

**EVALUATION OF IMMANUEL KANT'S CONCEPT OF SPACE AND TIME
EXAMINED IN LIGHT OF HUMAN EXISTENCE**

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**AN ORIGINAL ESSAY SUBMITTED TO THE DEPARTMENT OF
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OCTOBER, 2025

CERTIFICATION

This is to certify that this project work titled; **AN EVALUATION OF IMMANUEL KANT'S CONCEPT OF SPACE AND TIME EXAMINED IN LIGHT OF HUMAN EXISTENCE** was carried out by **OSEOBULU JORDAN USIGBE** with matriculation number **ART2101146** of the Department of Philosophy, Faculty of Arts, University of Benin, Benin- City.

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DEDICATION

This work is dedicated to God Almighty, the gracious and kind Father, whose love, guidance, and protection have sustained me throughout my academic journey. Truly, without Him, none of this would have been possible

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ABSTRACT

This study critically evaluates Immanuel Kant's concept of space and time as presented in his Critique of Pure Reason, examining its implications in the context of human existence. Kant revolutionized metaphysics by proposing that space and time are not empirical realities existing independently of human experience, but rather a priori forms of intuition through which the human mind structures all sensory data. This transcendental idealism asserts that space and time are subjective conditions that make experience possible, rather than external entities. The study explores how Kant's notion redefines human existence by situating individuals as active participants in the construction of reality, emphasizing the centrality of human cognition in shaping the phenomenal world. Through this evaluation, the research highlights the profound philosophical implications of Kant's theory for understanding human perception, knowledge, and existence. It argues that Kant's framework bridges the gap between empiricism and rationalism, providing a foundation for existential reflection on human limitations and possibilities within the bounds of perception. Ultimately, the study affirms that Kant's concept of space and time remains crucial in understanding the human condition as one that is both finite and meaningfully engaged with the world of appearances.

CHAPTER ONE

INTRODCUTION

1.1 BACKGROUND TO THE STUDY

The nature of space and time has long been a subject of intense philosophical inquiry, dating back to the pre-Socratic philosophers. Ancient thinkers such as Parmenides, Zeno, and later Aristotle sought to understand the structure of reality through reflections on motion, continuity, and change—all of which presuppose concepts of space and time. In the modern period, philosophers like Isaac Newton and Gottfried Wilhelm Leibniz offered contrasting views: Newton regarded space and time as absolute and independent realities, while Leibniz viewed them as relational entities, dependent on the positions and interactions of objects.¹ These foundational debates laid the groundwork for Immanuel Kant's critical intervention in the eighteenth century, wherein he proposed a novel theory that sought to transcend the dichotomy between absolutism and relationalism.

Kant's project, famously termed the "Copernican Revolution" in metaphysics, aimed to shift the focus of epistemology by proposing that the conditions of knowledge lie not in the world itself but in the structures of the human mind. In his *Critique of Pure Reason*, Kant posits that space and time are not derived from experience but are instead a priori intuitions that precondition all sensory experience. They are the pure forms of human

¹ Guyer, P. (2006), *Kant*, (London: Routledge), p. 34.

sensibility through which we perceive the external and internal worlds, respectively. This revolutionary theory redefined the boundaries of metaphysics and provided a framework for understanding how synthetic a priori judgments are possible. However, while Kant's theory addresses the structural conditions of knowledge and scientific understanding, it leaves out the lived, subjective dimensions of human existence.

In the twentieth century, existentialist and phenomenological philosophers began to question the adequacy of Kant's transcendental framework in accounting for the concrete realities of human life. Thinkers like Martin Heidegger, Maurice Merleau-Ponty, and Jean-Paul Sartre introduced new approaches that emphasized the existential and embodied experience of space and time. Heidegger, for example, redefined time as the horizon for the understanding of being, arguing that temporality is a fundamental structure of Dasein's existence.² Merleau-Ponty highlighted the role of bodily perception in constituting spatiality, opposing Kant's abstract and disembodied conception of space. These philosophical developments underscore the need to reevaluate Kant's ideas in light of the dynamic and situated nature of human experience.

This study is motivated by the tension between Kant's transcendental idealism and the existential-phenomenological critique that emphasizes lived experience. The aim is to explore whether Kant's a priori forms of space and time sufficiently capture the

² Heidegger, M. (1962), *Being and Time*, (J. Macquarrie & E. Robinson, Trans.). (New York: Harper & Row), p. 23.

complexity of human existence, or whether they must be supplemented or revised in light of existential insights. By critically engaging with both Kantian and post-Kantian perspectives, the study seeks to provide a more holistic understanding of space and time that encompasses both the conditions of objective knowledge and the realities of subjective, embodied existence. Immanuel Kant's philosophy marks a significant turning point in the history of metaphysics and epistemology, especially through his critical analysis of the concepts of space and time. In his *Critique of Pure Reason*, Kant presents space and time not as empirical realities derived from experience, but as a priori forms of sensibility that structure all possible experience. According to Kant, space and time are not properties of things-in-themselves (noumena) but the necessary conditions for the possibility of experiencing phenomena³. This means that the mind contributes to the structuring of experience by prefiguring how objects will appear to us in space and time. Space, he argues, is the form of outer sense, while time is the form of inner sense. These are not concepts derived from experience, but rather the framework that makes experience possible.

Kant's idea of space and time as a priori intuitions fundamentally reconfigures the metaphysical landscape. He rejected both Newton's view of absolute space and time, as well as Leibniz's relational view, proposing instead that space and time are subjective

³ Kant, I. (1998), *Critique of Pure Reason*, (P. Guyer & A. Wood, Trans.). (Cambridge: Cambridge University Press), p. 45.

conditions of human sensibility⁴. His transcendental idealism implies that while space and time are universal and necessary for human perception, they have no meaning independent of human cognition. This position attempts to bridge the gap between empirical realism and metaphysical idealism by affirming the objective reality of appearances, while denying knowledge of things as they are in themselves. In this light, Kant's concept of space and time can be seen as a profound contribution to the theory of knowledge, establishing the limits and structure of human understanding. When examined through the lens of human existence, particularly from existential and phenomenological standpoints, Kant's treatment of space and time reveals significant limitations. Existential philosophers such as Martin Heidegger challenge Kant's formal and abstract treatment of time. In *Being and Time*, Heidegger reinterprets time not merely as a container or sequence, but as the very horizon through which human existence (Dasein) understands its being. Heidegger argues that human temporality is not simply an a priori form of sensibility but is constitutive of existence itself. Past, present, and future are not fixed points but dynamically interwoven aspects of human care and anticipation. Thus, temporality in the existential sense is not neutral or universal, but deeply personal, historical, and situated.

Phenomenologists like Maurice Merleau-Ponty criticize Kant's conception of space for being too disembodied and abstract. In *Phenomenology of Perception*, Merleau-Ponty insists that space is not an empty form imposed on experience, but something that

⁴ Guyer, P. *Op. Cit.*, p. 56.

emerges through our embodied interaction with the world. For human beings, space is not simply “there”; it is lived and inhabited. Our body is not merely in space; it is *of* space. Through movement and perception, we create meaningful spatial relations. This view emphasizes the existential dimension of space, one that Kant's account largely overlooks. From this angle, Kant's a priori framework, while valuable in explaining the conditions for scientific objectivity, fails to capture the concrete, lived experiences of space and time that define human existence. Existential philosophers like Søren Kierkegaard and Jean-Paul Sartre also contribute to the critique of Kantian temporality by emphasizing human freedom, anxiety, and the subjective experience of time. Kierkegaard sees time as deeply tied to the human condition of becoming—a continuous struggle between possibility and actuality, marked by existential dread⁵. Sartre, in *Being and Nothingness*, explores how human consciousness projects itself into the future, revealing the inadequacy of any fixed or static conception of time⁶. In this existential context, time is not merely an intuitive form but is actively experienced through choices, regrets, expectations, and projects. Human temporality is thus fluid, open-ended, and inseparable from personal identity and freedom.

⁵ Kierkegaard, S. (1980), *The Concept of Anxiety*, (R. Thomte, Trans.). (Princeton: Princeton University Press), p. 83.

⁶ Sartre, J.-P. (2003), *Being and Nothingness*, (H. E. Barnes, Trans.). (New York: Routledge), p. 90.

Despite these criticisms, Kant's framework still holds value, particularly in its attempt to ground the sciences in universal conditions of experience. His transcendental analysis allows for a stable, objective understanding of phenomena, which is essential for empirical investigation. When considering the existential and phenomenological dimensions of life, his theory appears too restrictive and detached from the lived world. Kant provides a necessary but not sufficient explanation of space and time. His theory explains how we can have objective experience, but not how we actually live and feel our way through time and space. The existential perspective invites a rethinking of these categories not as fixed forms but as dynamic, unfolding aspects of being-in-the-world.

1.2 STATEMENT OF THE PROBLEM

Despite its seminal contribution to epistemology and metaphysics, Immanuel Kant's conception of space and time as a priori intuitions presents a significant conceptual challenge when juxtaposed with the lived realities of human existence. Kant posits that space and time are not empirical constructs derived from experience, but rather the necessary preconditions for any possible experience. While this framework has provided a robust foundation for scientific inquiry and objective knowledge, it falls short in addressing the subjective, dynamic, and embodied aspects of human life. The abstraction inherent in Kant's theory, which treats space and time as static and universally applicable forms, appears inadequate in capturing the fluid, relational, and contextual nature of human existence as experienced in everyday life.

