

Article

Science and Postmortem Survival

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Abstract

What we see currently emerging, in short, is a middle way between the warring fundamentalisms – religious and scientific – that have so polarized recent public discourse; specifically, an expanded science-based worldview that can accommodate empirical realities of paranormal and spiritual sorts, including postmortem survival, while also rejecting rationally untenable overbeliefs of the sorts targeted by critics of institutional religions. This emerging vision is both scientifically justifiable and spiritually satisfying, combining the best aspects of our scientific and religious heritage in an effort to reconcile these two greatest forces in human history. What is ultimately at stake here seems nothing less than recovery, in an intellectually responsible manner, of parts of our human heritage that were prematurely discarded with the meteoric rise of modern science starting four centuries ago. And what is especially significant at this critical juncture, and the fundamental new factor that may finally allow this recovery to succeed after numerous previous failures, is that it is now being energized by leading-edge developments in science itself. A potentially viable path to a better world seems to be opening up.

Keywords: Science, religion, postmortem, survival, paranormal, spiritual.

The rise of modern science, accompanied by its many technological triumphs, has led to widespread acceptance among opinion elites of a worldview that conflicts sharply both with everyday human experience and with beliefs widely shared among the world's institutional religions – including belief in the possibility of postmortem survival.

Most contemporary mainstream psychologists, neuroscientists, and biologists in particular, along with many philosophers of mind, subscribe explicitly or implicitly to some version of *physicalism*, the modern philosophical descendant of the *materialism* of previous centuries. It comes in a variety of subtly different shadings, but the basic story common to all goes like this: *All* facts are determined in the end by physical facts alone. Reality consists at bottom of tiny bits of self-existent stuff hurtling around under the influence of fields of force in accordance with mathematical laws, and everything else we observe must derive somehow from that most basic underlying stuff. In particular, we human beings are nothing more than extremely complicated biological machines, and everything we are and do is explainable, at least in principle, in terms of our physics, chemistry, and biology. Some of what we know, and our capacities to learn more, are built in genetically as complex resultants of biological evolution. Everything else comes to us through our sensory surfaces, by means of energetic exchanges with the environment of types

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already largely understood. Consciousness and its contents, and all other aspects of mind, are generated by (or in some mysterious way identical with, or supervenient upon), neurophysiological events and processes occurring in the brain. Our everyday experience of ourselves as effective conscious agents equipped with free will is mere illusion, a by-product of the grinding of our neural machinery. And of course since consciousness, mind and personality are entirely products of that machinery; they are necessarily extinguished, totally and finally, by the demise and dissolution of the body. On a more cosmic scale there seem to be no such things as final causes or a transcendent order; the overall scheme of nature appears utterly devoid of meaning or purpose.

This bleak worldview has permeated the intellectual elites and educational systems of all advanced societies and is undoubtedly a principal driver of the pervasive *disenchantment* of our modern world with its multifarious and rapidly worsening ills. It has also driven progressive erosion of traditional forms of religious belief. Indeed, recent years have witnessed a series of all-out attacks on everything religious by well-meaning defenders of Enlightenment-style rationalism such as Richard Dawkins and Daniel Dennett, who clearly regard themselves and current mainstream science as reliably marshaling the intellectual virtues of reason and objectivity against retreating forces of irrational authority and superstition. For them the truth of physicalism has been demonstrated beyond reasonable doubt, and to think anything different is necessarily to abandon centuries of scientific progress, unleash *the black flood of occultism*, and revert to primitive supernaturalist beliefs characteristic of our intellectual childhood.

However, reasons for skepticism regarding this physicalist worldview are rapidly gaining cumulative force. In the first place, classical physicalism is not merely incomplete (which no serious person can deny) but incorrect at its very foundation, essentially the physics of the late 19th century. Major tectonic shifts have subsequently occurred within physics itself. Newton's conception of absolute space and time as a pre-existing container for events, for example, has been replaced by Einstein's experimentally confirmed theories of special and general relativity. Even more fundamentally, with the rise of quantum theory nearly a century ago the deterministic clockwork universe postulated by Newton and Laplace has been overthrown, *matter* as classically conceived shown not to exist, and consciousness implicated as a fundamental player in the manifestation of the experienced world (Rosenblum & Kuttner, 2011; Stapp, 2007). These seismic events within theoretical physics have somehow not yet fully registered with the scientific community at large.

