



# The Cartesian Continuity: The Enduring Influence of Descartes' Philosophy on Modern Psychology

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## ABSTRACT

This paper examines the persistent and often unacknowledged influence of René Descartes' philosophical framework on the conceptual foundations of modern psychology. Despite explicit rejections of Cartesian substance dualism by many psychological schools, this analysis argues that core Cartesian ideas concerning the mind-body relationship, subjectivity, and methodological rigour continue to shape contemporary theory and research. The paper first outlines the essential tenets of Cartesian ontology and methodology. It then traces the transformation and adaptation of these ideas across five major psychological perspectives: cognitivism, subjectivism, psychoanalysis, behaviourism, and biological psychology. The findings reveal that Cartesian philosophy functions as a generative paradigm, with its distinctions between mind and body, subject and object, and rational and empirical inquiry remaining central to psychological discourse. The paper concludes that recognising this "Cartesian continuity" is crucial for understanding the theoretical fragmentation within psychology and advocates for a renewed integration of philosophical reflection with empirical science to achieve a more coherent understanding of the human mind.

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## 1. Introduction

René Descartes has long been regarded as one of the most influential figures in the history of human thought. Often described as both "the father of modern philosophy" and "the father of modern psychology" (Henley, 2019), Descartes developed a worldview that profoundly shaped how people understand the relationship between the mind and the world. His attempt to establish knowledge on a foundation of certainty inspired generations of scientists and philosophers. In psychology, his influence is evident in the way scholars conceptualise consciousness, rationality, and the interaction between mind and body. Even though many later thinkers explicitly rejected his

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dualism, Cartesian ideas still quietly guide how modern psychology frames its central questions about the self, perception, and cognition (Damasio, 1994; Varela, Thompson, & Rosch, 1991).

The historical development of psychology shows that its conceptual foundation has never been purely scientific but also deeply philosophical. From its inception as a philosophical branch in the seventeenth and eighteenth centuries, psychology has drawn on philosophical inquiry to define the concept of the "mind" and its study. Early psychologists such as Wilhelm Wundt and William James were both trained as philosophers and considered introspection—the direct observation of consciousness—a valid scientific method. Over time, however, psychology became increasingly empirical, distancing itself from its philosophical roots (Gazzaniga, 2018). The rise of behaviourism in the early twentieth century and the later dominance of experimental cognitive psychology strengthened this separation. However, despite these methodological changes, many of psychology's theoretical assumptions still reflect Cartesian thinking (Churchland, 1986; Clark, 1997).

One of Descartes' most enduring contributions is his theory of mind–body dualism. By distinguishing between *res cogitans* (thinking substance) and *res extensa* (extended substance), he established a framework that continues to influence how psychologists and neuroscientists understand the relation between mental and physical phenomena. Modern cognitive science, for instance, often treats the brain as a computational machine that processes representations, echoing Descartes' view of the mind as a rational system separated from bodily processes (Clark, 2016; Fodor, 1990). Even embodied and enactive approaches that reject strict dualism do so by positioning themselves against this Cartesian legacy rather than outside of it (Varela et al., 1991; Gallagher, 2005). Thus, whether accepted or contested, Cartesian thought remains a necessary reference point in psychological theory.

At the same time, the twentieth and twenty-first centuries have seen a renewed philosophical interest in revisiting Descartes from a contemporary perspective. Philosophers such as John Searle (2004), Daniel Dennett (1991), and Shaun Gallagher (2018) have each reinterpreted Cartesian problems in light of modern cognitive science. Dennett's theory of consciousness, for example, replaces the "Cartesian theater" with distributed neural processes, while Searle argues that subjective experience is an irreducible biological phenomenon rather than a separate substance. These debates illustrate that Descartes' fundamental question—how mental experience relates to physical processes—remains central to modern scientific inquiry.

Moreover, the growing influence of phenomenology and enactivism has reintroduced philosophical reflection into psychological research. Thinkers such as Varela (1999), Fuchs (2018), and Zahavi (2019) propose that understanding consciousness requires integrating first-person experience with third-person observation. This perspective, called *neuropsychology*, seeks to overcome Cartesian dualism not by denying it but by transforming it into a more dynamic and embodied framework. The persistence of such philosophical efforts demonstrates that psychology cannot entirely escape the conceptual challenges Descartes first articulated.

