

The Agora Conference on Panpsychism and Non-local Consciousness

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Abstracts

Galen Strawson: “Psychophysicalism — psychism”

‘Words do violence to the understanding’ (Bacon 1620); nowhere more so than when it comes to the (so-called) mind–body problem. There are (for example) at least three different and conflicting uses of ‘physicalism’, the Vienna-Circle use, the real physicalism use, and the physics-alism use. The first two are legitimate but undersubscribed, the third is widespread and noxious. [2] Unsurprisingly, problems with ‘physicalism’ connect to problems with ‘physical’, where we need to distinguish a descriptive use and a purely referential use. The two uses are constantly blurred, with disastrous effect. [3] Distinguishing them allows us to clarify the fundamental sense in which physics—and neuroscience—tell us nothing about the intrinsic non-structural nature of physical stuff (Helmholtz, Riehl, Eddington, Russell, Whitehead etc.); not even that it has at least some non-mental being. [4] But words still overcome us. We can try new terms in an attempt to break free: ‘ ϕ ’ for physical (nothing to do with IIT Φ !), ‘ ψ ’ (as in ‘psychical’) for ‘consciousness’, i.e. any sort of ‘experiential what-it’s-likeness’, however complex, however primitive. According to real physicalism (i) [$\psi \rightarrow \phi$]. *Panpsychist* real physicalism—*psychophysicalism*—adds (ii) [$\phi \rightarrow \psi$], to get (iii) [$\phi \leftrightarrow \psi$]. Given (iii), we ask whether (iv) [$\phi = \psi$], and consider the claim that this is the most plausible hypothesis in the present state of our knowledge. [5] Terminological play can’t help, you say. That remains to be seen.

Philip Goff: “A panpsychist interpretation of quantum mechanics”

The Many Worlds Interpretation of quantum mechanics has the advantage of being the simplest interpretation. However, one big problem with it is that it's hard to make sense of the probabilities associated with quantum mechanics if everything is going to happen. In the 1990s Euan Squires developed a view which tries to avoid this problem by adding that consciousness only goes down one branch of the wave function, thus allowing us to interpret the probability claims as claims about how likely it is that consciousness will go down each branch. One big problem with Squires' view is that it's hard to see what prevents different conscious minds going down different branches, with the result that most of us end up surrounded by zombies. Squires tried to avoid this problem with a vague appeal to 'universal consciousness.' We will explore whether cosmopsychism can give a more precise account of this interpretation of quantum mechanics and a more precise solution to this central problem

Hedda Hassel Mørch: “Why consciousness can’t overlap: A new defense of IIT’s exclusion postulate”

IIT’s Exclusion postulate claims that conscious systems/entities can’t overlap, i.e., a system/entity with (unified) consciousness cannot have parts that also have (unified) consciousness. The postulate has been widely criticized as unfounded or redundant (see, e.g. Schwitzgebel 2015, Bayne 2018, Merker *et al.* 2021). In this talk, I will point out the main problems with IIT’s current justification, based on the Exclusion axiom along with an appeal to Occam’s razor. I will then offer a new justification that avoids the problems with the current one, according to which overlapping consciousness leads to a straightforward contradiction.

Giulio Tononi: “Integrated Information Theory and panpsychism”

Integrated Information Theory (IIT) starts from phenomenology and develops an account of the essential and accidental properties of experience in causal terms. IIT explains from first principles why certain parts of the brain are essential for consciousness (the “main complex”) but others are not, why consciousness vanishes during dreamless sleep and anesthesia, why different modes of experience feel the way they do, and makes testable predictions. While IIT considers consciousness ontologically fundamental, it does not attribute experience indiscriminately. Most “things”—whether bodies, tables, rocks, atoms, or stars—are likely not conscious because they are mere aggregates of smaller complexes, or not meaningfully so because they have negligible integrated information (F). The same applies to parts of our brain outside the main complex, such as the cerebellum or much of prefrontal cortex, regardless of which “computations” they may perform. Notably, unlike computational functionalism, IIT can rule out the possibility that we may be carrying conscious AIs in our pockets.

Christof Koch: “Beyond physicalism – Looking at the world with fresh eyes”

The dominant metaphysical belief Science, the Academe and Big Tech is physicalism, the thesis that at rock-bottom everything is reducible to observer-independent quantities and interactions among them, such as mass, spin etc. Physicalism goes hand-in-hand with a systematic devaluation of first-person subjective experiences. This denigration of the reality of experience has profound consequences, such as the contemporary society-wide anomie and crisis of meaninglessness.