Classical physicalist brain/mind theory now seems headed in the same direction. At present we have no understanding whatsoever of how consciousness could be generated by physical events in brains, and recent theoretical work in philosophy of mind has convinced many, including at least a few prominent neuroscientists, that we can never achieve one.

Let's go back to the basics here. Any contemporary discussion of brain/mind relations must take as its point of departure the strong correlations that unquestionably exist between mental and physical events. New manifestations of mind appear everywhere to be closely associated with modifications of structure or process in brains. In biological evolution, for example, we see an overall correlation across animal species between behavioral complexity and the level of organization of the nervous system. The rapid post-natal development of the human infant is likewise associated with massive structural and functional changes in its maturing brain. Neuropsychologists have catalogued numerous specific and sometimes very peculiar perceptual and cognitive deficits that are reliably produced by brain injuries of particular sorts, and we are all presumably familiar as normal human adults with numerous additional facts – the customary daily cycle of consciousness and the effects of mild cerebral trauma induced by alcohol and other psychoactive substances, fatigue, thumps on the head, and so on – that also reflect this generalized dependence of mind on brain.

All of the traditional philosophical positions on brain/mind relations arise from different ways of interpreting this basic fact of correlation. Contemporary mainstream physicalists assume that brain processes unilaterally cause mental phenomena, and as indicated above there are certainly numerous situations in which that seems to be exactly what happens. But what about the other way around? It seems equally obvious, naively, that mental events can cause physical events too; I decide to raise my hand, for example, and up it goes. But there is a hitch here, an asymmetry in the causal structure. The physicalist response to this challenge is simply to assert that the causality in such cases resides not in the mental events *per se* but in their physical equivalents or accompaniments in the brain. In sum, we can cleanly, simply, and directly manipulate the *physical* side of the correlation, but not so the *mental* – at least under ordinary conditions.

However, as I will next explain, strong empirical evidence has accumulated for a wide variety of human mental and behavioral capacities that outstrip in principle the explanatory potential of physical processes occurring in brains. I will discuss these under two main headings.

I. “Psi” Phenomena, Including Direct Evidence for Postmortem Survival.

Here I'm referring to experimental and field observations adduced in the course of systematic scientific effort, beginning roughly with the formation of the British Society for Psychical Research (SPR) in 1882, by workers in psychical research and its narrower modern descendent, experimental parapsychology. The basic phenomena in question involve, by definition, correlations occurring across physical barriers that should be sufficient on presently accepted physicalist principles to prevent their formation (“basic limiting principles” as formulated by Broad, 1962, and refined by Braude, 2002). Popular terms for the main classes of relevant phenomena are *extrasensory perception* (ESP) and *mind-over-matter* or *psychokinesis* (PK). ESP

itself is sometimes broken down into subtypes such as *telepathy* (unmediated awareness of the mental state or mental activity of another person), *clairvoyance* (of distant or hidden events or objects), and *precognition/retrocognition* (of future/past events). It is widely recognized by researchers that these popular terms are unduly theory-laden and probably do not correspond to real differences in underlying process, and many therefore prefer the more theory-neutral terminology introduced by Thouless and Wiesner (1947) – *psi* for paranormal phenomena in general, occasionally divided into *psi gamma* for the input (ESP) side and *psi kappa* for the output (PK) side.

A large amount of peer-reviewed research involving experimental, quasi-experimental, and case studies of various kinds has produced cumulative results more than sufficient to demonstrate beyond reasonable doubt – at least to most open-minded persons who actually take the trouble to study it - that the sheer existence of the basic input/output phenomena is a fact of nature with which we must somehow come to scientific terms (Radin, 2006; Tart, 2009). Indeed, I predict with high confidence that future generations of historians, sociologists, and philosophers of science will make a good living trying to explain why it took so long for scientists in general to accept this conclusion.

All *psi* phenomena are theoretically important by virtue of providing examples of human behavioral capacities that appear impossible to account for in terms of presently recognized psychological, biological, or classical-physics principles. Two special subcategories stand out, however, in terms of the magnitude of the theoretical challenges they pose.

