

What is the Best Available Evidence for the Survival of Human Consciousness after Permanent Bodily Death?

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In memory of Carlos S. Alvarado (1955-2021)

Summary: This essay makes the case for survival in two parts. Part 1, which draws on my work in the academic history of science, intends to clear the path for an unbiased appreciation of the empirical evidence discussed in Part 2, as well as for other essays in this contest which I presume will confront the empirical data head-on: It identifies and eliminates *common obstacles* in the way of recognizing the very *existence* of a serious survival research tradition, which began in the late 1800s and continues in the present time. In line with the consensus of perfectly mainstream history of science, I will show that the marginalization of survival research had practically nothing to do with the growth of scientific knowledge. I reconstruct striking continuities of serious scientific interest in survival from the Scientific Revolution to the present time, beginning with founders of modern science like Francis Bacon and Robert Boyle in England. I then discuss later eminent scientific figures interested in survival research, including William James, the ‘father’ of American psychology. Closely working with psychical researchers in England, James in fact conducted ground-breaking empirical investigations of spirit apparitions and mediumship, and formulated important methodological maxims of survival research.

The empirical Part 2 begins by discussing evidence from conventional biomedical sciences showing that, contrary to popular assumptions, survival-related *subjective* experiences – of encounters with the departed, end-of-life and near-death experiences (NDEs) – are widespread and can have strong therapeutic effects. I will then look at recent developments in neuroscience, which increasingly show that traditional ‘production’ models of mind-brain connections, which predict that consciousness is annihilated at death, are inadequate to account for recognized psychophysical anomalies such as ‘terminal lucidity’ and paradox findings of neuroimaging studies during induced mystical and NDE-type experiences. I will then discuss evidence showing that not all experiences suggestive of survival are subjective, by drawing on rigorously investigated cases of mediumship and children claiming memories of past lives. Finally, I will argue that the only *rational* alternatives to the assumption of personal survival are not fraud or chance coincidence, but squarely parapsychological explanations. I will conclude by arguing that there is strong evidence for personal motivation in certain categories of mediumship, which, together with certain features of well-documented cases of the reincarnation type, more than just tip the scale towards survival.

PART 1:

IDENTIFYING AND REMOVING THE OBSTACLES

Leprous Cats and Public Opinion

120 years ago, Oxford philosopher F.C.S. Schiller wryly observed that it would be “easier to raise the funds for a hospital for leprous cats” than for scientific research on the question of survival after death.¹ Indeed, the only substantial scientific body dedicated to questions touching upon the subject at the time was the Society for Psychical Research

¹ Schiller (1901), 433.

(SPR) in England. Founded in 1882 by eminent Victorian intellectuals, the SPR's mission was to investigate various contested phenomena associated with spiritualism and other controversial beliefs and practices, "in the same spirit of exact and unimpassioned inquiry which has enabled science to solve so many problems, once not less obscure nor less hotly debated".² Members of the SPR included the leading scientists of the day, such as physics Nobel Laureates J. J. Thomson (the discoverer of the electron), and later Marie Curie. Serving as a the SPR's president in the years 1894 to 1895 was the great Harvard psychologist and philosopher, William James, who was also a co-founder of the smaller (and initially rather passive) American SPR in 1884. Certain influential accounts have portrayed the SPR as little more than a club of self-deluded spiritualists. But as we will see shortly, SPR membership often did not even indicate interest in the question of survival in the first place.³

Fast forward to the present day: The SPR still exists, and although it continues to publish research on the 'paranormal' in its peer-reviewed *Journal* and *Proceedings*, it is now a mere shadow of its glorious Victorian self. Today, still not all of the research published by the SPR is concerned with survival, and the society is still lacking means to train let alone employ investigators. In the USA, on the other hand, there exists a research unit, which – housed by one of the country's most prestigious medical schools – has specialised in survival research for over half a century. Founded in 1967 at the University of Virginia by the Canadian psychiatrist Ian Stevenson, the Division of Perceptual Studies (DOPS) is a team of psychiatrists, neuroscientists and psychologists, who investigate a wide range of reported phenomena suggestive of survival – e.g., near-death experiences, apparitions, spirit mediumship, terminal lucidity, and children's memories of previous

² Society for Psychical Research (1882), 4. By far still the most factually accurate history of the early SPR is Gauld (1968).

³ From 1886 to 1889, and from 1907 to the late 1990s, the American Society for Psychical Research (ASPR) also published key studies on survival in their *Journal* and *Proceedings*. On the tumultuous history of the ASPR see Society for Psychical Research (2019) and Sommer (2020).

lives. Applying open-minded yet critical and rigorous methodological approaches, members of DOPS have produced an astounding wealth of sophisticated research, much of which has been published in scientific and medical mainstream journals.⁴

As I will argue in Part 2 of this essay, anybody who has carefully studied this and the vast psychical research literature produced since the 1880s (*and* the critical responses to it) should agree it can no longer be doubted the data suggests that *something* strange is going on. Obviously, the ‘paranormal’ has always attracted dubious characters, and it would be ludicrous to deny that bias, wishful thinking, fraud and errors of human perception are problems which serious researchers constantly have to grapple with. But good science should and *can* separate the wheat from the chaff. And as I’ll try to indicate later, a perspective which integrates these data with more conventional scientific and medical knowledge can demonstrate that they point to a coherent picture of mind-body interaction that far outstrips mainstream reductionist accounts. In short, we are dealing with pretty revolutionary stuff, clearly demonstrating that the still prevailing worldview of nineteenth century physics is in urgent need of a facelift, to put it mildly.

But ask a random scientist if he or she has ever heard of DOPS or the SPR, let alone studied any of the psychical research data published over the past 150 years. Chances are that your question will either be met with a shrug or a reference to Wikipedia entries debunking all these studies as obvious pseudoscience. In fact, sociological evidence suggests that the average scientist rarely studies original, peer-reviewed research publications on ‘paranormal’ phenomena. Like the opinions of most non-scientists, judgements by members of the ‘scientific community’ on these controversial topics seem overwhelmingly informed by secondary, popular portrayals of this research.⁵

⁴ Much of this literature can be freely downloaded on the University of Virginia website at <https://med.virginia.edu/perceptual-studies>

⁵ E.g., McClenon (1984). The reliance of scientists on *popular* summaries of research in fields other than their own is well known. See, e.g. Phillips (Phillips), Weingart (1998).

Accounts informing public and mainstream scientific opinion are often produced or inspired by professional ‘Skeptics’, who usually make no secret of their outright hostility to the ‘paranormal’ in all its guises. The reason I write ‘Skeptics’ in American spelling and with a capital S is to specifically refer to self-appointed gatekeepers of scientific orthodoxy, who are typically associated with the ‘Committee for Skeptical Inquiry’ (CSI, formerly CSICOP) in the US.⁶ Well organized internationally in associations for the supposed promotion of ‘science’ and ‘reason’, these self-styled experts on ‘pseudoscience’ actively maintain and cultivate links to journalists, but have often no scientific or relevant academic training. To publicly bolster their supposedly scientific mission, Skeptics organizations have recruited celebrity scientists and science popularizers as ‘Fellows’ – astronomer Neil deGrasse Tyson, Harvard psychologists Steven Pinker, and the ‘Science Guy’, engineer Bill Nye, are just some of the most prominent names in the US.⁷ And while Skeptics portray their widely publicized debunking exercises as ‘investigations’ and ‘inquiry’, their targets have documented grave misrepresentations of the targeted research, along with other serious acts of intellectual dishonesty.⁸

Sociologists of science studying marginalized disciplines have independently confirmed these serious accusations: Regardless of the quality of scientific methods employed by unorthodox scientists, professional Skeptics have misrepresented even rigorous research as dangerous quackery, as soon as it produces findings suggesting the existence of ‘paranormal’ phenomena. Skeptical activists and their followers typically don’t err on the side of responsible caution, but are out to eradicate belief in the ‘paranormal’ whatever it takes – consciously destroying reputations and careers of serious,

⁶ In contrast, by ‘sceptic’ I mean one whose doubts are based not on a priori grounds, but on *actively informed* reasoning – which, it should go without saying, is the only scientifically constructive form of scepticism.

⁷ <https://skepticalinquirer.org/fellows-and-staff>. Prominent supporters of Skeptical activism in the UK are, for example, astronomer Brian Cox, biologist and militant atheist Richard Dawkins, and comedians Ricky Gervais and Stephen Fry.

⁸ For well-substantiated accusations by parapsychological researchers of unethical behaviour of ‘Skeptics’ see, e.g., Hansen (1992), Honorton (1993), Carter (2010).

qualified scientists in due course.⁹ In the face of well-documented instances of unethical conduct, scholars who studied the strategies by which ‘Skeptics’ and their supporters powerfully shape public opinion for decades have expressed concern. Sociologists of science Harry Collins and Robert Evans, for example, felt it was their duty to speak up and say:

*this is wrong – it is a dereliction of scientific duty. After all, among other things, scientists are there to help us know whether there are paranormal effects [...], but their input should be based on their best scientific efforts; ex-cathedra statements, or dirty tricks, are of no special value, nor should scientists pass their responsibility to outside groups.*¹⁰

Neither the general public nor scientists normally read sociological studies, any more than psychical research periodicals. It’s therefore pretty uncontroversial to say that your average scientist is usually unaware of the actually relevant research on the ‘paranormal’ – and the not exactly scientific ways by which the supposed consensus of the ‘scientific community’ regarding the non-existence of ‘psychic’ phenomena has been formed. This has certainly been my personal experience as well, in countless discussions I had with scientist friends and acquaintances over the last decades.

Most instructive in this regard were almost daily encounters with elite academics from a wide range of scientific backgrounds during my three years as a Research Fellow at Churchill College at the University of Cambridge. The Fellowship was awarded in recognition of my doctoral studies, which reconstructed the simultaneous emergence of experimental psychology and psychical research in nineteenth century Europe and US.¹¹ Being a Fellow at a typical Oxbridge college is a little like being part of a monastery, as

⁹ See, e.g., Collins (1983), Collins & Pinch (Collins & Pinch, 1979, 1982, 1998; Pinch & Collins, 1984), Hess (Hess, 1992, 1993). On Skeptical activism controlling the narrative regarding unorthodox science on Wikipedia, see Martin (2021).

¹⁰ Collins & Evans (2002), 265.

¹¹ Sommer (2013a). My dissertation also won an award from the International Union of the History and Philosophy of Science and Technology.

you live on college grounds and take your meals with other Fellows. Modelled on the MIT in the US, Churchill is one of the youngest and most secular Cambridge colleges, and its research and teaching staff are predominantly natural and applied scientists. Overwhelmingly, when I told scientists – including Fellows from other Oxbridge colleges and visitors from universities abroad – about my historical research, I had the impression of a general open-mindedness regarding my historical work.

Usually, however, there was considerable surprise when I mentioned that serious research on psychic phenomena was still going on. But as far as I can tell, even the few whose interest appeared sufficiently strong to request some of this literature never actually read it.

I was particularly stumped by several Fellows who told me in private of their own strange experiences. For example, one stressed he didn't believe in spirits or any other 'paranormal nonsense'. But then he shared what he said was the most striking experience of his life: he claimed that he *knew* his son had just died, at the very moment he had in fact perished in a car accident in London. Another senior scientist at Cambridge claimed that his wife saw apparitions of the dead on a regular basis. But even in these and other instances, there was not the slightest interest to study the literature, let alone to conduct research first-hand – or at least help bring critical but open-minded scientific attention to such experiences into the academic mainstream.

Another group of academic experts whose very job it is to help us separate the wheat from the chaff are professional philosophers of science, notably those trying to work out formal criteria distinguishing legitimate science from pseudo-science. But this literature hardly inspires confidence either. Seven years ago, I guest-edited a special section in a leading journal for the history and philosophy of science, with articles by fellow scholars working on psychical research in the history of science. In my introduction, I surveyed the professional literature and found that philosophers quite often literally didn't know what they were writing about when it came to psychical

research: primary sources such as original studies published by trained scientists in peer-reviewed organs were bypassed, and instead there was an unquestioning reliance on highly problematic secondary accounts popularized by media-savvy Skeptical activists and their supporters.

To illustrate *ambiguous* attitudes by philosophers of science to the topic, I also quoted from a private letter by Karl Popper, one of the most prominent philosophers of science of all time. Turns out that Popper himself was convinced of the existence of ‘paranormal’ phenomena, but absolutely rejected the idea of studying them scientifically – without bothering to offer a rational explanation why.¹²

Knowing my audience, I deliberately didn’t make any claims about the *reality* of psychic phenomena in my review, but simply focused on the philosophical *reception* of parapsychological research. Still, when I submitted the proofs for print, I felt a little nervous and started bracing myself for the expected onslaught.

But what happened? Practically nothing. No barrage of emails hurling abuse, no constructive critiques, no expressions of agreement. Today, my overview has 27 citations on Google Scholar by authors other than myself, but not a single one is from a philosophical text.

It seems, then, that you can’t just throw the data at scientists and other professional thinkers, expecting them to engage with this controversial material the way they engage with their own, conventional research specialities. Of course, serious research requires time and funding. So the situation may change if we could provide scientists with real career opportunities and some projection from the machinations of Skeptical activists and their journalistic supporters.

And I’m convinced that outright hostility to this research is not nearly as widespread as *indifference*. Not much has changed in this regard since 1869, when William James began complaining about responses by most of his fellow scientists to the

¹² Sommer (2014), 43.

reported marvels of spiritualism: James (who never came to fully believe in personal survival and was critical of the excesses of spiritualist beliefs) found that it was almost impossible to move scientists to actually *investigate* these empirical indications for survival. In practical terms, James thought, the usual response by scientists was to demand “that spiritualists should *come* and demonstrate to them the truth of their doctrine, by something little short of a surgical operation upon their intellects”.¹³

Meet the Judge

Since the rules of this contest demand evidence of the kind that would be accepted in a court of law, why not assume the person I need to convince is a hypothetical *judge*. Ideally one who has already demonstrated that she knows it’s her very *job* to put personal biases aside – because a life might depend on it. In fact, I will state for the case of survival what William James claimed 125 years ago concerning telepathy: “the concrete evidence [...] is good enough to hang a man twenty times over”.¹⁴

Critics may object to the legal metaphor. After all, we know all too well that crime *exists*. The task of providing persuasive arguments for the reality of an afterlife seems an entirely different ballgame, because a judge usually just needs to determine the Who Dunit, but never the existence of crime as such, *as a new natural fact*. So let’s imagine the persuasiveness of my arguments will *actually* inform our judge’s verdict whether or not to ‘hang a man’. And to make it difficult for me, let’s also agree she has the following characteristics:

- born or raised in a Western, industrialized country;
- no personal experience suggestive of survival;
- was raised and trained to believe the only legitimate view of the world is ‘materialism’ – the inevitable result of centuries of unbiased, scientific research;

¹³ James (1869), n.p., original emphasis.

¹⁴ James (1896), 650.

- thinks that any belief in survival is *wishful thinking* and a narcissistic reluctance to come to grips with the brutal facts of nature;
- takes for granted that all mediums are just *frauds* preying on the bereaved;
- believes that visions of the dead and other survival-related experiences are only reported by liars or *psychotics*;
- if not, they *always can* or *should be* explained by well-known *errors of perception*;
- believes that even if survival was a fact, *practical fruits* of a belief in it can only be *disastrous* (thinking of Jihad suicide bombers and Christians happily threatening atheists and LGBT communities with eternal torment in hell).

Let's further assume our judge has already taken note of what I argued above:

There are strong indications that scientists and the educated public are actually not very interested in *evidence* for or against survival.

In response, she may argue that this indifference is actually prudent. Because everybody and their mom *knows* that science has once and for all kicked the 'paranormal' out of educated discourse a long time ago – in fact, *centuries* before William James complained about his scientific peers' indifference to reported spiritualist phenomena. If there was something to this kind of stuff, surely science icons like Galileo, Newton, Francis Bacon and Robert Boyle would have said so. Hence, granted the methods by which Skeptics actively influence public opinion are problematic, they are still *right*: any evidence for survival presented today is absolutely incompatible with the bulk of knowledge, which science has amassed since the heyday of the Scientific Revolution in the late 1500s and throughout the age of Enlightenment.

It's exactly on this rather fundamental point where my credentials as a historian of science may encourage our judge to take the next set of arguments seriously indeed. The following section includes material which I have published in mainstream academic organs, and taught at University College London and the University of Cambridge. Moreover, what I say is not the opinion of a fringe historian, but the current consensus of

all mainstream historians of science and medicine who have *specifically investigated* historical relationships of science with the ‘occult’ – particularly the supposed ‘decline of magic’ in Western science.¹⁵

Mainstream History of Science vs. the Myth of Disenchantment

The Scientific Revolution. Cradle of ‘Scientific Naturalism’?

One of the first histories of parapsychological research I read was by John Beloff, a widely respected British psychologist and advocate of impartial research on the paranormal. Beloff was also instrumental in establishing the Koestler Chair of Parapsychology at the University of Edinburgh, following a bequest by author and social critic Arthur Koestler. I highly recommend Beloff’s sketch of the little-known history of parapsychology at universities other than Edinburgh throughout the twentieth century, which he wrote from the well-informed perspective of an insider.

But I doubt Beloff did his efforts of bringing parapsychology into the scientific mainstream any favours when he set the stage with a reference to the Scientific Revolution beginning in the sixteenth century. It was then, he wrote, that modern standard notions of “a sharp distinction between normal and paranormal, between science and pseudoscience, reality and magic” began to crystalize, and it was in the “aftermath of this revolution” that these supposedly fixed boundaries have “ever since divided parapsychology from conventional science”.¹⁶

To be fair to Beloff, he did draw on writings by professional historians of science. However, most of his sources were already outdated by several decades at the time he wrote his book. Other works not considered, such as a now classical eight-volume survey

¹⁵ See also my constantly updated list of important readings in the academic history of science and magic at <https://www.forbiddenhistories.com/key-readings>.

¹⁶ Beloff (1993), 8.

by science historian Lynn Thorndike, had already documented the significance of the ‘occult’ in the early history of experimental science by the late 1950s.¹⁷ Since about the 1970s, other mainstream historical works increasingly showed that supposedly fixed boundaries between science and the ‘paranormal’ simply did not exist during the Scientific Revolution. On the contrary, it is now common knowledge that practically all figureheads of the Scientific Revolution held rather strong occult beliefs.¹⁸ Isaac Newton’s alchemy is probably well known today – though not nearly as widely as his studies of apocalyptic prophecies.¹⁹ And next time you meet an astronomer, observe his reaction when you mention that Galileo, Kepler, and in fact all early heliocentrists, were practicing astrologers who didn’t just cast horoscopes for money, but because they seriously believed astrology worked.²⁰

The reason why I’m pointing this out is obviously not to imply that we all should believe in astrology because Kepler and Galileo did. It’s simply to illustrate the fact that once certain ingrained cultural myths are being questioned, public opinion can be as impervious to mainstream historical and sociological evidence as it is to heterodox but well-supported empirical findings. And here again it is no accident that modern historical standard narratives, which inform public opinion as well as the self-image of scientists as part of their very training, have relied upon popular myths rather than academic research.

The bible of modern popular science is probably Carl Sagan’s best-selling *The Demon-Haunted World*, first published in 1995. Sagan, an astronomer on a mission to improve public scientific literacy and critical thinking, was also a co-founder of the modern Skeptics movement. His works are no history books, but he occasionally invoked great scientific names of the past to get his core message across: Scientists are the

¹⁷ Thorndike (1923-1958).

¹⁸ A key text on magic and the Scientific Revolution is Webster (1982). For readable summaries by leading historians of the Scientific Revolution and the central role of occult philosophies, see Principe (2011) and Shapin (2018).

¹⁹ Newton (1733).