Contemporary existential and phenomenological critiques highlight that human temporality and spatiality are far more complex than mere conditions for perception. Philosophers such as Martin Heidegger and Maurice Merleau-Ponty argue that time and space are intertwined with the essence of being, shaping not only how we perceive the world but also how we exist within it. Heidegger's reinterpretation of time as a horizon of existence emphasizes that temporality is an integral component of human Dasein, marked by anticipation, care, and the unfolding of lived experiences. Merleau-Ponty's perspective on spatiality asserts that space is not a mere container but a field of lived experience, emergent from the body's interactions with its surroundings. The central problem, therefore, lies in the apparent disconnect between Kant's transcendental idealism and the rich nature of human existence as revealed through existential and phenomenological inquiry. If space and time are reduced to mere formal conditions of possibility, there is a risk of overlooking the profound ways in which these dimensions are experienced and constituted in daily life. This raises critical questions: To what extent can Kant's abstract categories account for the embodied, temporal, and spatial realities of human beings? Is it possible to reconcile Kant's a priori intuitions with the dynamic, lived experiences that define human existence, or must his framework be re-evaluated and supplemented with more nuanced perspectives?

Addressing this problem is not only crucial for a more comprehensive understanding of Kant's philosophical legacy but also for advancing contemporary debates in epistemology, metaphysics, and existential philosophy. By critically evaluating the limitations of Kant's

concept of space and time, this study aims to bridge the gap between abstract theoretical models and the practical, lived dimensions of human life, thereby enriching our understanding of both the structure of knowledge and the nature of existence.

1.3 PURPOSE OF THE STUDY

The purpose of this study is to critically evaluate Immanuel Kant's concept of space and time in relation to the lived experiences of human existence. This study aims

1. To examine Kant's presentation of space and time as a priori intuitions
2. To evaluate whether Kant's abstract, formal treatment of space and time can adequately capture the dynamic, embodied, and subjective nature of human existence.
3. To contrast Kant's transcendental idealism with existential and phenomenological approaches as advanced by philosophers.
4. To explore how re-evaluating Kant's concepts in light of human existence can contribute to ongoing debates in epistemology and metaphysics
5. To develop an integrative framework that acknowledges the foundational role of Kant's a priori conditions while incorporating the dynamic, evolving aspects of human experience, thus offering a more comprehensive account of space and time.

1.4 SIGNIFICANCE OF THE STUDY

1. The study sheds light on how Kant's concept of space and time forms the bedrock of his theory of knowledge, helping to better understand the framework within which human perception and understanding operate.
2. It highlights how Kant's abstract concepts of space and time are not just metaphysical ideas but are intimately linked with the way humans structure and interpret their lived experiences.
3. By re-evaluating Kant's ideas through the lens of human existence, the study offers fresh insights that can contribute to ongoing debates in phenomenology, existentialism, and even philosophy of science.
4. The analysis enhances understanding of how space and time are integral to human consciousness, perception, and the framing of reality, which is relevant to both philosophical and psychological studies.
5. The study contributes to discussions about the subjective vs. objective nature of reality, reinforcing the idea that reality as experienced is shaped by the cognitive faculties of the mind.

1.5 SCOPE OF THE STUDY

The study is delimited to an in-depth exploration of Immanuel Kant's conceptualizations of space and time, specifically focusing on how these constructs underpin human perception and existence. It navigates the intricacies of Kant's critical philosophy, primarily drawing from his seminal works, such as the *Critique of Pure Reason*, to elucidate how space and time are not merely external dimensions but essential conditions for human experience. By engaging with both primary texts and a broad spectrum of secondary literature, the research situates Kant's abstract theories within a broader intellectual tradition, making them accessible to contemporary debates in phenomenology, existentialism, and cognitive science.

1.6 METHODOLOGY

The study employs hermeneutic methods to unpack the layers of meaning in Kant's arguments, ensuring that both the historical context and the evolution of his thought are thoroughly considered. By engaging in comparative analyses, the methodology enables a comprehensive understanding of how Kant's abstract constructs can be interpreted in relation to human experience. This approach includes a close reading of Kant's original texts to identify and interpret his descriptions of space and time, alongside a critical review of secondary literature that situates his ideas within the broader philosophical discourse.

1.7 DEFINITION OF TERMS

Space: In philosophy, particularly in Kantian thought, space is considered an a priori form of intuition that structures all human experiences, rather than a property existing independently of the observer.⁷

Time: Time according to the Oxford Advanced Learner's Dictionary is defined as "the indefinite continued progress of existence and events in the past, present, and future regarded as a whole."⁸

A Priori: A priori means *"relating to or denoting reasoning or knowledge that proceeds from theoretical deduction rather than from observation or experience."*⁹

Transcendental Idealism: Transcendental Idealism is a philosophical doctrine most notably developed by Immanuel Kant in the 18th century. It holds that the way we experience and understand the world is shaped not merely by the world itself, but by the mind's own structures and categories.

⁷ Hornby, A. S. (2005), *Oxford Advanced Learner's Dictionary 8th Edition*, (Oxford: Oxford University Press), p. 100.

⁸ *Ibid.*, p. 105.

⁹ Hornby, A. S. *Op. Cit.* p. 90.

Phenomenology: The science of phenomena as distinct from that of the nature of being. An approach that concentrates on the study of consciousness and the objects of direct experience.¹⁰

Human Existence: Human existence refers to the condition or quality of being alive as a human, involving not just physical life but also conscious experience, thought, purpose, and awareness.¹¹

1.8 LITERATURE REVIEW

I. Kant's *Critique of Pure Reason*¹² is a landmark text in modern philosophy that seeks to resolve the conflict between rationalism and empiricism. Published in 1781 (first edition, A), and revised in 1787 (second edition, B), Kant introduces his revolutionary "transcendental idealism," asserting that our experience of reality is shaped by the structures of our own mind. He distinguishes between the *phenomenal* world (as we perceive it) and the *noumenal* world (things-in-themselves, which we cannot know). Kant develops the "Transcendental Aesthetic," dealing with space and time, and the "Transcendental Analytic," analyzing the categories of understanding. The work introduces the concept of synthetic a priori judgments and the notion that knowledge arises from the interplay of intuition and concepts. It remains a dense and challenging work, yet foundational for epistemology and metaphysics.

¹⁰ Hornby, A. S. *Op. Cit.* p. 257.

¹¹ Hornby, A. S. *Op. Cit.* p. 300.

¹² Kant, I. *Op. Cit.*, p. 66.

I. Kant's *Prolegomena*¹³ serves as an accessible introduction to the *Critique of Pure Reason*. Written in a more straightforward and concise style, it aims to clarify the main arguments of the *Critique*, particularly for readers who found the original text impenetrable. Kant restates his core thesis: that metaphysical knowledge is possible only if it adheres to the conditions of possible experience. He focuses on synthetic a priori knowledge, emphasizing the role of the human mind in structuring experience. The *Prolegomena* is especially significant for students and scholars as it distills the complex arguments of the *Critique* and illustrates them through examples from mathematics and physics.

H. E. Allison's *Kant's Transcendental Idealism: An Interpretation and Defense*¹⁴ is one of the most influential commentaries on Kant's philosophy. Allison advances the "two-aspect" interpretation of Kant's idealism, differentiating it from the problematic "two-world" interpretation. According to Allison, Kant's distinction between phenomena and noumena should not be read as a division between two kinds of things but as a distinction between two standpoints (empirical and transcendental) on the same object. This book provides a comprehensive and philosophically rigorous defense of Kant's epistemological project, and it has reshaped modern interpretations of the *Critique of Pure Reason*.

¹³ Kant, I. (1783), *Prolegomena to Any Future Metaphysics*, (Cambridge: Cambridge University Press), p. 90.

¹⁴ Allison, H. E. (2004), *Kant's Transcendental Idealism: An Interpretation and Defense*, (New York: Yale University Press), p. 11.

P. Guyer's *Kant and the Claims of Knowledge*¹⁵ presents a critical yet sympathetic interpretation of Kant's first Critique. Guyer focuses on the central problem of how Kant reconciles the necessity of knowledge with empirical contingency. He questions the coherence of Kant's transcendental idealism and proposes that Kant's system ultimately fails to provide a satisfactory account of objective knowledge. Nevertheless, Guyer acknowledges the philosophical depth of Kant's attempt and provides detailed analyses of the *Transcendental Deduction* and *Antinomies*. His work has sparked significant debate and is essential for understanding the critical challenges to Kant's epistemology.

E. Watkins' *Routledge Guidebook*¹⁶ is a student-friendly introduction to Kant's *Critique*. It offers a clear and structured breakdown of the text, focusing on key arguments and concepts without oversimplifying the philosophical content. Watkins contextualizes Kant's ideas within the broader Enlightenment and pre-Kantian philosophical landscape. He pays particular attention to Kant's theory of experience and the role of the faculties of sensibility and understanding. This guidebook is particularly useful for first-time readers and for those seeking a roadmap to the complexities of Kant's arguments.