This paper, therefore, aims to re-examine the continuing influence of Cartesian philosophy on modern psychology. It asks a central question: *Which elements of Cartesian thought remain present in the conceptual structure of contemporary psychology, and in what ways have they evolved?* To address this question, the paper first outlines the essential content of Cartesian ontology and

methodology, focusing on how Descartes' ideas of subjectivity, dualism, and rational inquiry provide the groundwork for psychological theorising. It then analyses the influence of these ideas on five major perspectives within modern psychology: cognitivism, subjectivism, psychoanalysis, behaviourism, and biological psychology. Finally, the discussion section reflects on how Cartesian ideas may contribute to resolving psychology's current theoretical fragmentation and to integrating philosophical reasoning with empirical science.

By revisiting Cartesian philosophy, this paper argues that modern psychology still operates within a "Cartesian framework," even as it seeks to move beyond it. Recognising this continuity may help psychologists understand why their field remains divided between the study of mind and body, and why philosophy continues to provide essential insights into the nature of human consciousness.

## **2. The Basic Content of Cartesian Philosophy**

Descartes' philosophy is a comprehensive system that integrates metaphysics, epistemology, and methodology. He famously compared philosophy to a tree, with metaphysics as its roots, physics as its trunk, and the other sciences as its branches (Descartes, 1991). At the heart of his thought lies the conviction that knowledge must be built upon certain and indubitable foundations. This pursuit of certainty shaped both his ontology and his method.

### **2.1 Cartesian Ontology**

In Descartes' ontology, reality is divided into two fundamental substances: *res cogitans* (thinking substance) and *res extensa* (extended substance). This distinction establishes a dualistic framework in which mind and body are separate yet interact. The statement "*Cogito, ergo sum*" ("I think, therefore I am") serves as the starting point for this view (Descartes, 1933). Here, the I—the subject—is defined by its capacity for thought, independent of material existence.

According to Descartes, the mind is an immaterial, thinking entity whose essence is consciousness, whereas the body is a material, extended entity governed by physical laws. This dualism elevates the subject to a position of independence from the material world. However, Descartes also acknowledged the mutual influence between mind and body, suggesting that they interact through the pineal gland (Tibbetts, 1975). Although modern neuroscience has refuted this anatomical claim, the underlying question of how mental and physical processes interact remains central to psychology (Churchland, 1986; Damasio, 1994).

Another important aspect of Cartesian ontology is the assumption of subject identity. Descartes believed that all rational subjects share a common mental framework that allows mutual understanding. This idea of a universal mental structure prefigures later theories of shared cognitive architecture, such as Chomsky's "mental organ" and Fodor's "modularity of mind" (Chomsky, 1988; Fodor, 1990). In this sense, Cartesian ontology anticipates the scientific study of the mind as an objective and rational entity.

The mind–body dichotomy also laid the foundation for the representational view of cognition—the idea that the mind contains internal representations of the external world (Clark, 1997). Although later approaches such as embodied cognition challenge this representationalism, they still rely on the conceptual legacy of Descartes' subject–object distinction (Varela et al., 1991; Lakoff & Johnson, 1999).

The Cartesian division between subject and object has profoundly shaped later theories of perception and cognition. Modern philosophy of mind has reinterpreted this dualism through the idea of intentionality, meaning that consciousness is always directed toward something. Contemporary cognitive science now views perception as an active construction rather than passive reception, suggesting that the "subject–object" relation is dynamic and reciprocal (Varela, Thompson, & Rosch, 1991; Gallagher, 2005). This shift transforms Descartes' static dualism into a framework where the perceiver and the perceived world continually co-constitute each other through embodied action.

The concept of mental representation also evolved from Cartesian roots. Descartes' belief that ideas mirror reality inspired later representational models of the mind, yet thinkers such as Dennett (1991) and Searle (2004) have challenged this assumption. Dennett rejects the idea of an internal "Cartesian theater" where experiences are displayed, arguing instead for distributed cognitive processes. Searle similarly contends that consciousness cannot be reduced to mental images or computational symbols but arises from biological processes in the brain. Their critiques highlight the limits of classical representationism while acknowledging its historical origin in Cartesian ontology.

## **2.2 Cartesian Methodology**

Descartes' methodological principles are based on two central processes: doubt and self-reflection (the cogito), and the complementary methods of intuition and deduction. These methods seek to establish certainty in knowledge and can be seen as the early form of scientific reasoning.

### **2.2.1 Doubt and Cogito**

Descartes proposed a radical method of doubt: to question all beliefs that could be false. He found that sensory perception is often deceptive and that even scientific reasoning can be uncertain (Li, 2006). Through this process, he arrived at a single indubitable truth—the existence of thought itself. The statement "I think, therefore I am" represents not only an ontological claim but also a methodological principle: self-reflective consciousness is the foundation of knowledge.

