

BETWEEN DIALECTICS AND CRITICISM: KANT'S PHILOSOPHICAL DEVELOPMENT

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Abstract. The article presents a unique interpretation of Kant's philosophical development by exploring the relationship between dialectics and criticism. The conceptual analysis of peculiar propositions in some of the philosopher's early writings reveals essential dialectical insights that lead to critical thinking. The text interprets Kant's critical methodology from a historical-philosophical and hermeneutical perspective, highlighting its transcendental form of development. Kant's philosophical development is characterized by the transcendental evolution, which confirms and expands upon the methodological thesis of a necessary transition from the pre-critical dialectics to the philosophical critique.

Keywords: dialectics; philosophical critique; critical methodology; transcendental evolution; Kant

Introduction

It is widely accepted that the scientific and philosophical views of the 'pre-critical' Kant played an important role in the development of modern thought. Indeed, some of the German philosopher's early writings are of particular importance for his own spiritual development, for his actual philosophical maturation, and also for laying the foundations of transcendental logic and critical methodology. The initial section of the text analyses Kant's dialectical insights in three of his early works, which serve as a basis for the development of his critical and transcendental philosophy.

Kant's *Critique of Pure Reason* (1781) is considered a seminal work that revolutionised philosophical thought. This work marked the beginning of a turning point in Kant's life and work, which scholars refer to as the 'critical period'. The critical period officially began¹ with the first edition of the *Critique of Pure Reason* (1781), continued with the editions of the *Critique of Practical Reason* (1788) and the *Critique of Judgment* (1790), and ended sometime around 1797. The *Critique of Pure Reason* (hereafter the *Critique*) is a significant work in the history of philosophy. Kant's aim was to demonstrate the possibilities of a different philosophi-

cal perspective, one that is not rooted in being and naturalness, but grounds cognition metaphysically. Kant's work is important because it awakened philosophy from 'dogmatic slumber'. He establishes philosophical criticism in the domain of a priori, pre-descriptive, absolutely necessary, and strictly universal cognition². The object of critique is human knowledge and cognitive faculties. Kant investigates their origins, limits, and possibilities. He establishes the general methodology of critical inquiry.

The second part of the text attempts a historical-philosophical hermeneutic of Kant's critical methodology. It interprets and explains the transition from dogmatism to criticism from the perspective of German classical philosophy and philosophical evolution. This task aims to justify and argue for the development and modification of philosophy while also acknowledging the unchanging forms of philosophising that explain the inherent power and heuristics of the transcendental as a mediating link in critical methodology. Thus, the transition from dogmatism to criticism leads to a form of transcendental evolutionism. This marks the methodological evolution from the pre-critical Kantian dialectic to philosophical criticism and transcendental thought.

Dialectics of the 'pre-critical' Kant

Kant's lifelong spiritual attunement is characterized by a unity between freedom and confidence in one's own reason, as well as an Enlightenment impulse for the progress of society. The problem of the contradictory unity of the 'general' and the 'particular' creates favorable conditions for the emergence and development of German classical philosophy. Kant's transcendental logic became the real basis of German classical philosophy, which served as the true source of the philosophical systems of Fichte, Schelling, and Hegel. Kant passed through various influences and stages of philosophical development to construct his transcendental logic, as evident in his early writings from the so-called 'pre-critical' period. The text explores how certain works contribute to the development of critical thinking and establish a new logical paradigm that builds upon and sublates formal-logical thinking. The first part of the text examines Kant's early pre-critical writings, which reveal his natural-scientific views and dialectical insights.

