Exploring Cognitive Science under Analytical Idealism

Grega Rodman†
Pedagoška fakulteta
Univerza v Ljubljani
Slovenija
gr6506@student.uni-lj.si

Olga Markič
Filozofska fakulteta
Univerza v Ljubljani
Slovenija
olga.markic@ff.uni-lj.si

Abstract

Modern science has been dominated by materialism, the belief that matter constitutes the fundamental reality and that everything, including consciousness, can be explained through physical processes. However, recent evidence suggests materialism might not fully explain all phenomena. These findings have led to the rise of a post-materialistic movement exploring new ideas. One such idea, Analytical Idealism, proposed by Bernardo Kastrup, suggests that consciousness is the fundamental reality and that the material world is a reflection of this universal consciousness. The implications of adopting this approach in science will be explored.

Keywords

ontology, methodology, materialism, analytical idealism

1. Introduction

The modern scientific worldview is predominantly founded on assumptions closely associated with classical physics. Among these is materialism, which posits that matter constitutes the sole reality. In the 19th century, these assumptions became increasingly rigid, evolving into dogmas that coalesced into the ideological framework known as "scientific materialism" [1]. Scientific materialism is a philosophical viewpoint that asserts that all phenomena in the universe, including consciousness and human experience, can be explained solely through physical processes and interactions. Throughout the 20th century, scientific materialism became the prevailing ideology in academic circles, to the extent that the majority of scientists came to believe it was the only rational interpretation of the world. Scientific methods rooted in materialistic philosophy have proven highly successful in enhancing our understanding of nature and in providing greater control and freedom through technological advances. However, the near-total dominance of materialism within academia has severely constrained scientific exploration, particularly in the study of mind. The exclusive reliance on this ideology has led scientists to overlook the subjective dimensions of human experience [1, 28].

2. Questioning the materialistic paradigm

At its core, science is a non-dogmatic, open-minded approach to acquiring knowledge about nature through observation, experimental investigation, and theoretical explanation of phenomena [8]. There is a common misconception that the methodology of science is inherently tied to materialism. In addition, an increasing body of empirical evidence points to the limitations of materialism. Of course, it is impossible to provide sufficient empirical research that definitively refutes materialism; however, we can present three examples from different fields that suggest the limitations of materialism: one from physics, another from animal cognition, and a third from psi phenomena in humans.

At the close of the 19th century, physicists encountered empirical phenomena that could not be adequately explained by classical physics. This led to the emergence of quantum mechanics (QM) during the 1920s and early 1930s. QM challenged the material foundations of reality by demonstrating that atoms and subatomic particles are not solid

objects with definite spatial locations and times. The researchers demonstrated that when two particles are in entangled quantum states, measuring a property of one particle allows one to immediately determine the result of an equivalent measurement on the other particle, regardless of the distance between them. Materialists have typically explained this phenomenon using the concept known as "hidden variables" [2], but the 2022 Nobel Prize in Physics challenges this explanation [3]. There are no hidden variables.

The second example is from animal cognition. Actually, it is about precognition, which is the perception of future events, typical for some animal species. Investigation in this field was done by Sheldrake [4], who studied a dog that seemed to know when its owner was coming home. Despite using various methods to rule out normal senses, Sheldrake consistently observed the dog waiting expectantly before the owner arrived, but not at other times. A replication of similar experiment by some sceptics was declared unsuccessful [5], but a later reanalysis of the same results showed the opposite [6].

The third example delves into meta-analyses of psi phenomena in humans, including telepathy, clairvoyance, and precognition. Studies investigating these phenomena have consistently found small but significant effects, suggesting that such abilities may exist. The evidence for psi is comparable to that for established phenomena in psychology and other disciplines, although there is no consensual understanding of them. Recent analyses also emphasize that these results cannot be easily attributed to methodological flaws, selective reporting, or fraud, further supporting the plausibility of psi phenomena [7].

The volume of empirical data indicating the shortcomings of materialism is so substantial that an increasing number of articles and books are being written on this subject. In fact, this has contributed to the emergence of a whole post-materialistic movement in recent decades, which is exploring what this new paradigm might look like [8, 9, 10, 11, 12]. Believe it or not, you can also find a manifesto for post-materialistic science [13].

3. Science under Analytical Idealism

One of the most vocal proponents of the post-materialistic movement is Bernardo Kastrup, who advocates for Analytical Idealism. Analytical Idealism posits that consciousness is the fundamental essence of reality, rather than matter. The focus of this summary is not to provide a detailed description of Idealism, but rather to explore the potential changes in the methodology of scientific research that could result from adopting this perspective.

A change in ontology leads to a change in research methodologies [26]. If consciousness is indeed a fundamental aspect of reality rather than a byproduct of neural activity, it implies that consciousness might directly access aspects of reality without relying solely on sensory perception [27]. This leads us to consider two distinct routes to knowledge: conventional sensory perception (science as it is mainly now) and a more direct introspective approach. Walach [8] calls this approach ‘’radical introspection’’. Radical introspection involves a deep inward focus, often achieved through contemplative and meditative practices. Unlike standard qualitative introspection, which relies on external referents (e.g., transcripts, observations), radical introspection does not have such referents beyond personal experience. It faces challenges of subjective bias and lack of established methodology for validating truth claims. However, it remains a crucial aspect of potential new methodologies in science, requiring the development of techniques to record, communicate, and verify first-person experiences.

When looking at current scientific practices, we can see some early attempts in that direction. The godfather of this approach is, of course, Francisco J. Varela [14]. From this approach emerged the field of contemplative neuroscience, which explores individuals in altered states of consciousness that develop through various contemplative practices. This field seeks to integrate traditional third-person

scientific methods, such as MRI, EEG, and MEG, with first-person accounts of personal experiences in these altered states of consciousness [16, 17, 18]. When we start taking contemplative and meditative practices seriously, science can begin to exchange ideas with ancient traditions such as Buddhism, Hinduism and others. Even this is already happening [19, 20, 21].

This interdisciplinary exchange highlights the potential for scientific and spiritual perspectives to enrich each other and expand our understanding of consciousness and reality. Additionally, to broaden scientific inquiry, spiritual practices like meditation and contemplation can be secularized and incorporated into the scientific process. Fun fact, At the 6th International Colloquium of Cognitive Sciences, Dr. Berkovich-Ohana began her presentation titled "Meditation and the Self: Neuroscience and Phenomenology" with a few minutes of guided meditation [25]. By integrating these practices, scientists could benefit from improved mental hygiene, enhanced creativity, and increased cognitive capacities [22], [23], [24].

In conclusion, I would like to emphasize a few points. First, the entire described methodology can, of course, be applied even from a materialistic standpoint. It is not the ontology itself that matters; rather, it is the methodology that enables insight. Materialist can do contemplative neuroscience, too. Secondly, year by year we have more scientific studies that indicate that we have a problem wizth current mainstream paradigm. Let us examine the data carefully and refrain from dismissing them simply because they contradict our preconceived assumptions [29].

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