

Response to Editorial “Should IANDS Endorse a Post-Physicalist Worldview?”: NDE Research Needs Firm Guiderrails but Soft Boundaries

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ABSTRACT: Should IANDS endorse a post-physicalist worldview? In this article I argue that the meaning of ‘physicalism’ is unclear because the meaning of ‘physical’ is unclear, and hence the meaning of a ‘post-physicalism’ might also be considered unclear. Nevertheless, I argue that there is value in IANDS discussing, and possibly endorsing, a post-physicalist worldview, but only if that is accompanied by a stance on how that worldview is to be assessed and refined, that is, an epistemology. I advocate a scientific epistemology and recommend that if IANDS endorses a post-physicalism, it also positions it as a ‘broad naturalism’ to affirm IANDS’s commitment to employing the scientific method to determine standards for evidential credibility and for determining the significance of that evidence for understanding the nature of the real world. In my view, this specification is important for fostering a sense of identity in the NDE research community, for relating NDE research to other scientific communities such as consciousness studies, and for establishing a basis for constructive discourse between researchers with different scientific worldviews.

KEYWORDS: post-physicalism, worldview, supernormal, near-death experience, scientific method

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This article is a response to Janice Holden's (2023) question as to whether IANDS should endorse a 'post-physicalist' worldview.

I understand 'physicalism' to be a contemporary view about the nature of the real world, one that asserts (roughly) that all phenomena can ultimately be explained in the language of physics, and that the task of science is to discover those explanations and, thus, dispense with hypothetical alternatives.

For clarity in discussing this view I will use the term 'real' to refer to what exists independently of what we might think about it, 'concrete' to refer the part of it that has causal powers—for example, physical atoms, 'abstract' to refer to the part of it that does not have causal powers—for example, numbers, and 'imaginary' to refer to things that exist only in a mind-dependent way—for example, unicorns. For more on terminological clarity see (Rousseau, 2015; Rousseau et al., 2018).

In my view, the standing of physicalism in general discourse is rather complicated. Although the basic claim seems a straightforward one, I think that what is being embraced or opposed by that worldview is very unclear, embedding such ambiguities that an enduring controversy is almost assured. Moreover, these debates are sustained by widespread misapprehension of what the issues at stake really are and by a general lack of knowledge about the rich variety of potential alternatives. I will expand these views in my comments below.

Physicalism is widely promoted in popular discourse as a majority view amongst academics, but from actual academic publications and debates, I have the impression that some loud voices have gained inordinate sway in how aggregate views are represented and communicated, and these generalized assertions do not represent well the actual balance and variety of views held in academic communities, especially in the ones for which it matters in what direction the answer might lie. Some of these communities have little engagement with phenomena that are so-called 'supernormal'—a term coined by Frederic Myers (1903) to denote phenomena that go beyond the ordinary and might pertain to a transcendental world—for example, telepathy or apparitions. With this term Myers was seeking a way to explicitly oppose labeling such phenomena as being 'supernatural,' a notion which he rightly described as "open to grave objections" (p. xxii) due its implication of the existence of an aspect of reality that lies outside of nature and, hence, is inaccessible to scientific investigation. Examples of such academic communities include the metaphysics of science, ethics, philosophy of mind, and consciousness studies, proponents of which nevertheless exhibit widespread—though not comprehensive—

skepticism about physicalism. For example, a significant number of metaphysicians of science do not subscribe to physicalism on the basis that many familiar phenomena seem in principle to be beyond physicalistic explanation, such as the intensionality of certain thoughts, the subjectivity of mental states, and the objectivity of abstractions such as mathematics and logics (De Caro & Macarthur, 2008, 2010; Gillett & Loewer, 2001).