This self-reflective approach anticipated modern introspective methods in psychology, where internal awareness becomes a legitimate source of data (Wundt, as cited in Nolen-Hoeksema et al., 2009). Even contemporary cognitive science's emphasis on "metacognition" — thinking about one's own thinking—can be seen as a continuation of the Cartesian method (Flavell, 1979; Frith, 2012).

### **2.2.2 Intuition and Deduction**

For Descartes, knowledge arises from two complementary faculties: intuition, which provides direct insight into truth, and deduction, which draws necessary conclusions from those intuitions (Descartes, 1991). Intuition is not sensory perception but an intellectual vision of clarity, what he called *intuitus mentis*. Deduction, on the other hand, is the rational process that extends these insights into systematic knowledge. Together they form a model of reasoning that closely parallels the empirical–theoretical cycle of modern scientific research (Varela, 1999; Gallagher, 2018).

From a psychological perspective, intuition and deduction can be interpreted as early precursors of dual-process theories of cognition, which distinguish between intuitive (System 1) and analytical (System 2) modes of thinking (Kahneman, 2011). Thus, Cartesian methodology continues to inform psychological models of reasoning and decision-making.

### **2.2.3 The Mathematical Spirit and the Rise of Scientific Rationality**

A central feature of Descartes' method is his belief that all sciences should adopt the clarity and precision of mathematics. He argued that reasoning must proceed from simple, self-evident principles to complex truths, much like geometric proofs. This emphasis on systematic reasoning influenced the later development of experimental psychology, which also seeks to derive general laws of behaviour and cognition from empirical data. The "mathematical spirit" of Cartesian thought is reflected in modern psychology's preference for quantification and model-based explanation (Friston, 2010). Even statistical hypothesis testing follows a Cartesian pattern of moving from foundational assumptions toward deduced predictions. By establishing this logical model, Descartes provided psychology with an enduring framework for constructing reliable knowledge about the mind.

### **2.2.4 Methodological Doubt and Cognitive Bias Research**

Descartes' methodological doubt also has surprising relevance to contemporary studies of reasoning and bias. His insistence on questioning sensory and intellectual certainty parallels modern research on cognitive heuristics and errors in human judgment (Tversky & Kahneman, 1974). In experimental psychology, such investigations show that human cognition often violates logical rules, confirming Descartes' warning about the unreliability of perception. Moreover, metacognitive awareness—the ability to monitor one's own thought processes—echoes the Cartesian project of self-reflective doubt (Frith, 2012). By encouraging systematic scepticism, Descartes anticipated the critical attitude that underlies scientific inquiry and evidence-based psychology. This connection demonstrates that Cartesian methodology not only shaped the philosophical foundations of knowledge but also continues to influence the psychological study of reasoning, bias, and self-awareness.

## **3. The Influence of Cartesian Philosophy on Modern Psychology**

Modern psychology, though diverse in its perspectives, continues to reflect many foundational ideas from Cartesian philosophy. These influences can be observed in five major perspectives: the cognitivist, subjectivist, psychoanalytic, behaviourist, and biological approaches. Each perspective reinterprets Cartesian concepts in distinct ways, either by adopting, transforming, or rejecting them.

### **3.1 Influence on the Cognitivist Perspective**

The most direct continuation of Cartesian philosophy appears in the cognitivist perspective. Early cognitive science in the 1950s and 1960s has often been described as "Cartesian cognitive science" (Liu, 2014). It viewed the human mind as a computational system that manipulates abstract symbols, separating cognitive processes from the physical body. This idea, known as the "computer metaphor," assumes that cognition occurs within an internal, representational system—a clear reflection of Descartes' mind–body dualism (Clark, 1997; Fodor, 1990).

In this metaphor, the brain acts as the software processor while the body functions as the hardware. Cognitive activities such as memory, reasoning, and language are seen as computational operations performed by the brain, largely independent of bodily experience (Varela et al., 1991). This disembodied view of cognition closely resembles Descartes' notion of the mind as an autonomous entity that exists apart from matter.

However, as cognitive science evolved, scholars began to challenge this disembodied framework. The emergence of the "embodied cognition" paradigm in the late twentieth century

sought to reunite mind and body, emphasising that cognitive processes are shaped by the body's sensorimotor interactions with the world (Varela et al., 1991; Lakoff & Johnson, 1999; Gallagher, 2005). Interestingly, this shift does not entirely reject Cartesian ideas. In fact, Descartes himself acknowledged the interdependence of mind and body, even if he failed to explain their interaction fully.