Kant's pre-critical texts are divided into two periods: the first from 1747 to 1756, and the second from 1757 to 1777³. As a true contemporary of the Enlightenment, Kant emphasized the importance of having confidence and conviction in the ability of reason to solve the problems of metaphysics and natural science. In his early work in natural philosophy, *Thoughts on the True Estimation of the Living Forces* (1746 – 1747) (Kant 2012, pp. 11 – 155), Kant took a firm stance on a debate between mathematicians and metaphysicians in eighteenth-century Germany. The debate centred around the concept of 'force', which, in Kant's interpretation, appears to align more closely with the ideas of Leibniz than with those of Descartes

and the Cartesians⁴. Kant referred to the vital force as *vis activa*, distinguishing it from the motive force (*vis motrix*). The inherent vital force manifests itself even when the body is at rest, without external action or movement. It is important to note that Kant's concept of force should be understood not only in terms of external action and movement, but also in terms of a potential for action that is inherent in the body at rest. Thus, even at the beginning of Kant's philosophical development, he demonstrates a particular form of dialectic. Kant explores the concept of force beyond the physical and mechanical, weaving it into the realm of the speculative-ontological. The concept of force undergoes a dialectical sublation by Kant, transforming it from a physical and mechanical conception to a speculative-ontological and metaphysical (Watkins 2003, pp. 9 – 10) resolution of the dualism between soul and body⁵. This resolution, however, is not in favor of Leibniz and his followers, not in favor of metaphysicians against mathematicians, or vice versa. It is its own, philosophically dialectical and ontological relation, self-embodied with the germ of the critical and the transcendental. Kant derives a new metaphysical form of the concept of force in order to provide a solution to the problem of the interaction and influence between soul and body. He gives a more general definition of force as a general capacity for influence (Watkins 2003, 10). Kant finds both camps to be one-sided in their views and solutions, and therefore makes room for both the external driving force and the vital essential force⁶. He explains the metaphysical conception of force and the idea of activity in general, which is well-known for revolutionising philosophy and promoting the famous 'Copernican turn'. Kant's metaphysical interpretation of the concept of force leads him to examine the foundations of transcendentalism and the essential proposition of criticism regarding the subject's activity and the purely active form of cognition. This marks a methodological transition from his natural philosophical and ontological elaborations to the epistemological and ethical problematic.

Starting with the problem of the concept of force, Kant proceeds to clarify the question of spatial dimensions (Kant 2012, pp. 26 – 28), and thus the possibility of multiple worlds (*ibid.*, pp. 28 – 29). Kant provides a logical justification for the existence of three-dimensional space in terms of the force that substances in the world exert upon one another. The three-dimensionality of space is a fundamental property that is necessarily linked to the law of universal attraction (according to Newton). Kant considers that: "...substances in the existing world, of which we are a part, have essential forces of such a kind that they propagate their effects (*Wirkungen*) in union with each other according to the inverse-square relation of the distances..." (Kant 2012a, 27). He concludes that, according to this law, the resulting 'whole space' is three-dimensional. In addition, Kant argues that this law is arbitrary because God could have chosen another, such as the law of inverse proportionality of the cube (of distances) (*ibid.*, p. 28). Kant thus relates the properties of space to numbers and their properties and relations, which also leads him to

the hypothesis of infinity and the existence of multiple worlds (multiverse). These worlds are fundamentally different from our world because they are based on different dimensions. Kant discusses the concept of multidimensional space and different levels of dimensions. Very insightfully and heuristically, he suggests the idea of a “higher geometry that a finite mind can construct” (ibid., p. 28).

Thus, although Kant was directly influenced by M. Knutzen (and substantially influenced by Leibniz), he actually experienced a mediated (i.e. methodological) influence by Newton. Newton’s physics provides an essential corrective for Kant, allowing him to cast a critical eye on available knowledge and science in general. Newton promoted a mechanistic view of the world that had metaphysical meaning⁷ and value. Through Knutzen, Kant was introduced to Newton’s writings, which inspired him to study natural science and natural philosophy more extensively.

The next major work of the German thinker, *Universal Natural History and Theory of the Heavens...* (1755), largely adheres to the premises of Newtonian mechanics (Kant 2012, pp. 182 – 308). In this pre-critical period work, Kant presents his cosmological hypothesis, discussing the origin of the universe, the structure and properties of the solar system, and the possibility of the existence of other worlds. Kant reflects on these ideas after contemplating the nature of change in 1754. He considered the evolution and development of the earth, including whether it ages, how it came to be, and where it is headed. This led him to study the origin of other celestial bodies and the universe as a whole.

