## Peer Review

## Review of: "The Mind as a Particular: Why Cartesian Dualism Is True"

## Wieslaw Galus<sup>1</sup>

1. Institute of Plasma Physics and Laser Microfusion, Warsaw, Poland

This essay presents insightful reflections on what the self is, why it is individually attributed to us, and why physical, materialist models cannot explain it. The author bases his reflections on the works of renowned philosophers of mind, and his expanded dualism is derived from the works of David Chalmers, Roderick Chisholm's epistemological and metaphysical dualism, and Jonathan Lowe's substantial dualism. He is not unfamiliar with contemporary theories of consciousness and mind, but in criticizing materialism, he prefers the theism of Kenneth Himma and Linda Zagzebsky.

One should approach his critique of consciousness models with caution, as their selective analysis leads the author to the mistaken suggestion that contemporary philosophy of mind treats the mind as an epiphenomenon, and philosophy of the person views the individual as an abstract idea, a mental construct. The author considers many metaphysical philosophies but consistently overlooks physicalist and reductive theories that effectively resolve all the discussed dilemmas. Although the discussion on these issues does not fade, there is no shortage of models explaining these matters. However, the author does not address them, but rather presents rather controversial views insufficiently justified by his own reasoning or the cited literature.

The author posits that each mind is unique and possesses a special form of "particularity" that transcends duplicable aspects such as mental states, beliefs, character, temperament, and memories. This particularity, he argues, cannot be replicated across multiple minds, thereby affirming the uniqueness of each conscious entity. However, the essay would benefit from a clearer definition of "particularity" and an exploration of how this concept differs fundamentally from physical attributes that are subject to duplication and variation.

In particular, it is claimed that this particularity excludes the possibility that the mind is analyzable into more fundamental components, and thus it would itself be fundamental and primitive. According to him, Cartesian dualism is the only defensible conclusion regarding its nature. Psychological

phenomena associated with consciousness, such as sensory perception and thinking, do not exist independently but are necessarily experienced by a specific person, whose distinctiveness cannot be explained by any reference to external factors relative to themselves, nor is the person merely a mental construct, but objectively real. However, it is not clear what it means for perceptions and thoughts to be objectively real. It is necessary to explain how they are real.

Many views emerge that are not grounded in the perspectives of psychology, neurology, and biophysics. Their generality sometimes qualifies them as folk psychology operating with vague concepts not incorporated into accepted theories. For example, the author tries to explain that "Macroscopic" phenomena are literally things as they "appear from afar" to our minds. But no, nothing appears in the mind, neither from afar nor up close. There are no spatial relations here. The mind is a function of the brain realized through associative memory created by a neural network. The role of this function is to generate psychological states which we can interpret as the content of consciousness because we recognize them and use them for further mental or behavioral reactions. Many theories explain this process: [1], [2], [3], [4], [5].

Furthermore, the author suggests that our mind is a phenomenon perceived macroscopically and illusionarily by our mind. He admits that this idea is in some sense circular and problematic, and that the case of the mind is fundamentally different from macroscopic physical phenomena. But what does it mean for the mind to be illusionarily perceived, and why is this idea circular? However, the statement that it is a case different from macroscopic physical phenomena is true. But is this a satisfactory conclusion?

As the gist of these problems, the Author considers that the various mental processes of "phenomenal" consciousness, for example, the way we experience, from a first-person perspective, sensory perception such as vision, hearing, or pain, the way we experience thought, reason, emotions, memory, etc., are impossible to explain with reference to the physical properties of our bodies. It seems that the author has insufficiently acquainted himself with scientific explanations of qualia, feelings, and phenomenal consciousness. These issues are exhaustively explained in the cited literature and can no longer support the author's argumentation (see: [5], [6], [7]). However, the lack of understanding leads to the strange notion of "particularity" of the mind.

The author appears to have limited engagement with scientific explanations of qualia, feelings, and phenomenal consciousness. Works such as Galus & Starzyk [5], [6], [7], provide comprehensive accounts of how physical processes in the brain give rise to subjective experiences. By not fully addressing these explanations, the original article introduces an unclear notion of "particularity" that

lacks empirical support. Incorporating insights from these studies could address potential counterarguments and enhance the robustness of the dualistic claim.

Elsewhere, the author supposes "that modern philosophy of mind, ......., seems to have completely overlooked the special particularity of minds". The mainstream of neuroscience stands in opposition, asserting that personal experiences result in varied reactions and different sensations.

Further, treading in the wrong direction, the author considers issues of duplication, i.e., the replication of the body and brain and the possible experiences of both resulting human specimens. This leads to dramatic questions that, if taken seriously, would undermine the meaning of human existence, but according to the author, they only challenge physicalism, neurology, and psychology. The author dramatically asks: "Why are you this person and not the other? Why are you any of these two persons at all? These crucial questions, ....., seem to not have occurred at all to the philosophy of mind", which, in light of contemporary cognitive science, are irrelevant.

