mind as substance” with “nature as substance,” opposing the separation of nature from freedom, and spares no effort in arguing for the harmony between the moral and cosmological orders. On the other hand, your critical interpretation of Kant’s philosophy, which stresses historical (productive) practice, seems to emphasize emotion-intuition and aesthetics as the bridge between the two. Your way of linking Kant’s philosophy with Chinese tradition therefore seems to differ significantly from that of the New Confucians in Taiwan and Hong Kong, and you have indeed criticized them, proposing “Western substance, Chinese application” and a “fourth stage of Confucianism.” Your theory has also been criticized by some young scholars. For instance, Liu Xiaofeng vehemently advocates the absolute transcendental divinity of salvation. He too criticized the moral ideal of reason in history proposed by the New Confucians no less than your aesthetic vision, which he

considers to be an aesthetic escapism that is indifferent to human suffering. How do you view the criticism now?

Li: I was amazed that Mou Zongsan spent so much time translating Kant's three *Critiques*, yet completely misunderstood or maybe deliberately distorted the basic concepts of Kant's philosophy, such as intellectual intuition and immanent transcendence. I'm not going to go into more detail about the concept of immanent transcendence because my essay "On the Fourth Stage of Confucianism" has elaborated on this. As to intellectual intuition, I argued in my essay "On Pragmatic Reason and the Culture of Optimism" that Kant rejects mysticism, believing that only God is possessed of the intellectual intuition that rises above the distinction between noumenon and phenomenon. However, Mou Zongsan holds that the human being also enjoys this intellectual intuition. Kant situated his discussion of the concept squarely in his epistemology, while Mou transplants it into the metaphysics of morality. What Mou calls "intellectual intuition" does not concern knowledge and logic, but rather the mystical experience of a religion of morality (see my *Pragmatic Reason and Optimistic Culture*, Joint Publishing, 2005, 96). Kant did indeed advocate moral theology, but he adamantly opposed theological morality and the identification of the rational law of morality with religion and mystical experience. That is one of the reasons I emphasize the distinction between religious morality and modern social morality. The former is a matter of private belief (personal morality) and mystical experience, while the latter is public reason (common morality), and has nothing to do with religion or mystical experience. This is what I mean by "the right is prior to the good." Despite the fact that different religions and cultures have different conceptions and criteria, the Good can not only regulate but also constitute the substance of modern rights. Therefore, my conception is entirely different from Mou's adherence to the tradition of "inward sage and outward king."

The Chinese tradition is a shamanistic tradition, and its teaching of "one world" in which man is an integral part of nature differs from the "two-world theory," which emphasizes the split between mind and body. The "one world" teaching celebrates the living and does not believe in an "original sin" that requires redemption. Chinese tradition cares for the sufferings of this world, as confirmed by such well-known mottos as "the people are my brothers, the creation is part of me," "save the people in the midst of fire and water," and "worry ahead of the people, and enjoy the fruits after the people." The moral aspiration of our tradition has always been to create the Great Harmony here on earth, rather than pursue a selfish immortality of the soul or a private spiritual salvation and transcendence.

My "philosophy of eating" is an attack on those who prate about "spiritual life," "salvation of the soul," and "transcendence of the mind," but look down on, overlook, and even despise material life. I deliberately employ these vulgar and coarse words "chi fan" (eating) to upset them. I said that I studied and flexibly apply Wittgenstein's thesis that the meaning of language lies in its use. Like my proposal for "Western substance, Chinese application" (as opposed to "Chinese substance, Chinese application"), and "the fourth stage of Confucianism" (as opposed to "the third stage of Confucianism"), what I call "the philosophy of eating" is a verbal

provocation as well as having an important implication for what I am trying to say in philosophy. When talking about life, I believe we ought first of all to talk about the material life of human beings, that is, the basic necessities of everyday life. A human being must first of all be alive and survive in material life before there is any discussion of spiritual life and the salvation of the soul. In Chinese tradition, spiritual life and the salvation of the soul do not necessarily refer to Christianity or other religions. Instead, these concepts belong to an aesthetic vision of the universe. This aesthetic vision is encapsulated in traditional mottos like “the accumulation of good by means of the beautiful,” and other mottos of ours that emphasize great moral temperance and the spirit of self-sacrifice, such as “knowing the impracticable nature of the times, yet willing to act,” and “sacrificing life to complete virtue, letting life go to choose righteousness.” Much more is at stake in this vision than mere sensuous pleasure, and it cannot be dismissed as a merely carefree, disinterested state. Kant answered his question concerning the essence of the human being with his vision of the cultural-moral human being, while I propose instead the modified vision of the human being as at once cultural, moral, and imbued with aesthetic value.

Shu: To my mind, *A New Approach to Kant*, written thirty years ago, and your essays on the history of traditional Chinese thought, such as “Reevaluation of Confucius” (1980), and *The Journey of Beauty* (1981) are intimately connected. They seem to form a systematic whole, and your critique of Kant’s philosophy is closely related to your unique interpretation of traditional Chinese thought. In recent years, you have written a good deal about historical ontology, pragmatic reason, the culture of optimism, the shamanistic tradition, and emotion as substance. On the one hand, you grasp the problems of Western thought with a critical mind; on the other hand, you creatively contemplate the future of Chinese civilization. It seems that you set great store by critique and creativity. Am I right?

Li: Yes. These two aspects, a skeptical and critical attitude combined with an emphasis on the value of creation and construction complement one another. I would not dare to say that my critique of Kant’s critical philosophy lays the foundation, but that is the goal for which I strive. I have proposed many concepts that should form a sort ground for a philosophical perspective.

Although my argument was often sketchy and left out details, nonetheless I believe that the purport of my thought was made quite clear.

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Reference

Guyer, Paul. 2000. *Kant On Freedom, Law, and Happiness*, 434. New York: Cambridge University Press.