In *Universal Natural History*, Kant provides a scientific explanation of the universe’s origin based on natural causes (Kant 2012, p. 204). The explanation is derived from matter and its inherent mechanical motion, rejecting anything mystical, fantastic, or pseudo-scientific. Kant’s main thesis is the existence of expediency in nature, which is a systematic and consistent immanent teleology. This is in line with the belief in the existing of a supernatural and absolute being that underlies the origin and nature of the universe⁸. However, Kant not only challenges the traditional view of religion but also attempts to reconcile the mechanical formation of the universe with God as the source of the necessity that is an absolute feature of the laws of nature. He turns to nature to rediscover the metaphysical. The solar system and its structure (intrinsic systematics) are the result of a long history with both natural scientific and metaphysical explanations. Kant’s *Universal Natural History* aims to expand on the foundations of Newtonian mechanics, reinforce its principles, and demonstrate its significance in relation to the necessary manifestation of God and the dynamic treatment of matter. The metaphysical forces inherent in matter are expressed by the latter, and they are the cause of the origin and evolution of the universe. Metaphysics is the prime mover that causes the movement of matter, and it is the cause of physics. This thesis is problematic and worthy of closer examination because it gives rise to the idea of the pre-critical Kant’s dialectical disposition, which posits dialectics as a provocation to criticism. In the *Critique of Pure*

Reason, Kant rejects dialectic, referring to it as 'the logic of illusion' (Kant 1998, p. 198, 267, 384). The transcendental dialectic aims to criticise the dialectical illusion (Kant 1998, pp. 199 – 200, 384), clarifying the natural dialectic of human reason (Kant 1998, p. 605). It is worth noting that Kant claims that dialectic is necessary before critical philosophy can emerge. Even though it is a fallacy (*negation*), it has its own positive inherent value (because it is dialectic) and gives rise to the impulse for a critical way of philosophising.

Kant attempted to overcome fantastic and mystical conceptions in cosmogony, which can be traced back to Newton's original work. In the *Universal Natural History*, the German philosopher had already completed the 'Copernican turn' in the natural sciences by establishing the principle of the epistemological problematic and the power of human cognition. The latter must study the origin and evolution of the universe; it is the essential, and nature conforms to it, not the other way around. The Earth is not the centre of the universe. Although humankind is not the pinnacle of creation, our power stems from our cognitive abilities, and how we utilise them.

At the beginning of the *Universal Natural History*, Kant states that he can build a world out of matter by showing how it can come into being (Kant 2012, p. 200). To achieve this, Kant methodologically studied the dynamics of matter and Newton's mechanical principles, including the laws of attraction and repulsion and the universal law of gravitation, to construct a stable universe. Kant also emphasised the study of changes in the motion of matter resulting from these laws, as well as the stages through which matter passes. Matter initially accumulates due to gravitational attraction, forming a cosmic cloud. As it moves, the matter heats up due to friction and forms stars. This is how the infinite universe is formed, consisting of many star systems similar to our solar system. Cosmic processes continue uninterrupted. The death of a star system does not threaten the existence of the Universe. The remains of the decay swirl around again, allowing new worlds to form elsewhere in the Universe.