First is *macro-PK*, psychokinesis involving human-scale physical objects. There are many sources of credible evidence for such occurrences, including individual spontaneous PK events, often associated with extreme emotions of one or another sort; recurrent spontaneous PK (RSPK or *poltergeist* cases), typically involving disturbed adolescents; and various kinds of physical manifestations, including levitation, associated with trance mediums such as D. D. Home, Eusapia Palladino, and Indridi Indridason (Braude, 1991). I will illustrate the subject here with a case that exemplifies the theoretical challenges in particularly stark form.

Levitation, a phenomenon reported of mystics from many traditions, was a principal feature in the case of Joseph of Copertino, a seventeenth-century Franciscan monk for whom “ecstatic flight” was a literal reality. Joseph was observed levitating in broad daylight on hundreds of occasions that cumulatively involved thousands of witnesses of varied types including skeptical and even hostile witnesses. Sworn testimony was obtained within a few years from scores of these and exhaustively reviewed in connection with the formal investigatory processes leading to Joseph’s canonization. His flights occurred both indoors and outdoors, covered distances and altitudes ranging from a few feet to thirty yards or more, and went on for periods ranging from a few seconds to many minutes at a time. The reported phenomena, in short, were anything but

subtle, and not glibly dismissible in terms of global allegations about “inattentive blindness” (Simons & Chabris, 1999), “mass hypnosis” or other possible errors of observation and/or memory. Of special significance is the fact that during his canonization proceedings the *promotor fidei* – the “Devil’s Advocate” or defender of the faith – was none other than the great humanist (and acquaintance of Voltaire) Prospero Lambertini, later Pope Benedict XIV, who was also the principal codifier of the Church’s rules of procedure and evidence for canonization. Lambertini himself was initially hostile to Joseph’s cause, but upon thorough and searching examination of all details of the case, including the sworn depositions, he concluded that the ecstatic flights must have occurred essentially as reported. Subsequently, as Pope, he published the decree of Joseph’s Beatification. A definitive treatment of this extraordinary case has recently become available in the form of the book by Grosso (2016), who not only provides a thorough and detailed account of Joseph’s own well-documented phenomena but situates them in the larger history of macro-PK and related psychic phenomena.

Second and in some ways even more disturbing is *true precognition* – direct or unmediated apprehension of future events. Such phenomena would seem on the surface to suggest that the future is fully determined, and hence to undermine any possibility of free will. This greatly troubled F. W. H. Myers (1895), who was therefore relieved to discover cases in which future accidents seemed to have been anticipated clearly and in detail, but were then averted by appropriate interventions.

The conceptual issues related to precognition are complex and deeply tangled. I will not attempt to unravel them here but rather will simply address the state of the evidence itself, which strongly suggests that true precognition is also a genuine phenomenon. The large amount of apparently supportive evidence from forced-choice precognition experiments is rendered somewhat uncertain in its bearings by the possibility that it might have been produced or contaminated by PK (Morris, 1982), but precognitive *remote viewing* experiments in which the possible targets are not even known to the subjects in advance and have not been picked at the time of the viewing seem less subject to alternative explanations of this sort. Most significant, in my view, are the many well-documented spontaneous cases involving multiple low-level factual details that are recorded at the time of the original experience (which often takes the form of an unusually vivid or intense dream), and then verifiably occur at a distant point in the future (Rosenberg, 2015).

Still more important for theoretical purposes, and particularly germane to the special issue of *JCER*, is the large further body of evidence directly suggestive of postmortem survival, the persistence of elements of mind and personality following bodily death. It is simply *false* to assert, as does eliminative materialist philosopher Paul Churchland (1988, p. 10), that we possess no such evidence. We in fact possess a large amount of such evidence, much of it of very high quality, but unfortunately this work remains practically unknown outside the small circle of

persons professionally involved with it. Here I can provide only the barest glimpses into a literature consisting of literally hundreds of thousands of pages of heavily documented case studies – anything but mere *anecdotes*, as would-be critics often allege. Three main lines of survival research are of particular importance for my purposes here.

The first concerns *trance mediumship*, a principal focus of the SPR during the first several decades of its work. *Mediums* here are persons who are ostensibly able, usually when in some sort of trance-like altered state of consciousness, to make contact with the dead (Gauld, 1982). A large proportion of the most important research revolves around a half-dozen or so such persons who proved especially good at providing, under well-controlled conditions, detailed and accurate information seeming to derive from specific deceased persons about whom they could not have learned in any normal way. There is a difficult issue here related to proper interpretation of such evidence, which we will get to shortly, but let me first indicate the character of the evidence itself.