R. Hanna's *Reader's Guide*¹⁷ aims to bridge the gap between Kant's abstract arguments and their philosophical significance. Hanna interprets the *Critique* through the lens of

¹⁵ Guyer, P. (1987), *Kant and the Claims of Knowledge*, (New York: Cambridge University Press), p. 41.

¹⁶ Watkins, E. (2004), *Routledge Guidebook*, (New York: Cambridge University Press), p. 89.

¹⁷ Hanna, R. (2005), *Reader's Guide*, (Oxford: Oxford University Press), p. 101.

“cognitive semantics,” arguing that Kant’s theory of knowledge is both conceptual and intuitive. He places strong emphasis on the constructive role of imagination and seeks to modernize Kant’s epistemology in line with contemporary cognitive science. Hanna’s interpretation is original and ambitious, making Kant’s ideas more accessible to readers interested in interdisciplinary connections.

K. Ameriks’ *Kant’s Theory of Mind*¹⁸ explores Kant’s views on self-consciousness, personal identity, and mental representation. Ameriks argues that Kant’s account of the self is both richer and more coherent than often supposed, emphasizing the centrality of the *Transcendental Deduction*. He addresses how Kant understands inner sense, the unity of apperception, and the limitations of introspection. Ameriks challenges the view that Kant’s theory is psychologically implausible, instead portraying it as a proto-phenomenological account of subjectivity that anticipates later thinkers like Husserl.

Though not a Kantian text per se, Merleau-Ponty’s *Phenomenology of Perception*¹⁹ engages deeply with Kantian themes, especially the relationship between perception, embodiment, and subjectivity. Merleau-Ponty critiques Kant’s abstract and disembodied conception of the subject, arguing instead for a lived, bodily experience of the world. He develops a “phenomenology of the body,” where perception is not a passive reception of data but an active, bodily orientation toward the world. His thought bridges Kant and

¹⁸ Ameriks, K. (2000), *Kant's Theory of Mind: An Analysis of the Paralogisms of Pure Reason*, (New York: Oxford University Press), p. 50

¹⁹ Merleau-Ponty, M. (1945), *Phenomenology of Perception*, (New York: Routledge), p. 77.

20th-century phenomenology, particularly in challenging the rigid mind-world dualism of classical epistemology.

M. Heidegger's *Being and Time*²⁰ is a foundational text in existential phenomenology that both builds upon and critiques Kant's metaphysics. Heidegger sees Kant as the first philosopher to raise the question of the conditions for the possibility of experience, yet criticizes him for remaining within a subjectivist framework. *Being and Time* reinterprets Kant's transcendental project by focusing on *Dasein*, the being for whom Being is a question. Heidegger introduces temporality as the fundamental horizon for understanding Being, thereby situating Kantian a priori structures within an existential-ontological context.

A.W. Wood's *Self and Nature in Kant's Philosophy*²¹ situates Kant within the scientific context of the 18th century, particularly in response to Newtonian physics. Wood explores how Kant sought to ground the objectivity of science through his transcendental method. He examines Kant's views on space, time, causality, and natural law, showing how these concepts are not derived from empirical observation but from the necessary conditions of scientific cognition. The book reveals how deeply Kant's metaphysics is tied to scientific practice, while also highlighting tensions between Kant's idealism and scientific realism.

²⁰ Heidegger, M. *Op. Cit.*, p. 90.

²¹ Wood, A. W. (1984), *Self and Nature in Kant's Philosophy* (ed.), (Ithaca: Cornell University Press), p. 17.

CHAPTER TWO

KANT'S CONCEPT OF SPACE AND TIME

2.1 HISTORICAL CONTEXT AND INFLUENCES

Immanuel Kant's philosophy, particularly his ideas about space and time, was shaped by a rich intellectual history and the prevailing scientific and philosophical ideas of his time. Kant's philosophy was profoundly influenced by the Enlightenment, a period characterized by an emphasis on reason, scientific inquiry, and skepticism of traditional authorities such as religion and metaphysics. Enlightenment thinkers, including Voltaire and Jean-Jacques Rousseau, advocated for human rights, liberty, and rationality, influencing the intellectual climate of Kant's time. The Enlightenment believed that human reason, through scientific method and philosophical reflection, could achieve progress and solve societal problems. Kant himself was part of this movement, though he emphasized the need for reason to be critically examined rather than uncritically embraced.²² The Enlightenment saw the rise of both empiricism and rationalism, two dominant schools of thought that shaped the era's intellectual debates. Empiricists like John Locke and George Berkeley argued that all knowledge originates from sensory

²² Kant, I. (1781), *Critique of Pure Reason* (translated by P. Guyer & A. Wood). (Cambridge University Press), p. 45.

experience. In contrast, rationalists such as René Descartes and Baruch Spinoza believed that reason and innate ideas were the foundation of knowledge. Kant sought to bridge these two traditions by claiming that knowledge begins with experience but is structured by a priori categories, like space and time, inherent in the human mind.²³

The scientific revolution of the 16th and 17th centuries, with groundbreaking discoveries by figures such as Galileo Galilei, Johannes Kepler, and Isaac Newton, had a profound impact on Kant's thought. Newton's laws of motion and universal gravitation, which provided a unified, mathematical description of the physical universe, positioned space and time as objective, measurable entities²⁴. Kant was influenced by Newton's success in using mathematics and empirical observation to explain the natural world, but he was critical of Newton's metaphysical view of space and time as independent, absolute entities. Kant argued that space and time, though essential to our experience of the world, were not objective realities existing independently of the human mind. He claimed that they were a priori intuitions—structural features of human cognition that shape how we experience the world. In this way, Kant acknowledged the success of Newtonian physics but sought to reconcile it with the limitations of human perception and cognition.

René Descartes was a key figure in the development of early modern philosophy and had a significant influence on Kant. Descartes' emphasis on the thinking subject as the

²³ *Ibid.*, p. 68.

²⁴ Newton, I. (1687), *Philosophiæ Naturalis Principia Mathematica*, (New York: Donald Hutchinson), p. 11.

foundation of knowledge, expressed in his famous dictum "Cogito, ergo sum" ("I think, therefore I am"), had a profound impact on Kant's thought²⁵. Descartes argued that the mind is a thinking substance separate from the material world. This distinction between the mind and the external world was central to Descartes' philosophy. Kant, while building on Descartes' focus on the subject, argued that the human mind actively structures experience. Unlike Descartes, who posited that the mind could only know the external world through clear and distinct ideas, Kant contended that the mind organizes sensory input through inherent, a priori categories such as space and time. For Kant, space and time are not external entities but necessary conditions for human experience. Thus, while Descartes focused on the subject-object split, Kant redefined the relationship between mind and world by suggesting that space and time are central to that relationship.

Kant's conception of space and time was also influenced by the German rationalist Gottfried Wilhelm Leibniz. Leibniz rejected the notion of absolute space and time, which Newton proposed, and instead argued that they were relational dependent on the existence of objects and events²⁶. According to Leibniz, space and time are not external, independent realities but are relations between objects and events in the world. Kant's view aligned somewhat with Leibniz's relational view but diverged significantly in his treatment of space and time as a priori intuitions. While Leibniz argued that space and

²⁵ Descartes, R. (1641), *Meditations on First Philosophy*, (Cambridge: Cambridge University Press), p. 45.

²⁶ Leibniz, G. W. (1714), *Monadology*, (London: John Harper), p. 43.

time could be understood through relations, Kant took a more radical approach, asserting that space and time were necessary forms of human intuition, not dependent on external objects but constitutive of our perception of the world.²⁷ This made Kant's view of space and time both relational and constructivist, challenging the notion of space and time as independent realities. The empiricist philosopher David Hume was another significant influence on Kant. Hume's skepticism about causality and knowledge was a direct challenge to the metaphysical certainty of traditional rationalist thought. Hume argued that human knowledge is derived from sense impressions and that concepts like causality, space, and time are habitual constructs based on repeated sensory experiences rather than objective truths.²⁸ This skepticism about human cognition and its ability to access objective reality deeply impacted Kant's thinking.

In response to Hume's skepticism, Kant famously wrote that he "awoke from his dogmatic slumber." Hume's work prompted Kant to ask how objective knowledge was possible despite the limits of human perception. Kant developed his concept of transcendental idealism, positing that the human mind shapes experience through a priori forms like space and time, making knowledge possible while acknowledging the limits of human cognition.²⁹

²⁷ Kant., I. *Op. Cit.*, p. 57.

²⁸ Hume, D. (1739), *A Treatise of Human Nature* (Oxford: Clarendon Press), p. 105.

²⁹ Kant., I. *Op. Cit.*, p. 100.

A defining feature of Kant's philosophy was his concept of the a priori, or knowledge that is independent of sensory experience. Kant argued that space and time are not derived from experience but are necessary conditions for the possibility of experience. These a priori forms are innate structures of the mind that organize and make sense of sensory data. Kant's revolution was in demonstrating that while knowledge begins with experience, it is not merely a passive reception of data; the mind actively structures experience through these a priori intuitions. This approach was a direct challenge to both empiricism, which denied the existence of any innate structures, and rationalism, which often assumed that knowledge is derived purely from reason. For Kant, the mind does not merely receive knowledge from the world; it actively shapes and structures that knowledge through its innate forms, including space and time.