²⁰ On Galileo and astrology, see, e.g. Rutkin (2018).

incarnation of heroic anti-dogmatism and love of truth, and if there was an essential characteristic of science, it was the systematic elimination of personal biases and wishful thinking. From its early beginnings, science was thus defined by a single and universal *method*, which boiled down to a set of personal virtues vouching for the *self-correcting nature* of science.

As an illustration, Sagan paraphrased statements to this effect by Francis Bacon, a key figure of the Scientific Revolution in England, who has been called the very ‘father’ of modern science. In 1604, for example, Bacon cautioned that the “root of superstition” lay in the widespread mental habit of men who “observe when things hit, and not when they miss, and commit to memory the one, and forget and pass over the other”.²¹ Sagan called this principle “observational selection”, but psychologists might say that Bacon gave a description of *confirmation bias* – roughly, the natural but unfortunate tendency of our minds to inflate the significance of perceptions if they confirm our beliefs. And while Sagan admitted that scientists have sometimes sinned against the ‘scientific method’ by being dogmatic and unethical, the take-home message of his writings was that such instances were only insignificant exceptions to the rule: The organizing principle of science has always been, still is, and will ever be, nothing but reason and devotion to truth.

We will see in a moment why his references to Bacon, which served the purpose of making Bacon appear like a modern ‘naturalistic’ scientist, may qualify as unintended evidence for Sagan’s own confirmation bias. In fact, other passages in Bacon’s writings, which clearly out him as a *believer* in things most scientists would dismiss as ‘superstition’, are pretty hard to miss. And as far as the ‘scientific method’ is concerned, Sagan also failed to address works by professional historians and historically informed philosophers of science who systematically studied the very *practice* of science, and in result dropped

²¹ Bacon (1803), vol. 2, 73 (1803), paraphrased in Sagan (1995), 201.

the term ‘the scientific method’ as an accurate description of what science separated from other fields of knowledge.²²

In 1974, *Science* journal in fact published an article with the peculiar title “Should the history of science be rated X?”, which seriously entertained the question if the growing consensus in the community of professional historians of science should be *censored*. After all, the upshot of this work, which the article stated could no longer be doubted, was that the popular image of the scientist did not stand up to scrutiny. History of science scholarship had thoroughly undermined the “professional ideal and public image of scientists as rational, open-minded investigators, proceeding methodically, grounded incontrovertibly in the outcome of controlled experiments, and seeking objectively for the truth, let the chips fall where they may”.²³ The author, a physicist and historian, justified his implicit suggestion to censor the findings of colleagues in the mainstream history of science for *pedagogic* reasons, arguing that young scientists needed a moral compass and heroes to look up to – even if the heroism of these figures was largely mythical. As candidates for censorship, he further briefly mentioned historical studies revealing occult beliefs in icons of the Scientific Revolution, which, however, he downplayed as supposedly inconclusive.

But the concrete historical evidence for the occult underpinnings of the Scientific Revolution was already too strong to be dismissed, with the paranormal beliefs of Francis Bacon being a point in question.²⁴ Bacon in fact suggested a wide range of squarely ‘parapsychological’ experiments, to test the effects of ‘fascination’ and ‘imagination’ – contemporary terms for modern concepts including ‘telepathy’ and ‘psychokinesis’. In a statement particularly interesting for survival researchers, Bacon was further open to the belief that

²² E.g. Kuhn (1970, 1996), Lakatos & Musgrave (1970), Feyerabend (1986), Laudan (1983).

²³ Brush (1974), 1164.

²⁴ E.g. Walker (1958).

*the mind, when it is withdrawn and collected into itself [...] hath some extent and latitude of prenotion, which therefore appeareth most in sleep, in extasies, and near death, and more rarely in waking apprehensions; and is induced and furthered by those abstinences and observances which make the mind most to consist in itself.*²⁵

Bacon here refers to prophetic glimpses into the future, reported to occur during what we may call ‘altered states of consciousness’ – sleep, trance or ecstasy, meditation, and the process of dying. Elsewhere, Bacon admitted that questions about the nature of the ‘soul’ – including its survival after death – had previously not been investigated in a systematic manner. Possible solutions, Bacon observed, “have been not more laboriously inquired than variously reported; so as the travel therein taken, seemeth to have been rather in a maze than in a way”.²⁶

However, instead of conducting such experiments, let alone suggesting concrete areas of research especially concerning *survival*, Bacon nipped such scientific aspirations firmly in the bud:

*But although I am of opinion, that this knowledge may be more really and soundly inquired even in nature than it hath been; yet I hold, that in the end it must be bounded by religion, or else it will be subject to deceit and delusion [...] the true knowledge of the nature and state of the soul, must come by the same inspiration that gave the substance.*²⁷

In other words: Bacon here explicitly disavows ‘survival research’ – not for scientific, but for squarely theological reasons. In the spirit of his time, he demanded that knowledge about the hereafter must come not by natural, but by properly *supernatural* means: by divine inspiration.

Bacon has been widely portrayed as the first thinker to systematically propose a modern scientific approach to nature, one supposedly unrestricted by religious dogma.

²⁵ Bacon (1803), vol. 1, 128.

²⁶ Bacon (1803), vol. 1, 127.

²⁷ Bacon (1803), vol. 1, 127.

Yet, especially in regard to the question of empirical research concerning survival, we see that this is simply false. Here it's also important to note that Bacon's daytime job was not 'man of science', but Lord Chancellor and Solicitor General of England. And in his role of a high-ranking politician, Bacon again expressed his religious worries over magic – by formulating bills for the prosecution of witchcraft such as these:

Where a man conjures, or invokes wicked spirits, it is felony.

*Where a man doth use or practise any manner of witchcraft, whereby any person shall be killed, wasted, or lamed in his body, it is felony.*²⁸

Perhaps you are puzzled by Bacon's prohibition to invoke *wicked* spirits only. But far from encouraging intercourse with good or divine spirits, early modern intellectuals considered any attempt to contact the spirit world with profound concerns. To be sure, in Bacon's day you would have been in serious trouble if you *denied* the existence of immaterial souls. But that may have been nothing compared to the problems you'd gotten yourself into by telling someone you were trying to *converse* with them. Bacon and fellow intellectuals still subscribed to biblical authority, and scriptural prohibitions of contacting spirits – the story of the witch of Endor in the Old Testament and warnings of evil spirits camouflaging as angels in the New Testament being important examples – still determined the way mainstream scholars like Bacon thought about these things.²⁹

Hence, Bacon's contemporary, the famous Cambridge mathematician John Dee, had every reason not to publicize his ostensible communications with angels, which he claimed to have received through crystal-gazing. When Oxford scholar Méric Casaubon published the records after Dee's death, he in fact presented them as a case study in illicit

²⁸ Bacon (ca. 1607/1803), vol. 4, 293.

²⁹ See, e.g., Clark (1999).

magic or necromancy. Issuing a stern warning in the preface, Casaubon asserted that Dee's accounts of spirits were authentic but "A Work of Darknesse".³⁰

We will see that fears of devils and other theological concerns would often continue to motivate intellectual opposition to the study of 'occult' phenomena until at least the nineteenth century. In fact, it would be a grave mistake to assume that attacks on all things smacking of magic by certain prominent modern *scientists* were necessarily driven by sympathies with 'scientific materialism', let alone atheism.

And here it's worth remembering that the very word 'scientist' was only coined in the 1830s, about two decades after Bacon's death. (Before then, men of science were called 'natural philosophers'). Many eminent scientific figures – such as physicist Michael Faraday and Darwin's 'bulldog', Thomas H. Huxley – rather disliked the term and refused to call themselves so.³¹ And while we are accustomed to assume that modern experimental science has always been the domain of universities, by the time of the coinage of 'scientist' there were almost no *university* laboratories for experimental sciences like physics anywhere in the world.

In fact, modern scientific experimentalism as a *collective* and *transparent* endeavour – with findings published in professional periodicals for anyone to scrutinize – emerged as an expression of *protest* against the perceived dogmatism and stagnation of knowledge in the early modern universities. Pathbreaking in this respect was the establishment of *private* associations like the Royal Society in England in 1660, which was co-founded by a 'father' of modern chemistry and physics, Robert Boyle. There was probably no other natural philosopher at the time who did more to put Francis Bacon's visions for an experimental approach to nature into common intellectual practice than Boyle, a wealthy man with important political connections. And Boyle and the early Royal Society once

³⁰ Casaubon (1659), 1.

³¹ Ross (1962).

again show the extent to which the close entanglements between early modern science and the ‘paranormal’ were virtually written out of history.

Like Newton, Boyle was an avid practitioner of alchemy, but in contrast to Newton, he was also a strong advocate of what we now may call psychical research. For example, he supported investigations by other Fellows of the Royal Society – most notably Joseph Glanvill and Henry More – of reported apparitions, poltergeist disturbances, spirit possession and hexing. Boyle also wrote the preface to the English translation of the ‘Devil of Mascon’, a French report about a poltergeist case which had thoroughly impressed him.³² Not least, Boyle himself investigated the faith healer Valentine Greatrakes and initiated field research on clairvoyance or Second Sight in the Scottish Highlands.³³ And while modern science popularizers in the ‘Skeptical’ tradition of Sagan typically cast the figure of the stereotypical scientist as a timeless *debunker* of ‘paranormal’ phenomena, the case of Boyle and others shows the opposite at a crucial moment in the history of modern science: Boyle and colleagues at the Royal Society tried not to debunk, but to *establish* the reality of the ‘paranormal’.

Here we must of course stress that Boyle and colleagues promoted these investigations explicitly as a weapon against ‘atheism’, and that their parapsychological research never became official part of Royal Society business. In fact, some Fellows like Robert Hooke, the astronomer and pioneer of modern microscopy, vocally opposed it. But neither should the Christian apologetic agenda of Boyle and fellow parapsychological researchers in the Royal Society make us assume that early modern *scepticism* regarding occult phenomena was informed or motivated by *science*, let alone that atheism or materialism were even remotely popular positions within early modern scientific communities. And if you look for dispassionate methodological dissections of these investigations by critics like Hooke, you will find nothing of the sort. Hooke’s ‘critiques’

³² Perrault (1658).

³³ See, for example, Hoppen (1976), Hunter (2000, 2001), Elmer (2013). Boyle’s original notes and records of some of these investigations can be accessed via the Boyle Project at <https://www.bbk.ac.uk/boyle>.

were essentially polemical and sarcastic, and therefore hardly more ‘scientific’ than Isaac Newton’s later reported howl of despair over those taking news of a contemporary poltergeist outbreak seriously: “Oh! yee fools ... will you never have any witt, know yee not that all such things are meer cheats and impostures? Fy, fy!”³⁴

Newton’s own rather strong occult beliefs and practices – the study of alchemy and biblical prophecies – are well known today, and in the case of Hooke it’s also important to note that his scepticism regarding the ‘paranormal’ was rather *selective* as well. While he rejected the heretical investigations of Boyle and other Fellows offhand, Hooke was still a believer in ‘fascination’ and ‘imagination’ – capacities of *embodied* minds to act and perceive at a distance. In his ‘Lectures of Light’, for example, Hooke provided a mechanical account of such parapsychological effects.³⁵

In the case of Newton’s scepticism regarding poltergeist phenomena, it would be fair to say that he simply had no *theological use* for reported manifestations of supposedly evil spirits. Newton’s theology belonged to a tradition called ‘mortalism’ – a term for then heretical Christian conceptions of the mind as being essentially dependent on the body. But far from maintaining sympathies for atheism, mortalists like Newton held that the only legitimate notion of immortality was the *bodily resurrection* of the dead on Judgment Day. According to mortalist theologies in their strict form, mind and body were inseparable and indeed perished together at death, only to be recreated for eternal bliss or damnation in a *physical* hell or heaven by a supernatural act of God. Newton kept his strong but heretical mortalist faith a secret to avoid trouble, but again, we shouldn’t simply assume his religion was informed by the state of science at the time.³⁶

In Boyle’s day and indeed throughout the next two centuries to come, it was still primarily fundamental *religious* and associated political convictions and worries, which discouraged and practically outlawed parapsychological research perhaps more than

³⁴ Quoted in Hunter (2020), 113.

³⁵ Hooke (1705).

³⁶ Snobelen (2004), Dempsey (2006).

anything else. Religion is almost certainly also the reason why Boyle and colleagues never held seances or tried other properly experimental approaches to the spirit world. In fact, for a while Boyle seriously considered taking up John Dee's technique of crystal-gazing to communicate with spirits, but in the end his scientific curiosity was outweighed by demonological scruples.³⁷

The Enlightenment Crusade

So where did all this 'atheism' and opposition to belief in paranormal phenomena come from, which troubled Boyle and several fellow men of science so much? The consensus of professional historians of science today is once again completely at odds with popular standard narratives here. In Boyle's day, the Enlightenment default derision of all things 'paranormal', which also increasingly came to characterise *religious* texts, was first popularized not by men of science, but by Protestant divines and anti-clerical though not strictly atheistic 'free-thinkers', who typically gathered not in scientific societies but at court and in fashionable coffee-houses.

Moreover, free-thinkers in England were often followers of the philosopher Thomas Hobbes, who – unlike Newton – made no secret of his mortalist theology. This – as well as the fact that he was a vocal philosophical critic of *conventional* scientific experimentalism – was enough to make Hobbes a *persona non grata* in the Royal Society.³⁸ Here it's important to point out that allegations of 'atheism' were hurled freely at anyone with unorthodox theological convictions, and it can be doubted if Hobbes really denied the existence of God. It was Hobbes's expressed *Christian* materialism, which inevitably provoked accusations of 'atheism' by the intellectual and scientific mainstream of the time. But while Newton would in secret only reject belief in *evil* spirits (he was fine with angels), the Christian materialism of Hobbes was far more thoroughgoing. This is

³⁷ Hunter (2000), 105.

³⁸ For the antagonism between Hobbes and Boyle regarding the value of experimental science, see Shapin & Schaffer (2011).

especially evident in the many attacks on belief in immaterial spirits and magic in Hobbes's famous *Leviathan*. And as we will see in a moment, it is hardly accidental that the rejection of spirits and magic occurred so prominently in what is now considered a classical text in *political* philosophy.

The key lesson of all this is another insight fundamentally at odds with popular views: In striking contrast to modern 'free-thinkers' since the late nineteenth century, early Enlightenment scoffers at magic did not claim *science* as the ultimate cudgel in their war on belief in the occult. On the contrary, early modern English opponents of magic in fact often followed Hobbes in holding the collective scientific experimentalism of the Royal Society in *contempt*. To assume that the new science championed by Boyle and colleagues – and here I mean perfectly *conventional* experimental sciences, including chemistry and physics – instantly gained prestige would again mean to write history backwards. In fact, those who began to laugh magic and spirits out of intellectual discourse also often mocked the new scientific experimentalism of the Royal Society as a trivial, eccentric fad, unworthy of men of culture and common sense.³⁹

Whereas science historian Michael Hunter, the leading expert on Boyle and the Royal Society, has reconstructed in painstaking detail the actual means by which the 'empirical occult' was suppressed in Enlightenment Britain, other historians have presented similar findings for countries including France, Germany and Italy. The professional consensus regarding the role of *science* for the supposed 'disenchantment' of the world throughout the Enlightenment was nicely captured in a seminal study of the marginalization of the anomalous by the former director of the Max Planck Institute for the History of Science in Berlin and a colleague at Harvard, who observed:

it was neither rationality nor science nor even secularization that buried the wondrous for European elites. Enlightenment savants did not embark on anything like a thorough program to test empirically the strange facts collected so assiduously by their

³⁹ Hunter (2000), esp. chapter 10.

*seventeenth-century predecessors or to offer natural explanations for them [...] Leading Enlightenment intellectuals did not so much debunk marvels as ignore them [...] On metaphysical, aesthetic, and political grounds, they excluded wonders from the realm of the possible, the seemly, and the safe.*⁴⁰

The case of the most famous spirit-seer of the Enlightenment, Emanuel Swedenborg, offers a good illustration of rejections of the occult on such non-scientific grounds. Swedenborg's greatest critic in Germany was philosopher Immanuel Kant, a devout believer in the immortality of the soul. On the one hand, Kant was certainly impressed by reports from reputable witnesses who claimed that Swedenborg – who, incidentally, was a leading man of Scandinavian science and a Fellow of the Royal Society – had demonstrated clairvoyance and the ability to communicate with the dead.⁴¹ But this didn't keep him from ridiculing Swedenborg by comparing spirit visions with brain flatulence, before declaring him mad.⁴² Apparently the only major representative of Enlightenment science to openly criticise Swedenborg was the great English chemist, Joseph Priestley. But despite Priestley's eminence as a natural philosopher, his 'critique' was no more scientific than Kant's. Unlike Kant, Priestley was completely uninterested in testimony for Swedenborg's supposed extra-sensory and mediumistic capacities, and he declared spirit visions null and void for explicitly theological reasons: Priestley, who was a lay preacher as much as man of science, was yet another devout Christian mortalist who used the *Bible* rather than science to 'prove' that immaterial souls and spirits did not exist.⁴³

Skeptics will of course object and say there were at least two instances in which the 'paranormal' was successfully refuted during the Enlightenment by perfectly rational means. One of the standard texts in the arsenal of modern Skeptics, after all, is the essay

⁴⁰ Daston & Park (1998), 361.

⁴¹ Kant (1873).

⁴² Kant (1766).

⁴³ Priestley (1791), Sommer (2021a).

“Of Miracles” by Scottish philosopher and critic of religion, David Hume.⁴⁴ In a nutshell, Hume argued that specific reports of ‘miracles’ can and always should be dismissed in favour of ‘natural’ *general* explanations, such as fraud, errors of perception, love of wonder, and of course religious dogmatism as the prime motivating force behind pitfalls of human testimony regarding the ‘miraculous’. Perhaps most crucially, Hume argued that the better-substantiated reports of ‘miracles’ (he mentioned levitations and dead men coming back to life as examples) were so rare and exceptional that the alleged effects would constitute violations of natural law, and therefore should be rejected along with purely anecdotal claims.⁴⁵

Interestingly, Hume’s arguments were practically ignored by contemporary fellow anti-occultism crusaders, and his essay only began achieving some popularity about a century after his death, when it was cited in battles against spiritualism and other large-scale occult movements. What’s more, it would be wrong to assume it was only spiritualists or religious types who fundamentally *disagreed* with Hume. ‘Darwin’s bulldog’ Thomas H. Huxley, for example, certainly shared Hume’s antipathies with orthodox Christianity and heretical occult beliefs, and dismissed contemporary evidence for paranormal phenomena (some of which, as we shall see, was published by scientific friends of his). Still, as we shall see below, Huxley especially rejected Hume’s interpretation of hypothetical levitations as self-evident violations of natural law, and part 2 of this essay will address other problems with Hume’s arguments.

For now, let’s say the examples of Bacon’s explicitly *theological* prohibition of ‘survival research’, and Boyle’s fears of devils preventing him to follow a strictly experimental route to a spirit world, more than indicate that Hume’s claim that reports of ‘paranormal’ phenomena have only been *motivated* by religious beliefs is questionable at best. But he probably knew this fairly well himself. For example, as an instance of

⁴⁴ E.g. Kurtz (1986), French (2003), Shermer (2002).