It is worth noting another of Kant's pre-critical works, *An Attempt to Introduce the Concept of Negative Quantities into Philosophy (1763)* (Kant 1992b, pp. 203 – 241) in which he establishes the framework for a new type of logic that is clearly distinct from traditional syllogistics. According to some authoritative scholars, Kant's most important methodological work of this period is the so-called *Prize Essay*⁹. However, I argue that the essay mentioned above, in which Kant philosophically overcomes the tendency towards mathematics and formal logic, is also of significant methodological importance. Kant argues that philosophy need not actually use the mathematical method in order to make its points. Using the analogy of negative quantities in mathematics, Kant argues for negative judgments that express specific relations of difference and characterise the object not in itself, but in relation to other objects. Therefore, Kant understands negation as a relation rather than a thing. The German philosopher argues that the term 'negative quantity' is

used incorrectly. It is used not only to negate as a logical negation, but also as a real negation, which affirms: “For negative things would in general signify negations (negationes), but that is not at all the concept we wish to establish. On the contrary, it is sufficient that we have now defined the reciprocal relations which constitute the whole concept and which consist in real opposition. However, we should like to make it immediately clear from the expressions themselves which we are employing that the one member of the opposition is not the contradictory opposite of the other member, and that, if the second member of the opposition is something positive, the first member is not a mere negation of the second, but, as we shall see in a moment, so affirmative...” (Kant 1992, pp. 214 – 215). Kant emphasises on the difference between real and logical negation. Real negation reveals as a *thing* and not as *nothing*, what is a true consequence of the logical negation. It has substantive and methodological importance in revealing the relation between two opposing things. True negation sublates the logical contradiction and transforms it into a positive statement. Negation is possible and conceivable as it affirms another being rather than nothing, since it negates a being. Kant distinguishes between formal-logical and dialectical opposition (contradiction) here. The former is a complete and unthinkable negation, while the latter is a real opposition in the form of the unity of contradictions. Dialectical contradiction is a thinkable contradiction. In transcendental logic, Kant highlights the significance of negative judgments, which reflect something real and positive: the relations of difference. The explanation for the positivity is that they reflect a real phenomenon. Kant establishes a new relationship between opposites, which can also be understood as forming essential parameters of dialectical contradiction.

Kant’s Critical Method

Kant characterises critique as a metaphysics of cognition and places it in the realm of the *a priori*. This creates a new, pure theoretical platform whose goal is not only the cognition of objects, but also an initial investigation of the very ability to think and know. This marks the beginning of the philosopher’s critical method, which acquires the status of a general philosophical methodology and presupposes the definition of the possibility of constructing and knowing the subject matter. Philosophical criticism embodies self-reflexivity, rigorous consistency, and a particular meta-methodology. It examines reason and its structure. Critique is also a propaedeutic, a science of the origins and structure of reason that precedes the metaphysics of being: “Now the concern of this critique of pure speculative reason consists in that attempt to transform the accepted procedure of metaphysics, undertaking an entire revolution according to the example of the geometers and natural scientists. It is a treatise on the method, not a system of the science itself; but it catalogs the entire outline of the science of metaphysics, both in respect of its boundaries and in respect of its entire internal structure” (Kant 1998, p. 113).

The cognitive construction of consciousness is derived within the limits of reason through the application of critical methodology to purely speculative reasoning. According to Kant, the main task of philosophy is to eliminate the harmful elements in metaphysics. Kant argues that reason cannot make progress in metaphysics without criticism, and that dogmatism is the dogmatic procedure of pure reason without an antecedent critique of its own capacity (ibid., p. 119). Beyond the content of reason, the critique explores the concepts of pure reason that go beyond possible experience. Simultaneity is both immanent and transcendent. To describe this, Kant introduces the term *transcendental*, which refers to the mode of cognition of objects rather than the cognition of objects themselves. The critical method's reflection on the cognitive faculty signifies the shift from the transcendent to the *transcendental*: "I call all cognition transcendental that is occupied not so much with objects but rather with our mode of cognition of objects insofar as this is to be possible a priori. A system of such concepts would be called transcendental philosophy" (ibid., p. 149).