2.2 KANT'S TRANSCENDENTAL IDEALISM

Before exploring Kant's transcendental idealism, it is essential to recognize the problem Kant sought to address: how can we have objective knowledge about the world if our perception of reality is shaped by the mind? Traditional metaphysical views either suggested that knowledge comes entirely from experience (empiricism) or that knowledge is inherent in the mind (rationalism). Kant argued that both views were inadequate. Kant's central question was: How can knowledge be possible, given that all our perceptions of the world are mediated by our senses, which are subjective? He recognized that while empiricists like John Locke and David Hume emphasized the

importance of sensory experience, they neglected the role of the mind in shaping that experience. On the other hand, rationalists like René Descartes and Baruch Spinoza argued that knowledge is primarily derived from reason, but they also ignored the subjective nature of human perception. Kant proposed that while all knowledge begins with experience, the mind does not passively receive data from the world. Instead, it actively structures this experience through a priori categories, like space, time, and causality, which allow us to make sense of the world. This position is known as transcendental idealism, and it claims that the mind plays a crucial role in organizing and interpreting sensory information

At the heart of Kant's transcendental idealism is his concept of the a priori. Unlike empirical knowledge, which comes from sensory experience, a priori knowledge is independent of experience and exists prior to it. For Kant, the mind does not merely passively receive information from the world; it actively structures the way we experience it. The a priori forms such as space and time are not learned from experience, but are conditions of possibility for experience itself. Kant famously argued that space and time are not external, independent realities that exist independently of the mind, as Newtonian physics suggested, but are instead forms of human intuition. Space and time are the a priori intuitions through which we perceive and organize sensory information³⁰. In this way, the world as we know it is not directly how it is in itself (noumenon), but is instead the way it appears to us through the lens of these mental structures (phenomenon).

³⁰ Kant., I. *Op. Cit.*, p. 121.

This is where Kant's transcendental idealism departs from both empiricism and rationalism. Empiricism assumed that knowledge is purely derived from sensory experience, while rationalism believed that knowledge is based on abstract concepts and reason. Kant's transcendental idealism, however, argues that the mind actively contributes to the shaping of experience through these a priori intuitions, making knowledge possible. Kant divides reality into two realms: the phenomenal world and the noumenal world. The phenomenal world refers to the world as we experience it, mediated by our senses and shaped by the a priori categories of space, time, and causality. This world is the one accessible to human perception and knowledge. The noumenal world, on the other hand, represents the world as it is in itself, independent of human perception. Kant argues that we can never have direct knowledge of the noumenal world because our knowledge is always filtered through the structures of our mind. Thus, Kant's transcendental idealism asserts that while we can never know the world as it truly is (noumenon), we can have knowledge of how it appears to us (phenomenon). This distinction between the phenomenal and noumenal worlds is crucial to understanding Kant's view on space and time. Space and time, as forms of intuition, are features of the phenomenal world. They are the lens through which we experience the world, but they do not apply to the noumenal realm.

One of the most important aspects of Kant's transcendental idealism is his view of space and time as a priori intuitions. Kant contended that space and time are not properties of objects in the external world but are instead inherent features of the mind that shape our

perception of the world. In this way, space and time are subjective and not objective, in contrast to the objective reality claimed by Newtonian physics. For Kant, space is the form of outer intuition, meaning that it is how we experience external objects. Similarly, time is the form of inner intuition, structuring our experience of events. These forms allow us to perceive the external world as spatially organized and temporally ordered. However, they are not properties of the external world itself; instead, they are the necessary conditions for the possibility of human experience.

Kant's view was revolutionary in that it rejected the traditional notion of space and time as independent entities that exist outside of human experience. Instead, Kant argued that space and time are fundamentally subjective, being the framework within which the human mind organizes sensory data. This is where Kant's philosophy intersects with constructivism, as he emphasizes the active role of the mind in creating the experience of the world.³¹ Kant's theory of transcendental idealism has had profound implications for subsequent philosophical thought. It directly influenced the development of German idealism, particularly the works of Johann Gottlieb Fichte, Friedrich Wilhelm Joseph Schelling, and Georg Wilhelm Friedrich Hegel. These philosophers expanded upon Kant's ideas, developing a more systematic account of the relationship between subject and object, mind and world. Kant's emphasis on the limits of human knowledge and the role of the mind in structuring experience has continued to resonate in epistemology and metaphysics. Kant's work laid the groundwork for later developments in phenomenology,

³¹ Kant., I. *Op. Cit.*, p. 116.

especially the work of Edmund Husserl and Martin Heidegger, who sought to explore the nature of human consciousness and its relationship to the world. Kant's transcendental idealism also paved the way for modern analytic philosophy, especially in areas like philosophy of mind and philosophy of perception, where scholars have continued to debate the nature of subjective experience and its relationship to objective reality.

2.3 SPACE AND TIME AS A PRIORI INTUITIONS

Immanuel Kant's theory of space and time as a priori intuitions is a central component of his epistemology, particularly within his *Critique of Pure Reason*. According to Kant, space and time are not empirical concepts derived from experience but rather forms of intuition that are preconditions for any experience. He argues that space and time are the necessary structures through which human beings perceive the world. In other words, they are the lens through which we view reality, shaping our understanding of objects and events. Kant categorizes space and time as *a priori* intuitions, meaning that they are inherent structures of the mind that exist before and independent of any particular experiences. For Kant, the mind does not passively receive impressions from the world but actively organizes these impressions using categories such as space and time. This position contrasts with the empiricist view, which holds that space and time are derived from sensory experience. Kant's notion of space is that it is the form of outer intuition. He argues that space is not an empirical concept that is learned from experience but an innate structure through which we organize our sensory inputs about external objects. For Kant,

the human mind must be able to structure objects in space before any specific experience of them. Without the a priori intuition of space, it would be impossible to make sense of the positions or relationships of objects in the external world. He states, "Space is the condition under which alone external intuition is possible"³²

This concept of space goes beyond simple geometric knowledge; it is foundational to our perception of the external world. Space is not something we encounter through sensory perception; instead, it is an essential framework that allows sensory data to be processed. Without this framework, the mind could not organize or make sense of the multiplicity of objects that it perceives. Kant extends his argument for space to time, which he considers the form of inner intuition. Time, like space, is not a concept derived from experience, but a necessary condition for the experience of change and succession. In his *Critique*, Kant contends that we cannot have any awareness of change or temporal events without the a priori intuition of time. Time is the framework within which the mind organizes its internal states and experiences. Without time, the succession of mental states, emotions, or thoughts would be incoherent.

For Kant, time is also universal and necessary, but unlike space, it is not experienced externally but internally. This intuition governs the way in which we perceive the flow of events, from past to present and into the future. Kant writes, "Time is not an empirical

³² Kant, I. *Op. Cit.*, p. 68.

concept that has been derived from any experience. It is rather an a priori intuition".³³

This a priori nature of time enables the mind to organize experience into a coherent sequence, marking the passage from one moment to the next.

The notion that space and time are a priori intuitions is a groundbreaking element of Kant's transcendental idealism. It upends the traditional empirical assumption that knowledge of space and time is derived from experience. Instead, Kant argues that our ability to experience the world in spatial and temporal terms is itself a function of the mind's inherent structures. This idea is pivotal in Kant's critique of metaphysical realism, as it challenges the notion that objects exist independently of the mind's cognitive faculties. By framing space and time as a priori intuitions, Kant provides a foundation for understanding how subjective experience can shape our perception of the objective world. The implications of this are profound for both epistemology and metaphysics, as Kant demonstrates that our knowledge of the external world is not simply a passive reception of sensory data, but an active construction mediated by the a priori forms of space and time. This construction is not arbitrary, but rather, is a necessary condition for any possible experience. Kant's theory of space and time as a priori intuitions has been subject to various critiques. One notable challenge comes from the work of later philosophers like Hermann von Helmholtz, who suggested that space and time might be derived from experience rather than being innate structures. Kant's distinction between *noumena* (things as they are in themselves) and *phenomena* (things as they appear to us)

³³ Kant, I. *Op. Cit.*, p. 145.

raises questions about how we can know anything about the external world if it is always mediated by our a priori intuitions.³⁴ Contemporary philosophy of mind and epistemology continues to engage with these issues, with some scholars exploring how Kant's insights into the nature of space and time might be reconciled with modern theories in physics, particularly regarding relativity and quantum mechanics.

2.4 IMPLICATIONS FOR KNOWLEDGE AND SCIENCE

Kant's assertion that space and time are a priori intuitions has profound implications for our understanding of knowledge and science. By framing these concepts as necessary structures of the human mind, Kant challenges both the empiricist and rationalist traditions, offering a new way to think about how we come to know the world and how scientific inquiry operates.³⁵ The implications for knowledge and science are broad, influencing epistemology, the philosophy of science, and the relationship between the mind and reality. Kant's distinction between a priori and a posteriori knowledge is central to his philosophy. A priori knowledge is knowledge that is independent of experience and is known through pure reason. Kant argued that the forms of intuition (space and time) and the categories of the understanding (such as causality, unity, and plurality) are a priori

³⁴ Schopenhauer, A. (1818), *The World as Will and Representation*, (New York: John Harper), p. 45.