One of the first and best of the great trance mediums was Leonora Piper, discovered by William James in 1885, and the most important phase of her mediumship involved a “communicator” named GP (George Pellew), ostensibly the surviving personality of a young man who had recently died unexpectedly in a fall. Over several years her principal investigator, Australian lawyer Richard Hodgson, arranged for some 150 “sitters,” exactly thirty of whom had been known to GP during his lifetime, to be introduced to sessions anonymously after Mrs. Piper had entered her trance state. The GP communicator recognized all and only those thirty sitters, and for most of them provided numerous and appropriate details of events and memories they shared, often with compelling verisimilitude in terms of GP’s own characteristic vocabulary, diction, sense of humor, and so on. Hodgson himself, initially a skeptic, became convinced of the reality of survival largely on the strength of this one series of sittings (Hodgson, 1898).

Speaking more generally, all of the main properties of minds or personalities as we customarily understand these terms are evident in high-grade mediumistic communications. In the formulation of Pols (1998), for example, building on that of Descartes in Book II of the *Meditations*, mind “knows, makes (that is, forms, produces, creates), understands, thinks, conceives, perceives, remembers, anticipates, believes, doubts, attends, intends, affirms, denies, wills, refuses, imagines, values, judges, and feels” (p. 98). Summarizing the very large scientific literature on mediumship, it is fair to say that all of these properties are exemplified individually in many cases, and most or all of them jointly in the best cases such as that of GP. Not only are previously existing semantic, autobiographical, and procedural memories apparently in considerable degree preserved, but new memories can also be formed, mediated at least in part by continuing and presumably psi-based interactions with the world of the living, whether directly or by way of the medium. Less verifiably, the communicating personalities also seem to experience themselves as continuous with their prior selves, and as conscious selves who inhabit

some sort of body and are able to interact with other deceased persons in some sort of shared phenomenal world.

The full picture regarding trance mediumship is of course more complicated and hazy than this brief summary suggests. A large proportion of garden-variety mediumistic (and *channeled*) communications are pure twaddle, and even the best cases sometimes display surprising weaknesses and limitations. Some of these limitations seem to derive from the medium, some from the communicators, and some perhaps from the still largely unknown nature of the connection between them. The GP persona for example exhibited certain curious lacunae, such as a determined unwillingness to discuss philosophic and scientific matters that had been of burning interest to the living GP, and vouched for the authenticity of certain other Piper “controls” that were transparently bogus, such as the soi-disant “Walter Scott” and “Julius Caezar” (sic). As in many other cases, GP’s awareness of ongoing events in this world was also very limited and imperfect, often extending even to uncertainty as to whether his attempted communications had gotten through Mrs. Piper to the sitters. For further information about Mrs. Piper and other great mediumistic cases see for example Balfour (1935), Braude (2003), Broad (1962), Dilley (1995), Ducasse (1961), Gauld (1982), Hart (1959), Murphy (1961), Myers (1903), Salter (1950), Sidgwick (1915), and Sudduth (2016).

A second large area of survival research concerns what we call “*cases of the reincarnation type*” (CORT), in which small children – typically ages two to five – begin to speak and act as though they are remembering events from a previous, usually very recent, lifetime. The children often give detailed information about people and places they had known, or talk about the circumstances in which they died, and with this information the parents, or sometimes an independent investigator, can identify a deceased person whose life and death corresponds to what the child was saying. In the best cases, detailed records of the child’s statements have been made by independent investigators before any contact between the child’s family and that of the ostensible previous personality (PP). The children also frequently show strong and unusual behaviors that seem appropriate for the PP – such as an extreme fear of water when that person had died by drowning – and in a sizeable subset of cases the child has an extremely unusual birthmark or birth defect corresponding to fatal injuries of the PP (see, especially, Stevenson, 1997).