⁴⁵ Hume (1750), 173-207.

seemingly well-attested ‘miracles’ reported to occur in the present, Hume referred to marvels associated with a group called the ‘French prophets’. These were followers of a widely revered heretical priest, at whose tomb in Paris a broad range of paranormal phenomena were observed – marvellous cures, clairvoyance, automatic writing and speaking, spirit visions, and so on. When physicians began documenting the efficacy of healings supposedly worked by the ‘prophets’, this was a serious problem not just for devout anti-clerics, but also for the Church: The prophets were members of a religious sect, so the Church could not possibly embrace them as legitimate Christian miracles, and therefore officially declared them false. British historian of Enlightenment science and medicine, Roy Porter, spelled out the dilemma:

if for reasons of its own, the Catholic Church saw fit to discredit ‘miracles’ which happened in the here-and-now, on its own doorstep and before people’s very eyes, how could any other ‘miracle’ in the Christian canon be sustained?⁴⁶

Porter also reminds us that the Church’s contradictory stance on ‘miracles’ was water on the mills of French atheist-materialist critics of the ‘paranormal’ like Denis Diderot, and anti-clerical Deists (who believed in God but rejected miracles) like the great Voltaire. And as we shall see, the debate over the French prophets is just one of countless examples where the ‘empirical occult’ was declared a mortal enemy by two powerful and mutually opposed camps: orthodox religion on the one end, and anti-clerical thinkers on the other.

Still, as Hume’s familiarity with the case already suggests, news of the French prophets spread across the channel, and soon enough they garnered a following in England and Scotland.⁴⁷ Isaac Newton considered these reports with interest, and one of his closest and most promising students, Nicolas Fatio de Duillier, even became their leading spokesman in England. Hardly surprisingly, de Duillier’s public support of these

⁴⁶ Porter (1999), 213.

⁴⁷ Schwartz (1980), Laborie (2015).

brazen heretics quickly resulted in the ruin of his scientific career and social standing, after his support of the prophets led to legal persecution and had him end up on the pillory.⁴⁸

Apart from Hume's essay on miracles, another episode routinely cited by Skeptics as a victory of Enlightenment science over the 'paranormal' was the famous refutation of mesmerism or 'animal magnetism' by a French Royal Commission, which included the pioneer of electricity, Benjamin Franklin, and the eminent chemist Antoine Lavoisier.⁴⁹ The commission's goal was to test claims by the physician Franz Anton Mesmer, who professed to have discovered an all-pervading physical imponderable or vital fluid. Health and disease, Mesmer argued, were a matter of balance and distribution of this 'animal magnetism' in the human organism. A prominent technique employed by Mesmer and his pupils to restore such balance were magnetic 'passes' – up- and downward movements of the hands, usually a few inches away from the patient's body, which were often reported to put patients in a state of trance and occasionally induced convulsions.

The Franklin commission set out to test these claims by conducting experiments on people who did not know whether they received actual or sham mesmeric treatment. In their report to the King, the commission did not doubt that patients did indeed occasionally get better. Crucial, however, was the finding that they not only responded to actual mesmeric interventions, but also when treatments were absent or only pretended. Instead of assuming the existence of a 'magnetic fluid' as claimed by Mesmer, any healing success was therefore explained in terms of effects of the 'imagination'. Modern medics usually read 'imagination' as the equivalent of what has been called the 'placebo effect' since about the 1950s: genuine healing caused not by medicine, but by a patient's beliefs and expectations.

⁴⁸ Jacob (1978), Heyd (1995), 251-261.

⁴⁹ E.g. Shermer (2010).

Today, physicians typically decry Mesmer as a self-deluded charlatan, not least because of the popular image of mesmerism as a ‘paranormal’ belief system. But while it is true that many other practitioners of mesmerism certainly claimed the occurrence of properly parapsychological phenomena in the therapeutic setting – telepathy, clairvoyance, and not least spirit visions – Mesmer himself was actively hostile to all these things. As a child of the Enlightenment and its worship of cold reason, he also considered the induction of trance states and convulsions in mesmeric patients not as a welcome part of the treatment, but a rather regrettable side effect.⁵⁰ And to be fair, even if we grant that the story of mesmerism can be reduced to a history of the placebo effect, it should be acknowledged that it often worked. Not to be outdone, mesmeric practice was also far less invasive and dangerous than treatments offered by contemporary mainstream medicine, which still prominently relied on blood-letting, purging, and other highly questionable blanket interventions. With a perspective on concrete historical contexts, it should also be acknowledged that Mesmer’s concepts were not actually that outlandish or even new, as they followed in the tradition of perfectly mainstream Renaissance natural philosophy.⁵¹

Moreover, Mesmer himself became known as a ‘scientific’ opponent of supernaturalism, when he was appointed by the Bavarian government to debunk the German exorcist Johann Gassner in 1775. Mesmer did not doubt that Gassner’s exorcisms often worked. But in his view, the ailments in Gassner’s patients were not caused by evil spirits but organic imbalances, which the priest unwittingly restored through unconscious use of his unusually strong ‘magnetic’ powers. Mesmerism may be considered a ‘pseudoscience’ today by the medical mainstream, but Mesmer’s ‘explanation’ was still good enough for the Bavarian Academy of Sciences to appoint him

⁵⁰ See, e.g. Gauld (1992), Pattie (1993).

⁵¹ Schaffer (2010).

a member in reward for his services in the battle against ‘superstition’, and it also informed Emperor Joseph II’s decision to prohibit exorcisms for the German empire.⁵²

We shall come back to squarely *political* motifs of Enlightenment crusades in a second. But there’s evidence that the downfall of Mesmer was also connected to a major course of worry of political elites in France, for the plain fact that mesmerist societies were often havens for revolutionaries working to upend the reign of the King.⁵³

There seems to be a widespread assumption today that the ‘scientific community’ instantly and overwhelmingly accepted the report of the Franklin commission as the ultimate verdict on the question of mesmerism. But as far as its *practice* by physicians is concerned, it certainly continued almost unabated, despite occasionally being prohibited by law. And this continuity included its ‘paranormal’ guises, which Mesmer himself had so thoroughly despised. Telepathic rapports between mesmerists and patients, and clairvoyant and spirit visions of entranced patients, continued to be anecdotally reported *en masse* not only by the scientific and medical laity all over continental Europe and, somewhat belated, in Britain and the United States, throughout the remainder of the eighteenth and the whole nineteenth century.⁵⁴

According to chronologists of modern ‘enlightened’ hypnotherapy, the irreversible death of mesmerism occurred at the hands not of the Franklin commission, but of Scottish physician James Braid in the early 1840s, when Braid experimentally demonstrated its medical powers lay not in a quasi-physical ‘animal magnetism’, but in the *psychological* principle of hypnotic suggestion. Like practitioners of mesmerism before him, Braid put his patients into a trance state, during which he claimed to painlessly extract teeth, cure paralysis, and restore sight and hearing. When Braid coined the term

⁵² Ellenberger (1970, 53-57), Ego (1991, chapter I.A.1). On Gassner and exorcisms in legal and medical contexts of Enlightenment Germany, see Midlefort (2005).

⁵³ Darnton (1968).

⁵⁴ Dingwall (1986), Gauld (1992), Crabtree (1988, 1993), Fara (1995), Winter (1998), Gantet (2021), Sommer (2013b).

‘hypnotism’, it was also important for him to stress that he never observed any paranormal phenomena in his medical practice.⁵⁵ This was certainly wise to state, as one of his most vocal critics had accused him of being in league with the devil, which was in fact the topic of Braid’s very first publication concerning hypnosis.⁵⁶ How far British science and medicine still was from embracing ‘scientific materialism’ is further illustrated by the fact that Braid himself was no materialist let alone an atheist – far from it: In 1852 he would sternly admonish a historian of magic for claiming there was no such thing as the devil and demons.⁵⁷

In the same year, Michael Faraday, perhaps the greatest British physicist of the nineteenth century, applied Braid’s psychological principles to explain ‘table-tilting’, a practice associated with spiritualism. Slight table movements, Faraday was able to show in a series of brilliant experiments, were not caused by ‘supernatural’ powers, but by unconscious muscular motions of the sitters.⁵⁸ This episode in particular has been interpreted as yet another supposed victory of secular Skeptical science over paranormal superstitions.⁵⁹ Never mind that Faraday, a devout member of a heretical Christian sect, revealed in a letter the squarely theological worries which had moved him to intervene: the new craze, Faraday suspected, was the work of “unclean spirits” let loose by Satan to delude man at the end of times, as predicted in the Bible.⁶⁰

Later, Faraday justified his conscious decision not to investigate widely reported phenomena which were inexplicable by unconscious muscular action – most notably *levitating* tables – by stating such reports were clearly ridiculous: levitations, Faraday proclaimed, were impossible because they obviously violated the law of the conservation

⁵⁵ Braid (1843), 21-22.

⁵⁶ Braid (1842).

⁵⁷ Braid (1852).

⁵⁸ Faraday (1853).

⁵⁹ E.g. Hyman (1985), 9-11.

⁶⁰ James (1991-2012), vol. 4, 539. On Faraday’s theological priorities see also Cantor (1993) and James (2010).

of force.⁶¹ There is some irony in the fact that one of the most detailed and angry critiques of this argument by Faraday came from a man who was widely suspected to be an atheist, the London mathematician August De Morgan.⁶² Whatever his religious beliefs, De Morgan was no friend of dogmatism in any form, as he was one of the first major intellectuals to confess that he was fully convinced of the reality of certain *phenomena* of spiritualism, while doubting they were caused by disembodied *spirits*.⁶³

When Charles Darwin and Alfred Russel Wallace formulated modern evolutionary theory, Faraday's refusal to comment on this game-changing event was probably also owing to his biblical commitments. Darwin's own antipathies to spiritualism and the occult are well known and have been taken to represent the attitude to these things by the Victorian 'scientific community'. But Darwin's ally Wallace of all people became an enthusiastic convert to spiritualist faith, and he would later even argue that spirits were actively involved in the process of human evolution.⁶⁴ It's not far-fetched to assume it was because of Wallace's highly unorthodox views, and his rather fervent proselytizing for spiritualism, that we associate only Darwin's name with modern evolutionary theory today. And as we shall see in Part 2 of this essay, unfortunately Wallace was not always critical in his investigations, and we shouldn't simply adopt his belief in survival on the grounds of his eminence as a biological scientist.

Wallace wrote that his first encounters with the paranormal took place during mesmeric experiments he conducted as a young man, which convinced him of the reality of clairvoyance.⁶⁵ This was in the decade of Braid's inauguration of medical hypnotism, which, however, British scientific and medical communities at large either completely ignored, ridiculed, or lumped in with mesmerism and spiritualism, Faraday and a few

⁶¹ Faraday (1859), 479.

⁶² De Morgan (1857, 1859).

⁶³ De Morgan (1863).

⁶⁴ E.g. Wallace (1875). For the impact of Wallace's spiritualism on his biological ideas, see Smith (1972), Kottler (1974), Fichman (2006).

⁶⁵ Kottler (1974), 164-165, Wallace (1905), vol. 1, 232-236.

others being notable exceptions. It was only in the 1870s that hypnotism began to gain momentum not so much as a medical treatment, but as an experimental tool for the exploration of the human mind. This time, however, the man whose name became prominently associated with hypnotism was not a devout Christian like Braid, but a fierce atheist: the neurologist Jean Martin Charcot in Paris.

Charcot consciously blended public spectacle and medical demonstration in his legendary hypnotic performances at the Salpêtrière, a hospital which predominantly housed mentally ill female patients. Using hysterical girls and women as little more than dummies to demonstrate the stupendous powers of the hypnotist over the weak and sick mind, Charcot induced and released trance states, catalepsies, and seizures in his patients at will. Particular stress was laid by Charcot and his peers on the ease with which states resembling demonic possession and mystical ecstasy could be induced. This hammered home Charcot's principal message: The whole history of religious experience was to be reduced to hysteria and mental disease.⁶⁶

Politics of the 'Soul': The Making of Modern 'Naturalistic' University Sciences

And here we need to stress one absolutely crucial dimension of our story, which both Skeptics and historians of parapsychology have almost consistently ignored: the rather explosive significance of the 'soul' as a *political* object, and heated debates over its nature which more than just shaped the very curricula of modern sciences.

Most fundamentally and consistently, this played into the rather justified concern over the unholy alliance of altar and throne. A central argument by both religious and areligious critics of Catholicism not just since the Reformation was that the Church, supported by monarchs and aristocrats appointed by the Pope, consciously exploited human fears of hell for the purpose of maintaining absolute power. Such fears, it has been alleged throughout the centuries, were kept alive by stories of demonic possession,

⁶⁶ Goldstein (1982), Micale (1985), Porter (1999).

poltergeist infestations and ghostly visions of souls of the damned, and the assurance that relief could only come from Catholic priests performing exorcisms and reading masses.

And here we begin to understand the prominent place of attacks on ‘paranormal’ belief in Hobbes’s aforementioned political treatise *Leviathan*, first published in 1651. A much more prominent move to deny the existence of spiritual beings apart from God, as in the examples of Hobbes, Newton (who, however, still believed in angels) and Priestley, was to deny not the *existence* of spirits, but merely the possibility of their manifestation in the physical world. This view was consistent with mainstream Protestantism and (officially) held by major Enlightenment thinkers including John Locke, Leibniz, and to some degree, Kant.⁶⁷ Also in the eighteenth century, it was properly atheistic materialists predominantly in France, including Diderot and La Mettrie, who fought alongside Deists like Voltaire to wage a war on any form of ‘paranormal’ belief, with the declared political goal to end talk of souls, hell, and devils once and for all.⁶⁸

It was these fierce debates over souls, prophecies, visions and ‘magic’ which also lay at the root of wars of religion, riots and bloody revolts, such as Cromwell’s overthrow of the monarchy in England before the restoration of the throne (and foundation of the Royal Society) in 1660, and the French Revolution in the 1780s and 90s in particular. Unsurprisingly, these never-ending religio-political upheavals were prominent topics in the correspondence and often at least alluded to in published writings of virtually every Enlightenment intellectual. And as Charcot’s appropriation of hypnosis for overtly secularizing purposes during renewed anti-Catholic revolts in Third Republic France indicates, this ‘Enlightenment crusade’ (to use Roy Porter’s term) continued until far into the nineteenth century and early twentieth century. Perhaps the most relevant cultural

⁶⁷ E.g. Almond (1994), Cameron (2010). I say ‘official’ because we know that Leibniz and other Enlightenment figures secretly did maintain rather interesting ‘paranormal’ beliefs. See, e.g., Bostridge (1997, chapter 5) on Locke, and the essays in Coudert (1998) on Leibniz.

⁶⁸ E.g. Porter (1999), Roe (2010).

transformation following similar events, however, occurred in Germany – a major cradle of modern experimental university sciences.

When debates over materialism divided German scientific and medical communities after a group of political radical physiologists declared that “Thoughts stand in about the same relationship to the brain as bile to the liver and urine to the kidneys”,⁶⁹ these self-styled ‘scientific materialists’ were attacked not just by religious scientists.⁷⁰ Among their most vocal critics in Germany were the famous physicist Herman Helmholtz and his friend, the physiologist Emil du Bois-Reymond. These men, who would become two of the most influential scientists and science popularizers internationally, were themselves deeply anti-clerical. And their critiques of the ‘scientific materialists’ notwithstanding, they certainly also contributed to modern notions of materialism being the default worldview of science.

Throughout their long careers, both men worked relentlessly to implant a methodological *reductionism* in the fledgling life-sciences in Germany and beyond. This had been their professed goal since their student days, when they formed a circle of friends including other now famous physiologists, Ernst Brücke (Sigmund Freud’s teacher) and Carl Ludwig. Together, as put by du Bois-Reymond in a letter in 1842, these young men “conspired to assert the truth that there are no forces at work in the organism other than the common physical-chemical ones”.⁷¹

Again, it would be writing history backwards if we simply assumed that this ‘truth’ was already scientifically established in 1842 (the beginning, by the way, of one of several political German revolutions against the Church). In fact, it’s not particularly controversial to state that the jury is still out even from the perspective of today’s

⁶⁹ Vogt (1874), 354 (all translations are mine). The French vitalist P.-J.-G. Cabanis had already described thoughts as secretions of the brain in the preceding century. See Temkin (1946), 14.

⁷⁰ The unsurpassed standard history of German ‘scientific materialism’ is still Gregory (1977a).

⁷¹ Du Bois-Reymond (1918), 108. For useful biographical studies of the men addressing some of their religio-political priorities, see Finkelstein (2013), Cahan (2018).

mainstream biophysics.⁷² On the contrary, the reference to “*common* physical-chemical” forces already implies that ‘animal magnetism’ and related notions of a vitalistic ‘life force’ were to be categorically *excluded* from the men’s empiricism, which they indeed dismissed without any investigation whatsoever. Interestingly, this was demonstrably not the case in British elite physics, where such concepts – along with parapsychological phenomena, which Helmholtz and du Bois-Reymond also categorically rejected – continued to be seriously considered at least until the early 1900s.⁷³

Still, and contra the ‘scientific materialists’, Helmholtz and du Bois-Reymond absolutely refused to claim that science had solved the mystery of the relationship of mind and brain. Instead, and despite their own life-long anti-Catholic political commitments, they actively popularized a programmatic *agnosticism*: Science, they argued, never has and never will be able to say anything definite about the ultimate *nature* of the mind. This agnosticism was famously expressed in one of the most influential mottos of German science in the late nineteenth and early twentieth centuries, which would also stake the permitted limits of scientific *enquiry* for decades to come: du Bois-Reymond’s verdict *ignoramus et ignorabimus* (Latin for “we do not know, and we will not know”).⁷⁴

Helmholtz and du Bois-Reymond were friends with prominent scientists in Britain including Thomas H. Huxley and the physicist John Tyndall, who pursued the same secularizing goals as their German allies: to transform the sciences from an activity of leisurely, wealthy gentlemen to stable, paid professions protected from theological influence and censorship.⁷⁵ We already noted Huxley’s critique of Hume, and his dislike of the new word ‘scientist’. As for neologisms, Huxley himself was the inventor of an important modern word which I just used: *agnosticism*. Huxley had originally coined the

⁷² Denton, Kumaramanickavel, & Legge (2013), Nickolson (2014).

⁷³ Noakes (2019). On continuities of ‘vitalism’ in the history of biomedical sciences and philosophy from the Enlightenment to the present day, see, e.g. Bud (2014), Harrington (1996), Reill (2005), Roe (2003), Lenoir (1982).

⁷⁴ Du Bois-Reymond (1872).

⁷⁵ Turner (1978).

term in 1869, not so much to profess ignorance regarding the nature of mind-brain relationships, but of the existence of God. And unlike his German friends, Huxley famously *did* argue for the complete dependence of the mind on the brain.⁷⁶

Still, as philosophers are well aware, mind-brain epiphenomenalism is not the same as ontological materialism: Assuming matter, including the brain, turns out to be completely reducible to a *mental* substance or process, it does not necessarily follow that our *individual minds* persist after the brain dies. Despite his epiphenomenalism, Huxley was therefore still a vocal critic of ontological materialism, and while Huxley and Tyndall have often been called ‘materialists’, they both in fact subscribed to metaphysical positions much more closely akin to ‘pantheism’ – the belief in nature’s all-pervadedness by an *impersonal* divine spirit or force.⁷⁷

But as far as spiritualism and paranormal phenomena were concerned, Huxley, Tyndall and other members of the growing network of popularizers of ‘scientific naturalism’ were just as programmatically hostile as their German allies Helmholtz and du Bois-Reymond. To illustrate this, let’s briefly return to Huxley’s critique of Hume’s assertion that even well-substantiated reports of ‘paranormal’ phenomena should be dismissed because the claimed effects would constitute transgressions of natural law (which, as you may have noted, closely resembles Faraday’s later claim concerning the impossibility of levitating tables). In reply, Huxley wrote:

If a piece of lead were to remain suspended of itself, in the air, the occurrence would be a “miracle”, in the sense of a wonderful event, indeed; but no one trained in the methods of science would imagine that any law of nature was really violated thereby. He would simply set to work to investigate the conditions under which so highly

⁷⁶ Huxley (1874).