³⁵ Fichte, J. G. (1794), *Science of Knowledge*, (London: Sage Publishers), p. 43.

elements that shape all human knowledge. According to Kant, these a priori structures do not just passively receive sensory data; they actively organize it. Thus, knowledge is not simply a mirror of the world as it exists independently (a view held by classical empiricism) but is the product of an interaction between the world and the cognitive structures of the mind.

The implication for knowledge acquisition is that human beings cannot access the world in itself (noumenon) directly. Instead, they know it only as it appears to them (phenomenon), filtered through the forms of intuition and categories. This leads Kant to the idea that all knowledge is limited to the realm of phenomena. Consequently, knowledge is not an objective representation of the external world but a construction of the mind that organizes sensory data into coherent experience.

In terms of scientific knowledge, this idea suggests that science cannot offer a complete picture of reality, as it can only deal with the phenomena—the world as it appears to us, structured by space, time, and categories. As such, Kant believed that scientific knowledge is necessarily bound by the conditions of human perception, which restrict the scope of what science can ultimately know. Kant's view of science is closely tied to his understanding of a priori intuitions. In Kant's framework, the scientific method operates within the confines of the a priori structures of space and time. Scientific inquiry, according to Kant, is a process of uncovering the regularities and laws that govern phenomena, but this is always done from within the framework of human cognitive

faculties. Scientific laws are not reflections of the world as it is in itself but are the result of applying human concepts to the data provided by sense perception. This raises important questions for the philosophy of science. One of the most significant implications is that scientific theories, while they may be highly successful in predicting and explaining phenomena, are still constrained by the limits of human perception and cognition. For instance, while the laws of physics are universally applicable within the realm of phenomena, Kant would argue that these laws cannot reveal the nature of things as they exist independently of human perception.³⁶ This view is echoed in contemporary debates in the philosophy of science, where issues such as scientific realism versus anti-realism challenge whether scientific theories correspond to an independent reality or simply offer useful models of the world as it is experienced by humans.

The a priori nature of space and time has important implications for empirical science, particularly regarding its limits. Kant's philosophy suggests that science can only investigate the empirical world—the world as it appears through human perception. The limits of human sensory faculties prevent science from accessing the noumenal world, the world as it is in itself. This leads to a critique of metaphysical speculation that tries to go beyond what is accessible to human cognition. Kant's argument is significant in the context of the debate between rationalists and empiricists. For rationalists, knowledge of

³⁶ Hegel, G. W. F. (1807), *The Phenomenology of Spirit*, (New York: Harper and Row), pp. 45-47.

the world can be derived through reason and is independent of sensory experience, whereas empiricists argue that all knowledge comes from sensory experience. Kant's middle ground asserts that knowledge is shaped by both sensory experience and the a priori structures of the mind. Science, according to Kant, must rely on empirical data but is necessarily constrained by the limitations imposed by space, time, and the categories of the mind. This view is particularly relevant in discussions of scientific knowledge today, where debates around the nature of observation and measurement in fields like quantum mechanics continue to raise questions about the limits of empirical science.

Kant's theory of knowledge also provides a unique perspective on the evolution of scientific theories. Since scientific knowledge is always a product of human cognition, theories are not mere representations of the external world but are shaped by the cognitive structures that define human experience.³⁷ This means that scientific theories are contingent upon the conceptual and perceptual frameworks that are available to human beings at any given time. For Kant, scientific progress occurs when new insights and discoveries lead to changes in the way the mind organizes and interprets sensory data within the framework of space, time, and categories. The theory of relativity, for example, fundamentally challenged our conception of space and time, showing that they are not

³⁷ Allais, L. (2015), *Kant's Theory of Perception*, (Oxford: Oxford University Press), p. 77.

fixed absolutes but relative to the observer. While this discovery fits within Kant's framework (as it still pertains to phenomena experienced by human beings), it also highlights how scientific theories evolve as they reflect deeper insights into the structures that govern human cognition and experience.³⁸ Kant's ideas foreshadow the idea that scientific progress involves expanding or refining the way in which human beings interact with the world, allowing for the formulation of new concepts and categories that better account for the data provided by experience. Kant's conception of space and time as a priori intuitions has profound implications for our understanding of knowledge and science.³⁹ His philosophy asserts that human knowledge is not a passive reflection of an objective world but an active construction shaped by the mind's inherent structures. In this sense, science is constrained by the limits of human perception, and while it can offer powerful insights into the laws that govern phenomena, it cannot access the world as it is in itself. Kant's work challenges the traditional empiricist and rationalist views, offering a middle ground that has influenced contemporary philosophy, especially in the philosophy of science. The implications for the limits of scientific knowledge, the evolution of

³⁸ Guyer, P. (2006), *Kant's Critique of Pure Reason: A Reader's Guide*, (London: Continuum), p. 15.

³⁹ Kitcher, P. (2001), *Science, Truth, and Democracy*, (Oxford: Oxford University Press), p. 17.

scientific theories, and the relationship between perception and reality continue to shape philosophical debates today.⁴⁰

CHAPTER THREE

HUMAN EXISTENCE AND THE LIMITATIONS OF KANT'S THEORY

3.1 HUMAN EXISTENCE IN EXISTENTIAL AND PHENOMENOLOGICAL THOUGHT

Existentialism and phenomenology are two influential philosophical movements that have profoundly shaped the discourse on human existence. At their core, both traditions

⁴⁰ McDowell, J. (1994), *Mind and World*, (Harvard: Harvard University Press), p. 100.

seek to reorient philosophy from abstract theorizing to a concrete examination of lived experience. Human existence, in this context, is not merely a biological or psychological phenomenon but a deeply subjective and dynamic mode of being that is best understood through introspection, choice, and engagement with the world.

In existentialist thought, human existence is defined by freedom, responsibility, and the inherent absurdity of life. Thinkers such as Søren Kierkegaard, Friedrich Nietzsche, Jean-Paul Sartre, and Albert Camus emphasize the individual's struggle to find meaning in a world that does not offer it inherently. Sartre, for instance, asserts that "existence precedes essence,"⁴¹ meaning that a person first exists and then defines themselves through actions. This places the burden of creating meaning squarely on the individual, who is condemned to be free and must navigate the anxiety and anguish that come with absolute responsibility.

Phenomenology, pioneered by Edmund Husserl and further developed by Martin Heidegger, Maurice Merleau-Ponty, and others, focuses on the structures of experience and consciousness. Husserl advocated for a return "to the things themselves," which means analyzing phenomena as they appear in experience, free from preconceived

⁴¹ Sartre, J.P. (1943), *Being and Nothingness* (H. E. Barnes, Trans.), (London: Routledge), p. 11.

notions⁴². Heidegger, a student of Husserl, radicalized this approach in *Being and Time* by distinguishing between the being of objects (Vorhandenheit) and the being of human existence, which he termed *Dasein*. “Dasein is unique because it is the being that is concerned with its own being; it exists in a mode of "being-in-the-world," always already engaged in a context of meaning”⁴³. Phenomenology emphasizes embodiment and perception. Merleau-Ponty, for example, argued that human existence is always mediated through the lived body (corps vécu). “The body is not a mere object but the primary site through which we perceive the world and express ourselves”⁴⁴. Thus, human existence is not reducible to abstract consciousness but is fundamentally situated, embodied, and relational.

Both existentialism and phenomenology converge on the view that human existence is characterized by temporality, finitude, and authenticity. Authentic existence, according to Heidegger, “involves a recognition of one’s mortality and a resolute confrontation with the inevitability of death, which enables a more genuine engagement with life”⁴⁵. Similarly, Camus highlights the absurd condition of life, “where humans seek meaning in

⁴² Husserl, E. (1983), *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, First Book* (F. Kersten, Trans.). (Amsterdam: Martinus Nijhoff), p. 16.

⁴³ Heidegger, M. (1962), *Being and Time* (J. Macquarrie & E. Robinson, Trans.), (London: Harper & Row), p. 45.

⁴⁴ Merleau-Ponty, M. (2012), *Phenomenology of Perception* (D. A. Landes, Trans.). (New York: Routledge), p. 21.

⁴⁵ Heidegger, M. *Op. Cit.*, p. 55.

a silent universe, and he suggests that one must imagine Sisyphus happy, finding meaning in the struggle itself”⁴⁶.

Nevertheless, Human existence occupies a central place in both existential and phenomenological traditions, where it is explored not as a static condition but as a dynamic, ever-unfolding process. Existentialism focuses on the individual's confrontation with freedom, choice, and meaninglessness, whereas phenomenology emphasizes the structures of experience through which human beings come to understand themselves and the world. Together, these approaches reject abstract or detached philosophical systems and instead ground understanding in the immediacy and subjectivity of lived experience. Søren Kierkegaard, often regarded as the father of existentialism, explored human existence through the lens of personal anguish and the individual's relationship with God. He described the human condition as a "sickness unto death," which refers to a despair rooted in the failure to become one's true self⁴⁷. According to Kierkegaard, “this despair arises from the conflict between finite limitations and the infinite possibilities of human freedom”⁴⁸. The individual must choose to confront this despair and affirm their existence in faith, making Kierkegaard's existentialism deeply rooted in Christian theology. For him, authentic existence could only be realized through a leap of faith.