The originator and principal architect of this line of work was our UVA colleague Ian Stevenson, and, between 1961 and the present, he and others including Jim Tucker and Emily Kelly of our group have directly investigated over 2,500 such cases, many in great detail (see, for example, Kelly, 2013; Stevenson, 1975–1983, 1997, 2001; Tucker, 2005, 2013). Although the great majority of cases to date have come from countries where belief in reincarnation is strong, such as India and Burma, good cases have also been found in most other parts of the world including the countries of Europe and North America. An important further development now nearing

completion is the entry of all cases into a cumulative database according to a detailed coding system. Completion of this database will open a path toward development of statistical models and testing of hypotheses about factors that govern the phenomena – for example, predictors of the number and accuracy of remembered details, or the length of the *intermission* between death and rebirth.

Although the latter work in particular is still at an early stage, a number of points have already emerged that should command the attention of theorists. First and foremost, of course, is the strong indication that rebirth at least sometimes occurs. Second, although it is easy to imagine more complex scenarios in which personalities split or merge – i.e., one-to-many or many-to-one relations between PPs and the corresponding children – the data available so far strongly support one-to-one correspondence as the predominant pattern. Something seems to encourage continuity of personality both within and between lives. This picture has been reinforced, moreover, by early results from the database indicating strong tendencies toward conservation of gender and of some basic personality characteristics between successive lifetimes. Another striking fact is the high incidence of early, violent or unnatural death among PPs (around two-thirds of the cases), which may be related somehow to these children’s unusual capacity or impulse to recall (Stevenson, 1997). Little evidence has yet emerged of anything like moral improvement or punishment for past misdeeds, such as might be expected from theories of *karma* and the like, but this is conceivably due to limitations of the available sample, biased as it is toward unusual conditions of death in the PPs. If all or most of us in fact reincarnate, and we could discover means for reliably accessing past-life memories in adults, a fuller picture might conceivably emerge.

However, although there is some relevant meditative lore and a bare handful of interesting hypnotic-regression and psychedelic experiences suggestive of such possibilities, no meaningful conclusions can be drawn about such things at the present time. A final point which concerns the birthmark/birth-defect cases is that in most such cases the dying and perhaps surviving PP seems likely to have been aware of the fatal injury, and hence is plausibly suspected of being the source of the subsequent marks or defects. A surviving PP might similarly be the source in an important subclass of *experimental birthmark* cases in which the child’s marks correspond to marks deliberately placed on the deceased person’s body after the death by grieving relatives in hopes of identifying the successor. However, there are other cases – for example, cases involving wounds to visually inaccessible or even interior parts of the PP’s body – in which such interpretations seem less plausible.

The third main area of survival research concerns what we call *crisis apparitions*, in which a “percipient,” person A, may see an actual visual apparition, hear a voice, have a dream, or simply feel the presence of a loved one, person B, at or near the time that B, the “agent,” is undergoing serious or fatal injury at some physically remote location. The early SPR researchers

took a special interest in such events, carefully collecting and documenting large numbers of cases and produced as its first major work the landmark *Phantasms of the Living* (Gurney, Myers, & Podmore, 1886). This remarkable two-volume study includes not only detailed reports of over 700 individual cases (many including detailed documentation such as medical and legal records, supporting testimony from witnesses or interlocutors, and so on), but also an elaborate and sophisticated discussion of methodological issues regarding eyewitness testimony and means for dealing with them. Subsequent case collections, mostly carried out with far less concern for detailed documentation, have shown generally similar patterns, as revealed especially by initial trailblazing attempts to encode their features in standardized fashion for computer modeling and analysis (Schouten, 1979, 1983).

A number of general features of crisis-apparition cases stand out in terms of theoretical relevance and interest. First is the apparent importance of strong emotional ties as a driver of these unique events, somehow overriding normally existing physical barriers. Also striking is their apparent association with altered states of consciousness in the percipients, especially dreaming and hypnagogic/hypnopompic states – the *twilight zone* between waking and sleeping. In many cases the event begins with the percipient having a vague feeling of distress or disturbance, sometimes accompanied by a vivid sense that the injured person is present at a particular location nearby, and progresses into a full-fledged apparition only later on when the percipient enters a more receptive state. Third, as argued by Myers (1903), the timing of the events relative to verified times of death is sharply asymmetrical, rising steeply right around the time of death and declining slowly thereafter (vol. 2, p. 14). Percipients also typically have only a single such experience in their entire lifetime and remember it vividly for decades afterward as something uniquely significant (and note that Gurney et al. took pains to show that when questioned repeatedly over periods of many years, percipients typically reported *fewer* details with the passage of time).

