

# Exploring Cognitive Science under Analytical Idealism

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## Abstract

In modern science, materialism has played a significant role, positing that matter is the fundamental reality and that all phenomena, including consciousness, can be understood 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 largely based on assumptions closely linked to 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. Though the popularity of scientific

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materialism is waning, the legacy persists, having limited the scope of inquiry, particularly in the study of consciousness, by ignoring subjective human experience [1, 2].

## 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 [3]. There is a 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 two examples from different fields that suggest the limitations of materialism: one from animal cognition and the second from psi phenomena in humans.

### 2.1 Example from animal cognition

The first 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 a similar experiment by some sceptics was declared unsuccessful [5], but a later reanalysis of the same results showed the opposite [6].

### 2.2 Example from psi phenomena in humans

The second example addresses meta-analyses of psi phenomena, which are defined as extraordinary human capacities like telepathy, clairvoyance, and precognition that involve gaining information without known sensory mechanisms. Studies investigating these phenomena have consistently found small but significant effects, suggesting that such abilities may exist [7]. 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.

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 [1, 7, 8, 9]. 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 [3, 9, 10, 11, 12]. Believe it or not, you can also find a manifesto for post-materialistic science [13].

### 3 Cognitive Science under Analytical Idealism

One of the proponents of the post-materialistic movement is Bernardo Kastrup, who advocates for Analytical Idealism [3]. Analytical Idealism posits that consciousness is the fundamental essence of reality, rather than matter [12]. 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.

#### 3.1 Two distinct routes to knowledge

Changes in ontological views lead to changes in scientific methods as they alter the foundational concepts and relationships that guide inquiry [14]. 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 [15]. 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 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.

At this point, it is important to highlight that Walach is not the only proponent of integrating radical introspection into scientific inquiry. Kordeš [16] arrives at a similar conclusion in his arguments, even though he does not refer the concept of idealism at all. He suggests that in-depth, existentially liable introspection and self-inquiry should be considered as serious scientific research tools.

#### 3.2 Combining first and third person research

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 [17]. 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 [18, 19, 20]. 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 [21, 22, 23].

#### 3.3 The consequences of such a research approach

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 [24]. By integrating these practices, scientists could benefit from improved mental hygiene, enhanced creativity, and increased cognitive capacities [25], [26], [27].

This step can be highly significant, as it enhances the performance of researchers. A greater focus may lead to reduced bias, while increased creativity fosters better hypotheses, ultimately resulting in more effective research. Such advancements are essential for achieving substantial breakthroughs.

Engaging in meditation and/or contemplative practices poses potential downsides for scientists, too. First, the focus on personal experience conflicts with the concurrent objective standards required in scientific research. While self-research can yield valuable insights, its subjective nature can lead to biases that undermine intersubjectivity. Furthermore, the personal transformation that occurs during deep self-reflection may distract researchers from maintaining the rigorous, detached perspective typically expected in scientific inquiry. Ultimately, the integration of such practices into mainstream science remains challenging, as it contrasts with the traditional role of researchers.

### 4 Conclusion

In conclusion, I would like to emphasize a few key points. First, the entire described methodology can, of course, be applied from a materialistic standpoint as well. It is not the ontology itself that matters; rather, it is the methodology that enables insight. Materialists can also engage in contemplative neuroscience. Second, year by year, we have more scientific studies suggesting that the current mainstream paradigm may be flawed. Let us carefully examine the data and avoid dismissing it simply because it contradicts our preconceived assumptions [28]. Third, if more scientists were to engage in meditation-like practices, this would generally benefit the scientific community for reasons previously discussed. Fourth, when we establish a connection between science and religion, mutual learning can begin.

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