⁷⁷ Lightman (1987), Barton (1987).

*unexpected an occurrence took place; and thereby enlarge his experience and modify his, hitherto, unduly narrow conception of the laws of nature.*⁷⁸

In practice, however, things looked a little different. When Huxley's friend Alfred Russel Wallace invited him in 1869 to join a committee for the scientific investigation of reported marvels of spiritualism, which quite frequently involved levitating objects, Huxley replied: "Supposing the phenomena to be genuine – they do not interest me".⁷⁹ Still, both Huxley and Tyndall *did* occasionally attend seances. But as the unveiled sarcasm especially in Huxley's private correspondence, and the bitingly polemical tone of both men's 'reports' (published in popular papers) indicates, they did so with the evident goal to *debunk* rather than seriously investigate mediums.⁸⁰

Besides the 'other Darwin', A. R. Wallace, additional eminent scientific friends of Tyndall and Huxley came out in favour of the reality of spiritualist phenomena. The most prominent among those apart from Wallace was William Crookes, the discoverer of the element thallium and a pioneer in the study of radioactivity. Another eminent British parapsychological investigator was a former assistant and co-worker of Tyndall's, physicist William Barrett. After failed attempts to mobilize scientific interest in parapsychological investigations through lectures to the British Association for the Advancement of Science and elsewhere, in 1882 Barrett became one of the founders of the aforementioned Society for Psychical Research (SPR).⁸¹

When he was appointed president of the SPR in 1904, Barrett mentioned in his presidential address a meeting with Hermann Helmholtz during a visit in Britain in the late 1800s. When the conversation turned to the topic of telepathy, Barrett claimed, Helmholtz told him that neither "the testimony of all the Fellows of the Royal Society, nor even the evidence of my own senses", would make him "believe in the transmission

⁷⁸ Huxley (1894), 155.

⁷⁹ London Dialectical Society (1871), 229.

⁸⁰ E.g. Tyndall (1876), Huxley (1889), L. Huxley (1903), vol. 2, 143-148. See also Wadge (2006).

⁸¹ Gauld (1968), Noakes (2004).

of thought from one person to another independently of the recognised channels of sensation”, as this was “clearly impossible”.⁸²

We should be wary to accept Barrett’s verbatim quote from a decades-old conversation as a historical document. But his characterization of Helmholtz as an influential critic of the paranormal who was absolutely uninterested in empirical evidence is certainly consistent not just with Helmholtz’s goal to liberate science from theological tyranny through the professionalization and polarization of ‘naturalistic’ science, but expressed in statements Helmholtz made first-hand, for example in his correspondence with du Bois-Reymond.⁸³ It’s also no coincidence that Helmholtz was one of the main proponents of a physical law which is still cited by Skeptics as a supposed knock-down proof of the physical impossibility of *any* paranormal phenomenon: the principle of the conservation of energy.⁸⁴ Helmholtz himself explicitly stated that his formulation of the law – which was immediately translated into English by Tyndall – had been motivated by his intent to demonstrate the implausibility of the concept of the soul and vitalist notions of a life-force.⁸⁵

Psychical Research – The ‘Shadow’ of Experimental Psychology?

Helmholtz was the teacher of several famous physicists including Heinrich Hertz and Max Planck, but he also trained the founder of experimental psychology – the science of the ‘soul’ (a literal English translation of *psyche*) – in Germany, Wilhelm Wundt. Some psychologists still debate the question whether the ‘father’ of their profession was Wundt in 1879, or William James at Harvard a few years earlier. More important for our purpose

⁸² Barrett (1904), 129.

⁸³ E.g. Kirsten (1986).

⁸⁴ E.g. Reber & Alcock (2020), 392. Helmholtz’s law served a similar purpose as Faraday’s appropriation of the law of conservation of *force*, but these laws should not be confused. On Tyndall’s translation, see Cahan (2012).

⁸⁵ Helmholtz (1878).

is a check of how the maximally opposed attitudes to the ‘paranormal’ by the founders of modern academic psychology have been portrayed in histories of the discipline.

Since histories of psychology are still often written not by trained historians, but by psychologists invested in promoting the ‘naturalistic’ public image of psychology, it may not be very surprising that Wundt’s rejection of the ‘empirical occult’ has been adopted without question. Occasionally, even professional historians have praised him as a hero of modern science vanquishing self-evident paranormal charlatantry.⁸⁶ Reviews of the scholarship on William James, on the other hand, found that his life-long involvement in parapsychological research had either been downplayed or passed over by most scholars until about the late 1980s.⁸⁷

While James’s advocacy of psychical research will become evident enough during the remainder of this essay, it’s probably no overstatement to say that Wundt consciously cultivated a deep hatred of all things ‘occult’. In fact, Wundt had practically inaugurated the birth of his institute for experimental psychology in 1879 with a polemical attack in the same year on fellow Leipzig scientists who investigated the hotly debated American medium Henry Slade.⁸⁸ Spearheaded by astrophysicist Karl F. Zöllner (a friend of William Crookes in England), these investigators included the man Wundt himself would later call “the founder of experimental psychology”, the widely revered physicist and philosopher Gustav T. Fechner.⁸⁹

Later, Wundt literally rewrote history when he portrayed Fechner as being overwhelmingly *sceptical* of paranormal phenomena, by selectively quoting from the dead man’s diary.⁹⁰ The full diary would only be published in 2004, but relevant passages, which shone a rather different light on Fechner’s actual attitudes than Wundt’s selections,

⁸⁶ E.g. Marshall & Wendt (1980), Ash, Gundlach, & Sturm (2010).

⁸⁷ E.g. Ford (1998), Taylor (1996), Sommer (2013a).

⁸⁸ Wundt (1879). For examples of Wundt’s misrepresentations of these published experiments and other problems, see Sommer (2013c).

⁸⁹ Wundt (1888), 477.

⁹⁰ Wundt (1901).

were printed in a German psychical research journal as early as 1888.⁹¹ In his tribute to his teacher, Wundt also briefly mentioned correspondence with Fechner in response to Wundt's 1879 attack on spiritualism, but did not reveal its contents. Little wonder, as Fechner's letters included a detailed critique of Wundt's arguments and misrepresentations of the experiments.⁹² Wundt also swept Fechner's attempts to publicly set the record straight under the carpet, concerning misrepresentations of parapsychological research in general and Fechner's views in particular. These included a book by Fechner on these topics and his public protest to made-up sceptical statements attributed to him in an interview with the secretary of the Seybert Commission for the 'investigation' of spiritualism at the University of Pennsylvania.⁹³ However, Fechner's interventions had practically no effect and psychologists have essentially ignored these contexts up to the present day.⁹⁴

The cultural and political climate in which Fechner and colleagues had conducted their parapsychological investigations was of course still hardly conducive to a calm, dispassionate reception of their findings by fellow intellectuals. After all, with Wundt's foundation of German experimental psychology, they took place toward the end of yet another political key event, which would only reinforce the 'naturalistic' foundations of modern university sciences during their infancy: The so-called *Kulturkampf* ('war for culture'), waged by Chancellor Otto von Bismarck against the Catholic Church in Germany throughout the 1870s. The crisis reached a peak in 1876 in Marpingen, a small village in Baden, where three eight-year-old peasant girls claimed to see apparitions of the Virgin Mary. Soon, crowds of pilgrims began flocking to Marpingen, where the 'Virgin' began making dangerous political statements. Hardly surprisingly, the result was a brutal

⁹¹ Fechner (1888).

⁹² For English translations of relevant parts of Fechner's letter, see Sommer (2013c).

⁹³ Fechner (1879), Hübbe-Schleiden (1887). On the Seybert Commission see also Massey (1887), Sommer (2020), n15.

⁹⁴ E.g. Tompkins (2017).

crackdown on the child visionaries and their followers by the police, and this and similar events only served to polarize debates about the supposed pathology of visions and other supposed revelations from the beyond, which were lumped in with spiritualism.⁹⁵

Declared opponents of spiritualism and its calm, dispassionate investigation also included a growing number of philosophical materialists, most notably the founders of Communism including Karl Marx – who, incidentally, explicitly refused to base their ‘dialectical materialism’ on science.⁹⁶ One of Marx’s few scientific friends in England was the zoologist and self-appointed secular Great Inquisitor of the paranormal, Ray Lankester.⁹⁷ A patron saint of the modern Skeptics movement, Lankester is often credited for having exposed the medium Henry Slade as an evident impostor before he was investigated by Zöllner and Fechner.⁹⁸

Let’s assume for the sake of brevity that Lankester really *did* catch Slade red-handed in the act of fraudulently producing ‘spirit writings’ as often claimed. What matters for our present purpose is not to obtain certainty whether Slade – a professional medium who charged hefty fees for his seances – was the real deal or nothing but a fraud (thankfully, we don’t have to rely on his case). What should be acknowledged is that Slade wouldn’t have stood a chance of getting a fair hearing, no matter the concrete evidence either way. In fact, when Lankester famously sued Slade for fraud in England, the court proceedings show that the rule of ‘innocent until proven guilty’ was not observed. For example, there were eminent intellectuals on the defence for Slade, and while Lankester certainly made a strong case, he did not prove fraud beyond reasonable doubt.⁹⁹ Still, Slade didn’t just get a slap on the wrist, but was sentenced with the maximum penalty of three months prison with hard labour.

⁹⁵ Blackburn (1993). For a similar event see Klein (2007).

⁹⁶ On the antagonism between ‘scientific’ and ‘dialectical’ Communist materialists, see Gregory (1977b).

⁹⁷ On Lankester, see, e.g., Feuer (1979), Barnett (2006).

⁹⁸ E.g. McCabe (1920), 160-161.

⁹⁹ Gauld (1968), 124-127, Kottler (1974), 179, Milner (1999).

Among Slade's defenders were not just devout spiritualists like the biologist Alfred R. Wallace, but another major Victorian intellectual, Cambridge philosopher Henry Sidgwick. A doubter of survival and the physical phenomena of spiritualism, Sidgwick was widely admired for his scepticism in the proper meaning of the word – doubt or suspended judgement *informed* by active and calm consideration of all sides of an argument. A tireless promoter of women's rights, Sidgwick became a reformer of British secular education after resigning his Fellowship at Trinity College at Cambridge University in the late 1860s because of religious doubts. Fellows were required to pay only lip-service to Anglican dogmas including belief in the biblical miracles, but having lost his faith, Sidgwick felt it was his duty to resign from his highly prestigious and well-paid position. Impressed by his integrity, supporters at Trinity would eventually create a lectureship for Sidgwick, which came without any theological stipulations. Later, Sidgwick occasionally worked with Huxley and other agnostics to achieve the admission of students by universities regardless of their religious faith.¹⁰⁰

In 1882, Sidgwick became the first president of the SPR after its foundation by Tyndall's former assistant, William Barrett. Early members included (apart from the already-mentioned) J. J. Thomson and another future physics Nobel laureate, Lord Rayleigh, as well as dozens of now less famous members of the Royal Society, and even one of Helmholtz's famous students, Heinrich Hertz in Germany. However, the wider context spelled out below makes it easy to understand why Hertz would remain the only famous professional German scientist among the early members, and why, as Hertz had emphasized to his friend Oliver Lodge, he would categorically refuse to conduct parapsychological investigations himself.¹⁰¹

Contrary to the often-claimed 'disenchantment' of the modern world, there has been a clear continuity of serious interest in the paranormal by British scientific elites

¹⁰⁰ Turner (1974), Williams (1984), Sommer (2013a), chapter 2.

¹⁰¹ Lodge (1894).

wide into the twentieth century.¹⁰² And as I have tried to show, even though physicists like Crookes, Barrett and Lodge were among the most active investigators, the strongest and most conscious efforts by early SPR members to contribute to scientific knowledge was not in the realm of physics, but to the fledgling science of experimental psychology.¹⁰³ Apart from Sidgwick and his wife, the mathematician Eleanor M. Sidgwick, by far the most industrious early workers in this regard were two close friends and former students of Sidgwick's, Edmund Gurney and Frederic W. H. Myers.

A nephew of the man who coined the term 'scientist' (William Whewell), Myers is known for also having invented a famous word, which, however, most scientists today may utter in a tone of enlightened contempt at best: *telepathy*. Myers's Wikipedia page shows perhaps a little too clearly that whatever is at stake for modern Sceptics, concern for historical evidence is not it. The entry is an almost exhaustive list of 'scientific' critiques and rumours spread about Myers, along with several false claims and misrepresentations of his work, all with the evident purpose of making him appear like a hapless victim of an obsessive 'will to believe'.¹⁰⁴ The entry also mentions but immediately downplays the fact that Myers's theory of the 'subliminal self' (of which more in Part 2) influenced Théodore Flournoy, the founder of Swiss experimental psychology, and Wundt's competitor in ongoing claims of having 'fathered' the psychology as whole, William James.

What's missing, however, is the acknowledgement that Myers – along with the Sidgwicks and other SPR figures – practically represented British psychologists at the early International Congresses of Psychology, the main platform on which the methods of fledgling experimental psychology were negotiated, from its first session in 1889 until Myers's death in 1901. And while it is true that several 'enlightened' psychologists either ignored or actively denounced Myers, both Gurney and Myers became James's closest

¹⁰² Noakes (2019).

¹⁰³ E.g. Sommer (2013a, 2020).

¹⁰⁴ https://en.wikipedia.org/wiki/Frederic_W._H._Myers

collaborators in experimental psychology. They corresponded frequently, James replicated some of their experiments in automatic writing and hypnosis, and cited these studies in his *Principles of Psychology* and other canonical texts. Not least, between 1889 and 1897, James would collaborate with Myers and the Sidgwicks on an international survey of ‘telepathic hallucinations’, which we will discuss with other evidence in Part 2.¹⁰⁵

And as far as such ‘enlightened’ critics of Myers and psychical research go, of the early university psychologists who aggressively battled his and James’s unorthodox science, not a single one was a materialist.¹⁰⁶ On the contrary, major early university psychologists, such as Wundt in Germany and G. Stanley Hall in the US, routinely asserted that spiritualism and its open-minded investigation posed a fundamental threat to “true religion”.¹⁰⁷

But let me complicate things even further: While empirical approaches to occult phenomena prior to the nineteenth century have been rather consistently motivated by religious apologetics indeed, Victorian psychical research was by no means the exclusive domain of religious or even spiritual folk.

Myers’s and James’s principal collaborator in France, for example, was the future Nobel prize winner in physiology, Charles Richet. After inspiring Charcot’s interest in hypnosis, Richet would later be a major force behind the foundation of the International Congresses of Psychology.¹⁰⁸ But far from being a spiritualist, Richet – the doyen of French psychical research from the 1870s to his death in 1935 – shared Charcot’s ‘medical materialism’. Although he held survival researchers like Myers and Oliver Lodge in high esteem and would somewhat soften his stance late in life, Richet was convinced that the mind would die together with the brain, and therefore rejected the survival hypothesis

¹⁰⁵ Taylor (1983, 1996), Kelly et al. (2007), Sommer (2013a, 2020).

¹⁰⁶ Hatfield (1995), Sommer (2013a).

¹⁰⁷ Hall (1887), 145, Wundt (1879); see also Sommer (2013a), chapter 4.

¹⁰⁸ Alvarado (2019), Ellenberger (1970), Evrard et al. (2021).

throughout his long career.¹⁰⁹ It is true that Richet published volumes of empirical evidence for the occurrence of a wide range of paranormal phenomena, and he even claimed the coinage of ‘ectoplasm’ – the word for the weird substance out of which spirits are claimed to materialize in seances. But his work was explicitly *atheoretical*, and he considered the marvels of whose reality he convinced himself not as evidence for a spirit realm, but as fundamental scientific anomalies with unique potential to expand human understanding of the *physical* world.¹¹⁰

The historical novelty of this strictly positivist approach, which investigated and accepted parapsychological phenomena as facts of nature but programmatically rejected spiritualist interpretations, can hardly be exaggerated. Especially in continental Europe, this non- and often anti-spiritualist approach was shared by other pioneering psychical researchers, and would characterize the work of practically all leading continental investigators in the twentieth century.¹¹¹ These would also include Marie and Pierre Curie, who were rather uninterested in evidence for personal survival, but more than intrigued particularly by the physical phenomena produced by spiritualist mediums.¹¹²

Einstein rejected off-hand spiritualist beliefs together with evidence for the physical marvels which interested J. J. Thomson, Lord Rayleigh and the Curies so much, but occasionally participated in tests of clairvoyance and telepathy.¹¹³ Though he usually avoided taking a stance in public, the archival evidence suggests that Einstein was more than just interested in certain psychic phenomena, and once he even wrote the preface to

¹⁰⁹ See, for example, his *magnum opus* (Richet, 1923) and discussion of survival (Richet, 1924) with Lodge (1924).

¹¹⁰ Mauskopf & McVaugh (1980), Wolf (1993), Sommer (2013a), chapter 2.

¹¹¹ Sommer (2013a), chapter 2, Brancaccio (2014), Surman (2021).

¹¹² Unlike Marie, her husband Pierre did not join the SPR, although he was even more actively engaged in experimental studies of ‘paranormal’ phenomena and convinced of their reality than his wife. For relevant correspondence by Pierre Curie, see Blanc (2009), 578-644. On the Curies’ psychical research, see, e.g., Courtier (1908), Evrard (2017).

¹¹³ E.g. Schmidt (1930).

an experimental study of telepathy – in which he urged scientific psychologists in particular to pay open-minded attention to psychic phenomena.¹¹⁴

Einstein never joined the SPR, but two of the most iconic modern psychologists – Sigmund Freud and Carl Gustav Jung – did. Jung’s parapsychological interests and convictions are well known, but despite his belief in psychic phenomena he did not adopt the ‘spirit hypothesis’. This was the subject of an article by Jung in the SPR *Proceedings*, which he concluded by stating “I am personally convinced of the reality of such facts, but I cannot accept them as evidence for the independent reality of spirits”.¹¹⁵

Freud, who had studied hypnosis under Charcot, is known for his own promotion of ‘medical materialism’, and his epoch-making work was significantly motivated by a similar wish to reduce religion to pathology. Still, Freud would also become a believer in telepathy, which he almost certainly interpreted not as a spiritual phenomenon, but within the prevailing positivist and physicalist frameworks of continental European parapsychology.¹¹⁶ However, he was far more hesitant than Jung to put his convictions on public record. A letter by Freud to his disciple Ernest Jones, who was worried that Freud’s paranormal belief may jeopardise the ‘scientific’ image of psychoanalysis, speaks volumes:

*When anyone adduces my fall into sin, just answer him calmly that conversion to telepathy is my private affair like my Jewishness, my passion for smoking and many other things, and that the theme of telepathy is in essence alien to psychoanalysis.*¹¹⁷

¹¹⁴ Einstein (1962). For the archival evidence see Kugel (1994).

¹¹⁵ Jung (1921), 93.

¹¹⁶ E.g. Sommer (2019). On Freud and telepathy, see, e.g. Freud (1943), Josephson-Storm (2017), Evrard, Massicotte, & Rabeyron (2017).

¹¹⁷ Jones (1957), 395-396.

The History of Science and 'Magic' – a Free-for-All?

Atheist philosopher Ludwig Feuerbach once famously suggested that the Christian dogma stating man was created in God's image had to be inverted, as it was actually the other way around. There's obviously much to be said for this argument. But as we have seen, it's also in the nature of man to create eminent fellow mortals in his own image, through the magic of the historian's pen.