Hence, doubts about physicalism do not exist only in communities such as parapsychology, religious studies, transpersonal psychology, and near-death experience (NDE) research that engage with supernormal phenomena, nor do they represent a niche or rogue stance amongst academics. Controversies about the evidential status of supernormal phenomena such as psychical, spiritual, and mystical experiences do make opposition to physicalism harder to defend solely on the basis of such evidences, but it is clear that physicalism, as a worldview, is already dubious long before evidences of supernormal phenomena are brought into consideration. However, whether this trouble, or even widespread scientific acceptance of supernormal phenomena, could ultimately be fatal for physicalism is unclear, for reasons I will address further below.

To me it seems moot whether the International Association for Near-Death Studies (IANDS), or any organization supporting the pursuit of a true understanding of the nature of reality and the place of humans in it, and having an ambition to help bring such an understanding into mainstream culture, would benefit from endorsing a non- or post-physicalistic worldview. The issue is complex, as I will illustrate by unpacking some of the issues at stake. To be clear, I do not oppose such an endorsement, but I think the way in which it is done, and what is included in it, has a significant bearing on how well such a move would serve both the fortunes of the advocacy group and humanity at large.

For all of us humans, forming worldviews is unavoidable, as they ground our judgments about what to value, how to judge, and when act, and, hence, determine how we live our lives in our concrete and conceptual worlds. To survive, grow, and thrive, we have to combine forces with likeminded individuals, that is, enter into relations with people we trust and would support because we understand the overlap between their worldviews and our own. In this sense there is important value for members of the NDE research community in coming to have a clear sense of their shared convictions about the nature of reality and their place in the scheme of it, and thus building and reinforcing a clear and objective sense of communal identity. This distinct com-

munal identity might be captured, at least in part, by notions such as embracing a ‘post-physicalist worldview.’ Beyond that, and building on it, there could also be value in the IANDS community coming to have a sense of how aspects of its worldview overlap or contrast with those of other academic communities, some of which might yield important allies or produce significant counter-advocates.

However, evolving a communally embraced worldview is not a simple undertaking for any group, due to the diversity of dynamic influences impacting individual worldviews. Personal worldviews are always provisional, because they are grounded in a combination of experiences, knowledge, and intuitions (Rousseau, 2019). These factors not only are dynamic but also are never fully objective. For example,

- experiences are always conditioned—by personal context and our humanly limited cognitive capacities,
- knowledge is always incomplete—because of our rational and instrumental shortcomings and the short history of the scientific enterprise, and
- intuitions are increasingly suspect in our rapidly changing world—because they typically arise via slow-moving evolutionary processes (von Bertalanffy, 1955).

There is much good evidence for the existence of supernormal experiences, knowledge, and intuitions (e.g., Kelly et al., 2007; Sidgwick et al., 1894), but these data are similarly subject to doubts and challenges on the basis of inconsistencies and confounding psychological factors, and no one can consider their own data to be fully reliable or definitive. Consequently, worldviews are always works in progress, and the really important issue is not how realistic they are at any one time but whether we are engaged in a process whereby they are becoming increasingly realistic. In this sense it is important for self-aware individuals and organizations to not only articulate a worldview position in which they have confidence but also to say by what means that worldview would be subject to scrutiny and further development.

In the light of their experiences, knowledge, and intuitions about psychical, spiritual, and/or mystical phenomena—and other exceptional human capabilities, it is reasonable for members of IANDS to have doubts about a worldview predicated on contemporary physicalism. However, I would argue that the great majority of such personal alternative worldviews arise despite, not because of, institutional views, and they would not change on the basis of what any institution, including IANDS, might endorse or repudiate.

What then, would be the value of IANDS endorsing a “post-physicalist” worldview, whatever that might be? What could be gained, and what might be lost? In assessing this trade-off, a lot rests on just what worldviews consist of, on what is meant by terms such as ‘physical,’ and whether the debate is really about the foundations and nature of reality—as represented by ontology, the study what exists, and by metaphysics, the study of the nature of what exists—or about something else such as epistemology, the study of how we gain knowledge of anything, including the ontology and metaphysics of the real world (Rousseau & Billingham, 2018). To my mind, the potential value of having a discussion about these matters is much higher than the potential value of having an endorsed convergent view. I think there would be little merit, and much risk, in IANDS endorsing a particular worldview if those who would be bound by it do not understand well what that view actually entails and how, in practice, it helps them to hold it.