⁴⁶ Camus, A. (1991), *The Myth of Sisyphus* (J. O'Brien, Trans.), (London: Vintage International), p. 67.

⁴⁷ Kierkegaard, S. (1983), *The Sickness unto Death* (H. V. Hong & E. H. Hong, Trans.). (Princeton: Princeton University Press), p. 31.

⁴⁸ Kierkegaard, S. *Op. Cit.*, p. 65.

Friedrich Nietzsche, in contrast, secularized the existential project by declaring the “death of God,” which symbolized the collapse of objective values and absolute truths in modernity⁴⁹. Nietzsche saw this as both a crisis and an opportunity. Without external authorities to dictate meaning, individuals are challenged to become *Übermenschen* (overmen), those who create their own values and live with a profound sense of self-overcoming. Human existence, therefore, is not bound by essence but is a continuous act of becoming. Nietzsche’s philosophy introduces the concept of eternal recurrence—the idea that one must live as though every moment of life will recur eternally, thereby instilling each choice with the weight of permanence.

Jean-Paul Sartre further radicalized existentialism by asserting that humans are "condemned to be free"⁵⁰. According to Sartre, since there is no predetermined human nature or divine blueprint, individuals must take full responsibility for their actions. This freedom is both empowering and terrifying, leading to what Sartre called *anguish*, a deep realization of the weight of one's freedom. He also introduced the concepts of *bad faith* (self-deception) and *authenticity*. Living in bad faith means fleeing from one's freedom by conforming to societal expectations or denying responsibility. Authentic existence, by contrast, requires embracing one’s freedom and acting in accordance with self-chosen values.

⁴⁹ Nietzsche, F. (1974), *The Gay Science* (W. Kaufmann, Trans.). (London: Vintage International), p. 78.

⁵⁰ Sartre, J.P. *Op. Cit.*, p. 100.

Phenomenology, though less dramatic in tone than existentialism, complements it by exploring how human beings encounter the world through intentional consciousness. Edmund Husserl introduced the method of *epoché*—the bracketing of assumptions and judgments—to investigate the essence of phenomena as they present themselves to consciousness. For Husserl, “human existence is characterized by intentionality, the idea that consciousness is always about something, and thus our existence is inherently directed and relational”⁵¹. Martin Heidegger also extended phenomenology to ontological questions. In *Being and Time*, Heidegger introduced the notion of *Dasein*—a being for whom Being is a question. Human existence, or *Dasein*, is fundamentally temporal, meaning it understands itself in terms of past (thrownness), present (fallenness), and future (projection). Heidegger emphasized *authenticity* as living in full awareness of one's finitude and death (*Being-toward-death*). Death is not just a biological end but the most personal and non-relational possibility that makes all others meaningful. It brings the individual face to face with their unique existence and the necessity to live meaningfully within it. Maurice Merleau-Ponty, building on Heidegger and Husserl, emphasized the centrality of the body in human existence. He argued that our primary way of being in the world is through the *lived body*—not as an object in the world, but as a subjective medium through which we perceive, act, and express ourselves. His phenomenology of perception shows that human existence is not primarily mental or rational, but embodied

⁵¹ Husserl, E. *Op. Cit.*, p. 124.

and situated. The body is not separate from consciousness; rather, it is through the body that we inhabit space, time, and social relations.

Emmanuel Levinas brought an ethical dimension to phenomenological thought. For Levinas, “human existence is primarily ethical, characterized by the encounter with the “Other.” The face-to-face relationship reveals the infinite responsibility one has for the Other, disrupting self-centered existence and calling one to justice and care”⁵². This encounter with the Other challenges the autonomy emphasized in existentialism by placing alterity and responsibility at the heart of human life. Existentialism and phenomenology, while differing in methodology and emphasis, share a deep concern for the meaning, structure, and challenges of human existence. They reveal that to be human is to be free, embodied, finite, and responsible. These traditions resist reductionist views that define individuals by biology, psychology, or social roles, instead presenting human beings as beings-in-the-world, continually shaping and being shaped by their experiences and choices.

3.2 LIMITATIONS OF KANT’S CONCEPTION

Immanuel Kant’s moral philosophy, particularly his conception of duty and the categorical imperative, has been highly influential in the development of modern ethics. However, despite its intellectual rigor and aspiration toward universality, Kant’s moral

⁵² Levinas, E. (1969), *Totality and Infinity: An Essay on Exteriority* (A. Lingis, Trans.). (Amsterdam: Duquesne University Press), p. 32.

theory has drawn several criticisms and exhibits notable limitations when applied to complex, real-world scenarios. One major limitation of Kant's conception lies in its rigid formalism and abstraction. Kant insists that moral duties must be determined by reason alone, independent of empirical considerations such as emotions, personal desires, or consequences. This deontological framework, while logically consistent, often appears detached from human experience and moral intuitions. Kant famously argues that "it is wrong to lie under any circumstance even to save a life because lying cannot be universalized without contradiction"⁵³. "This strict application of duty over consequence has led critics to claim that Kant's ethics can be morally counterintuitive and insensitive to context".⁵⁴

Kant's theory presumes that all rational beings are capable of autonomously recognizing and acting upon moral laws, yet this assumption has been criticized for ignoring psychological, social, and cultural factors that shape moral agency. Critics argue that Kant's model may only be fully applicable to idealized agents and may fail to accommodate the moral struggles of individuals facing systemic oppression, trauma, or social inequality⁵⁵. His emphasis on pure reason and autonomy does not fully

⁵³ Kant, I. (1996), *Groundwork of the Metaphysics of Morals* (M. Gregor, Trans.). (Cambridge: Cambridge University Press), p. 14.

⁵⁴ O'Neill, O. (1989), *Constructions of Reason: Explorations of Kant's Practical Philosophy*. (Cambridge: Cambridge University Press), p. 92.

⁵⁵ Hill, T. E. (2000), *Respect, Pluralism, and Justice: Kantian Perspectives*, (Oxford: Oxford University Press), p. 34.

acknowledge how human vulnerability, emotion, and interdependence play crucial roles in ethical life.

Another limitation of Kant's moral theory is its limited account of moral emotions and relationships. By prioritizing duty over inclination, Kant effectively sidelines moral sentiments like empathy, compassion, and love, which many philosophers and ethicists believe are essential to moral life. Carol Gilligan, for instance, has critiqued Kantian ethics from a feminist perspective for its masculine emphasis on abstract rules and detachment at the expense of relational ethics and care⁵⁶. This has prompted the development of care ethics, which stresses the importance of emotional responsiveness and contextual moral reasoning—areas where Kantian ethics appears deficient. Kant's categorical imperative, especially the formula of universal law, faces challenges in application. While it demands that one act only on maxims that can be universalized without contradiction, critics argue that this test can sometimes produce ambiguous or conflicting results. Multiple conflicting maxims may pass the universalizability test, leaving the agent with no clear guidance⁵⁷. Moreover, some morally reprehensible actions might be cleverly formulated to appear universalizable, raising doubts about the practical reliability of the test.

⁵⁶ Gilligan, C. (1982), *In a Different Voice: Psychological Theory and Women's Development*, (New York: Harvard University Press), p. 32.

⁵⁷ Wood, A. (2008), *Kantian Ethics*, (Cambridge: Cambridge University Press), p. 71.

Kant's moral philosophy also struggles with moral pluralism. In complex moral situations involving competing duties—for example, a duty to tell the truth versus a duty to protect someone from harm—Kant provides no systematic method for resolving such conflicts. This inflexibility in prioritizing duties can lead to moral paralysis or choices that seem ethically⁵⁸. Real moral dilemmas often require balancing various values, something Kant's framework does not easily allow. In sum, while Kant's moral philosophy has profoundly shaped the landscape of modern ethics through its emphasis on autonomy, reason, and the dignity of persons, it is not without significant limitations. Its abstractness, rigidity, and emotional detachment limit its responsiveness to the nuanced, relational, and often ambiguous nature of moral life. As such, many contemporary ethicists have sought to complement or revise Kantian ethics to better reflect the complexity and richness of human moral experience.

3.3 THE EXISTENTIAL TURN

The “existential turn” marks a pivotal shift in philosophical thought in the 19th and 20th centuries, wherein thinkers began to center human existence, freedom, anxiety, and subjectivity over abstract rationalism and universal ethics. This movement, often seen as a reaction against the perceived limitations of Kantian and Hegelian idealism, sought to

⁵⁸ Allison, H. E. (1990), *Kant's Theory of Freedom* (Cambridge: Cambridge University Press), p. 57.

bring philosophy closer to the lived experiences of individuals, particularly in a world marked by absurdity, uncertainty, and alienation. This turn is most prominently associated with philosophers such as Søren Kierkegaard, Friedrich Nietzsche, Martin Heidegger, Jean-Paul Sartre, and Albert Camus, who each, in their own way, emphasized the primacy of existence over essence. In contrast to traditional metaphysics, which focused on objective truths and eternal principles, existentialists contended that "existence precedes essence"—a phrase popularized by Sartre meaning that human beings first exist, encounter themselves, and define their essence through choices and actions. Thus, unlike Kant's conception of moral autonomy grounded in reason, the existential turn relocated moral responsibility to the individual's confrontation with freedom in an indifferent or even hostile world.