The mystery of "particularity" is not sufficiently explained, because to distinguish it from the universal parameters of the physical world, it is not enough to state, for example, "two identical chairs, for which a description in terms of universals is exhaustive, whereas they are extremely meaningful for minds, whose mysterious particularity sets them apart from the rest of the universe." The concept of "particularity" remains ambiguously defined within the original article. To differentiate it from universal physical parameters, the author uses the analogy of two identical chairs, suggesting that while universals exhaustively describe their properties, their meaning to minds stems from their "mysterious particularity." However, this analogy fails to clarify how mental particularity uniquely distinguishes minds from physical objects. A more precise operationalization of "particularity" is necessary to substantiate its role in affirming dualism over physicalist explanations. For example, the essay could elaborate on how genetic and environmental factors contribute to mental particularity in ways that are irreducible to physical properties, or alternatively, acknowledge how physicalist models account for the uniqueness of individual minds through complex interactions of biological and environmental variables.

The mind is shaped by genetic factors and environmental influences throughout a person's life. There are no other factors. Nevertheless, the variability of these factors is so immense that identical individuals cannot be produced. They cannot even have identical fingerprints, iris patterns, and vein structures in their hands. This also applies to functions of the material world. The mind and consciousness is one of these functions and is as unique as the body/brain that generates it.

Following the path of theistic personalists, the author asserts: "The concept of the self is the most

fundamental and familiar concept that we innately have, and therefore it is the most difficult to express in terms of other concepts." This claim raises important questions about the nature of the self. While the self is undeniably a central concept in both philosophy and cognitive science, labeling it as the "most fundamental" may overlook its interconnectedness with other cognitive and neurological processes. Moreover, equating the self solely with self-awareness simplifies a complex construct that encompasses identity, agency, and personal continuity. The essay could enhance this section by exploring how contemporary theories in cognitive science and neuroscience define and investigate the self, thereby providing a more comprehensive critique of the original author's claim. If a robot has a model of the world and understands the roles of objects in that world, as well as has senses and distinguishes its body, which it controls and experiences sensations received by that body, it will naturally categorize it as a separate object in the environment. If it has a biographical memory (which is essential for building an adequate model of reality), it will be impossible to convince it that it is not a person.

Physicalism approaches the problem of the "self" through various frameworks that demystify the concept traditionally associated with the soul:

The Self as a Product of the Brain

Physicalism posits that all phenomena, including the "self," emerge from physical states and interactions. In this view, the "self" is interpreted as a neurobiological construct arising from the brain's activity. This perspective aligns with the identity theory, which equates mental states with brain states, providing a clear, empirical basis for understanding the self.

The Self as a Bundle of Mental States

From a physicalist standpoint, the "self" can be likened to bundle theory, as adapted from David Hume's philosophy. Here, the self is viewed as: Dynamic and Non-substantial – a collection of physical and mental states without any underlying essence; the Illusion of Continuity – he perception of a stable self over time is a result of memory and cognitive patterns created by ongoing physical processes in the brain.

The Self and Identity in Physicalism

Physicalism posits that personal identity is grounded in physical continuity, meaning that the persistence of the self over time is intrinsically tied to the continuous functioning of the brain and body. This perspective emphasizes the role of neurobiological stability and the maintenance of physical structures in sustaining personal identity.

Reduction of the "Soul" Concept: Under physicalism, the self is not viewed as a metaphysical entity,

such as a soul, but is entirely explainable in terms of physical systems and their properties. This reductionist approach seeks to eliminate the need for non-physical explanations by demonstrating how complex mental phenomena emerge from simpler biological processes.

This framework aligns with advancements in neuroscience that explore how disruptions to brain function can alter aspects of personal identity, supporting the physicalist claim that the self is deeply rooted in the body's physical state.

By outlining these approaches, the essay effectively highlights the multifaceted nature of the physicalist explanation of the self. However, it could be strengthened by addressing potential counterarguments from dualistic perspectives and by discussing how physicalist models account for the subjective experience of the self, thereby providing a more comprehensive critique.

Studies in neuroscience explore how specific brain regions and brain processes give rise to self-awareness and self-representation. This results in the inseparable unity of the body (including effectors and external senses, as a result of the functioning of exteroceptors, and internal senses, as a result of the action of interoceptors) and the mind. This problem is described in detail in work [7]. Ignoring the achievements of contemporary cognitive science leads to the detailed consideration of the false problem of "pairing". The author proceeds to state that deeper contemplation of the pairing problem reveals that the mind-body pairing cannot be determined by physics, and hence physicalism is false. He formulates further dramatic questions: "What is the cause of my pairing with this particular body that I am paired with? Speaking as if materialism is true, out of the billions of bodies currently alive on earth, why is it that mine, and mine alone, gives rise to me?" One can answer that it is precisely this body and this mind that is you, and thus further questions are without basis. The apparent problem of pairing the mind to the body arises from adopting erroneous assumptions about separating the "particular" mind from the body.