This is most safely done when the revered person in question is dead and can't object. That such transformations can occur even when the idol in question is still alive, I already suggested through the example of Gustav T. Fechner's failed attempts to rectify false claims about his scepticism regarding parapsychological phenomena. There are of course other cases, including that of Robert Boyle, a founder of the Royal Society. When Boyle was still alive, someone circulated rumours asserting he had finally seen the errors of his ways and no longer believed in poltergeist phenomena. Like Fechner centuries after him, Boyle publicly set the record straight and emphasized his views had not changed, but without effect.¹¹⁸

1848 saw the birth of modern spiritualism, but also the publication of a new history of the Royal Society. Written by its secretary, it briefly addressed investigations of 'things that go bump in the night' by the Society's founding members, but adjusted the historical record to recreate them in the image of nineteenth-century scientists:

*It was a labour well worthy the men who met avowedly for the investigation and development of truth, to inquire into these superstitions, and patiently and dispassionately to prosecute such experiments as should tend to eradicate them. It would indeed be difficult to over-estimate the great benefit that accrued to society by their destruction, and a lasting debt of gratitude is due to the Royal Society, for having been so essential an instrument in dispelling such fatal errors.*¹¹⁹

¹¹⁸ Hunter (2020), 109-110.

¹¹⁹ Weld (1848), vol. 1, 93, quoted in Hunter (2011), 113.

As we have seen earlier, this is pretty much the exact *opposite* of what had actually happened: Boyle and other early members who did investigate the phenomena came out in favour of their reality, and the few outspoken critics *within* the Society empathically did not proceed “patiently and dispassionately”, but responded just like non-scientific outside critics: with little more than scoffs. Still, as Boyle scholar Michael Hunter observed, this falsification of basic historical facts survived into the next major history of the Royal Society published in 1944, and continued to inform the ‘naturalistic’ self-image of modern scientists.¹²⁰

The nineteenth century was the first time in history when scientists made efforts of becoming celebrities, a status which was often cultivated and exploited to influence public opinion. One such science celebrity in Germany was du Bois-Reymond, who also appropriated history for his own secularizing ends. In one of his legendary public lectures, he proclaimed, rather falsely:

*In the place of miracle, natural science put law. Like fading from the light of dawn, spirits and ghosts faded away from her. She broke the reign of old sacred lie. She extinguished the witches’ and heretics’ burning stakes. She put the blade into the hand of historical criticism.*¹²¹

14 years later, du Bois-Reymond’s friend Huxley replaced his coinage ‘agnosticism’ with ‘scientific naturalism’ at the end of a historical reconstruction of the evolution of modern naturalistic thought. The first proponents of scientific naturalism, Huxley asserted, were not the materialists of the French Enlightenment, but the humanists of the Renaissance. But instead of singling out a Renaissance man of *science* for special praise, Huxley’s focus was on the great philologist and early biblical critic Erasmus.¹²² Huxley’s selection made good sense in the context of his ‘naturalistic’ agenda, as he could hardly afford to admit the fact that practically every leading man of Renaissance science

¹²⁰ Lyons (1944), 41.

¹²¹ Du Bois-Reymond (1878), 35.

¹²² Huxley (1892), prologue.

embraced beliefs in occult principles and phenomena, ranging from astrology to clairvoyance and what was now called telepathy. And as historians of early modern science accept today, it was these occult Renaissance philosophies which would inspire and shape the experimental philosophy of the man widely regarded as the very ‘father’ of modern science, Francis Bacon.¹²³

Naturally, evidence-free historical narratives would also underpin anti-parapsychology polemics by early university psychologists. In 1892, for example, Wilhelm Wundt launched an attack on the SPR in England, two German psychological societies emulating the SPR’s work, and French scientists (he explicitly targeted Richet and fellow psychologist Pierre Janet) who had published experimental evidence for telepathy. Recycling tropes from his public assault on spiritualism in 1879, Wundt claimed that telepathy would indicate the existence of a world in which natural law would be “turned on its head”, one which was separate from “the world of a Copernicus, Galileo and Newton, of a Leibniz and Kant”, and he concluded this ‘scientific’ critique by terming psychical research an endeavour he thought was “pathological through and through”.¹²⁴

The year of the coinage of the German term *Parapsychologie* (by philosopher-psychologist Max Dessoir) saw the attack on psychical research by another eminent experimental psychologist using history in his defence of ‘science’ and ‘reason’. Hugo Münsterberg, a pupil of Wundt’s, scolded psychical researchers for failing to realize that telepathy was quite obviously “impossible”, arguing that a serious consideration of telepathy would be just as anachronistic as a renewed scientific interest in alchemy.¹²⁵ After William James employed Münsterberg to run his laboratory of experimental psychology at Harvard from 1892, the German psychologist only ramped up his polemical crusade. Using tricks which might put the stereotypical fraudulent medium to

¹²³ Thorndike (1923-1958), vols. 4-6, Henry (2002, 2008), Vickers (1984).

¹²⁴ Wundt (1892), 11, 110. See also Le Maléfan & Sommer (2015).

¹²⁵ Münsterberg (1889), 115. On Dessoir and the coinage of *Parapsychologie*, see Sommer (2013b, 2021b).

shame, he would virtually sabotage James's efforts to establish critical but open-minded psychical research as a branch of experimental psychology.¹²⁶

One of James's and Münsterberg's successors at Harvard was the psychologist and historian Edwin Boring. An opponent of continuing attempts to establish parapsychology at American universities, in 1950 Boring still briefly acknowledged Gurney's and Myers's work in his classic *History of Experimental Psychology*. But he situated psychical research "just at the periphery" of the discipline, and neglected to mention the fact that William James, whom Boring considered the 'father' of psychology, considered Gurney and Myers his closest scientific allies.¹²⁷ Later, in a preface for a book by a debunker of experimental parapsychology, Boring selectively quoted James, with the purpose of portraying him as being at best agnostic regarding the existence of psychic phenomena: Insisting that it was "quite clear that interest in parapsychology has been maintained by faith. People want to believe in an occult something", Boring praised "James's own suspended judgement on psychic research".¹²⁸

¹²⁶ See, e.g. Sommer (2012) on his celebrated 'exposure' of the medium Eusapia Palladino.

¹²⁷ Boring (1950), 502. For Boring's role as a critic of efforts to establish parapsychology at American universities, see Mauskopf & McVaugh (1980).

¹²⁸ Boring (1966), xvi, xvii. The essay in question is James (1909a).

PART 2:
THE EMPIRICAL EVIDENCE AND ITS INTERPRETATIONS

Are Afterlife Beliefs Harmful?

Insights from the Medical Mainstream

You probably noted that I still haven't made anything like a strong statement about the *reality* of parapsychological phenomena. But as it should be evident by now, one major obstacle for many people to even look at the evidence has long been removed by perfectly mainstream history of science and medicine scholarship: The standard belief that 'scientific naturalism' – the categorical exclusion of 'paranormal' explanations from science, and indeed academic discourse at large – is the inevitable, cumulative and irreversible *result* of impartial scientific research over the past centuries, is not supported by evidence. Quite on the contrary: perhaps shockingly, 'naturalism' turns out to be little more than a gentlemen's agreement, one that has been shaped by theological as much as by properly secular concerns.

Our Judge might of course still object even before we get to the empirical evidence, and say: Fine, Skeptics and their orthodox religious forerunners shouldn't have twisted historical facts to suit their ends. But their battle against paranormal beliefs is still praiseworthy and noble. After all, it's undeniable that such beliefs have always disastrous consequences: Jihad suicide bombers commit unspeakable atrocities for rewards in the afterlife. In Africa and other parts of the world, people accused of witchcraft continue to be tortured and murdered. Even here in the West, people still sometimes die in the course of exorcisms. Then there's the undeniable emotional and economic damage caused by charlatans making a profession out of preying on the bereaved and other vulnerable people.

Similar arguments were of course common throughout history. In fact, Wilhelm Wundt advanced such concerns in his 1879 attack on spiritualism, where he explicitly stated that *evidence* for paranormal phenomena simply *didn't matter*. Wundt thought it would be irresponsible to admit them even if they were real: “The moral barbarism produced in its time by the belief in witchcraft”, Wundt wrote, “would have been precisely the same, if there had been real witches,” and he added: “We can therefore leave the question entirely alone, whether or not you have ground to believe in the spiritualistic phenomena”.¹²⁹

Nobody in their right mind will deny that uncritical belief in the paranormal has caused disasters, and will continue to do so. In fact, my own journey into the strange world of survival research as a teenager back in Germany began with such a tragedy: My surrogate family fell apart as a result of my closest friend’s mother’s growing obsession with the Ouija board, leading to divorce and grief which continues up to the present day. For me, this was a painful experience, and it’s probably easy to image it would bias me against rather than in favour of belief in the paranormal. But I have also witnessed how friends and acquaintances became *better* people – kinder, more responsible, and more resilient to the hardships of life – after adopting certain paranormal or spiritual beliefs which I myself find rather odd and do not share.

And here I have to confess I don’t quite buy it when Skeptical activists claim they are primarily motivated by feelings of social responsibility. After all, it would never occur to Skeptics associations to try and debunk nuclear physics because of Hiroshima and Chernobyl; or destroy the automobile industry because of hundreds of thousands of traffic accident fatalities; or attack mainstream medicine and pharmaceutical corporations because of tens of thousands of patients dying of medical misconduct and side-effects of drugs every year. What’s missing here is a basic appreciation of *symmetry* regarding *evident functions* of paranormal beliefs. And the need for symmetry as a basic

¹²⁹ Wundt (1879), 592.

methodological tool in the assessment of the empirical evidence should start becoming clear once we face certain drastic changes in recent mainstream medicine in approaches to survival-related experiences (as I have argued in a recent contribution to a volume published in the *Oxford Cultural Psychiatry* series).¹³⁰

For example, since the early 1970s there has been growing medical attention to so-called ‘hallucinations of widowhood’ or ‘bereavement hallucinations’, medical terms for encounters of the bereaved with deceased spouses and loved ones. These ‘hallucinations’ are now recognized to be remarkably widespread, with a conservative estimate of at least 40% of the bereaved experiencing them. They range from a vivid sense of presence to tactile, auditory and visual impressions, which can be indistinguishable from encounters with actual people. These ‘hallucinations’ are reported by persons with no other indications of mental illness, and they can be transitory but can occur over years. ‘Ghostly’ encounters experiences by the bereaved are not usually perceived as scary or disturbing, and physicians do not consider them pathological or even therapeutically undesirable. On the contrary: whatever their ultimate explanation, it is recognized that these ‘hallucinations’ often provide the bereaved with much-needed strength to carry on.¹³¹

A related body of clinical data concerns so-called ‘end-of-life experiences’ including ‘deathbed visions’, i.e. comforting other-worldly visions reported by dying patients. The first mainstream psychiatrist to call systematic attention to often emotionally striking visions of dead relatives and friends by terminally ill patients was Elisabeth Kübler-Ross, a pioneer of the modern hospice movement. Like ‘hallucinations of widowhood’, these visions, which seem to differ markedly from drug- and dementia-induced hallucinations, are also reported to have overwhelmingly constructive effects,

¹³⁰ Sommer (2021a).

¹³¹ E.g. Rees (1971, 2001), Greeley (1975), Olson et al. (1985), Streit-Horn (2011), Sabudeco, Evans, & Hayes (2020).

and are recognized to be of significant help for the dying and sometimes bystanders (including family and medical personnel) to come to terms with the fear of death.¹³²

Kübler-Ross was also one of the first psychiatrists to write about ‘near-death experiences’ (NDEs), which have been reported by survivors of cardiac arrests and other close brushes with death. Certain NDE elements have become part of popular culture – impressions of leaving the body, passing through a barrier or tunnel, encounters with deceased relatives and friends, a light representing unconditional love, a sudden insight of the interconnectedness of all beings, and so on. The public discourse over NDEs is typically polarized by claims that scientists who study NDEs have either proven life after death or debunked them through ‘natural’ explanations. But once you get past the clickbait, it again turns out there exists a wealth of rigorous research published in biomedical mainstream journals which suggests something strange is going on indeed. Medical authors usually steer clear of discussions of paranormal effects often reported by NDE survivors, but yet again even the ‘naturalistic’ clinical consensus is that NDEs have often strikingly constructive after-effects and can even be transformative.

While no two NDEs are identical, they can often occasion lasting and significant personality changes. Regardless of survivors’ previous religious convictions or lack thereof, they usually ‘come back’ with the unshakable conviction that personal consciousness persists after bodily death. Other long-term effects of NDEs are striking increases in empathy, altruistic engagement and environmental responsibility, as well as significantly reduced consumerism and competitiveness.¹³³ Considering that NDEs are overwhelmingly characterized as a state of bliss, perhaps the most counter-intuitive finding is that those having them are not prone to commit suicide. In fact, studies have suggested that suicide survivors reporting NDEs typically don’t repeat attempts to end

¹³² E.g. Brayne et al. (2006), Fenwick et al. (2010), Kerr et al. (2014), Devery et al. (2015), Renz (2018).

¹³³ E.g. Greyson (1983b), Klemenc-Ketis (2013).

their lives, and claim their NDEs as a reason to categorically rule out suicide in the future.¹³⁴

Interestingly, full-blown NDEs can occur in situations other than near death, such as in states of deep meditation. Practically each of its elements have also been described throughout history by people (including – you guessed it – modern scientists) reporting to be overcome by ‘mystical’ ecstasy and related states.¹³⁵ The mainstream biomedical literature has also shown NDE-style experiences to occur in psychedelically *induced* mystical states, using substances such as psilocybin (‘magic mushrooms’) and N, N-Dimethyltryptamine (DMT, naturally occurring in the ayahuasca plant). Clinical trials have demonstrated that these induced ‘other-worldly’ experiences often cause similar personality changes as NDEs, most notably a loss of fear of death, and a newfound courage to face the struggle of life. For these reasons, psychedelic therapies have become serious contenders in the treatment even of severe conditions, including alcohol- and drug-addictions, and treatment-resistant depressions and post-traumatic stress disorder.¹³⁶

There is great irony in the fact that experiences and states of mind which mainstream medics now *induce* for *therapeutic* purposes have been demonized and aggressively pathologized throughout the history of Western science and medicine.¹³⁷ The fact that today’s medicine is far more discerning in its diagnoses of patients reporting ‘weird’ experiences, and has even begun to exploit apparently striking therapeutic *benefits* of certain mental states and experiences which were systematically suppressed throughout the last four centuries, might justify a rather delicate question: *Can clinicians afford historical illiteracy?*

¹³⁴ E.g. Rosen (1975), Ring & Franklin (1981), Greyson (1992-1993).

¹³⁵ For a comprehensive review of the phenomenology, clinical status, and parapsychological aspects of NDEs and related experiences, see Greyson (2014). On the history and phenomenology of NDEs across cultures, see Shushan (2011, 2018). For transformative mystical experiences reported by modern scientists, see Kripal (2019).

¹³⁶ E.g. Mithoefer et al. (2010), Griffiths et al. (2016), Carhart-Harris et al. (2018).

¹³⁷ Heyd (1995), Flaherty (1992), Klein & La Vopa (1997), Pick (1989), Porter (1999), Porter, Nicholson, & Bennett (2003), Williams (1985), Le Maléfan & Sommer (2015), Sommer (2020).

After all, it seems the ‘naturalistic’ self-image of modern scientists and clinicians has been informed – or rather, fundamentally *misinformed* – by certain historical myths and evidence-free assumptions. Modern axiomatically ‘naturalistic’ sensibilities have had a considerable limiting impact not only on scientific and medical *research*, but also on clinical practice. And while it remains important to keep exaggerated and uncritical beliefs in the ‘paranormal’ in check to avoid tragedies, I think it is high time to finally look at the other side of the coin, and wonder how much concrete damage has been caused by centuries of stigmatization, mis-diagnoses and mis- or overmedication of people reporting ‘paranormal’ experiences.

Are We ‘Moist Robots’?

Biomedical Indications for the Transcendence of the *Embodied* Mind

One of the major upshots of the secularization of modern sciences by professionalization since the 1800s is what historian of neuroscience Fernando Vidal has called ‘brainhood’ – the popular standard view of modern neuroscientists claiming that anything worthwhile saying about humanity can be said by studying the brain.¹³⁸ According to this view – parodied by cartoonist Scott Adams with the image of the ‘moist robot’ – our minds and personalities cease to exist with the death of our bodies.¹³⁹ As the aforementioned examples of Christian materialists Hobbes and Priestley, and the German ‘scientific materialists’ of the nineteenth century already suggested, the idea ‘mind equals brain’ has long predated modern neuroscience. And as a growing body of sophisticated studies in the history of neurosciences have shown (which, I hardly need to stress, are not usually read by scientists), the fledgling brain sciences of the nineteenth and early twentieth centuries would become major platforms for political battles driving the ‘soul’ out of scientific discourse. In practical terms, rather than constituting the undisputable

¹³⁸ Vidal (2009).

¹³⁹ I’m borrowing the moist robots from Ed Kelly’s introduction to Kelly, Crabtree, & Marshall (2015), xii.

result of modern brain sciences, ideas of ‘brainhood’ were on the contrary a significant motivating factor in their very formation. Unsurprisingly, any *competing* ideas, data and theories, which have always existed as well, fell to the wayside – again not so much for coercively scientific and empirical reasons, but on overtly political and ideological grounds.¹⁴⁰

One of the most striking psychophysical anomalies reported by physicians since antiquity, but ignored by brain researchers from about the mid-nineteenth century until recent years, is called ‘terminal’ or ‘paradoxical lucidity’. These are well-documented cases of a sudden and often full restoration of personality in cognitively impaired, mentally ill or disabled patients, whose loss of cognitive functions has been assumed to be *permanent*, shortly before death. The anomaly lies in the fact that ‘terminal lucidity’ is reported to occur even in victims of *severe* neural decay or brain damage following accidents, hydrocephalus, meningitis, dementia, hemispherectomy, Alzheimer’s disease, strokes, abscesses, tumours, and so on.

In a typical case, a patient who was in a prolonged state of profound dementia and confusion would spontaneously come to, recognize and communicate with their family and friends in a clear and coherent manner, and appear to be in a state of heightened mood and vitality – only to die within hours or days after the puzzling recovery. Cases of such anomalous recoveries just before death are now again reported in the biomedical mainstream literature and are acknowledged to pose serious difficulties for reductionistic understandings of brain-mind relationships.¹⁴¹

As pointed out by authors like nineteenth-century philosopher Carl du Prel and the modern rediscoverer of ‘terminal lucidity’, biologist Michael Nahm, these cases occasionally are reported to come with other anomalies, e.g. patients having visions of

¹⁴⁰ E.g. Hagner (2000), Harrington (1987, 2009), Smith (1992, 2013), Weidman (1999), Young (1990), Vidal & Ortega (2017).

¹⁴¹ Nahm & Greyson (2009), Nahm et al. (2012), Mashour et al. (2019), Batthyány & Greyson (2021), Peterson et al. (2021).

deceased loved ones or displaying extra-sensory perception.¹⁴² But even without properly ‘paranormal’ features, cases of terminal lucidity belong to a growing class of anomalies which are threatening to explode practically all models reducing the mind to the brain. If our understanding of mind-brain relationships is at least basically accurate, ‘terminal lucidity’ simply should not occur.¹⁴³

The same applies to classical NDEs occurring during states like cardiac arrests and deep general anaesthesia – including cases in which patients have reported ‘veridical’ perceptions, i.e. often highly specific events taking place while they ‘flatlined’. Cases involving veridical components are occasionally published even in the medical mainstream literature, and in my view there are now too many well-corroborated veridical cases on record to be dismissed as anecdotes.¹⁴⁴ But even if we categorically ignored veridical cases, NDEs often occur during states in which, according to recognized criteria of modern brain sciences, neocortical functions required for *any* form of coherent conscious experience are abolished.¹⁴⁵

Since 2012, neuroscientists have struggled to make sense of neuroimaging studies which demonstrate another fundamental anomaly. We already noted well-established therapeutic effects of NDE-type mystical states produced by psychedelic drugs. Brain scans made during these experiences have shown that the *intensity* of these mystical experiences dramatically correlates with a *deactivation* of all neural regions held to be responsible for conscious experience.¹⁴⁶ These findings have caused quite a stir in the neuroscientific community as they show the opposite of what *should* happen: conscious

¹⁴² E.g. du Prel (1888), Nahm (2012).