Kierkegaard, often regarded as the father of existentialism, challenged the abstract rationalism of Hegel and emphasized the subjectivity of truth. For Kierkegaard, "the individual must make a "leap of faith" in the face of uncertainty and despair, embracing an authentic existence rooted in passion and inwardness"⁵⁹. His concern was with the existential condition of the self, caught between aesthetic distraction and ethical seriousness. This represented a direct challenge to Kantian formalism, which Kierkegaard believed overlooked the anguish and inner struggle of moral decision-making.

⁵⁹ Kierkegaard, S. *Op. Cit.*, p. 78.

Friedrich Nietzsche further radicalized the existential critique of rational ethics. He famously declared the "death of God," signaling the collapse of traditional sources of meaning and moral absolutes⁶⁰. In a world without objective values, Nietzsche proposed the *übermensch* (overman) as one who creates values through the exercise of will to power, standing in stark contrast to Kant's emphasis on duty and universal moral law. Nietzsche saw Kantian morality as life-denying, grounded in herd mentality rather than the flourishing of individual strength and creativity. The existential turn reached its mature philosophical articulation in Martin Heidegger's fundamental ontology. In *Being and Time*, Heidegger redirected philosophical inquiry from abstract epistemology to Dasein, the being that questions its own being. For Heidegger, human existence is characterized by being-towards-death, anxiety (Angst), and the call to authenticity. Unlike Kant's rational subject, Heidegger's Dasein is thrown into a world, burdened with freedom and the task of meaning-making. His phenomenological method brought forth a new way of understanding existence as a temporal, embodied, and situated experience.

Jean-Paul Sartre extended Heidegger's insights but focused more sharply on human freedom and responsibility. In works such as *Being and Nothingness*, Sartre argued that humans are condemned to be free—an idea that underscores the burden of self-definition in the absence of objective moral guidance. For Sartre, "there is no divine or rational order to guarantee meaning; rather, each person must create meaning through choice,

⁶⁰ Nietzsche, F. *Op. Cit.*, p. 80.

even in anguish and bad faith”⁶¹. This existential emphasis on choice and responsibility again contrasted sharply with Kant’s universal moral law, instead advocating for a situational and personal ethics grounded in human freedom. Albert Camus, though reluctant to be labeled an existentialist, contributed significantly to this turn with his philosophy of the absurd. In *The Myth of Sisyphus*, Camus described the human condition as one of absurdity, where individuals seek meaning in a silent universe. Unlike Kant, who sought a moral law grounded in reason, Camus encouraged a lucid rebellion against meaninglessness through sustained engagement with life’s absurdity. His call was not to retreat into metaphysical comfort, but to affirm life despite its lack of inherent meaning.

3.4 TOWARDS A HUMAN-CENTERED UNDERSTANDING OF SPACE AND TIME

The traditional conception of space and time, especially within the framework of classical physics and rationalist metaphysics, views them as objective, measurable, and independent dimensions. Immanuel Kant significantly contributed to this view by arguing in his *Critique of Pure Reason* that space and time are a priori intuitions—necessary

⁶¹ Kant, I. (1998), *Critique of Pure Reason* (P. Guyer & A. Wood, Trans.), (Cambridge: Cambridge University Press), p. 105.

conditions of human sensibility that shape all possible experience. According to Kant, “space and time are not empirical concepts derived from experience, but rather forms of human perception that structure how we encounter the world”⁶². However, this transcendental idealist view, while revolutionary, remains rooted in a static and universalistic model that abstracts away from the individual’s lived experience.

The phenomenological and existential traditions, particularly in the works of Martin Heidegger and Maurice Merleau-Ponty, initiated a human-centered rethinking of space and time, emphasizing their relational and experiential dimensions. Heidegger, in *Being and Time*, rejected the Cartesian and Kantian dualism of subject and object and introduced the concept of “being-in-the-world” (In-der-Welt-sein), where space is not an empty container but a field of involvement defined by care, concern, and practical activity⁶³. For Heidegger, spatiality is constituted through the way Dasein (the human being) navigates the world—tools are “ready-to-hand” not by occupying geometrical space, but by being meaningfully accessible to human purposes. Heidegger also redefines time as temporality, which is not a linear sequence of “nows” but the existential unity of past (having-been), present (making-present), and future (being-ahead-of-itself). This understanding of time as an existential structure shifts focus from clock time to the human experience of time, where meaning is rooted in anticipation, memory, and

⁶² *Ibid.*, p. 110.

⁶³ Heidegger, M. *Op. Cit.*, p. 77.

decision. This temporality underlies all human projects and engagements, illustrating that human existence is fundamentally temporal and cannot be reduced to mere chronology.⁶⁴

Maurice Merleau-Ponty further developed this line of thought by grounding spatial and temporal understanding in embodied perception. In *Phenomenology of Perception*, Merleau-Ponty argues that we do not perceive space and time as abstract entities, but as dimensions of our bodily engagement with the world. Space is lived through the body's motility and orientation: a doorway is not merely measured in meters, but is seen as "passable" or "too narrow" depending on one's bodily capacity. Similarly, time is not experienced as a ticking sequence, but as a rhythm of lived duration—waiting, rushing, lingering—all of which are qualitatively different modes of temporal experience. In existential terms, space and time become conditions of situatedness, grounding the uniqueness of human existence. Jean-Paul Sartre reinforces this in his analysis of intentionality and nothingness in *Being and Nothingness*. Sartre describes how human beings transcend their immediate spatial and temporal positions through projection and negation—they imagine future possibilities, reinterpret past actions, and thus constantly remake their spatial-temporal being. This reveals that humans are not passive occupants of time and space, but active constructors of meaning through their orientation toward the world. This human-centered understanding of space and time has significant philosophical and practical implications. It allows for a richer engagement with questions

⁶⁴ Heidegger, M. *Op. Cit.*, p. 103.

of identity, culture, memory, and ethics. For instance, in postcolonial and feminist thought, spatial and temporal structures are shown to be socially and politically constructed, influencing how different groups experience inclusion, marginalization, or erasure. The phenomenological approach exposes how space and time are not neutral but laden with power and value, shaped by human interactions, histories, and expectations.

3.5 RELEVANCE TO CONTEMPORARY PHILOSOPHY

Immanuel Kant's theory of space and time continues to hold significant relevance in contemporary philosophical discourse, particularly in epistemology, metaphysics, phenomenology, cognitive science, and the philosophy of science. Kant's critical philosophy, especially his transcendental idealism, laid the groundwork for modern understandings of how human cognition shapes experience. His idea that space and time are not properties of things-in-themselves but rather forms of human intuition remains influential in discussions about the nature of perception and the limits of human knowledge.⁶⁵

In contemporary epistemology, Kant's emphasis on the conditions of the possibility of experience has encouraged philosophers to explore how knowledge is constructed rather than merely received. This is evident in the development of constructivist theories of knowledge, which stress that the mind actively organizes sensory input. This perspective has influenced thinkers such as Thomas Kuhn, "whose theory of scientific paradigms

⁶⁵ Kant, I. *Op. Cit.*, p. 154.

echoes Kant's view that perception is mediated by conceptual frameworks"⁶⁶. It also finds resonance in cognitive science, where researchers investigate how the brain structures spatial and temporal information, often in ways that support the notion of space and time as dependent on the observer's perceptual apparatus.

Kant's theory has shaped ongoing debates in the philosophy of science, especially in light of the advent of non-Euclidean geometry and Einstein's theory of relativity. These scientific developments challenged Kant's claim that space is necessarily Euclidean and time is absolute. Nevertheless, many philosophers argue that Kant's deeper insight, that the human mind imposes order on sensory data through innate structures, remains relevant. While space and time may not be universal and immutable in a physical sense, their role as frameworks for organizing experience is still central to understanding human cognition and perception.⁶⁷ In phenomenology, Kant's theory has inspired and been critically expanded by thinkers such as Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty. Husserl, while influenced by Kant's transcendental method, sought to bracket the empirical world and return to the structures of consciousness itself. He viewed time and space as immanent to consciousness, a position that remains rooted in

⁶⁶ Kuhn, T. S. (1962), *The Structure of Scientific Revolutions*, (Chicago: University of Chicago Press), p. 98.

⁶⁷ Friedman, M. (1992), *Kant and the Exact Sciences*, (Harvard: Harvard University Press), p. 101.

Kant's insight about the subjective origin of spatiotemporal frameworks.⁶⁸ Heidegger, on the other hand, critiques and reinterprets Kant by emphasizing existential temporality rather than inner intuition, asserting that temporality is not merely a form of sensibility but a fundamental structure of *Dasein*, the being that questions its own existence.⁶⁹

Merleau-Ponty, in his *Phenomenology of Perception*, argues that space and time are not merely cognitive forms but are lived and experienced through the body. This “lived space” and “lived time” approach expands Kant's theory by incorporating the embodied nature of perception and consciousness. In this way, Kant's theory is seen not as obsolete but as a foundation upon which richer and more nuanced accounts of human experience have been constructed.⁷⁰ In metaphysics, contemporary philosophers continue to engage with the Kantian distinction between phenomena (things as they appear) and noumena (things-in-themselves). This distinction raises enduring questions about the nature of reality, objectivity, and the limits of human understanding. It has implications for discussions on realism vs. anti-realism and the possibility of metaphysical knowledge. Even as Kant's strict dichotomy has been challenged, his concern with the limits of human reason and the conditions of intelligibility remains central to modern metaphysical inquiry.