Many crisis apparitions seem potentially interpretable as hallucinations generated by percipients who have been alerted at some level to their loved ones' circumstances by a psi process, as argued in particular by Louisa Rhine (1977). Others, however, seem to locate agency and purpose squarely in the dying or deceased, as for example in the case of a long-dead husband who seems to have come for his newly deceased wife but is seen by her tenant, a total stranger. Many apparitions also display what are aptly described as *quasi-physical* properties, as discussed by Tyrrell (1953, pp. 77-80). For example, they sometimes obscure the background, cast shadows, and can be seen in mirrors, like ordinary physical objects. Pet animals may also detect them, and, if more than one human is present, all or most may observe it, with differences of perspective appropriate to their differing locations in the communal space. On the other hand, apparitions sometimes enter and exit through walls or floors, become transparent and disappear, and in sundry other respects behave very *unlike* normal physical objects. Thus, they both resemble and differ from ordinary embodied persons, approximating them in widely varying

degrees, from marionette-like to so lifelike as to be mistaken temporarily for the corresponding person. (Similar properties apply, parenthetically, to haunting cases in which the apparitional form is recurrently associated with some particular *place*.) Complicating the picture further, there are also a number of well-documented *reciprocal* and *experimental* cases of out-of-body experiences in which one living person more or less deliberately *projects* to a distant location, observes verifiable circumstances there, and is observed at the corresponding location in the form of an apparition by one or more persons present (Hart & Hart, 1933; Myers, 1903, vol. 1, pp. 682–685).

The bulk of the available evidence concerning apparitions thus seems consistent with a picture in which some part or aspect of a given person departs from one place and appears in another in a form which is somehow intermediate between genuinely physical and purely hallucinatory. This is essentially the picture originally arrived at by Myers (in debate with Gurney), which is also endorsed – but only reluctantly and after lengthy critical consideration – by Gauld (1982). Further confirmation lies in the fact that certain kinds of crisis apparitions that might be expected on the telepathy-plus-hallucination model seem not in fact to occur – in particular, what might be called *disseminated* apparitions, in which a dying person appears simultaneously to loved ones in widely separated locations.

So what are we to make of all this *direct* evidence for postmortem survival? Ironically, the primary threat to survivalist interpretations usually arises *not* from considerations of evidential quality – problems of fraud, credulity, errors of observation or memory, and the like – but from the difficulty of excluding alternative explanations based upon psi-type processes involving only living persons. For example, a trance medium who appears to be delivering veridical information from your deceased uncle might actually be acquiring that information by means of a psi-type process from you as the sitter, or from other living persons who knew him, or from physical records of some relevant sort, rather than from your deceased uncle himself, and in general it proves extremely difficult to determine with certainty which sort of explanation is correct. This is the infamous “survival vs. living agent psi” debate, recently discussed in depth by philosophers Braude (2003) and Sudduth (2016).

Either horn of this interpretive dilemma – survival or psi – is fatal to the prevailing physicalist brain/mind orthodoxy, and this undoubtedly helps explain the hostility of dogmatic physicalists to both. It should also be evident that compelling evidence for postmortem survival, an element of belief common in some form to all of the world’s great religious traditions, would demonstrate especially clearly the inadequacy of present-day mainstream physicalism. In my judgment we are at or very close to that point – close enough, I believe, to justify rational belief in the possibility if not indeed the likelihood of one’s own personal survival. I must also underscore, however, how little we have learned so far: The most that can responsibly be said at present is that a few persons may have continued to exist in some unknown fashion following bodily death, for

varying periods of time and under essentially unknown conditions, some of whom may also have been reborn. Nevertheless, a world that includes such a possibility is already radically different, and in humanly significant ways, from that inhabited by most contemporary scientists (at least in their day jobs!).

II. Additional “Rogue” Phenomena Incompatible with Physicalism.

Evidence for psi and survival flagrantly conflicts with conventional physicalist expectations, and it is for precisely this reason that many mainstream scientists are anxious to dismiss it, or perhaps more accurately to isolate and quarantine it as though this were the only sector in which contemporary physicalism is not triumphantly advancing. In fact, however, many other well-evidenced human mental and psychophysical capacities also resist or defy explanation in conventional physicalist terms and thus point in the same theoretical direction.