Contemporary theorists such as Damasio (1994) and Clark (2016) argue that the Cartesian legacy persists in how cognitive models conceptualise the self as a unified system of internal representations. While embodied cognition opposes strict dualism, it remains indebted to Descartes's effort to define the mind as an organised, structured system. Therefore, Cartesian thought continues to serve as both a foundation and a point of resistance for cognitive psychology.

### **3.2 Influence on the Subjectivist Perspective**

Subjectivist psychology, including humanistic and existential approaches, emphasises the subjective experience of the individual. It uses introspection, phenomenological methods, and existential reflection to understand human consciousness (Lin, 2003). These approaches might appear anti-Cartesian, given their critique of mechanistic rationalism. However, at a deeper level, they continue to draw upon the Cartesian idea of subjectivity as the centre of experience.

In humanistic psychology, figures such as Carl Rogers and Abraham Maslow focused on the self as an autonomous and self-reflective being. This echoes Descartes' concept of the cogito, where self-awareness forms the foundation of existence. Both perspectives view consciousness as the starting point of knowledge and action (Rogers, 1961; Maslow, 1968). Even existential psychology, inspired by philosophers like Sartre, continues to work within a Cartesian frame by defining the self as both reflective and free (May, 1969).

Phenomenological psychology, rooted in the work of Husserl, directly inherits Descartes' method of radical reflection (epoché). Husserl explicitly referred to his project as a "return to the Cartesian meditations," aiming to uncover the essential structures of consciousness (Husserl, 1931/1960). Modern phenomenological psychologists, such as Giorgi (2009), also maintain this focus on first-person experience. Thus, while humanistic and existential approaches reject Cartesian rationalism, they preserve his core insight that consciousness and self-reflection are central to understanding human nature.

Moreover, the subjectivist focus on personal meaning and freedom parallels Descartes' view of the human subject as an active agent rather than a passive object. Even Marxist and social-humanist psychology, which emphasises social relations and collective experience, builds upon this idea of human agency (Chen, 2011; Zhang, 2008). Hence, Cartesian subjectivity remains a hidden foundation of subjectivist psychology, bridging individual consciousness and social existence.

### **3.3 Influence on the Psychoanalytic Perspective**

Psychoanalysis, founded by Freud and later developed by Jung and others, presents another reworking of Cartesian ideas. Although Freud rejected the notion of conscious rationality as the essence of the self, his theory of the unconscious still operates within a dualistic structure—dividing mental life into conscious and unconscious realms (Freud, 1915/1957). This division resembles Descartes' separation of thought and matter, except that Freud's "mind" includes irrational and unconscious forces.

Carl Jung's analytical psychology develops this further through the concept of the collective unconscious (Jung, 1971, 1972). Jung proposed that all humans share innate mental structures—archetypes—that shape experience and behaviour. This concept parallels Descartes' assumption of a shared mental framework, or the identity of the subject, which allows mutual understanding among individuals. Jung's archetypes, like Descartes' innate ideas, suggest a universal structure of the mind.

Modern psychodynamic theorists continue to address this dualism between conscious and unconscious processes, now reframed in cognitive or neuroscientific terms (Panksepp & Biven, 2012). The persistence of this dual-layered model of the psyche demonstrates how deeply Cartesian assumptions remain embedded in psychological theory. The idea that the mind contains internal, hidden mechanisms mirrors the Cartesian search for certainty within mental introspection.

### **3.4 Influence on the Behaviourist and Biological Perspectives**

Behaviourism, emerging in the early twentieth century, explicitly rejected introspection and dualism. Pioneers such as Watson and Skinner aimed to make psychology an objective science focused on observable behaviour. However, even behaviourism owes part of its intellectual lineage to Descartes. Descartes was among the first to describe reflexes as mechanical responses to external stimuli, anticipating the stimulus–response (S–R) framework later used in behavioural psychology (Tibbetts, 1975).

While Descartes viewed reflexes as movements caused by the "animal spirits" flowing through nerves, the underlying concept of mechanistic causation directly influenced the behaviourist model of automatic reactions. Behaviourism, in this sense, retains the Cartesian idea of the body as a physical machine, even though it removes the mind from the equation (Watson, 1913; Skinner, 1953).

Biological psychology, by contrast, reintroduces the mind–body relation in physiological terms. Descartes proposed that the mind interacts with the body through the pineal gland, which he considered the "seat of the soul." Although this anatomical claim was mistaken, it represents an early attempt to link mental and neural processes. Contemporary neuroscience continues this line of inquiry by locating mental functions within specific brain networks (Gazzaniga, 2018).