¹⁴³ To ‘explain’ these and other cases with the catchword ‘brain plasticity’ only pushes back the real question: what is the *organizing principle* behind cases of sudden as well as gradual restoration of *profound* brain damage?

¹⁴⁴ Van Lommel, Van Wees, & Meyers (2001). For a review of veridical NDEs, see Holden (2009).

¹⁴⁵ E.g. Greyson (2014, 2021), Van Lommel (2004).

¹⁴⁶ Carhart-Harris, et al. (2012), Muthukumaraswamy et al. (2013).

experience is normally associated with *activation* of the neural network in question.¹⁴⁷

Almost a decade later, it seems there is still no conventional solution for this puzzle in sight.¹⁴⁸

Granted, discussions of these findings are ongoing, and they do not provide strong, direct evidence for personal survival by themselves. But apart from considerably weakening the evidence-base for all models which hold that consciousness inevitably dies with the brain, models which do account for these anomalies, and which also provide a conceptual framework allowing us to integrate these findings with more positive evidence for survival, have existed since the late 1800s.¹⁴⁹

So let's turn to such more direct evidence, and begin with indications suggesting that at least some of the aforementioned 'bereavement hallucinations', deathbed visions, and encounters with the departed during NDEs are no hallucinations in the ordinary meaning of the word.

Apparitions of the Living and the Dead

Probably the first modern American psychiatrist to call for a more discerning use of the term 'hallucination' on the basis of experiences discussed above was Ian Stevenson, chair of the department of psychiatry and founder of DOPS at the University of Virginia, mentioned at the beginning of this essay. In an article in the *American Journal of Psychiatry*, Stevenson cited clinical and sociological studies which suggested that 'hallucinations' of

¹⁴⁷ See Kastrup & Kelly (2018) for a readable exposition of these problems and further sources.

¹⁴⁸ I thank Ed Kelly for allowing me to read an article draft addressing the latest developments.

¹⁴⁹ The biggest breakthrough in modern psychical research in my opinion has been the publication of *Irreducible Mind* (E. F. Kelly et al., 2007). Critically testing Frederic Myers's theory of the 'subliminal self' in the light of cutting-edge biomedical and neurosciences, the authors found that Myers's ideas have more than just stood the test of time. It is this a theory along the lines of Myers's integrative framework which I firmly believe will be needed to provide a truly scientific model to explain ordinary as well as extraordinary capacities of the human mind.

deceased loved ones are remarkably common in the general population, and that therefore not all ostensible spirit visions were pathological.¹⁵⁰

Stevenson's article didn't provoke any responses from fellow psychiatrists, probably because it offended modern 'enlightened' sensibilities by placing emphasis on empirical evidence suggesting that many of such 'hallucinations' were not just purely subjective. Apparitions of the dead, Stevenson argued, have been reported to be perceived by more than one credible witness at a time, and are often *veridical* ('truth-telling'): They are reported not just by *grieving* persons who are obviously well aware of a loved one's death, but there is a wealth of well-corroborated cases indicating that often clear and vivid visions of dead or dying relatives, partners and friends are also seen by people who did not *know* that the 'hallucinated' person had in fact just died or suffered an accident around the moment of the vision. Stevenson cited two cases of veridical apparitions he had investigated himself,¹⁵¹ as well as classical early works produced by leading members of the SPR, including Edmund Gurney, Frederic Myers, and Henry and Eleanor Sidgwick.

In the light of the historical contexts sketched above, it's probably unsurprising that the SPR's first major field research on 'hallucinations' – spearhead by Gurney in England – was the first major effort by secular thinkers to actually *test* Enlightenment assumptions that apparitions were self-evident figments of diseased imaginations.¹⁵² After Gurney's death in 1888, this work was replicated on behalf of the International Congress of Psychology, with William James being in charge of the American census portion.¹⁵³ Published in 1894 by the SPR, the results of the international census, which drew on responses from over 17,000 participants, essentially confirmed the findings of Gurney's

¹⁵⁰ Stevenson (1983b).

¹⁵¹ Stevenson (1964, 1965).

¹⁵² Gurney, Myers, & Podmore (1886).

¹⁵³ James (1890c).

original study: not only were ‘hallucinations’ in the sane surprisingly common, but they also often included veridical elements.¹⁵⁴

Skeptical activists cited on Wikipedia as the supposed ‘experts’ on these things have consistently portrayed this SPR material, along with later research by Stevenson and others, as little more than anecdotal ghost stories collected by self-deluded spiritualists. In fact, one of the most influential historical standard texts of the Skeptical genre, a biography of Gurney by amateur historian Trevor Hall, argued that Gurney had killed himself, following devastating scientific critiques and the discover that he had been hoodwinked.¹⁵⁵ Unfortunately, Hall’s account continues to inform even professional historical works, whose authors have been unaware of refutations of Hall’s story, showing in detail that it is based on severe omissions, misrepresentations and other tricks deployed by Hall to make the past fit the orthodoxy of the present.¹⁵⁶

One of several scholars taken in by Hall was philosopher of science Ian Hacking. Still, on the basis of primary sources which Hacking *did* study for himself, he acknowledged in an article on the history of statistical randomization that it was in the work of the early SPR where we find the first applications of probabilistic inference. Before advancing into a methodological standard in fields like psychology, biology and medicine, Hacking argued, randomized trials were pioneered by psychical researchers like Gurney and Charles Richet with the specific aim to rule out *chance coincidence* as a counterexplanation for telepathy and veridical hallucinations. Despite his evident antipathies, Hacking therefore admitted that “Throughout these discussions the highest standards of positivist scientific methodology were observed”.¹⁵⁷

Early psychical researchers applied additional measures to systematically rule out *confirmation bias* and other issues in their field research on ‘veridical hallucinations’. For

¹⁵⁴ Sidgwick et al. (1894).

¹⁵⁵ Hall (1964).

¹⁵⁶ E.g. Nicol (1966), Gauld (1965, 1968), Hamilton (2009, 2016).

¹⁵⁷ Hacking (1988), 437.

example, collectors of the SPR's census questionnaires were instructed to hammer home to participants the importance of *Yeses and Noes* in response to the question of whether they had experienced 'hallucinations'. Also, data coming from spiritualists and other known *believers* in the paranormal were marked for higher scrutiny. Cases were not simply published on the basis of trust, but personal cross-examinations of claimants and their witnesses were carried out to assess their credibility, and only reports deemed sufficiently strong were printed, together with documents corroborating the veracity of claimed experiences.¹⁵⁸

And while Skeptics typically like to claim that psychological researchers had not the slightest clue of the pitfalls of *eyewitness testimony*, by far the most sophisticated and systematic discussion of these problems available at the time is to be found not in a text of conventional psychology, but throughout the two bulky volumes of Gurney's first case collection of 'veridical hallucinations'.¹⁵⁹

Not to be outdone, one year after Gurney's pilot study, the first *experimental* study investigating pitfalls of eyewitness testimony was not conducted by a professional psychologist, but by Richard Hodgson of the SPR. Collaborating with a conjuror who fraudulently produced direct 'spirit writings' in sealed slates and other physical phenomena of spiritualism, Hodgson tested the reliability of observations of such phenomena in (usually dimly lit) *séance* rooms. By comparing written statements by observers with the actual events, Hodgson was able to demonstrate expectations and prior beliefs had indeed produced rather grave distortions in their perception and memories of the witnessed 'phenomena'.¹⁶⁰

¹⁵⁸ On methods employed in early research on 'veridical hallucinations', see, e.g. Gauld (1968), Broad (1962), chapter 4, Sommer (2013a), chapter 3.

¹⁵⁹ But see especially Gurney, Myers, & Podmore (1886), vol. 1, chapters 4, 10-11, Sidgwick et al. (1894), chapters 3-5, 10.

¹⁶⁰ Hodgson & Davey (1887).

It was this rigour and quality of methods employed by Gurney, Myers, the Sidgwick, Hodgson and others in the SPR which prompted William James's decision to actively collaborate with them for the remainder of his life. James also often publicly protested against polemical attacks and misrepresentations of the methods of psychical research by several 'enlightened' fellow psychologists in Germany and the US, who actively manufactured what James called the "newspaper and drawing-room myth", according to which "soft-headedness and idiotic credulity are the bond of sympathy" in the SPR, "and general wondersickness its dynamic principle".¹⁶¹

For example, in a review of Gurney's study of 'veridical hallucinations', James stated in *Science* journal that it displayed a combination of qualities "assuredly not found in every bit of so-called scientific research that is published in our day".¹⁶² A decade later, he took it up a notch:

*were I asked to point to a scientific journal where hard-headedness and never-sleeping suspicion of sources of error might be seen in their full bloom, I think I should have to fall back on the Proceedings of the Society for Psychical Research. The common run of papers, say on physiological subjects, which one finds in other professional organs, are apt to show a far lower level of critical consciousness.*¹⁶³

And a critical but fair study of this early material, which is now freely available in digital format, certainly confirms James's impressions.¹⁶⁴

Unsurprisingly, however, such public endorsements by James as the leader of the American psychological profession would only make other psychologists ramp up their efforts to demarcate their fledgling discipline from politically dangerous associations with the 'occult'.¹⁶⁵ A comparatively harmless example of such 'boundary-work'¹⁶⁶ was

¹⁶¹ James (1897), 303, original emphasis.

¹⁶² James (1887), 19.

¹⁶³ James (1897), 303-304.

¹⁶⁴ E.g. http://iapsop.com/archive/materials/spr_proceedings, <https://archive.org/details/phantasmsoflavin001gurn>, <https://archive.org/details/phantasmsoflavin02gurniala>.

¹⁶⁵ Coon (1992), Taylor (1996), Sommer (2012, 2020).

the appropriation of Hodgson's study of the fallibility of eyewitness testimony by Joseph Jastrow, an 'enlightened' psychologist on a life-long mission to eradicate paranormal belief at all cost. Jastrow, America's first major popularizer of psychology, cited Hodgson's findings to imply they demonstrated the wholesale fallibility of testimony for *all* psychic phenomena.¹⁶⁷

Jastrow here pioneered a basic strategy adopted by Skeptics and their champions in academic psychology up to the present day: The application of insights from the psychology of error *without limits* on a general, *abstract* level to explain away *any* belief in the paranormal, as an excuse to bypass systematic engagement with the best *concrete* evidence and cases.¹⁶⁸

However, psychical researchers were not just the first to systematically formulate and experimentally demonstrate the fallibility of perception and memory. The primary sources also show they went out of their way to *apply* the lessons learnt from these insights to systematically eliminate or limit errors – to ensure, one could say, the sifted, published evidence would stand in a court of law. In the case of research on apparitions, for example, it's simply not true that psychical researchers were typically satisfied with cases of ambiguous impressions reported to be perceived in low light, at long range, fleetingly, or by uncritical people in a state of expectation or similar conditions known to be associated with pathological and non-pathological hallucinations. On the contrary, the bulk of published cases has focused on perceptions of vivid apparitions over the course of several minutes at close range and in bright light, and under such conditions they have also been reported to be perceived *collectively*, i.e. by more than one credible witness.¹⁶⁹

¹⁶⁶ Gieryn (1983).

¹⁶⁷ Jastrow (1889), 726, 728-730, Jastrow (1900), 149-157.

¹⁶⁸ E.g. French (2001, 2003), Zusne & Jones (1989), Tompkins (2019).

¹⁶⁹ Apart from Gurney, Myers, & Podmore (1886) and Sidgwick et al. (1894), see, e.g. Alvarado (2014), Barrett (1926), Hart & Ella (1933), Tyrrell (1973), Green & McCreery (1975), Osis (1986), Haraldsson (1987), Osis & Haraldsson (1986), Osis & McCormick (1982), Williamson (1982), Stevenson (1995), Playfair & Keen (2004).

Moreover, while Skeptics typically assume that memories of anomalous experiences are embellished over time to inflate their significance, those who have actually *tested* this assumption by re-interviewing recipients found that experiences are usually remembered consistently, over the course of up to 20 years.¹⁷⁰

This is of course not to claim that psychical researchers were infallible and never made mistakes. But anybody who begins their research by studying the *primary sources* with a critical but open mind, instead of simply relying on Skeptical secondary accounts, will agree that on average considerable pains have been taken to separate the wheat from the chaff. A standard move by Skeptics to dismiss all this material off-hand is of course to echo David Hume and simply ‘explain’ it on a general level by *fraud*. But as William James observed, anybody who suggests fraud as a *scientific* hypothesis should remember that

*in science as much as in common life an hypothesis must receive some positive specification and determination before it can be profitably discussed; and a fraud which is no assigned kind of fraud, but simply ‘fraud’ at large, fraud in abstracto, can hardly be regarded as a specially scientific explanation of specific concrete facts.*¹⁷¹

In other words: unless a critic can provide *specific* evidence that concrete precautions taken by serious researchers against fraud have *failed*, general accusations of fraud are merely polemical and impede rather than advance actual scientific inquiry.¹⁷²

¹⁷⁰ Alvarado & Zingrone (1998), Greyson (1983a, 2007), Hart (1956), Stevenson (1968), Stevenson & Keil (2000).

¹⁷¹ James (1898), 421. See also the same argument developed by sociologist of science Pinch (1979) for the case of twentieth-century experimental parapsychology.

¹⁷² This of course includes accusations made by Skeptical stage magicians such as the late James Randi. Moreover, professional conjurors have always stood on either side of the debate over the reality of paranormal phenomena, as shown by magician and historian Peter Lamont (2013).

Evidence from (*Legit*) Mediumship

James made this argument in a skirmish with a contemporary Skeptic, fellow psychologist James McKeen Cattell, concerning tests of veridical statements made by a supposed spirit medium. The medium in question was Leonora Piper, who was discovered by James in 1885, and who became the most thoroughly investigated medium of all time. An ordinary Boston housewife, Piper seems to have started her career somewhat reluctantly, when she spontaneously fell into a trance.¹⁷³ Moreover, unlike most other mediums, she never actually *claimed* to channel spirits, and although the SPR arranged generous compensation for her services as a test medium, it seems the wish to have her states explained by competent researchers also motivated her consent to be scrutinized for almost three decades.¹⁷⁴

James's allusion to Mrs. Piper as his 'white crow' to express his belief in her psychic abilities is relatively well known. More obscure is an earlier reference in the *Principles of Psychology*, where James gave a brief account of experiences with her and stated that "a serious study of these trance-phenomena is one of the greatest needs of psychology".¹⁷⁵ However, James's discovery of Piper by no means marked the first time he investigated a medium.¹⁷⁶ And like his colleagues at the English SPR, James was not exactly squeamish when it came to making sure he wasn't fooled.

To test if Piper feigned her trance state, for example, James pricked her arm, tongue and lips with a pin in his early experiments, but reported that he found them to be "absolutely anæsthetic".¹⁷⁷ Richard Hodgson, who became Piper's principal investigator after leaving England for Boston in 1887, also put Piper's trance to the test on several occasions, by holding a bottle of ammonia under her nose, putting a spoonful

¹⁷³ Hodgson (1892), §7.

¹⁷⁴ E.g. Lodge (1890a), 445. For an excellent overview of the Piper case, see Gauld (1982), chapter 2.

¹⁷⁵ James (1890a), vol. 1, 396.

¹⁷⁶ The earliest known reference to James's first-hand mediumistic tests was in a letter in 1874. Skrupskelis & Berkeley (1992-2004), vol. 4, 496.

¹⁷⁷ James & Carnochan, (1886), 95, James (1890a), vol. 1, 399.

of salt in her mouth, severely pinching her, and holding a lit match to her forearm.¹⁷⁸

When physicist Oliver Lodge hosted Mrs. Piper during the first series of experiments in England in late 1889, he pushed a needle into her hand, which, according to Lodge, elicited “not the slightest flinching”.¹⁷⁹

Like his colleagues in England, Hodgson in Boston strictly flew his supervision of Piper experiments under the radar of the press, and only selected test sitters who were strangers to her and her family.¹⁸⁰ As an additional safeguard, for several weeks the Piper family was shadowed by detectives, who failed to discover indications that Piper or members of her household may be part of a network of fraudulent mediums supplying each other with information about sitters.¹⁸¹ Similar precautions were taken when Piper visited England for experiments arranged by the SPR in Liverpool, London and Cambridge.¹⁸² Piper’s host in Liverpool, Oliver Lodge, for example, used the occasion to employ new servants unaware of his unorthodox research interests; upon Piper’s arrival he searched her luggage; he locked rooms and hid photographs and documents a trickster would search for information presented in fake seances; he read nearly all her letters; and like Hodgson and other investigators, he introduced all sitters anonymously.¹⁸³

Lodge was the first investigator to express in 1890 his suspicion that some of Piper’s trance phenomena suggested the intervention by certain departed individuals.¹⁸⁴ And when in 1898 Richard Hodgson announced the verdict of his 11 years of research with Mrs. Piper, it came quite as a shock to those who knew him as a zealous debunker of psychic frauds: At least one of Piper’s trance personalities, Hodgson declared, had indeed

¹⁷⁸ Hodgson (1892), 4-5.

¹⁷⁹ Lodge (1890a), 447.

¹⁸⁰ Hodgson (1892), 1.

¹⁸¹ Hodgson (1898), 285, Myers (1890b), 438.

¹⁸² Records of the first English sittings are Myers (1890b), Leaf (1890), Lodge (1890a, 1890b).

¹⁸³ Lodge (1890a).

¹⁸⁴ Lodge (1890b).

furnished undisputable evidence for its identity with a deceased person, an acquaintance of Hodgson's named George Pellew.¹⁸⁵

Hodgson's conviction was not shared by everybody in the SPR, although all key researchers agreed that Piper's often strikingly specific veridical performances were not explicable by chance coincidence let alone fraud. Many continued to stick to what Hodgson had regarded a more parsimonious interpretation himself before accepting the 'spirit hypothesis': Piper's mediumship was a case of a benign multiple personality, telepathically mining the minds of the living to construct persuasive impersonations of the dead.¹⁸⁶ Odd as this view may sound, we shall unpack it below and see why it needs to be considered as a possible counter-explanation for survival.

Skeptics will of course tell you the Piper case collapsed shortly after William James's death in 1910, when psychologist Amy Tanner published a book detailing her and G. Stanley Hall's *really scientific* experiments with the medium, which showed that absolutely nothing paranormal was going on. But as an historian with no discernible sympathies for psychical research put it: "Hall and Tanner proved little with their tests except that they could do physical damage to Mrs. Piper".¹⁸⁷ This refers to procedures they performed on Piper, which – unlike the also rather invasive tests of Piper's trance by James, Hodgson and Lodge two decades earlier – seemed to have little purpose other than to cause Piper discomfort, and left her with badly blistered lips and a scar. Based on just six sittings, Hall and Tanner's main finding, touted as their own discovery, was hardly original: Mrs. Piper, they concluded, was a case of multiple personality.¹⁸⁸

¹⁸⁵ Hodgson (1898).

¹⁸⁶ E.g. Podmore (1898), Sidgwick (1900), James (1909c).

¹⁸⁷ Coon (1992), p. 149.