A project organized in 1998 under the auspices of Esalen Institute’s Center for Theory and Research (CTR), and led by me, began by systematically assembling large amounts of peer-reviewed evidence of this sort. We approached this task by revisiting an extraordinary book published in 1903 which had already pursued the same general strategy: *Human Personality and Its Survival of Bodily Death* (2 vols.), by Frederic W. H. Myers (1843-1901), a founder of the SPR and friend and colleague of William James. We set out to update and re-evaluate Myers’s great work in light of the subsequent century of scientific work on various topics that had been central to his own original argument, and to this end we systematically collected material related to manifestations of extreme psychophysiological influence, such as stigmata and hypnotically induced blisters; prodigious forms of memory and calculation; unexplained aspects of everyday human memory; psychological automatisms and secondary centers of consciousness; out-of-body and near-death experiences, including intense and transformative experiences occurring under extreme physiological conditions such as deep general anesthesia and/or cardiac arrest, which contemporary neuroscience deems incapable of supporting any experience whatsoever; genius-level creativity; and mystical-type experiences whether spontaneous, pharmacologically induced, or resulting from transformative practices such as intense meditative disciplines of one or another sort. Collectively, these phenomena greatly compound the explanatory difficulties posed by everyday phenomena of human mental life (such as meaning, intentionality, subjective point of view, and the qualitative aspects of consciousness) that have recently been targets of intense philosophical discussion. In a nutshell, they add a rich empirical dimension to what appears to be a rising worldwide chorus of theoretical dissatisfaction with classical physicalism as a formal metaphysical position. We seem to be at or very near a major inflection point in modern intellectual history.

This first-stage effort culminated in publication of an 832-page book titled *Irreducible Mind* (Kelly et al., 2007; henceforth *IM*). For details of the evidence I must refer readers to *IM* itself,

but what matters most here is its central theoretical implication. Specifically, it became clear that rogue phenomena of the sorts we catalogued can be accommodated more naturally within an alternative to the conventional physicalist interpretation of the brain/mind correlation, an interpretation already advanced in abstract form by William James (1898/1900). James there points out that to describe the mind as a function of the brain does not fully specify the character of the functional dependence. Physiologists routinely presume that the role of the brain is *productive*, the brain generating the mind in something like the way that the tea kettle generates steam, or the electric current flowing in a lamp generates light, but there are other forms of functional dependence which merit closer consideration. The true function of the brain might for example be *permissive*, like the trigger of a crossbow, or more importantly *transmissive*, like an optical lens or a prism, or like the keys of a pipe organ (or perhaps, in more contemporary terms, like the receivers in our radios and televisions).

More generally, one can at least dimly imagine some sort of mental reality – which in James’s view might be anything from a finite mind or personality to a World Soul or cosmic consciousness – that is closely coupled to the brain functionally but somehow distinct from it. Within this basic framework James himself speaks variously of the brain as straining, sifting, canalizing, limiting, and individualizing that larger mental reality existing behind the scenes. He quotes approvingly Schiller’s characterization of matter as “an admirably calculated machinery for regulating, limiting and restraining the consciousness which it encases. ... Matter is not that which *produces* consciousness, but that which *limits* it, and confines its intensity within certain limits” (James, 1898/1900, pp. 66-67), and Kant’s declaration in the *Critique of Pure Reason* that “the body would thus be, not the cause of our thinking, but merely a condition restrictive thereof, and, although essential to our sensuous and animal consciousness, it may be regarded as an impediment of our pure spiritual life” (as cited in James, pp. 28-29). James also explicitly portrays the brain as exerting these various effects in a manner dependent on its own functional status, and links this idea to Fechner’s conception of a fluctuating psychophysical threshold (p. 24, pp. 59-66).

Much can immediately be said in favor of such a picture, James then argues. It is in principle compatible with all of the facts conventionally interpreted under the production model, and however metaphorical and incomprehensible it might at first seem, it is in reality no more so than its physicalist rival. It also has certain positive superiorities: In particular, it appears potentially capable of explaining various additional facts, including those being unearthed by F. W. H. Myers and his colleagues in psychical research (pp. 24-27).