Damasio's (1994, 1999) work, for instance, revisits Descartes' dualism by arguing that emotions and bodily states are integral to reasoning—a view he calls "the embodied mind." This research, though rejecting metaphysical dualism, reaffirms Descartes' insight that mind and body interact dynamically. Similarly, modern neurophenomenology seeks to integrate subjective experience with brain processes, explicitly drawing upon Cartesian methodological reflection (Fuchs, 2018).

Thus, both behaviourism and biological psychology, despite their opposing orientations, can be seen as descendants of Cartesian thought—each emphasising different aspects of the relationship between mind, body, and behaviour.

### **3.5. Summary of the Influence of Cartesian Philosophy on Modern Psychology**

Across the five perspectives discussed above—cognitivist, subjectivist, psychoanalytic, behaviourist, and biological—it becomes clear that Cartesian philosophy continues to serve as a hidden framework guiding much of modern psychology. Each perspective, despite its differences,

inherits and transforms specific aspects of Descartes' original ideas about the mind, body, and knowledge. Taken together, these patterns reveal a consistent continuity between Cartesian thought and contemporary theories of human cognition and behaviour.

In the cognitivist view, Descartes' legacy appears most directly through the conception of the mind as an information-processing system. The "computer metaphor" used in early cognitive science reflects his belief that thought follows logical and rational principles independent of physical substance (Clark, 1997; Fodor, 1990). Even when embodied approaches replaced this model, its theoretical structure remained Cartesian in spirit. The move from disembodied to embodied cognition represents a shift in emphasis rather than a complete rejection of dualism, because the mind is still considered a distinct yet interactive system that organises experience (Varela et al., 1991; Gallagher, 2005).

In subjectivist and humanistic psychology, Cartesian influence emerges through the continuing focus on the reflective self. Thinkers such as Rogers and Maslow treated self-awareness as the foundation of personal growth, echoing the cogito as the centre of human meaning (Rogers, 1961; Maslow, 1968). Phenomenological and existential psychologists extended this insight by treating consciousness as both subjective and universal. Even though these approaches reject the rationalism and detachment of Cartesian philosophy, they preserve its belief that understanding the human mind requires turning inward toward experience.

Psychoanalytic theory presents another dimension of Cartesian inheritance. Freud's model of the divided mind mirrors Descartes' distinction between the rational and the irrational. Jung's concept of the collective unconscious also continues the Cartesian assumption that human beings share a typical mental architecture (Jung, 1971, 1972). These theories demonstrate that even approaches centred on emotion and the unconscious maintain the dual structure of mind that Descartes first articulated.

The behaviourist and biological perspectives further illustrate how Cartesian ideas can persist in empirical science. Behaviourism, while denying introspection, inherits Descartes' mechanistic view of the body as a system of reflexes responding to stimuli (Tibbetts, 1975; Watson, 1913). Biological psychology, in turn, revives the mind–body question by locating mental activity within brain mechanisms, echoing Descartes' attempt to connect the immaterial mind to a specific physical organ. Neuroscientific studies by Damasio (1994, 1999) and Gazzaniga (2018) show that this search for a material correlate of consciousness continues today, even if framed in different terms.

Overall, these findings indicate that Cartesian thought functions not as a fixed doctrine but as a generative paradigm that modern psychology continues to reinterpret. While each school of thought claims to depart from dualism, all retain the central concerns Descartes introduced: the nature of consciousness, the interaction between mental and physical processes, and the quest for certainty in understanding human behaviour. This continuity suggests that the history of psychology is also a history of the transformation of Cartesian ideas. Modern psychology's pluralism—its coexistence of diverse paradigms—can thus be seen as an ongoing negotiation between Cartesian heritage and post-Cartesian innovation. Recognising this dynamic relationship provides a clearer understanding of how philosophical traditions continue to shape the evolution of psychological theory and research.

## **4. Discussion and Conclusion**

### **4.1. Reconsidering the Cartesian Legacy**

Cartesian philosophy has left a lasting imprint on modern psychology. Across its five major perspectives, one can observe not only the influence of Cartesian dualism but also the transformation of his central ideas. Cognitivism inherits the representational model of the mind, subjectivism extends the reflective self, psychoanalysis reproduces dual mental structures, behaviourism adopts mechanistic causality, and biological psychology continues the exploration of mind–body relations.