⁶⁸ Husserl, E. (1991), *On the Phenomenology of the Consciousness of Internal Time (1893–1917)*, (London: Springer Books), p. 33.

⁶⁹ Heidegger, M. *Op. Cit.*, p. 88.

⁷⁰ Merleau-Ponty, M. *Op. Cit.*, p. 105.

CHAPTER FOUR

EVALUATION, CONCLUSION AND RECOMMENDATIONS

4.1 EVALUATION

Immanuel Kant's theory of space and time, as articulated in his *Critique of Pure Reason*, marked a revolutionary shift in metaphysical and epistemological thought. Kant argued that space and time are not empirical concepts derived from experience, but rather a priori intuitions that serve as necessary conditions for the possibility of experience.

According to Kant, “space is the form of outer sense and time is the form of inner sense, which together structure all perceptions and give them coherence”⁷¹. This means that we do not experience space and time as objects or substances, but as preconditions that shape the way we perceive phenomena. This radical move separated Kant from both rationalist metaphysics and empiricist epistemology, providing a “Copernican Revolution” in philosophy by asserting that the mind actively structures experience.

The strengths of Kant’s theory lie in its foundational role in modern epistemology and its influence on subsequent scientific and philosophical developments. By framing space and time as subjective forms of intuition rather than objective realities, Kant provided a compelling explanation for the universality and necessity of mathematical judgments in physics and geometry. This explains why geometric propositions can be known a priori, yet still apply to the empirical world, because the world as we know it is already structured by these forms.⁷² His theory also preserves objectivity by positing that while we cannot know things-in-themselves (*noumena*), we can have certain and valid knowledge of appearances (*phenomena*) because they conform to the a priori structures of our cognition.

Kant’s account has also been the subject of considerable criticism, particularly when evaluated in light of human existence and the lived experience of space and time. Critics

⁷¹ Kant, I. (1998), *Critique of Pure Reason*, (Cambridge: Cambridge University Press), p. 104.

⁷² *Ibid.*, p. 115.

from the phenomenological and existential traditions, such as Martin Heidegger and Maurice Merleau-Ponty, argue that Kant's theory is overly abstract and detached from the concrete realities of embodied human life. Heidegger, contends that "Kant's notion of time as an inner intuition misses the existential structure of *Dasein*, in which temporality is not merely a condition of perception but a fundamental mode of being".⁷³ In his words, "time is existentially significant"⁷⁴, it is not simply a container for events but is woven into the very way humans project themselves into possibilities and interpret their being.

Merleau-Ponty criticizes the Kantian view for failing to account for the embodied and pre-reflective nature of spatiality. He argues that "space is not simply given in intuition, but is constituted through the bodily engagement with the world"⁷⁵. From this perspective, space is lived rather than merely represented; it is dynamic, relative, and shaped by the movement and orientation of the body. Thus, while Kant's theory provides a powerful transcendental framework, it lacks the phenomenological richness necessary to describe the full texture of spatial and temporal existence. Kant's rigid distinction between phenomena and noumena has been criticized for creating an unbridgeable gap between human knowledge and reality as it is in itself. This dualism has been seen as problematic because it renders the *noumenal* realm entirely unknowable, raising the question of how one can assert anything about it at all. Advances in contemporary science and cognitive

⁷³ Heidegger, M. (1962), *Being and Time*, (New York: Harper & Row), p. 57.

⁷⁴ *Ibid.*, p. 78.

⁷⁵ Merleau-Ponty, M. (2012), *Phenomenology of Perception*, (London: Routledge), p. 98.

studies challenge the idea of fixed a priori intuitions. Developments in non-Euclidean geometry, relativity theory, and neuroscience suggest that spatial and temporal understanding may be more plastic and variable than Kant imagined. Despite these criticisms, Kant's theory remains a cornerstone of philosophical thought. Its insistence on the active role of the subject in shaping experience laid the groundwork for both phenomenology and constructivist theories of knowledge. While his account may be limited in capturing the lived and existential dimensions of space and time, it continues to offer invaluable insights into the conditions under which experience and knowledge are possible. Therefore, evaluating Kant's theory involves both recognizing its profound contributions and acknowledging its limitations in light of human embodiment, temporality, and the evolving landscape of human understanding.

4.3 CONCLUSION

The evaluation of Immanuel Kant's concept of space and time, particularly when examined through the lens of human existence, reveals a philosophical legacy that remains both influential and contentious. Kant's assertion that space and time are a priori forms of intuition fundamental conditions for the possibility of experience marked a profound transformation in the way philosophers approached the relationship between mind and world. This "Copernican revolution" in thought emphasized the active role of the subject in shaping knowledge, moving beyond empiricist and rationalist limitations. It offered a compelling explanation for the universality of mathematical and scientific

judgments, anchoring them in the very structure of human cognition rather than in the external world itself.

Yet, in the light of human existence, understood in its full experiential, embodied, and temporal dimensions, Kant's theory has important limitations. Philosophers such as Heidegger and Merleau-Ponty have shown that space and time are not merely conditions for perception, but are lived realities that form the basis of existential experience. Their phenomenological and existential critiques deepen and humanize Kant's abstractions, reminding us that time is not simply a succession of inner intuitions, but the horizon within which meaning, purpose, and mortality unfold. Likewise, space is not a mere container for objects, but a dynamic field shaped by bodily presence, action, and orientation. Nonetheless, Kant's insights remain foundational to numerous contemporary discussions in epistemology, metaphysics, cognitive science, and even physics. While relativity and quantum mechanics have challenged Kant's notion of absolute time and Euclidean space, his broader framework — that the structures of human understanding shape how the world appears — continues to inspire debate and reinterpretation. The relevance of Kant's thought lies in his profound concern with the limits of human reason, the conditions for objectivity, and the role of the subject in the constitution of reality.

4.4 RECOMMENDATIONS

The evaluation of Immanuel Kant's concept of space and time, especially when viewed through the lens of human existence, invites further exploration across a range of

philosophical and interdisciplinary domains. Although Kant laid the groundwork for understanding space and time as a priori forms of intuition, the evolution of philosophical thought and the advancement of science and technology continue to challenge and expand the boundaries of his theory. To ensure a holistic and contemporary understanding of these concepts, it is important that scholars engage in deeper research that both critiques and builds upon Kant's legacy. One vital area for future research is a comparative study between Kant and post-Kantian philosophers such as Hegel, Schopenhauer, Husserl, and Heidegger. These thinkers extended or revised Kant's views, particularly by shifting attention from the static conditions of knowledge to the dynamic structures of lived experience. Heidegger, for instance, reinterpreted time not as an inner intuition but as a fundamental structure of *Dasein* — human existence. A thorough engagement with such perspectives could provide a more existential and phenomenological account of space and time, thereby enriching our understanding of human finitude and temporality.

The intersection between Kantian philosophy and modern physics presents another rich field for inquiry. Scientific advancements such as Einstein's theory of relativity, which reconceptualizes time as relative rather than absolute, pose a significant challenge to Kant's view of time as a fixed, necessary condition of experience. Researchers can explore whether Kant's framework can be updated or integrated with these discoveries without undermining his critical philosophy. This kind of interdisciplinary dialogue between philosophy and science can yield new insights into both the nature of reality and

the cognitive structures through which we perceive it. The phenomenological tradition offers valuable avenues for further investigation. Thinkers like Merleau-Ponty argued that space and time are not simply mental categories but are lived and embodied phenomena. Future research might explore how human beings *inhabit* space and time, how they are affected by memory, anticipation, movement, and mortality. Such phenomenological explorations of spatiality and temporality could greatly enhance our understanding of human experience in a more grounded and concrete way than Kant's abstract categories allow.

There is also a need for cross-cultural philosophical dialogue that includes non-Western perspectives. African, Indian, and East Asian philosophical systems offer rich and often contrasting views on space and time. For example, African thought, with its cyclical concept of time and communal understanding of space, could provide alternative insights that challenge or complement Kant's Eurocentric framework. Comparative studies of this kind would not only broaden the philosophical discourse but also contribute to a more inclusive and pluralistic understanding of existence. In essence, with the increasing role of technology in shaping human experience, further research should investigate how Kant's ideas apply to contemporary digital and virtual realities. In a world where human interaction is increasingly mediated through screens and algorithms, the traditional experience of space and time is rapidly changing. Philosophers and researchers can examine how such developments influence our perception of temporality and spatial presence, and whether Kant's transcendental categories remain relevant in such

technologically altered conditions. Scholars may explore the implications of Kant's theory in cognitive science and artificial intelligence. Since Kant posited that space and time are forms of human intuition, examining how these intuitions are processed neurologically or simulated in machines could yield fascinating results. Can artificial intelligence truly experience space and time, or merely simulate them? This question invites a cross-disciplinary approach involving philosophy, neuroscience, and AI research.

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