In sum, “transmission” or “filter” models are *logically* viable, and they should rise or fall in the usual scientific way in light of their ability to accommodate the available empirical evidence. The central aim of the first phase of our Esalen/CTR project had been to review and re-assess Myers’s filter-type model of human personality in light of subsequent research, and we had

found that the evidence supporting such pictures has actually grown far stronger in the century following his death. Myers and James were of course soon pushed aside by the rise of radical behaviorism with its self-conscious aping of the methods of classical physics, and that influence persists in modified form even now in mainstream cognitive neuroscience. In my view psychology has taken a hundred-year detour, and is only now becoming capable of appreciating the theoretical beachhead that our founders had already established.

I should also underscore here that for me personally this first phase of our project had gone a long way toward dissolving what the eminent American psychologist Gardner Murphy (1961) long ago called the “immovable object” in the survival debate – the *a priori* biological objection to survival: Specifically, if physicalism were true, and mind and consciousness manufactured entirely by neurophysiological processes occurring in brains, then survival would be impossible, period. This is essentially the position argued *ad nauseum* by Martin and Augustine (2015), as though it were something novel. But the evidence we assembled in *IM* clearly shows, I submit, that the connections between mind and brain are in fact much looser, and can be conceptualized in the alternative fashion of filter or transmission models without violence to other parts of our scientific understanding, including in particular leading-edge neuroscience and physics (see especially *IM* Chapter 9). For me this shift in theoretical perspective instantly opened the door to the possibility of survival.

The normally hidden subliminal region of the mind, “The More” of William James, is the wellspring of the latent human potentials that historically have comprised Esalen’s main practical focus. But it is also precisely these transpersonal aspects – especially psi phenomena and mystical experience with their deep historical and psychological interconnections, postmortem survival, and genius in its highest expressions – which jointly demonstrate that classical physicalism must give way to some richer form of metaphysics. Please note here that what is at issue is *not* whether we will have metaphysics – because we inevitably will, whether conscious of it or not – but whether we will have good metaphysics or bad.

Classical physicalism is definitely inadequate, but what sort of alternative metaphysics should take its place? Our basic strategy in approaching this second and much more difficult task was to examine in depth a sampling of conceptual frameworks or theories, ancient and modern, that take the existence of rogue phenomena of the sorts catalogued in *IM* for granted and attempt to imagine how reality must be constituted in order that such things can happen. This ultimately led to our publication of a second large book, *Beyond Physicalism* (Kelly, Crabtree, & Marshall, 2015; henceforth, *BP*), which includes theoretical contributions from an unusual diversity of perspectives including those of physicists, neuroscientists, psychologists, philosophers, and scholars of religion.

The central conclusion of *BP* is that theorizing based on an adequately comprehensive empirical foundation of the sort set forth in *IM* leads inescapably into metaphysical territory partly shared with the world's major religious traditions. Specifically, we argue that emerging developments in science and comparative religion, viewed in relation to centuries of philosophical theology, point to some form of evolutionary panentheism as the current best guess about the metaphysically ultimate nature of things. In brief, panentheisms attempt to split the difference between classical theisms and pantheisms, conceiving of an ultimate consciousness of some sort as pervading or constituting the manifest world, as in pantheism, but with something beyond, as in theism. The version we tentatively embrace further conceives the universe as in some sense slowly waking up to itself through evolution in time. Most importantly, the rough first-approximation picture we have developed so far can be elaborated and tested through many kinds of further empirical research, especially research on meditation and psychedelics as pathways into higher states of consciousness. In sum, although a great deal remains to be done both theoretically and empirically to bring the current rough picture into sharper focus, we feel confident that it is headed in the right general direction.

What we see currently emerging, in short, is a middle way between the warring fundamentalisms – religious *and* scientific – that have so polarized recent public discourse; specifically, an expanded science-based worldview that can accommodate empirical realities of paranormal and spiritual sorts, including postmortem survival, while also rejecting rationally untenable *overbeliefs* of the sorts targeted by critics of institutional religions. This emerging vision is both scientifically justifiable and spiritually satisfying, combining the best aspects of our scientific and religious heritage in an effort to reconcile these two greatest forces in human history. What is ultimately at stake here seems nothing less than recovery, in an intellectually responsible manner, of parts of our human heritage that were prematurely discarded with the meteoric rise of modern science starting four centuries ago. And what is especially significant at this critical juncture, and the fundamental new factor that may finally allow this recovery to succeed after numerous previous failures, is that it is now being energized by leading-edge developments in science itself. A potentially viable path to a better world seems to be opening up.

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