

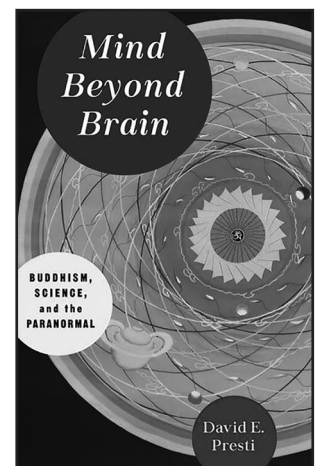
## A Challenge to Materialist Models of Mind<sup>1</sup>

Max Velmans

Goldsmiths, University of London

Review of *Mind Beyond Brain: Buddhism, Science and the Paranormal*, edited by David Presti. New York: Columbia University Press, 2018. Pp. xxii + 200. ISBN 9780231189569

This six-chapter book largely focuses on pioneering research in the Division of Perceptual Studies (DOPS) in the Department of Psychiatry of the University of Virginia Medical School. Founded by Ian Stevenson in 1967, DOPS investigates “near death experiences” (NDEs); “cases of the reincarnation type” (CORT) in which small children speak and act as though they are remembering persons, places and events from another usually recent life; other death and dying-related phenomena such as cases of mediumship, apparitions and deathbed visions; and laboratory-based studies of psi such as telepathy and precognition. Overall, such phenomena pose a significant challenge to the currently dominant, materialist way that mind is understood in Western science.



The opening chapter by David Presti (Department of Molecular and Cell Biology, UC Berkeley) provides a broad theoretical context for the book, giving a succinct review of the many ways that consciousness has been shown to *relate* to brain functioning without *reducing* to brain functioning, thereby presenting a “hard problem” for materialist reductionism and an invitation to paradigm change. Four lucidly written chapters then follow that survey major areas of research of interest to DOPS. Bruce Greyson focuses on near-death experiences (NDEs), Jim Tucker on past-life memories, Emily Williams Kelly on investigations of mediums, apparitions, and deathbed experiences, and Ed Kelly on paranormal (psi) phenomena and the *siddhis*—unusual capacities developed by advanced Yogis and meditators, through the use of psychoactive plants, fungi, or rituals. Each of these content chapters also follows a systematic pattern: a brief historical survey, a description of the typical features of the surveyed phenomena, detailed histories of persuasive, well-documented cases, a consideration of the conditions under which the phenomena tend to occur, an analysis of the most common, conventional ways of explaining (or explaining away) the phenomena, reasons for not accepting such dismissive arguments (for example on the grounds of conflicting evidence), and broad suggestions about the theoretical implications of taking the evidence seriously. In the penultimate chapter by Kelly and in the opening and closing chapters by

<sup>1</sup> Send correspondence to Max Velmans, Ph. D., Department of Psychology, Goldsmiths, University of London, Lewisham Way, New Cross, London SE14 6NW Email [m.velmans@gold.ac.uk](mailto:m.velmans@gold.ac.uk)

Presti, the theoretical consequences of the evidence and the current and prospective future of research in this area are also considered in greater depth.

Given the routine materialist assumption that mind and consciousness are nothing more than localized states and/or functions of the brain and therefore entirely dependent on brain, such phenomena are routinely dismissed both by scientists and the media on the grounds that any form of post-mortem survival (of the kind suggested by NDEs and CORT) or information access to events or other minds distant in space or time by non-normal means (e.g., telepathy and clairvoyance) is theoretically impossible. Consequently, on this view, there *cannot* be scientific evidence for such phenomena and the so-called scientific evidence for these phenomena *must be* “pseudoscience” or at best “poor science” that does not take into account well-known cognitive errors, fraud, alternative conventional explanations, and so on.

As a natural response to this establishment skepticism, research into areas covered by this book has become increasingly rigorous and well-controlled, and data that cannot be easily dismissed have become extensive. Each of the content chapters offers examples of this kind. Greyson, for example, lists typical features of NDEs, including a flood of memories or a life-review associated with a sense of revelation or sudden understanding, emotional changes that can include an overwhelming sense of peace and well-being, and a sense of cosmic unity and a feeling of unconditional love—all of which are surprising in the near-death situation. Greyson reports that such features are 10 times more common in patients with clinically established cardiac arrest than in patients with other serious cardiac incidents, and do not appear to be associated with age, gender, race, intelligence, neuroticism, extraversion, anxiety, mental illness, or personality traits. There are however cultural differences in the way individuals interpret such experiences. Such NDEs are of particular clinical interest in that they often have profound after-effects. For example, experiencers typically report increased spirituality, compassion, altruistic behavior, sense of connection to others, sense of meaning and purpose, and appreciation for life. Conversely, they report loss of fear of death and become more opposed to suicide. Such NDE changes go well beyond those in people who have come close to death without an NDE.

Explanations of NDEs include imaginative mental constructions based on pre-existing religious beliefs to protect us from fear of death, but, according to Greyson, research does not support this idea. For example, no association has been found between religiosity and NDEs, and the reported experiences often conflict with religious expectations. The same kinds of experiences are also reported by people familiar and unfamiliar with NDEs (prior to their experiences). Others speculate that NDEs are caused by oxygen deprivation to the brain or by the drugs administered to the dying. However, studies show that those who experience NDEs in the dying process actually have more oxygenated brains than those who do not report NDEs, and those given more drugs are less likely to report NDEs than those given fewer drugs. Greyson goes on to survey and cast doubt on other forms of explanation based solely on brain malfunctioning, and notes that NDEs are in fact associated with enhanced mental clarity—which opens up the question of whether NDEs are simply hallucinations or, perhaps, a way of gaining access to other domains to which we are usually blinded by the normally functioning brain. On his own assessment, the findings challenge the view that consciousness is solely the product of brain processes and lend support to the view that the brain acts more as a filter, selecting mental content most relevant to everyday survival.