The transcendental pertains to the cognition of cognition (metacognition) and focuses on the construction of subjectivity. Kant addresses the issue of what kind of cognition human reason can achieve, starting with the origin of cognition and the role of our senses in the process. Kant distinguishes between *a priori* and *a posteriori* cognitions, with the latter being empirical and post-experiential. They are concrete, but do not provide definite dependencies or universal and necessary laws in cognition. A priori cognition processes the data obtained from the senses and experience through thinking. These cognitions allow us to formulate general dependencies and reason with necessity about given objects, abstracting from concrete experience. Kant defines a priori cognition as pre-experiential, general and necessary cognition that is not influenced by the senses. These cognitions are synthetic because they are prerequisites for the formation of new cognitions. This pure a priori cognition is the subject of study for Kant's transcendental philosophy and critical metaphysics, which, in turn, justifies the possibility of *synthetic a priori judgments*.

Kant reduces the question of types of cognition to judgment, which he sees as the basic element of all cognition. Judgment brings a given cognition into the objective unity of apperception (ibid.). Kant describes two kinds of judgments: *analytical* and *synthetic*. Analytical judgments are explanatory and do not produce new knowledge. According to the source, analytic judgments are limited to the subject they refer to, while synthetic judgments provide new knowledge about the subject (ibid., p. 141).

In the *Critique*, sensibility and thinking are developed as separate areas within the overall structure. *Transcendental aesthetics* is dedicated to sensibility, while *transcendental logic* is dedicated to thinking. Kant further divides thinking into two faculties: understanding and reason. Understanding defines and fixes an object,

while reason encompasses all objects of thought. *Transcendental analytics* deals with the problems of judgment and the functions of understanding, while *transcendental dialectics* deals with the problems of inference and reason. The common task of these two divisions of the *Critique* is to elucidate the concepts that organize the cognition of the subject¹⁰.

Kant poses the question, “How is metaphysics possible as a science?” The critical method is employed to derive the new metaphysics, which examines and takes reason’s system as its object. It is worth noting the influence of D. Hume’s scepticism on Kant, whose studies awakened the German philosopher from his ‘dogmatic slumber’. Hume rejects the apodictic legislation of reason and highlights the impossibility of a priori propositions and metaphysics. He examines the causal relation of things and concludes that metaphysics is illusory. The latter is set to be confused with the cognition of reason, which in reality is borrowed from experience and has acquired the appearance of necessity through habit. Causality is not a sufficient ground in the realm of reason. In fact, the causal relation of things operates in the realm of experience¹¹. This prompted Kant to direct his efforts in a different direction, by attempting to ground pure philosophy in an analysis of how we acquire knowledge, in order to determine the capacity of reason and set its necessary limits. This approach also answers the question of how metaphysics can be considered a science, through a critique presented in the form of an alternative methodological variant of skepticism and dogmatism. Metaphysics as science is possible in the form of a critique of pure reason¹².

The critical study of cognition as a meta-methodology involves examining its elements and functions to distinguish it from being. Kant emphasises this in order to undermine the foundation of old metaphysics, the principle that thinking and being are identical. The philosopher “...reveals that the isomorphism between reason and being is only valid of experience and outside of that cannot be legitimately assumed” (Fincham 2010, p. 49). Transcendental philosophy does not equate existence (being) with concept. According to Kant’s thesis, it is necessary to surpass the limits of the concept to reach being. In justifying “...the impossibility of an ontological proof of God’s existence”, Kant states: “...that the concept of an absolutely necessary being is a pure concept of reason, i.e., a mere idea, the objective reality of which is far from being proved by the fact that reason needs it...” (Kant 1998, p. 563). The existence of an object cannot be deduced solely from its concept. The object’s actual existence is not considered an attribute derived from the concept, but rather an assumed fact that can only be confirmed through experience.