¹⁸⁸ Tanner (1910). For a detailed critique, see Hyslop (1911). Other critiques are, e.g., Lang (1911a, 1911b), Sidgwick (1911). Another Skeptical standard text debunking Piper is Tuckett (1911), a masterclass in misrepresentations of primary sources. Tuckett's 'scientific' attitude may already be suggested by his embrace of Faraday and Huxley as experts on psychic phenomena, and assertions throughout the book that any paranormal belief expressed "the bias of superstition, characteristic of ignorant savage races and of childish minds" (96). Later, science popularizer Martin Gardner based his essay "How Mrs. Piper

Piper continued to sit for tests despite her widely publicized ‘exposure’ by Hall and Tanner. But around the time of James’s death in 1910, she would be just one of several mediums investigated by the SPR, who together became involved in the famous ‘cross-correspondences’, which we will briefly look at in the next section.

Meanwhile, James Hyslop, professor of logic at Columbia University and a former pupil of Hall’s, had re-founded the American SPR in 1907. One of Piper’s American main investigators, Hyslop was the author of the most extensive Piper report, and one of a growing number of investigators who shared Hodgson’s conviction that Piper occasionally channelled spirits of the dead.¹⁸⁹ Hyslop discovered several promising new mediums in the US, and continued to publish extremely detailed reports of his experiments with ‘Mrs. Smead’ (pseudonym for Mrs. Willis M. Cleveland), ‘Mr. Chenoweth’ (pseudonym for Minnie Soule) and others until his death in 1920.¹⁹⁰

In England, the medium most thoroughly tested by the SPR after Mrs. Piper was Gladys Osborn Leonard. Among Mrs. Leonard’s specialties was the production of highly specific veridical information in so-called ‘proxy-sittings’: There, sitters who hadn’t known the deceased person supposedly channelled by a medium attended séances on behalf of others who had. Proxy sittings sought to rule out ‘cold readings’ – fraudulent mediums’ use of subtle unconscious clues given by sitters to construct a convincing but fake spirit impersonation –, but also an immediate telepathic ‘contamination’ of trance statements by sitters in the know.¹⁹¹

bamboozled William James”, which is probably the most widely cited modern article about Piper, predominantly on Hall and Tanner’s book. Going even further than Hall and Tanner, Gardner bluntly asserted that Piper was a clever fraud who was part of a “network of scoundrels who passed information freely back and forth” (Gardner, 2003, 256). On Gardner’s text see, e.g., Taylor (2010).

¹⁸⁹ Hyslop (1901). Another important American investigator of Piper was philosopher-psychologist William Newbold at the University of Pennsylvania (Newbold, 1898).

¹⁹⁰ E.g. Hyslop (1907, 1910, 1912, 1918). Important studies of Mrs. Soule and other mediums by American investigators other than Hyslop are, e.g., Allison (1929), Thomas (1929, 1937).

¹⁹¹ E.g. Thomas (1935). For accounts of the Leonard mediumship with references to primary sources, see Smith (1964), and Gauld (1982), chapter 4. ‘Cold reading’ techniques employed by fraudulent psychics

Hyslop's mediums and Mrs. Leonard were by no means the last to provide an overall striking mass of evidence in the twentieth century. Initial tests of a young medium named Eileen Garrett in the 1930s provided further interesting results.¹⁹² Like Mrs. Piper before her, Garrett was unconvinced of the 'spirit hypothesis', and after she became wealthy through marriage, from 1951 she would actively sponsor research of phenomena suggestive of survival by founding the still existing Parapsychology Foundation in New York.¹⁹³

Later, it was again psychiatrist Ian Stevenson who continued to publish methodologically rigorous research on mediumship suggestive of survival, often in collaboration with the Icelandic psychologist Erlendur Haraldsson.¹⁹⁴ And while experiments with mediums are still occasionally published in mainstream scientific journals today, to me it seems that few are of the same quality as these earlier studies by the SPR, William James, Hyslop, Haraldsson and Stevenson.¹⁹⁵

Cases of the Reincarnation Type (CORT)

However, Stevenson did not just replicate findings from classical areas of survival research. In the early 1960s, he single-handedly created a new branch of investigations into survival, which can be considered complementary to classical research on mediumship and apparitions: the evaluation of claimed memories of previous lives by young children. As put by Stevenson, if the strongest mediumship and apparition cases suggested that someone who had died was still alive, some cases of the reincarnation type suggested that someone who is now alive had previously died.

were well-known and systematically eliminated by psychical researchers, long before they were touted as their own discovery and offered as blanket 'explanations' by Skeptics. E.g. Lodge (1890a), 449. Gault (1982).

¹⁹² E.g. Carrington (1933), Carington (1935), Thomas (1937).

¹⁹³ <https://parapsychology.org>.

¹⁹⁴ E.g. Stevenson (1970, 1973), Haraldsson & Stevenson (Haraldsson & Stevenson, 1974, 1975a, 1975b).

¹⁹⁵ For an exception, see Kelly & Arcangel (2011), co-authored by Stevenson's pupil Emily Kelly at DOPS.

In the early days of the SPR, ideas of reincarnation were strongly associated with the ‘Indian Theosophy’ of H. P. Blavatsky, one of several psychics debunked by Richard Hodgson.¹⁹⁶ However, although early psychical researchers like James and Myers did not investigate claimed reincarnation memories, they were certainly open to the notion. In fact, years before James came rather close to accepting the ‘spirit hypothesis’ as an interpretation of the strongest mediumship cases, he wrote that to him empirical evidence for reincarnation would make the most convincing case for personal survival.¹⁹⁷

In 1960, Stevenson was the first scientist to write about rigorously investigated empirical indications of reincarnation, and eight years later he published his first collection of 20 investigated cases.¹⁹⁸ Most though by no means all of Stevenson’s investigations took place in India and other countries and regions where belief in reincarnation is widespread and cases not as difficult to come by as in the West.¹⁹⁹ Today, however, there are thousands of cases on record internationally. And while modern Skeptics dismiss this material along with other findings of psychical research, one of the most widely read endorsements of Stevenson’s research in 1995 came from a rather unlikely figure: co-founder of modern Skepticism Carl Sagan, who wrote in his classic *The Demon-Haunted World* that Stevenson’s investigations of the reincarnation type (CORT) deserved “serious study”.²⁰⁰

By the time of Sagan’s reference, Stevenson was no longer the only scientist to investigate CORT by applying rigorous methods and the highest standards of documentation.²⁰¹ Principal investigators who independently replicated his findings were

¹⁹⁶ On the history of reincarnation research and beliefs see Matlock (2019), chapters 2-3.

¹⁹⁷ James (1892). For letters by James signalling a near-acceptance of the spirit hypothesis, see Skrupskelis & Berkeley (1992-2004), vol. 9, 565; vol. 10, 16; vol. 12, 346.

¹⁹⁸ Stevenson (1960). The first edition of his earliest case collection (Stevenson, 1974) was in 1968.

¹⁹⁹ For early American and European cases, see Stevenson (1983a, 2003).

²⁰⁰ Sagan (1995), 285. Later Skeptical activists were not so courteous. On such ‘critiques’ of CORT research, see Matlock (1997; 2019, 103-110).

²⁰¹ On methodological issues such as parental and sociocultural influences, see, e.g. Mills (2004), Pasricha (1992, 2011), Schouten & Stevenson (1998).

the aforementioned Erlendur Haraldsson, Indian psychologist Satwant Pasricha, Canadian anthropologist Antonia Mills, German-born psychologist Jürgen Keil at the University of Tasmania, and the current director of DOPS at the University of Virginia, psychiatrist Jim Tucker, whose own research has strongly focused on American cases.²⁰²

I'd be surprised if there wasn't at least one essay in this contest that will specifically deal with CORT, so I think I can be brief and say that a strong case might look like this: A child, usually aged between 2 and 5, alarms their parents by claiming to be someone else, stating the name of their 'previous self'. To the parents' added horror, the child also demands to be reunited with their spouse, children, and 'real' parents, whose names are also given. Despite threats and beatings by the parents, the child continues to insist. Apart from giving names and other details, the child also exhibits unusual and specific *behaviours*, which strikingly correspondent with idiosyncrasies of personality in an actual individual, who is eventually located in a different city or village, and who had in fact died a few years before the child was born. Perhaps most incredibly, in addition to specific memories, the child also displays birthmarks, lesions or deformations, which strikingly correspond to fatal *wounds* in the 'previous self' (as corroborated by autopsy reports), who had died in an accident, or by murder or suicide.²⁰³

²⁰² E.g. Haraldsson & Samararatne (1999), Haraldsson (Haraldsson, 1991, 2000a, 2000b), Haraldsson & Abu-Izzedin (2002, 2004), Pasricha (1990), Pasricha et al. (2005), Mills, Haraldsson, & Keil (1994), Mills (Mills, 1988, 1989, 2004), Keil (1991, 2010a), Keil & Tucker (Keil & Tucker, 2000, 2005), Sharma & Tucker (2004), Tucker & Keil (2013), Tucker & Nidiffer (2014) Tucker (2000, 2021). Replication studies of European cases include Hassler (2013) and Rivas (2003). Joint studies by Stevenson with independent researchers include Keil & Stevenson (1999), Pasricha & Stevenson (1987), Stevenson & Haraldsson (2003), and Stevenson & Keil (2005). Another major figure in reincarnation research is anthropologist James Matlock (1990, 2019), whose work is mainly theoretical, and whose online resources is indispensable for anyone studying the literature on this mind-boggling subject: <http://jamesgmatlock.com/resources>. See also Matlock, Haraldsson & Matlock (2016).

²⁰³ Stevenson's most important work is a two-volume collection and analysis of such well-documented birthmark cases (Stevenson, 1997). The best overview of clinical and parapsychological findings by Stevenson and other reincarnation researchers is Mills & Tucker (2014).

Stevenson and most other principal investigators never claimed that the mass of this astounding empirical material provided conclusive proof of reincarnation.²⁰⁴ One seasoned CORT researcher, Jürgen Keil, even explicitly argued against the reincarnation hypothesis, but his alternative still had to resort to squarely parapsychological explanations involving ‘psi’ (extra-sensory perception and psychokinesis) from the *living*.²⁰⁵ You remember a similar theme in my brief account of Piper’s mediumship, whose principal investigators discussed whether her trance phenomena should be explained by spirit agency or unconscious telepathic information acquisition from the minds of living persons. And it is in a discussion of these ideas where I believe we can find evidence that more than just tips the scale towards personal survival.

‘Push’ or ‘Pull’? Tracking Down the Input Source

Exotic and strange as distinctions of parapsychological capacities of *embodied* minds from the agency of discarnate spirits may appear to most moderns, they are hardly new. Such ideas were in fact at the heart of mainstream Renaissance natural philosophy and related Neoplatonic currents, which centred around notions of a ‘world soul’, in which individual minds were thought to be embedded and intrinsically interconnected with the material world on a basic ontological level. This was also the cosmology of early modern science icons including Copernicus, Kepler, Galileo and Francis Bacon. In 1605, for example, Bacon noted that parapsychological cognitions needed to be distinguished according to the ‘input source’: In his discussion of psychic phenomena occurring near death and in altered states, from which we briefly quoted in Part 1, for example, Bacon divided ‘natural divination’ (*divinatio naturalis*) into ‘primitive’ divination –

²⁰⁴ Matlock (2019) has been the only principal researcher arguing the evidence was conclusive.

²⁰⁵ Keil (2010b).

parapsychological capacities of the *embodied* mind – and divination by ‘influxion’ – veridical input from *disembodied spirits*.²⁰⁶

Far from being refuted during the supposedly linear growth of scientific knowledge, it would again be fair to say that such holistic cosmologies were squarely written out of history by figures like Huxley and du Bois-Reymond, along with striking continuities of associated ‘paranormal’ beliefs held by members of intellectual elites. Notions of a ‘world soul’ would be preserved in major philosophical systems of German idealism, a worldview which grounded much of late-eighteenth and early nineteenth century science.²⁰⁷ These idealist frameworks were notably formulated by F. W. J. Schelling, J. G. Fichte and later G. W. F. Hegel – all of whom were convinced of the reality of ‘paranormal’ phenomena, especially those reported to occur in mesmerist trance and other altered states.²⁰⁸

For example, Hegel’s leading philosophical antagonist was Arthur Schopenhauer, who still agreed with Hegel that “He who nowadays doubts the facts of animal magnetism and its clairvoyance is not to be called incredulous, but ignorant”.²⁰⁹ Schopenhauer also studied reports of spirit apparitions, which, however, he did *not* interpret as evidence for personal survival, but as indications of dramatized expressions of an impersonal and unconscious ‘world will’. Similar notions were at the roots of the famous *Philosophy of the Unconscious* by Eduard von Hartmann, who adopted Schopenhauer’s comparisons of biological instinct with clairvoyance, and who was a major German critic of spiritualism.²¹⁰

One scientifically eminent contemporary of Hartmann who also subscribed to the notion of a ‘world soul’ was the aforementioned Gustav T. Fechner, whose works would

²⁰⁶ Bacon (1803), vol. 1, 128.

²⁰⁷ E.g. Cunningham & Jardine (1990).

²⁰⁸ E.g. Schelling (1804, 1865), Fichte (1835), Hegel (1845), Magee (2008).

²⁰⁹ Schopenhauer (1874), vol. 1, 243-244.

²¹⁰ Hartmann (1869, 1885). See also Alvarado, Nahm, & Sommer (2012), Wolfram (2012).

increasingly come to inspire William James's philosophy.²¹¹ And it is hardly an accident that James's fellow psychical researcher Frederic Myers was a trained classicist. In fact, Myers's coinage of 'telepathy' in 1882 – as well as his invention of the word 'subliminal' – was more than informed by his studies of ancient Greek mystical to Renaissance natural philosophical and German idealist traditions.²¹² While Skeptics typically portray Myers as a haplessly naïve and uncritical spiritualist, his early work in fact seemed to directly undermine the idea of spirit agency, which provoked rather fierce attacks by actual spiritualists.²¹³

Rather than through *isolated* investigations of anomalies directly suggestive of survival only – verifications of 'spirit identity' in mediumship and apparitions – Myers tried to strengthen the scientific case for survival by constructing a model of the self, in which undisputed psychological and properly parapsychological phenomena did not face each other as irreconcilable, but were *continuous*. For the case of mediumship, for example, Myers argued that properly scientific research in this area

*will not be difficult only, but impossible, – it will lead to mere confusion and bewilderment – if it be undertaken without adequate preliminary conception of what our own personalities, our own intelligences, are in reality and can actually do. The most ardent Spiritist should welcome a searching inquiry into the potential faculties of spirits still in the flesh. Until we know more of these, those other phenomena to which he appeals must remain unintelligible because isolated, and are likely to be obstinately disbelieved because they are impossible to understand.*²¹⁴

²¹¹ E.g. Fechner (1851), James (1905, 1909b).

²¹² See, for example, Myers (1893, 1921), Sommer (2013a), chapters 2-3.

²¹³ On disputes between early SPR figures and spiritualists, see, e.g. Cerullo (1982), 71-84, Hamilton (2009), 158-164.

²¹⁴ Myers (1891), 121.

This quote is from Myers's review of James's *Principle of Psychology*, where we find a general conception of mediumship which James himself had adopted from Myers.²¹⁵ Somewhat oversimplified, this methodological maxim roughly goes like this:

Even veridical cases of mediumship should initially be approached as non-pathological instances of multiple personality. A medium is simply someone with a disposition to go into a self-induced trance, during which expectations by a sitter wishing to communicate with a deceased loved one are unconsciously acted out. Rather than actually 'channelling' the spirit in question, the entranced medium, uninhibited by the habitual control of self-consciousness, constructs a 'split personality', persuasively camouflaging as the expected 'spirit' by accessing a cosmic mental nexus, in which the minds of all beings (living *and* dead) are *constantly* connected below the threshold of everyday conscious awareness.

A similar approach was applied in the SPR's aforementioned early studies of veridical 'hallucinations', which Myers conceptualized as exceptional, dramatized telepathic eruptions of subliminal mental interconnectedness into conscious experience. One of the spiritualists who had absolutely no use of all this new talk about subliminal minds and divisions of the self was the 'other Darwin', Alfred Russel Wallace. But instead of attacking his fellow countryman Myers, he singled out Carl du Prel, a German author who proposed similar ideas.²¹⁶ Never mind that du Prel – the most prominent German-language theorist of the unconscious mind before Freud, who once called du Prel "that brilliant mystic" – was a devout spiritualist himself, as he reminded Wallace in his reply.²¹⁷

At a time when the medical and psychological mainstream still regarded hallucinations and trance states as clear signs of mental degeneration, Myers and

²¹⁵ E.g. Myers (1884, 1885), James (1889), 555-556; James (1890a), vol. 1, 228, James (1890b), 665, Sommer (2013a), chapter 3.

²¹⁶ Wallace (1891).

²¹⁷ Freud (1914), 48n, du Prel (1892).

colleagues at the English SPR, William James in the US, and du Prel in Germany belonged to the most vocal figures who disputed such blanket diagnoses. Their insistence on more discerning diagnostics would in fact place them firmly against the grain of medical orthodoxy even *before* they discussed properly *parapsychological* phenomena.²¹⁸ Regarding divisions of the self, for example, du Prel argued that rudimentary forms of non-pathological multiplicity already occurred in ordinary dreams:

*If in dream I sit at an examination, and do not find the answer to the question put by the teacher, which then my next neighbour, to my great vexation, excellently gives, this very clear example shows the psychological possibility of the identity of the Subject with the contemporaneous difference of persons.*²¹⁹

Approaching spiritualism using such minimalist conceptions which were continuous with ordinary psychological knowledge, Myers and James initially viewed trance mediumship as a more pronounced instance of such dramatized dream monologues. For example, on the height of her career Mrs. Piper occasionally gave up to three communications simultaneously, each hand writing a message from a different ‘spirit’, while a third would coherently address another sitter in the room.²²⁰ Spiritualists viewed such dramatic instances as self-evident spirit communication even when messages were not veridical. However, Gurney, James and various psychologists were able to demonstrate similar multiple automatic action in *hypnotized* subjects, while experiments

²¹⁸ Williams (1985), Le Maléfian & Sommer (2015), Sommer (2020). Skeptics like G. Stanley Hall and his pupil Joseph Jastrow, for example, embraced the orthodox view that spiritualism went against “the normal, psychological growth of racial culture” and that any paranormal belief signalled “reversions to more primitive modes of thought” of the “psychic life of savage tribes” (Jastrow, 1886, 567). See also Hall (1887, 1910).

²¹⁹ Du Prel (1889), vol. 1, 85.

²²⁰ Hodgson (1898), 292-295, Sidgwick (1915), 36.

in telepathy between the living through automatic writing likewise suggested striking parallels without the need to invoke spirits.²²¹

And it is in this context that early Piper investigators came to believe that her first prominent ‘spirit control’, a personality calling himself ‘Phinuit’, was not a spirit, but a fragment of Piper’s own mind: Not only did ‘Phinuit’ fail to produce evidence supporting his claim that he was the spirit of a certain French doctor. While he did often provide highly specific veridical information about ‘spirits’ *other* than himself, Phinuit and other trance personalities would also often make absurd statements reminiscent of confused ramblings of a sleepwalker. One example is the often-cited claim by the ‘spirit’ of Sir Walter Scott that there were monkeys in the sun, a statement the reasonably well-educated medium would not have made in the waking state.²²² On another occasion, the entranced Mrs. Piper grabbed the arm of the chair she sat in, correctly identifying it as belonging to a deceased aunt of Lodge’s, but stating it was part of a church organ.²²³

Another strong indication that Phinuit was indeed a partition of Mrs. Piper’s own mind was the fact that he would sometimes shamelessly ‘fish’ for information, trying to tease out responses from sitters which might help to improve his performance.²²⁴ These and other instances – for example, Phinuit sometimes making up ludicrous excuses for giving blatantly false information – only reinforced the impression that the entranced Mrs. Piper, through the vehicle of ‘Phinuit’, was unconsciously responding to investigators’ expectations like a hypnotic subject, compelled to satisfy sitters by furnishing them with ‘information’ *no matter how*. Principal Piper investigators frequently discussed these and many other signs as fundamental hurdles for the spirit

²²¹ E.g. Myers (1884, 1885, 1887, 1888), Gurney (1887), 317-321, James (1889). Such hypnotic inductions of multiplicity were independently demonstrated by other psychologists, including Pierre Janet (1889) and Alfred Binet (1890) in France.