This is not a small matter. It is to be avoided that an endorsement by IANDS of a “post-physicalist worldview” results in the IANDS community being branded by academic communities as naïve and/or irrational and/or unscientific, or as promoting vague and/or ambiguous views. Such a reaction would in turn generate a risk of deterring engagement with NDEs and related experiences by the very scientists and philosophers who might, under more conducive circumstances, assist in bringing tolerance, or even wide support, for a properly defined “post-physicalist” worldview into the cultural mainstream. By “more conducive circumstances” I do not mean IANDS having no, or an overly open, view on the nature of reality and the nature of appropriate discourse about it but, rather, one for which IANDS can academically defend the credibility of both the philosophical and scientific implications of its ‘post-physicalist’ position and the tolerant open-mindedness of its community. In my view, this positioning implies a need for some pre-emptory reflection on what such an endorsement would underwrite, based on what the terms used in such a worldview signify (Rousseau et al., 2018), and what options are, by implication, opened up or closed down by holding such a worldview (Rousseau, 2015).

Physicalism seems on the face of it to be an uncomplicated claim that is in a straightforward way either true or false. A closer look reveals that it is really a combination of two claims: a claim that every complex concrete thing is ultimately composed of relatively simple physical stuff, and a claim that the variety of extraordinary properties and complex behaviours we encounter in the concrete world result from

different ways of putting together simple physical parts. The first is a claim about what exists—ontology, and the second is a claim about the nature of what exists—metaphysics, which is grounded in claims about the significance of structure and organization in the make-up of things. By implication, any consideration of the truth or falsehood of physicalism, and any consideration of what might be alternatives to it, must likewise involve claims about what exists fundamentally and how the nature of complex things is to be understood in terms of the organization of more fundamental existents.

However, before such claims can be developed, it is important to discuss the meaning of the term ‘physical,’ on which the clarity of a proposal for a ‘post-physicalist worldview’ would depend. The first thing to note is that despite most scientists’ confidence in using the term, we have no positive definition of ‘physical’ in the philosophy of science, where it is usually defined relatively or negatively, by saying things such as “a property is physical if it is the sort of property needed to give an account of the nature of a paradigmatically physical object” (e.g., Stoljar, 2009), which seems particularly unrevealing. This ambiguity or, indeed, circularity is what gives rise to “Hempel’s dilemma” (Hempel, 1980). The two horns of this dilemma arise as follows. As I mentioned at the outset, a core premise of physicalism is that all phenomena are physical, and hence in principle explainable in the language of physics. But this ‘physicalistic sentiment’ can be interpreted in two ways, both of which are ultimately unsatisfactory, as follows.

On the one hand, it can be interpreted as defining ‘physical’ as denoting whatever is explained by our best physical theories, such as quantum mechanics and general relativity. However, this definition is unhelpful because it cannot be used to assess what is or isn’t physical amongst the phenomena that have not yet been explained by physics, and so this interpretation does not provide a useful general sense of the meaning of ‘physical’, and, therefore, is of little value in assessing the plausibility of physicalism.

On the other hand, the physicalistic sentiment can be interpreted as meaning that a future, more advanced physics will explain everything in terms of an enhanced notion of ‘physical’ expressed by those “better” physical theories. But this conjecture seems empty, as it gives no idea of what kind of extension will be required to formulate the upgraded notion of ‘physical.’ Perhaps one day science will explain everything, and perhaps science will do it in terms of something it will still call ‘physical,’ but we cannot now have any idea of what that notion of ‘physical’ might entail. In this sense, a future notion of physical could

be radically different from today's, just as the current quantum model of a chemical atom is radically different from the older 'atoms' of Democritus and Newton. Granted that the quantum theoretical notion of an atom still denotes 'atom' today, who is to say that a future notion of 'physical' will not adequately represent an enlightened idea of 'the fundamental nature of the universe'? Perhaps the term 'physical' will survive radical tweaking of its meaning to extend its scope far beyond its present meaning and will survive into the long term much as 'atom' has done. Future physicalists may feel as little affinity with today's physicalists as today's quantum atomists do with classical atomists.