This enduring influence suggests what might be called a "Cartesian Continuity Hypothesis": despite rejecting explicit dualism, modern psychology remains conceptually rooted in Cartesian distinctions. As Gallagher (2018) and Clark (2016) observe, even contemporary embodied and enactive theories retain an implicit focus on internal cognitive organisation—a legacy of Descartes' search for rational structure.

### **4.2. Theoretical Implications**

Two main implications arise from this analysis.

First, psychology's theoretical fragmentation may reflect the unresolved tension within Cartesian thought—the desire to unify knowledge while dividing reality into separate domains. The coexistence of cognitive, biological, and humanistic frameworks mirrors Descartes' own attempt to reconcile rationality and experience. A more integrative psychology may therefore require revisiting Cartesian concepts of unity and interaction rather than dismissing them.

Second, the dominance of empirical and computational approaches in psychology has led to an underestimation of philosophical reflection. As Damasio (1994) and Varela et al. (1991) have shown, understanding the mind demands not only experimental precision but also conceptual clarity about what the "mind" is. Reviving philosophical analysis within psychology could help clarify assumptions about consciousness, embodiment, and rationality.

Reconsidering Cartesian philosophy does not mean returning to metaphysical dualism. Instead, it means acknowledging that psychology, as a science of the mind, cannot escape its philosophical foundations. Descartes' quest for certainty, his focus on the self, and his methodological rigour continue to inspire contemporary inquiry into cognition and consciousness.

### **4.3. Cartesian Continuity and the Fragmentation of Psychology**

One important implication of this analysis is that modern psychology continues to operate within a Cartesian framework even while attempting to transcend it. Different schools of thought often emphasise separate aspects of Descartes' dualism. Cognitive psychology inherits the rational structure of the mind, while behaviourism and neuroscience adopt the mechanistic view of the body. This division mirrors the Cartesian separation of mental and physical domains and may explain why psychology remains fragmented into competing paradigms. Dennett (1991) and Gallagher (2018) both suggest that integrating first-person experience with third-person data could overcome this fragmentation. By revisiting the Cartesian search for unity, psychology might achieve a more coherent understanding of human behaviour and consciousness that connects mental, biological, and experiential levels of explanation.

#### **4.4. Embodiment and the Reinterpretation of Dualism**

Modern embodied and enactive theories challenge Descartes' strict mind–body separation but, paradoxically, still rely on the conceptual clarity of his distinction. Theories such as Varela's enactivism and Damasio's "embodied mind" propose that cognition emerges from continuous interaction between brain, body, and environment (Varela et al., 1991; Damasio, 1999). These approaches reinterpret the Cartesian notion of dualism as a dynamic relationship rather than a metaphysical division. Instead of rejecting Descartes entirely, they transform his insight into a relational model where subjective experience and physical processes are inseparable. As Gallagher (2005) argues, the challenge for contemporary psychology is not to abandon dualism but to redefine it as embodied interdependence. This reinterpretation keeps Descartes relevant while extending his philosophy into an empirically grounded framework.

#### **4.5. The Return of Subjectivity in Cognitive Science**

Despite early cognitive science's emphasis on computational models, recent developments highlight the importance of subjective experience. Predictive processing and active inference theories, for instance, describe the brain as a system that constantly interprets sensory input through internal models shaped by prior beliefs (Friston, 2010; Hohwy, 2013). These theories implicitly acknowledge the Cartesian idea of the self as an active subject constructing its world. However, they also incorporate phenomenological insights by emphasising that perception is embodied and context-dependent. This convergence between computation and experience suggests that the Cartesian cogito has evolved into a scientific concept of self-organising cognition. Psychology thus moves beyond the classical separation of the thinker and the world, while still preserving Descartes' original concern with how consciousness structures knowledge.

#### **4.6. Reintegrating Philosophy and Psychology**

Finally, the persistence of Cartesian themes underscores the need for renewed dialogue between philosophy and psychology. As Searle (2004) and Zahavi (2019) argue, philosophical reflection provides essential conceptual clarity for interpreting empirical findings. Many psychological models implicitly rely on assumptions about consciousness, intentionality, and representation that originate in philosophical discourse. Ignoring these foundations risks conceptual confusion and theoretical isolation. Reintegrating philosophical reasoning into psychological research can help clarify what is meant by "mind," "self," or "experience," terms that remain ambiguous despite scientific progress. Descartes' methodological rigour and reflective inquiry serve as reminders that psychology is not only an experimental science but also a discipline concerned with meaning and existence. Recognising this dual character could guide future theoretical synthesis across psychology's many subfields.