Contrary to the author's assertion that "... truth can be obtained only by introspection," the acquisition of truth encompasses both introspective methods as a result of deductive reasoning, but also external forms of inquiry such as observation and inductive reasoning. While introspection provides valuable insights into subjective experiences, empirical research and theoretical modeling are essential for understanding how the material brain can generate subjective first-person impressions and feelings. Neuroscientific studies utilize brain imaging techniques to correlate specific neural activities with conscious experiences, thereby bridging the gap between subjective reports and objective data.

The claim that the mind is "neither an actual fact nor a macroscopic illusion produced by biological

processes" overlooks the substantial body of evidence supporting the emergence of mental phenomena from biological substrates. By integrating findings from cognitive neuroscience, the physicalist perspective offers comprehensive explanations for how complex mental states arise from simpler neural interactions. Furthermore, the interactions between mental and physical domains are actively explored within interdisciplinary frameworks, addressing questions about causality and the nature of consciousness. Highlighting specific studies or theories that successfully explain these interactions would strengthen the critique's argument against the original author's dismissal of physicalist explanations.

The causality of physicalism arises from the observation of symmetry in the universe, from which the laws of physics derive, as proven by Emma Noether [8]. To undermine these observations, one would have to prove the existence of a miracle, that is, an action contrary to the laws of nature. Dualists do not understand the physical and reductive models of thinking and consciousness. Many accept dualism for ideological reasons and treat it as a scientific theory because one cannot prove the non-existence of immaterial entities. The author unequivocally defends the dualistic position, writing: "... our inability to explain causal interaction between a mental and a physical entity does not imply that dualism is false any more than our inability to explain causal interaction between two physical entities implies that physics is false".

While the presented form of dualism may limit the scientific applicability of the discussions, it successfully draws attention to the enduring explanatory gap concerning the relationship between the mind and the body/brain. This focus stimulates deeper discourse on phenomenal consciousness and the causality of mental processes, which are pivotal areas in the philosophy of mind. Nevertheless, the critique could benefit from acknowledging potential strengths in the original author's approach. For instance, the emphasis on the explanatory gap underscores a genuine philosophical challenge that physicalist models strive to address. Additionally, the exploration of dualistic perspectives enriches the debate by presenting alternative viewpoints that question the sufficiency of purely physical explanations.

It would be highly valuable to explore whether the author might reconsider his stance upon engaging with publications that elucidate causal interactions between the mental and the physical, such as: [5], [6], [7], [9]. Encouraging the author to integrate these insights could lead to a more nuanced dualistic theory or even foster a synthesis between dualistic and physicalist perspectives. Publishing such reflections could significantly contribute to a more comprehensive and inclusive discussion within the scholarly community interested in the philosophy of mind and consciousness studies.

References:

[1] Lamme VA. (2018) Challenges for theories of consciousness: seeing or knowing, the missing

ingredient and how to deal with panpsychism. Philos Trans R. Soc. Lond. B. Biol Sci. 373:20170344.

doi:10.1098/rstb.2017.0344

[2] Lamme V.A.F., Roelfsema P.R. (2000) The distinct modes of vision offered by feedforward and

recurrent processing, Trends in Neurosci. Vol. 23,11; 571–579.

[3] Clark, A. (2015). Surfing Uncertainty: Prediction, Action, and the Embodied Mind. New York: Oxford

**University Press** 

[4] Hohwy J. (2013) The Predictive Mind. Oxford University Press,

[5] Galus, W.L. & Starzyk, J. (2020) Reductive Model of the Conscious Mind. IGI Global. ISBN13:

9781799856535 (Basic Book).

[6] Galus, W. (2023) Different Aspects of Consciousness Explained by Distinct Biophysical Processes.

Journal of Theoretical and Philosophical Psychology., https://doi.org/10.1037/teo0000236

[7] Galus, W. (2023) Mind-brain identity theory confirmed?, Cognitive Neurodynamics vol.17: 1467-

1487. https://doi.org/10.1007/s11571-023-09992-6

[8] Hanc J., Tuleja S., Hancova M. (2004) Symmetries and Conservation Laws: Consequences of

Noether's Theorem. American Journal of Physics 72, 428; https://doi.org/10.1119/1.1591764

[9] Galus. W.L. (2024) Neurological Foundations of Moral Responsibility. Cognitive Systems Research.

Available as preprint: https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4933128

**Declarations** 

Potential competing interests: No potential competing interests to declare.