This vagueness in the meaning of 'physical' creates a loophole for a contemporary physicalist, who could fairly claim that the meaning of 'physical' is sufficiently open that the concerns of the would-be 'post-physicalist' have no bite because they have no real content standing in contrast to that of physicalism. On such a view the physicalist could assert that an opposition to 'physicalism' is a trivial position, resting on a naïve interpretation of the term 'physical' and a misunderstanding of the way in which science advances. Such an outcome would not be the result that an endorser of 'post-physicalism' would wish for, as it does not move the debate forward in any way and potentially harms the reputation of 'post-physicalists.' To avoid this outcome, an endorser of 'post-physicalism' would have to be fairly explicit about what they aim to oppose and what they intend to support when they advocate a position they would call 'post-physicalism' and, furthermore, be clear about the means by which this position arose and might be further refined in the future.

This conjunction of claims about reality with claims about how we come to such insights is interesting and important, in that it shifts the focus beyond arguments about what could be meant by slippery terms like 'physical' or 'post-physical,' and onto reflection on how we come to know, and name, and understand, anything at all. This is a matter of *epistemology*, the process and dynamics of knowledge generation and refinement. In many ways, the ongoing epistemological process of increasing revelation and insight is more important than the outputs of that process at any one time, because the latter will surely be superseded in due course. For this reason, it would be important, when endorsing a worldview, to include a position on an associated epistemology.

In epistemology, physicalists and their doubters could find common ground, because it is via the methods of epistemology that knowledge, and the meanings of terms, change over time. If those who are physicalists and those who are 'post-physicalists' can agree on the means by

which knowledge issues might be decided, then both parties can work together to get closer to the truth in a collegiate spirit, minimizing acrimony or mutual disdain.

Is such a common ground available? For physicalists, this methodology must be that of science, which is one amongst many advocated routes to knowledge. Generally, by ‘science’ is meant a specific enterprise that is a discipline in the most general sense of the word, consisting of a knowledge base—comprising data, theories, and methodologies; a guidance framework—comprising a domain view, worldviews, and terminology; and an activity scope—comprising exploration, development, and application (Rousseau et al., 2016, 2018). In particular, the methods of science are grounded in a guidance framework that includes a specific set of tenets underpinning its worldview—the tenets of ‘naturalism’ (Rousseau 2011a). I’ll say more about these grounding tenets and naturalism later on. The methods of science consist in formulating testable hypotheses *in accordance with a scientific worldview* and evaluating them *in the light of credible evidence*. On the basis of the success of science it is widely regarded as the most effective way of obtaining reliable knowledge. It is probable that it is only via the application of a commonly supported scientific method that physicalists and post-physicalists could find a convergence of opinion on what counts as credible evidence, and what that evidence means for our understanding of the nature of the real world.

However, epistemology covers multiple claims about routes to knowledge, notably the scientific method but also others such as the interpretation of sacred texts (hermeneutics), divination, divine revelation, meditation, spiritual enlightenment, religious experiences, and altered states of consciousness. Scientists typically reject all the non-scientific epistemologies on the basis of an alleged lack of evidence for their validity, and, in view of the success of science a majority of metaphysicians of science support science as the only valid epistemology. However, this debate is not settled, and it is unclear that these epistemological claims are mutually exclusive. If there really are valid supernormal phenomena such as true divination or genuine spiritual revelation, then the methods of science surely will, in due course, accept the evidence for them and include their implications in its evolving epistemology. Likewise, if there truly are supernormal phenomena, such as telepathy, then the methods of science will in due course settle the evidence for them and incorporate their implications in its evolving worldview. On this basis, endorsing the scientific method as the favored epistemology seems a safe and wise choice, because it would establish a common ground with other scientifically oriented groups—including