However, three major challenges threaten physicalism, although this has gone largely unnoticed. Firstly, physicalism has failed to explain how consciousness emerges from mechanisms (*i.e.*, the *explanatory gap* or the *Hard Problem*). Instead, much of modern analytic philosophy has argued that people are confused about their subjective experiences and that these do not exist in any meaningful manner (illusionism). Yet consciousness refuses to be cancelled. Secondly, defining the physical has become challenging with the rise of quantum mechanics. A primary characteristic of physical quantities is that they have definite values that do not depend on any observer. Furthermore, reality is assumed to be local, such that only nearby events can influence each other. Both of these precepts are now being rejected by many physicists (entangled EPR pairs). Defining physicalism with respect to a future physics is meaningless (Hempel’s dilemma) as we do not know the status of such an ideal physics; furthermore, it might subsume the mental as a fundamental constituent. Thirdly, the existence of extra-ordinary spiritual experiences – whether religious-conversion experiences, near-death experiences or mystical experiences during high-doses of classical psychedelics – from which subjects return which deeply held panpsychic, pantheistic, or idealistic view of reality need to be explained. This poses the question of the epistemological validity of such metaphysical insights (noetic quality), based on experiences subjects routinely describe as among the most meaningful in their lives.

This physicalist trilemma suggests that contemporary scholars and scientists should consider older metaphysical views of reality, in particular forms of panpsychism and idealism, including those compatible with IIT. None of these deny the external world, the evolution of this world subject to causal powers entirely within the world (naturalism), nor the validity of the scientific method.

Harald Atmanspacher: “The role of meaning in dual-aspect monism”

Dual-aspect monism is a metaphysical framework addressing the mental and the physical as two aspects of an underlying reality that is neither mental nor physical, *i.e.* psychophysically neutral.

In contemporary versions of dual-aspect monism (e.g. Pauli-Jung, Eddington-Wheeler, Bohm-Hiley), the mental and physical aspects arise by decomposition of the psychophysically neutral. This implies correlations between the mental and the physical that are neither causal nor by chance -- rather, they are substantiated by meaning. The spectrum of such correlations has been studied using empirical results from clinical psychology, psychophysiology and psychophysics. As a relational concept connecting the triad of mind, matter, and the psychophysically neutral, meaning has a deep structure which is crucial for the understanding of its surface structure.

Paavo Pylkkänen: “Panprotopsyichism in Bohmian quantum ontology”

The physicist David Bohm proposed in 1952 the first consistent realist interpretation of quantum theory. de Broglie had presented a version of this interpretation already in 1927, but Bohm independently rediscovered and completed it. The interpretation postulates that an electron is always a particle accompanied by a new type of quantum wave field which guides it (thus the name “pilot-wave theory”, often used for this interpretation). Bohm, with Basil Hiley, began to re-examine the interpretation in the mid-1970s, when they realized that it illustrated in a very vivid way the holistic features of quantum theory, such as non-locality and the irreducible wholeness of the many-body quantum state. Bohm also soon realized that the way in which the pilot wave guides the particle should not be understood as mechanistic push and pull. Rather, the mathematics of the theory suggested that the effect of the wave upon the particle only depends on the form (second spatial derivative) of the amplitude of the wave. Thus he proposed that the quantum wave field carries information about the environment (e.g. slits), which literally in-forms, or puts form into the movement of the particle. He saw such “activity of form” (or “active information”) at the quantum level as a primitive mind-like quality of the particles of physics, while adding that “of course, they do not have consciousness”. In relation to contemporary philosophy of mind, Bohm’s view can thus be seen as a form of panprotopsyichism, rather than panpsyichism in a full sense. Bohm died in 1992, just before consciousness became a major topic in philosophy and cognitive neuroscience, and thus, while he did write about the relation of mind and matter in the active information framework, he did not develop any detailed views about how conscious experience might be explainable in it. This question has been explored by Pylkkänen (often together with Hiley).

Bohm’s framework is, of course, not the only one in which one can try to explain consciousness with a concept of information. David Chalmers (1996) proposed a double-aspect theory of information as his own preliminary way to approach the hard problem of consciousness. And of course, the Integrated Information theory (IIT) of consciousness, developed by Tononi and others is another prominent attempt.

In this talk I will explore how consciousness might be explained in the framework of Bohmian quantum ontology, and compare and contrast this approach with Chalmers’ and Tononi’s views.