Kant’s critical method investigates the origin of cognition through transcendental philosophy and the idea of incomplete abstraction from its content. This provides a foundation for refining the scope of logic. Kant aims for a comprehensive approach to thinking. He introduces content into the field of logic and remains within the sphere of thinking. He gives purely subjective meanings to logi-

cal definitions, which Fichte later deepens and elaborates. Fichte takes it to such an extent that, starting from the 'I' (ego), it becomes an absolute principle that builds itself up within itself, synthesises itself, and creates the entire content of the universe. Fichte discusses metaphysics as a genetic deduction of what is present in our consciousness. Similarly, Kant views the categories as 'ancestral concepts of pure understanding' (Kant 1998, p. 213) that, along with derived concepts, form the principles of his system. They are deeply ingrained in human understanding and are presented by Kant in a systematic unity. The philosopher explains the totality of thinking by advancing the essence of the triadic principle, which Fichte then applies in his systematisation and in his well-known scheme of categories: *thesis-antithesis-synthesis*. The third category is achieved only when both the first and second elements of a class are combined, and such a combination is conceived as "...an entirety of things, since one is not subordinated, as effect, under another, as the cause of its existence, but is rather coordinated with the other simultaneously and reciprocally as cause with regard to its determination..." (ibid., p. 216). The process of thinking involves a critical awareness of performing a transcendental synthesis¹³, which combines the pure a priori form of cognition with the subject content in a specific manner.

Kant employs the transcendental unity of apperception to establish synthetic a priori knowledge (Pippin 1989, p. 17). Synthesis is a fundamental act in critical and transcendental philosophy, an act of spontaneity and freedom of the subject. This is linked to the essence, the nature of the transcendental in general – not to transcend all experience, but to precede experience (*a priori*) and make empirical knowledge itself possible. The transcendental synthesis in Kant is genetically linked to both the faculty of imagination (*Vermögen*) and the faculty of judgment (*Urteilkraft*). According to Kant, the synthesis of representations rests on the imagination, while the transcendental power of judgment reveals the schematism of pure reason and its basic premises (Kant 1998, p. 281, 270).

Kant states that 'conjunction is the notion of the synthetic unity of the manifold', and from this, he derives the fundamental position and role of judgment. In the *Lectures on Logic*, judgment is the idea of the unity of the consciousness of different conceptions, or the idea of the relation between them, insofar as they form one concept: "...distinct concepts can only arise by means of a judgment" (Kant 1992a, p. 220). The general question that arises from the critical (cognitive¹⁴) treatment and philosophising of judgment, which embodies the transcendental (synthetic) unity of apperception, is whether synthetic judgments are possible a priori.

Kant's critical method reveals the isomorphism between the transcendental unity of apperception and the objective unity of self-consciousness. The 'I' unites the manifold given in intuition into a single concept through combination (*conjunctio*), distinguishing itself from a merely subjective unity based solely on the inner sense of time. The objective unity of self-consciousness is based on reason's fundamental

criteria of necessity and universality. The judgment explicates the objective unity of apperception by realizing a relation between cognitions is realized, and the copula distinguishes it from the merely subjective unity. The logical function of judgment is to unite intuition and concept into a necessary unity. The manifold of intuition is subordinated to the categories, whose deduction essentially purifies meaning into the form of concepts. Categories are a means of achieving synthetic unity and, as a product of understanding, they serve as a mediator between subject and object. Kant derives categories through this active aspect. Thus, deduction is only possible through reflection.

Kant's critical method is not external to experience. The transcendental integration of experience into the philosophy system is a valuable critical hermeneutic. Experience is not external, but rather the result of the active function of thinking, specifically categories as the internal product of mental determinations. Philosophical criticism regards experience as the outcome of the transcendental unity of apperception, an internal product that possesses its own objective validity. This has implications for the application of categories to empirical intuition. According to Kant, categories only appear as 'the possibility of empirical knowledge', of experience: "The categories consequently have no other use for the cognition of things except insofar as these are taken as objects of possible experience" (Kant 1998, p. 255).

Kant's brilliance is evident in his conception of the generative dynamics of thinking and the self-criticism of man's higher faculty. He methodologically generates and constitutes being through transcendental logic, which is the field of critique. This logic delves deep within itself to search for the conditions of transcendental synthesis and to push through the synthesis itself. Transcendental logic studies the forms of understanding and reason in a meaningful way and relates them to the object of thought. Kant's doctrine of logic aims to demonstrate the mode of acquiring new knowledge and to pose the real problem before pure reason. This particular mode (*modus*) lies in the sublation of the dogmatism of rationalism and empiricism, which prioritize thinking and experience, respectively.