physicalists—and it does not, in principle, exclude the possibility of supernormal phenomena nor the development of a scientific worldview that goes well beyond contemporary physicalism. In this context it is important to note that there are already several competing scientific worldviews, some of which go beyond physicalism—but not beyond the foundational tenets of science. I will say more on this subject in a moment, but it seems clear that IANDS should, if it were to endorse a post-physicalism, make clear whether or not it sees this alternative as a scientific worldview, subject to scrutiny and refinement via the scientific method. I hope that IANDS will take the scientific route, but of course the choice of which ontology and which epistemological strategy to embrace rests with the IANDS leadership, in consultation with the membership.

Physicalism is a scientific worldview, but it is just one member of a family of scientific worldviews. Physicalism is a very restricted perspective, and in describing it, many terms are conflated, terms that can be differentiated so as to create broader perspectives. A core tenet of science is that it is the study of nature and that the natural world is all that exists concretely. This view is called ‘naturalism,’ and all scientific worldviews are varieties of naturalism. The key characteristic of something being natural is that its behavior is subject to laws—“laws of nature”—and, hence, it exhibits regularities that make it amenable to systematic study. By this token anything not governed by laws is deemed to be ‘supernatural,’ and science assumes that nothing supernatural actually exists. However, the rejection of supernaturalism does not entail that everything is ‘physical,’ as per the view of physicalism.

Naturalism pure and simple, sometimes called ‘Standard Naturalism,’ claims only that the world is comprised of stuff called matter and that all change is subject to laws. Physicalism claims that all matter is physical matter; that is, matter can have only paradigmatically physical properties. For this reason, physicalism is also called ‘strict naturalism,’ to distinguish it from ‘broad naturalisms’ that, in different ways, envision the possibility of additional kinds of matter, such as matter that has only mentalistic properties, or has both mental and physical properties, or has more fundamental properties that can manifest as mental or physical properties under the right conditions. Many combinations of these possibilities are logically possible, and on this basis I have elsewhere identified 15 types of naturalism (Rousseau, 2015). These include naturalistic varieties of monism, dual-aspect monism, neutral monism, non-Cartesian dualism, and pluralism. These variations demonstrate the huge variety of options available for scientific explanatory models that go beyond physicalism but also indicate

that we are still far from convergence to a single or even a small set of scientific worldviews. It is too early to pick a frontrunner, but it is not too early to judge that physicalism is unlikely to win out—except maybe by fiddling with the meaning of ‘physical.’ It would be useful, if IANDS were to endorse a post-physicalistic worldview, for IANDS to affirm it as a type of broad naturalism, so as to confirm it as a scientific worldview and connect it to the broader academic debates about worldviews and the adequacy or not of physicalism.

Once the possibility of kinds of broad naturalism has been opened up, many more refined worldview positions come into view because, as discussed earlier, a worldview does not make claims only about the kinds of stuff that exist but also about the significance of how stuff is organized to produce complex phenomena. A good example is the case of models about the mind-body relationship. Here, two factors come into play: the variety of kinds of stuff being considered, and the variety of structural relationships between the mind and the body. Many options are logically possible, and I have elsewhere discussed 16 logical possibilities, 14 of which had contemporary support amongst philosophers of mind (Rousseau, 2011a, 2011b, 2015). Once again, this collection serves to show how far we are from a definitive scientific view on the nature of persons—but also that we are not without viable research approaches that can get us progressively closer to the truth of the matter. I have argued elsewhere that, in principle, supernormal phenomena and abstractions such as values can be brought into naturalistic worldviews in a non-devaluative manner (Rousseau, 2014), and I have high hopes that the study of NDEs will provide the credible key data needed to achieve this accomplishment (Rousseau & Billingham, 2021). NDE research is on an important research trajectory, but is still far from its endgame. For this journey, NDE researchers need guiderails that would help them to find and stay on a scientifically viable path while supporting them in resisting setting boundaries too early or too firmly.

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