### **5. Conclusion**

Cartesian philosophy, with its profound insights into the nature of the mind and the pursuit of knowledge, continues to exert a significant influence on modern psychology. Its legacy is evident across diverse psychological perspectives, from the computational models of early cognitivism to the embodied approaches of contemporary cognitive science. Although many schools of psychology have explicitly sought to move beyond Descartes, his fundamental ideas remain deeply embedded within their theoretical structures. Recognising this continuity can help modern psychology better understand its internal divisions and facilitate a renewed dialogue with its philosophical origins.

One of the most enduring aspects of Cartesian thought is the mind-body distinction. This dualism has been transformed rather than abandoned. For instance, cognitive psychology initially adopted a form of dualism by treating the mind as an information-processing system separate from the body. While embodied cognition has challenged this view, it still engages with the Cartesian framework by redefining the relationship between mental and physical processes as one of dynamic interaction (Varela, Thompson, & Rosch, 1991; Gallagher, 2005). Similarly, biological psychology continues Descartes' quest to localise mental functions, albeit within complex brain networks rather than a single gland, reflecting a persistent desire to link subjective experience with physical substrates (Gazzaniga, 2018).

Furthermore, the methodological principles established by Descartes continue to underpin psychological science. His emphasis on doubt and rigorous self-reflection prefigured modern metacognition research, which investigates how individuals monitor and control their own thought processes (Frith, 2012). The Cartesian ideal of mathematical clarity is mirrored in psychology's strong preference for quantitative methods and model-based explanations, seeking to derive specific laws of behaviour from empirical data (Friston, 2010). This demonstrates that Descartes' quest for a secure foundation for knowledge resonates in the empirical and theoretical practices of contemporary psychology.

In summary, Descartes' legacy is not a static set of doctrines but a generative paradigm that continues to shape inquiry. His questions about consciousness, the self, and the relationship between mind and body are as relevant today as they were in the 17th century. Acknowledging this philosophical heritage does not mean a return to substance dualism, but rather an appreciation of the conceptual foundations upon which psychology is built. Ultimately, reintegrating philosophical reflection with empirical research promises a more coherent and comprehensive understanding of the human mind, one that honours psychology's dual identity as both a science and a humanistic discipline concerned with meaning, existence, and experience.

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### **References**

- [1]. Chen, Q. (2011). A review of the development of Marxist psychology. *Journal of Hexi University*, 03, 77–82. <https://doi.org/10.13874/j.cnki.62-1171/g4.2011.03.018>
- [2]. Chomsky, N. (1988). *Language and problems of knowledge*. Cambridge: The MIT Press.

- [3]. Churchland, P. S. (1986). *Neurophilosophy: Toward a unified science of the mind-brain*. Cambridge, MA: MIT Press.
- [4]. Clark, A. (1997). *Being there: Putting brain, body, and world together again*. Cambridge, MA: MIT Press.
- [5]. Clark, A. (2016). *Surfing uncertainty: Prediction, action, and the embodied mind*. Oxford University Press.
- [6]. Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York, NY: Putnam.
- [7]. Damasio, A. R. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. New York, NY: Harcourt Brace.
- [8]. Dennett, D. C. (1991). *Consciousness explained*. Boston, MA: Little, Brown.
- [9]. Descartes, R. (1933). *Methodology*. Beijing: The Commercial Press.
- [10]. Descartes, R. (1991). *Guiding principles for the search for truth*. Beijing: The Commercial Press.
- [11]. Descartes, R. (1991). *Talk about methods*. Beijing: The Commercial Press.
- [12]. Descartes, R. (1998). *First philosophical meditations*. Beijing: The Commercial Press.
- [13]. Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *The American Psychologist*, 34(10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>
- [14]. Fodor, J. (1990). *A theory of content and other essays*. Cambridge: The MIT Press.
- [15]. Freud, S. (1957). The unconscious (J. Strachey, Ed.). *Standard Edition of the Complete Psychological Works of Sigmund Freud (Vol. 14)*. London: Hogarth Press. (Original work published 1915)
- [16]. Friston, K. (2010). The free-energy principle: A unified brain theory? *Nature Reviews. Neuroscience*, 11(2), 127–138. <https://doi.org/10.1038/nrn2787>
- [17]. Frith, C. D. (2012). The role of metacognition in human social interactions. *Philosophical Transactions of the Royal Society of London. Series B. Biological Sciences*, 367(1599), 2213–2223. <https://doi.org/10.1098/rstb.2012.0123>
- [18]. Fuchs, T. (2018). *Ecology of the brain: The phenomenology and biology of the embodied mind*. Oxford University Press.
- [19]. Gallagher, S. (2005). *How the body shapes the mind*. Oxford University Press.
- [20]. Gallagher, S. (2018). *Action and interaction*. Oxford University Press.
- [21]. Gazzaniga, M. S. (2018). *The consciousness instinct: Unravelling the mystery of how the brain makes the mind*. New York, NY: Farrar, Straus and Giroux.
- [22]. Giorgi, A. (2009). *The descriptive phenomenological method in psychology*. Pittsburgh, PA: Duquesne University Press.