Conclusion

The heuristics of transcendental logic lies in its potential for meta-methodologising the critique of cognition itself, which is also known as the critique of the critique of cognition. It is an invariant transcendental-logical form of philosophising and thematising content that has contemporary applications. The development of technologies and systems with artificial intelligence is based on the creation and standardisation of algorithms and models derived from natural intelligence, which refers to human thinking and cognitive abilities. It is critical to format these algorithms and models in a way that is comprehensible and logically structured. Critically examining the application of transcendental thinking to artificial intelligence systems and exploring their capabilities and limitations involves evaluating the for-

matted consciousness that AI mimics human cognitive faculties. The development of artificial intelligence is considered a *metacritique* that originates from the nature and typology of transcendental evolution of thought.

The *form-modus* of consciousness, known as the transcendental model, has the potential to construct worlds. Today, artificial intelligence is equipped with the power of the transcendental and is already constructing a new reality. Human cognition builds artificial intelligence, which in turn produces new cognition. Therefore, a meta-methodology is needed to critique the capabilities, possibilities, origins, and limits of artificial intelligence. Today, there is a lack of a logical and epistemological theory of AI. Such a theory can be constructed through metacriticism, as suggested and enabled here.

NOTES

1. According to some scholars of Kant's philosophy and the history of philosophy, the transition from the 'pre-critical' to the 'critical period' is marked by the defense of the dissertation *The Form and Principles of the Sensible and Intelligible World* in 1770. This also marks the end of the 'pre-critical period' (1746 – 1770). The above-mentioned work marks a significant turning point in Kant's intellectual development and philosophical maturity, which prepared the ground and the favorable conditions for the development of the *Critique*. V. Kanawrow summarizes the reasons for this: "Kant's philosophical maturation is in relation with the global conceptual and methodological discrepancy and opposition between classical rationalism and classical empiricism" (Kanawrow 2011, p. 27) (translated from Bulgarian – I. M.). Kant aimed to protect science from dogmatism and overconfidence while also dispelling disbelief in science and its potential. In a unique way, Kant positions criticism between the dogmatism and skepticism of his era.
2. "Necessity and strict universality are therefore secure indications of an *a priori* cognition..." (Kant, 1998: 137).
3. See Kant, I. (1976). *Gesammelte Schriften*. Bd 1 (I/1) *Vorkritische Schriften I: 1747-1756*. De Gruyter Verlag; Kant, I. (1969). *Gesammelte Schriften*. Bd 2 (I/2) *Vorkritische Schriften II: 1757 – 1777*. De Gruyter Verlag.
4. Fr. Beiser's study of Kant's intellectual development reveals a debate between Leibnizianism and Cartesianism on the correct and appropriate measurement of force. The Cartesians, who adhered to geometric physics, analyzed physical properties solely in terms of extension. They viewed force as a physical property and measured it strictly in terms of 'quantity of motion' – 'velocity multiplied by mass' (MV). The Leibnizians, however, argued that force should be viewed differently. They believed that a body possessed something beyond its extension, which they referred to as its 'inherent living force'. This force was understood as the body's attempt to reproduce the 'quantity of motion' it received from external causes from within itself (MV²). (Beiser 1992, pp. 28 – 29).