Although, in this brief review, I do not have space to give details of the other content chapters,

they are similarly structured and well-considered. Taken together with the encyclopedic survey of evidence in the 832-page book *Irreducible Mind* edited by Kelly et al. (2007), it is hard to disagree with Ed Kelly that the evidence for phenomena inconsistent with a materialist-reductionist worldview is now so extensive that the most plausible default is to accept at least some of them as real, and that it is now time to focus on how they work, the conditions that foster them, and what they imply, both for the nature and potential abilities of the human mind, and, perhaps, for our understanding of reality itself. In his own chapter, he offers potentially fruitful directions. For example, in laboratory studies of psi with gifted individuals, successful trials can be related in principle to psi conducive internal and external conditions and, through the use of neural imaging techniques, to the brain states of those participants during those trials. This strategy was supported by Kelly's own 1982 analysis of a large body of data on successful psi trials drawn from six gifted individuals and a variety of testing procedures that successful hits tend to come in groups rather than be randomly distributed, and appeared to be related to well-marked shifts in participants' internal state (evidenced, for example, by a change in GSR). The state-specific propensity for psi was also supported by research at the Maimonides Medical Center in the 1970s and 1980s on heightened propensity for ESP during periods of REM sleep while volunteers were dreaming, and by many laboratories that use ganzfeld techniques in which participants wearing earphones and halved ping-pong balls over their eyes are exposed to homogenous or random sound and light while being taken through a progressive relaxation procedure.

What might it all mean? Both Kelly and Presti list alternative ingredients of a model of mind beyond brain. Kelly argues for an expanded version of the Myers-James filter or transmission model of the mind in which brain does not *generate* the mind but *conditions* its operations. On this view brain does not *encompass* the mind, which opens the possibility of some form of post-mortem survival. Various models along these lines were developed in Kelly, Crabtree, and Marshall (2015) edited book *Beyond Physicalism* a series of metaphysical essays that argued for a form of evolutionary *panentheism*, described as some kind of ultimate consciousness that both pervades and constitutes the world, while also, in part, transcending it, slowly waking up to itself as it evolves ever more complex biological forms over time.

Presti suggests that an expanded model of mind might usefully draw from modern physics, perhaps through a deeper appreciation of the participatory, experiential role of the observer in quantum mechanics, and, to understand apparent connections between non-local events, we may need to consider the existence of physical dimensions additional to four-dimensional space-time. He also argues for a dual-aspect model of mind in which both consciousness and brain are manifestations of a deeper unifying process, that can be explored by complementary first- and third-person perspectives. This opens up the possible integration of third-person science with the findings of first-person investigative traditions such as Buddhism, leading to a deeper appreciation of the interrelatedness of subjectivity and objectivity and how mind and the world, in a sense, "enfold" each other. Ultimately, he suggests, we may be at a place where hypotheses about the nature of mind that incorporate non-local and transpersonal aspects may be scientifically justified, leading to an expanded view of nature that is *super natural* rather than *supernatural* (i.e. not above or beyond nature), and that in order to make sense of the many phenomena described in this book one might have to accept that the brain/body can be receptive to information from transpersonal/transcendent domains as well as the well-understood material ones, for example through spiritual and shamanic practices, the use of psychedelic plants and fungi, and so on.

Whether some or all of these suggestions find their way into some grand synthesizing theory remains to be seen. The convergence of expanded theories of mind with developments in modern physics is tempting (and arguably inevitable)—but whether it is the experience of the observer or simply the interaction of measuring instruments with quantum events that actualizes them is highly controversial—with the majority of physicists favoring the latter view. On the other hand, the possibility of added dimensions in the nature of reality is common in physics (there are 11 postulated by *M-theory*) and interesting suggestions about how one or more added dimension might have explanatory value in parapsychology have been made by Carr (2015). Again however, the approach is contested. Marwaha and May (2016) for example, propose a more conventional theory of precognition and clairvoyance based on a *multiphasic model of informational psi* that makes no reference to consciousness (local or non-local) and draws only on classical physics, engineering, cognitive psychology, and neuroscience.

Given these controversies, it might be more fruitful at the present time to seek convergences with non-reductive ways of understanding consciousness within psychology, philosophy, and neuroscience, which are equally concerned with basic questions such as what consciousness is and does, how it relates to the unconscious mind, the brain, the physical world, and so on. In this connection, it is worth remembering that even normal conscious experience presents a “hard problem” for reductionist science, with the consequence that there are many efforts to develop expanded models of consciousness and mind. Intriguingly, the complementary, dual-aspect monism favored by Presti is precisely the same as that developed in depth in my own psychological/philosophical work, and Kelly’s *panentheism* converges smoothly with *reflexive monism*—a model of the self-observing universe in which consciousness realizes the nature of being (in the sense of making it subjectively real (e.g. Velmans, 2009), opening up the possibility of an expanded, inclusive model that might incorporate both ordinary and extraordinary experience.

Overall, this book introduces an increasingly well-researched and challenging field, covered in more depth in *Irreducible Mind* and *Beyond Physicalism*. All the chapters are clearly written, giving historical overviews of the areas they cover, current research, illustrative cases, and a considered analysis of their theoretical implications, thereby providing an excellent, engaging introduction to research into the various ways in which mind might extend beyond brain.

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