- [23]. Henley, T. (2019). *Hergenhahn's an introduction to the history of psychology*. Boston: Cengage Learning.
- [24]. Hohwy, J. (2013). *The predictive mind*. Oxford University Press.
- [25]. Husserl, E. (1960). *Cartesian meditations: An introduction to phenomenology* (D. Cairns, Trans.). The Hague: Martinus Nijhoff. (Original work published 1931)
- [26]. Jung, C. (1971). *Symbol of transformation*. Princeton: Princeton University Press.
- [27]. Jung, C. (1972). *The psychological foundation of beliefs*. Princeton: Princeton University Press.
- [28]. Kahneman, D. (2011). *Thinking, fast and slow*. New York, NY: Farrar, Straus and Giroux.
- [29]. Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. New York, NY: Basic Books.
- [30]. Li, S. (1933). *Introduction to philosophy*. Beijing: World Book House.
- [31]. Li, X. (2006). *Research on Descartes' methodology*. Guizhou University.
- [32]. Lin, C. (2003). *The dictionary of psychology (Part II)*. Shanghai: Shanghai Education Publishing House.
- [33]. Liu, H. (2014). "Decoding" the shape and quality theory of the second generation of cognitive science paradox. *World Philosophy*, (6), 120–128. <https://doi.org/CNKI:SUN:ZXYC.0.2014-06-012>
- [34]. Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). New York, NY: Van Nostrand.
- [35]. May, R. (1969). *Love and will*. New York, NY: Norton.
- [36]. Nolen-Hoeksema, S., Fredrickson, B., Loftus, R., & Wagenaar, A. (2009). *Atkinson & Hilgard's introduction to psychology*. Andover: Cengage Learning.
- [37]. Panksepp, J., & Biven, L. (2012). *The archaeology of mind: Neuroevolutionary origins of human emotions*. New York, NY: Norton.
- [38]. Rogers, C. R. (1961). *On becoming a person: A therapist's view of psychotherapy*. Boston, MA: Houghton Mifflin.
- [39]. Searle, J. R. (2004). *Mind: A brief introduction*. Oxford University Press.
- [40]. Skinner, B. F. (1953). *Science and human behaviour*. New York, NY: Macmillan.
- [41]. Tippetts, P. (1973). A historical note on Descartes' psychophysical dualism. *Journal of the History of the Behavioural Sciences*, 9(2), 162–165. [https://doi.org/10.1002/1520-6696\(197304\)9:2<162::AID-JHBS2300090209>3.0.CO;2-F](https://doi.org/10.1002/1520-6696(197304)9:2<162::AID-JHBS2300090209>3.0.CO;2-F)
- [42]. Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science (American Association for the Advancement of Science)*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>

- [43]. Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: MIT Press.
- [44]. Watson, J. B. (1994). Psychology as the behaviourist views it. *Psychological Review*, 101(2), 248–253. <https://doi.org/10.1037/0033-295X.101.2.248>
- [45]. Wertz, F. J. (1998). The role of the humanistic movement in the history of psychology. *The Journal of Humanistic Psychology*, 38(1), 42–70. <https://doi.org/10.1177/00221678980381006>
- [46]. Wu, L. (2005). Two humanistic approaches in Western psychology: On the humanistic psychology and phenomenological psychology. *Journal of Northwest Normal University*, (02), 50–54. <https://doi.org/10.16783/j.cnki.nwnus.2005.02.012>
- [47]. Zahavi, D. (2019). *Phenomenology: The basics*. Routledge.
- [48]. Zhang, G. (2008). From Descartes to Marx. *Social Science Forum*.
- [49]. Zhou, X. (2010). Two cognitive orientations of the humanistic view of education: A comparative study of Sukhomlinsky and Carl Rogers' humanistic educational thought. *Modern Education Forum*, (6), 7–9. <https://doi.org/CNKI:SUN:XDJY.0.2010-06-004>