5. The influence on Kant in this case comes from M. Knutzen, a professor of logic and mathematics at the University of Königsberg. Knutzen revived and transformed the thesis of the physical influence of the spiritual on the material, which was originally directed against Leibniz's 'pre-established harmony', by eliminating the dualism between soul and body.
6. Watkins presents this position as Newtonian (Watkins 2013, p. 431).
7. In his *Lectures on the History of Philosophy*, Hegel notes that Newton had a negative attitude towards metaphysics. Specifically, he states that: "Newton was indisputably the chief contributor to the popularity of the philosophy of Locke, or the English method of treating of Philosophy, and more especially did he promote its application to all the physical sciences. "Physics, beware of metaphysics," was his maxim..." (See: <https://www.marxists.org/reference/archive/hegel/works/hp/hpgrotiu.htm#newton>) [viewed 11.03.2024]. However, contemporary authors argue that if the term 'metaphysics' is reinterpreted as the discussion of the most general features of the constitution of the world and of the principles of human inquiry into the nature of the world, then there are grounds to speak of Newtonian metaphysics (Stein 2004, pp. 256 – 307).
8. Newton believed that the systematic arrangement of the bodies in the solar system was due to God's intervention because the space between the heavenly bodies was empty (absolute void) and therefore could not have a material cause. "Kant admits that we cannot avoid such a supernatural hypothesis if we assume that the present order of the universe is eternal, for then no material cause could have produced it. If, however, we assume that space was originally filled with some primordial mass, then we can explain how systematic order arose from the forces of attraction and repulsion acting upon it" (Beiser 1992, pp. 32 – 33). To avoid a supernatural hypothesis, Kant argues that the field of cosmology must be approached with the tools of natural history. In doing so, however, he attempts to reconcile the principles of mechanics and the dynamics of matter with the existence of a supernatural being that is the primary cause and necessity that gives rise to motion. Later, P. S. Laplace developed Kant's cosmological hypothesis further, which became known as the 'Kant-Laplace hypothesis.' Laplace mathematically developed the hypothesis in his *Exposition du système du monde* (Paris, 1796) based on the law of universal attraction. He also discussed the problem in his *Traité de mécanique celeste*, v. 1 – 5 (Paris, 1799 – 1825), concluding that supernatural forces are not necessary for maintaining the solar system. According to K. Rosenkranz in Laplace's cosmogony, there is no significant difference from what is already present in Kant's *Universal Natural History* (Rosenkranz 1840, p. 133).
9. *Untersuchung über die Deutlichkeit der Grundsätze der Natürlichen Theologie und der Moral* (Investigation of the Clarity of the Principles of Natural Theology and Morals) (1762) (Beiser 1992, p. 40).
10. For example, as "the result of the system of judgment is also the derivation of the system of pure concepts of understanding" (Kristeva, 2018: 163) (Translated from Bulgarian – I. M.).
11. Cf. Hume, D. (2007). *A Treatise of Human Nature*. Ed. by David Fate Norton and Mary J. Norton. Clarendon Press, Oxford, U.K.

12. In the 1860s, Kant began to question the veracity of the rationalist methodology of Leibniz-Wolffian philosophy. As a result, he turned to empiricist methodology and became increasingly skeptical about the possibilities of the old metaphysics: "By 1766 Kant had reformulated the very task of metaphysics: Its aim was to provide not knowledge of God, providence, and immortality, but a science of the limits of human reason. Metaphysics was no longer the queen of the sciences, but only the handmaiden to ethics" (Beiser 1992, p. 37).
13. According to the common conception of the logic, it is not the role of logic to explore the circumstances in which concepts can be linked to sensory intuitions and therefore possess content. This is because logic abstracts from any content of cognition, that is, from any relation of cognition to the subject (object). J. M. Young writes: "In the *Critique*, however, this relation is of central concern. When Kant introduces the notion of synthesis and says that synthesis "gathers the elements for cognition and unites them in certain content", his aim is to explain this relation. The notion of synthesis is supposed to make clear how it is that intuition enters into concepts and provides them with content that they would otherwise lack" (Young 1992, p. 113).
14. The term 'cognitive' is emphasized, despite the fact that the research literature often characterises judgment ontologically. Some authors view the *synthetic a priori* as ontological. Huaping Lu-Adler's work, *Ontology as Transcendental Philosophy*, is particularly interesting. The author focuses on "...how Kant's Critical metaphysics represents a definitive turn from, as well as notable continuity with, traditional treatments of ontology, particularly the Wolffian one" (Lu-Adler 2018, pp. 53 – 73).

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