²²² Newbold (1898), 48.

²²³ Lodge (1890a), 460, 548.

²²⁴ E.g. Myers (1890b), 440, Leaf (1890), 558, 617, Lodge (1890a), 449-450, Hodgson (1892), 2, 7-8, 85, Hodgson (1898), 286, Newbold (1898), 7-8, Sidgwick (1900), 28.

hypothesis.²²⁵ At the same time, they still struggled to make sense of the wealth of impressive veridical information provided by Phinuit and other supposed ‘split personalities’ of Mrs. Piper, which they preliminarily pigeonholed as ‘telepathy from the living’.

One of several early examples which appeared to far outstrip such an interpretation, however, was reported by Oliver Lodge. When he hosted Mrs. Piper during the first series of experiments in England, a personality claiming to be the son of Mr. Rich, head of the Liverpool post office, was purported to communicate. The only other sitter present was a friend of Lodge’s, whom he had introduced to Piper using a pseudonym, but who was still addressed by his actual name. Moreover, while Lodge and his friend faintly knew Mr. Rich, neither were aware that his son had died. The communicator then urged Lodge and his friend to pass on a message to Mr. Rich, expressing worry over his wellbeing and claiming among other things that he had recently suffered from dizziness and saw himself forced to retire.

Lodge decided to bite the bullet and convey the message to Mr. Rich as requested, who confirmed these and other details. Moreover, Rich said that he took the loss particularly badly because of an estrangement with his son shortly before his unexpected death a few months before the sitting. Considering how he should explain Piper’s veridical impersonation of his dead son to Mr. Rich in terms of telepathy from the *living*, Lodge wrote:

*the only thought-transference explanation I can reasonably offer him is that it was the activity of his own mind, operating on the sensitive brain of the medium, of whose existence he knew absolutely nothing, and contriving to send a delusive message to itself*²²⁶

²²⁵ For an important book-length discussion, see Sidgwick (1915).

²²⁶ Lodge (1890a), 456.

This is by no means one of the most striking cases, and there are countless others, reported and analysed in often painstaking detail, in studies of many other mediums.²²⁷ Moreover, the case of Mr. Rich already gives us an idea of the *intimacy* of many communications. In fact, a frequent complaint by James in his writings and private letters to friends was that sitters frequently did not consent to a publication of some of the most striking veridical material because it was too private and personal.²²⁸

A much more complicated case of mediumship strongly suggestive of survival were the so-called ‘cross-correspondences’, beginning in 1906. On the face of it, this appeared like a concerted long-term effort from the ‘other side’ by deceased SPR personnel – including Gurney, Myers, Henry Sidgwick and Hodgson – to prove their continued existence through mediums distributed across three continents. These included Rosalie Thompson, ‘Mrs. Forbes’ (the wife of Judge Raikes), Mrs ‘Willett’ (Mrs Winifred Coombe-Tennant), and Margaret Verrall and her daughter Helen in Britain; Mrs. Piper in the US; and ‘Mrs. Holland’ (Rudyard Kipling’s sister Alice Fleming) in India. Prompted by the supposed spirits of Myers and colleagues, each medium conveyed pieces of a literary jigsaw puzzle, whose individual parts were meaningless in themselves, but assumed significance when assembled according to directives of ‘Myers’ and fellow spirits.²²⁹

An often-cited critique of the cross-correspondences has interpreted them as a result of chance-coincidence.²³⁰ However, the author only used a small fraction of these literary fragments, while ignoring said ‘directives’ by ‘Myers’ and other supposed spirits, which in themselves contained many rather specific, veridical aspects. The most recent and comprehensive account and painstaking analysis of published and previously

²²⁷ For good summaries of even more impressive but complicated instances in the Piper mediumship with references to original sources, see Gauld (1982), chapter 3.

²²⁸ E.g. James (1890b), 658, James (1909c), 33n, 37, 78, 108-109, Skrupskelis (1992-2004), vol. 9, 148n98.

²²⁹ Beginning with Verrall (1906). For a good overview, see Gauld (1982), 77-89. (2017).

²³⁰ Moreman (2003).

unpublished primary sources has clearly shown that chance coincidence is a rather inadequate explanation for the bulk of the messages: “Whatever the source”, Trevor Hamilton has argued, “the scripts were not passive inert structures that did not answer back”.²³¹ ‘Myers’ and other communicators regularly gave explicit instructions in which order to assemble the pieces of the puzzle, gave hints of interpretations, and provided an overall strong impression of a conscious, deliberate direction and monitoring of the process from the outside.

William James and other critical mediumship researchers increasingly acknowledged that telepathy and clairvoyance of the living seemed insufficient as an explanation of subtle aspects of the ‘trance drama’, which were often lost in the printed records. Even the most seasoned and cautious sitters would often admit to be impressed not only by veridical bits of *information* specifically matching a certain deceased individual, but especially the *way* in which it was conveyed – vividly displaying a deceased person’s unique mannerisms, tone of voice, characteristic humour, and so on.²³²

In his final comprehensive study of Piper’s mediumship, James once again admitted to struggle with what he called the “rubbish of trance-talk”, which we briefly addressed above. At the same time, he strongly doubted that a medium’s subconscious ‘will to personate’ plus telepathy was a sufficient explanation. If telepathy from the living was all there was, James argued, it should “play an entirely passive role – that is, the telepathic data would be fished out by the personating will, not forced upon it by *desires to communicate, acting externally to itself*”.²³³

Some of the strongest impressions of such an external ‘push’ often only emerge from a close study of certain details in the original records. Boston psychiatrist Walter F. Prince, an authority in the study of multiple personality disorder, provided a vivid example of the apparent discrepancy between a medium’s ‘will to personate’ and a

²³¹ Hamilton (2017), 213.

²³² See the important discussion of concrete examples in Gauld (1982), chapter 7.

²³³ James (1909c), 117.

supposed spirit's 'will to communicate' in an account of his investigations of Mrs. Chenoweth. There, a 'spirit' claiming to be Prince's deceased mother tried to identify herself by mentioning an event in Prince's childhood, a visit to a neighbour who owned a young calf (colloquially a 'bossy') which young Prince had been fond of. Here's an excerpt from the stenographic records of communications from Prince's supposed mother:

"We went to a neighbor's to see a pet Bunny" – pause – "pet Bunny BB Bunny" – pause – "No, it was a pet Bunny BB Bunny B" – long pause – (medium moans) "Milk – a small cow Bossy".

Prince, who stated there was no plausible way for the medium to be aware of the event from his childhood through conventional means, comments:

Who can doubt that someone or something intended "Bossy" [...] from the first? Else why did the communicator stop at Bunny every time and begin again, express dissatisfaction, pause as though pondering what was the matter or how to remedy it, experience emotion which extorted moans from the medium, and finally say 'small cow' as though to avoid the word beginning with B? If two minds were engaged in the process, the second receiving from the first, we can see how this second, call it [...] the medium's subconscious, would, when the 'pet B-' was reached, conceive the picture of a rabbit and cling to the preference for some time despite the efforts of the first mind to dislodge it.²³⁴

In short: The stammers in the communication suggest signs of a struggle by the spirit of Prince's mother to enforce her own memory against the medium's immediate association with the letter B.

By far the strongest evidence for personal survival along these lines available by 1939 has been provided by German philosopher Emil Mattiesen. Discussing findings of English, American, French, Italian and German psychical research throughout his three volumes of fine-grained analysis of such important formal aspects of mediumistic

²³⁴ Prince (1922), quoted in Gauld (1982), 142.

impersonations, as well as apparitions, Mattiesen identified what he called a “centre of activity”, arguing that

*a complete theory has to explain not only where the expressed knowledge comes from, but also determine the origin of the drive that weaves both into a lively personation, which as such bowls over the sitter as persuasive.*²³⁵

Similar views were also expressed by perhaps the last scientifically eminent figure to sit with Mrs. Piper, American psychologist Gardner Murphy. Following an intense study of the literature on mediumship, Murphy likewise concluded that it was “the autonomy, the purposiveness, the cogency, above all the individuality, of the source of the messages, that cannot be by-passed”.²³⁶

Finally, another class of mediumistic case reports also more than suggests a ‘push’ from the ‘other side’ instead of a ‘pull’ from the living: well-documented cases in which a ‘spirit’ who was completely *unknown* not just to the medium, but to all sitters, initiates communications. While Lodge and his friend in the Rich case cited above, for example, were aware of the *existence* (though not of the death) of Rich’s son, cases of so-called ‘drop-in communicators’ are defined by the perfect strangeness of a ‘spirit’, whose deceased biographical counterpart is eventually identified only through its own veridical statements.²³⁷ Here, motivations to produce impersonations are typically difficult to ascribe to the medium or any of the sitters, but more plausibly to a deceased man or woman whose communications seem driven by their own motivations.²³⁸

There are close equivalents of ‘drop-in’ cases in studies of apparitions, some of which seem even more suggestive of spirit agency than so-called ‘Peak-in-Darien’ cases,

²³⁵ Mattiesen (1936-39), vol. 1, 357. Mattiesen’s important volumes remain to be translated into English. To me, his analysis seems to pose severe difficulties even for the most sophisticated defences of ‘living agent psi’ (Braude, 2003; Sudduth, 2016).

²³⁶ Murphy (1961), 273.

²³⁷ E.g. Myers (1890a), 355-357, Price (1931), Gibbes (1937), Haraldsson (2011), Haraldsson & Stevenson (Haraldsson & Stevenson, 1975a, 1975b), Stevenson (1970, 1973).

²³⁸ See the discussion in Gauld (1982), chapters 5-6.

where a person thought to be alive appears, and is later found to have died before the ‘hallucination’ occurred.²³⁹ The most striking and recent counterpart of ‘drop-ins’, however, is to be found in certain cases of the reincarnation type. Here are some of the most impressive and well-documented features:

- Reported past-life memories by young children are narrated repeatedly and with strong emphasis;
- Specific names of persons, places, etc. are given, which eventually lead to the discovery of the child’s supposed previous personality (PP);
- Social standing and profession of the PP is acted out in play;
- Claimed memories engender family conflicts, due to ambiguity of family membership;
- Sexual precocity and gender dysphoria in cases where the PP belonged to the opposite biological sex;
- Display of unlearned skills not plausibly acquired in the present life, including basic foreign language skills, procedures associated with a profession, etc.;
- Unusual behaviour and idiosyncratic traits corresponding to the PP, including phobias, aversions, obsessions, and penchants;
- Alcohol and drug addictions that were manifest in the PP;
- Symptoms of post-traumatic stress disorder, which do not seem to match any events in the child’s current life, but to specific circumstances in the remembered PP’s life, often their mode of death; and not least:
- Birthmarks, differing in etiological features such as size, shape and colour from conventional birthmarks, and other bodily abnormalities, including severe deformations. Often resembling actual scars and lesions, they significantly correspond to wounds involved in the death of the PP as shown by autopsy reports and other evidence.

²³⁹ E.g. Barrett (1908), Johnson (1899), Myers (1889), Cook, Greyson, & Stevenson (1998), Greyson (2010).

Puzzling psychological and behavioural reincarnation evidence, especially children's substance addictions seemingly out of nowhere, and phobias and full-blown post-traumatic stress disorder symptoms corresponding with remembered causes of death, is occasionally discussed even in conventional medical and psychology journals.²⁴⁰ Together with the physical evidence – specific lesions which mirror typically fatal wounds of a PP – they strongly point to the carrying-over of affects and other compulsive elements of personality from one life to the next. And while cases of birthmarks and lesions may appear especially odd and inexplicable, even they seem continuous with phenomena of conventional biomedicine: Shortly after World War 2, for example, the *Lancet* reported the case of a traumatized army officer, on whose body marks or imprints would spontaneously appear, resembling ropes with which he had been tied up during war.²⁴¹ Other cases reported since then have involved similar spontaneous reappearances during psychotherapy of signs of physical abuse.²⁴²

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To sum up: After Part 1 has cleared the path for an ideally unbiased recognition of a serious research tradition which most educated people are unaware of, it seems there are only two interpretations of the empirical evidence discussed in Part 2: We can either assume some kind of cosmic conspiracy by a Neoplatonic 'world-soul' or Absolute Mind bent on perpetually tricking us, or adopt the more natural and simpler view that the dead continue to exist, and sometimes – under conditions whose exploration will need to be part of continuing research – are able to manifest, either sporadically as suggested by the best cases of apparitions and mediumship, or through rebirth into a new life.

²⁴⁰ E.g Haraldsson (1995, 2003), Haraldsson, Fowler, & Periyannanpillai (2000), Schouten & Stevenson (1998).

²⁴¹ Moody (1946, 1948).

²⁴² For references to and discussions of these and many other extreme psychophysical phenomena discussed in conventional medicine, see Stevenson (1997) and E. W. Kelly (2007).

Note that I do not claim personal survival is *scientifically* proven. However, unlike our alternative hypothesis, the idea of survival can be *put to work* for the purpose of developing new avenues of research, whose results may eventually engender techniques or devices which might allow us to communicate with the ‘other’ side in much the same reliable and robust ways we communicate with the living today. But for that to happen, not only will we need to actively work to remove the immense social stigma associated with this kind of research, but also raise a question which is practically never raised by survival researchers: *Who is our audience?*

Best Evidence – but for Who?

This question brings us back to the concrete context of F. C. S. Schiller’s sarcastic comment on fundraising for survival research vs. medical care for leprous cats at the beginning of this essay. Schiller’s article was in fact part of an appeal to fellow academics to help him tackle questions that had never been addressed in a systematic manner: Is it true, as it has been asserted by advocates *and* opponents of survival, that the question was felt by most humans to be of fundamental importance? And was there really a universal *preference* for survival – or a ‘will to believe’ in it, which, it has often been argued, inevitably *contaminated* any supporting evidence? Schiller – you probably guessed it already – was a member of the SPR. And like his friend William James, he was on the fence regarding survival but still a vocal advocate of impartial survival research.

To obtain an informed picture of actual attitudes to survival in the educated public, Schiller designed a questionnaire which was sent to around 10,000 participants. The project was quite different from more recent sociological surveys, which have assessed the prevalence of *belief* in life after death. Among the key questions was if survival was *desirable* in the first place, while others tried to tease out how common not just a ‘will to *believe*’ in it was, but also a ‘will to *disbelieve*’. Most crucially for survival researchers, Schiller wanted to find out how common the ‘will to *know*’ was. After all, the

question whether or not there is an audience for the findings of empirical studies *regardless of results*, was and is now vital for the future of research funding.

The results of Schiller's questionnaire study predicted a rather bleak future for survival researchers: Not only was there a high ambivalence in attitudes regarding the *desirability* of survival. Most significantly for investigators, the results suggested a striking lack of interest by most respondents to have their beliefs or disbeliefs *informed* by solid evidence.²⁴³ The results were met with silence then, and there has never been a discussion of their implications in the dwindling community of survival researchers up to the present day.

I think this silence spoke, and continues to speak, volumes. The practical point I'm trying to make is this: To the majority of educated Westerners, what *I* may think is evidence for survival 'beyond reasonable doubt' can never be as straightforwardly persuasive as, say, evidence for the discovery of a new butterfly species. The question of survival goes straight to the essence of what we believe, hope, and fear we *are*.²⁴⁴ I doubt that anything resembling *mathematical proof* for survival is possible, but as long as the problem of the 'personal equation' is simply ignored, such proof would fall on deaf ears just the same way as the already existing volumes of published empirical evidence has. After all, as Schiller observed, if there is resistance you can't *make* someone even add 2+2.

Biases either way do exist and must be dealt with in a systematic way, before there can be any tangible progress. Rather than exclusively focusing on empirical research, I therefore think that public education concerning the *nature and history* of both conventional and unorthodox science will be just as important as the actual empirical research.

²⁴³ Schiller (1904).

²⁴⁴ On these questions, see, e.g. Grosso (1990), Sommer (2016).

References

- Allison, L. W. (1929). *Leonard and Soule Experiments in Psychical Research. Also Experiments with Sanders, Brittain, Peters and Dowden*. Boston, MA: Boston Society for Psychic Research.
- Almond, P. C. (1994). *Heaven and Hell in Enlightenment England*. Cambridge: Cambridge University Press.
- Alvarado, C. S. (2014). Classic Text No. 98. 'Visions of the Dying', by James H Hyslop (1907). *History of Psychiatry*, 25, 237-252.
- Alvarado, C. S. (2019). *Charles Richet. A Nobel Prize Winning Scientist's Exploration of Psychic Phenomena*. Guildford: White Crow Books.
- Alvarado, C. S., Nahm, M., & Sommer, A. (2012). Notes on early interpretations of mediumship. *Journal of Scientific Exploration*, 26, 855-865.
- Alvarado, C. S., & Zingrone, N. L. (1998). Factors related to the depth of Near-Death Experiences: testing the "embellishment over time" hypothesis. *Imagination, Cognition and Personality*, 17, 339-344.
- Ash, M. G., Gundlach, H., & Sturm, T. (2010). Irreducible mind? *American Journal of Psychology*, 123, 246-250.
- Bacon, F. (1803). *The Works of Francis Bacon (10 vols.)*. London: Bryer.
- Barnett, R. (2006). Education or degeneration: E. Ray Lankester, H. G. Wells and *The Outline of History*. *Studies in History and Philosophy of Biological and Biomedical Sciences*, 37, 203-229.
- Barrett, W. F. (1904). Presidential Address. *Proceedings of the Society for Psychical Research*, 18, 323-350.
- Barrett, W. F. (1908). Cases. G. 283. Apparition seen soon after death. *Journal of the Society for Psychical Research*, 13, 228-234.
- Barrett, W. F. (1926). *Death-Bed Visions*. London: Methuen & Co.
- Barton, R. (1987). John Tyndall, pantheist. A rereading of the Belfast Address. *Osiris*, 3, 111-134.
- Batthyány, A., & Greyson, B. (2021). Spontaneous remission of dementia before death: Results from a study on paradoxical lucidity. *Psychology of Consciousness: Theory, Research, and Practice*, 8(1), 1–8 (<https://doi.org/10.1037/cns0000259>).
- Beloff, J. (1993). *Parapsychology. A Concise History*. London: Athlone Press.
- Binet, A. (1890). Double consciousness in health. *Mind*, 15, 46-57.
- Blackbourn, D. (1993). *Marpingen: Apparitions of the Virgin Mary in Bismarckian Germany*. Oxford: Oxford University Press.
- Blanc, K. (Ed.) (2009). *Pierre Curie: Correspondances*. Paris: Éditions Monelle Hayot.
- Boring, E. G. (1950). *A History of Experimental Psychology* (second ed.). New York: Appleton-Century-Crofts.
- Boring, E. G. (1966). Introduction. Paranormal phenomena: Evidence, specification, and chance. In C. E. Hansel (Ed.), *ESP. A Scientific Evaluation* (pp. xiii-xxi). London: McGibbon & Kee.
- Bostridge, I. (1997). *Witchcraft and Its Transformations, c. 1650-c. 1750*. Oxford: Oxford University Press.
- Braid, J. (1842). *Satanic Agency and Mesmerism Reviewed, in a Letter to the Rev. H. Mc Neile, A.M. of Liverpool, etc*. Manchester: Sims and Dinham, Galt and Anderson.
- Braid, J. (1843). *Neurypnology or the Rationale of Nervous Sleep Considered in Relation with Animal Magnetism. Illustrated by Numerous Cases of Its Successful Application in the Relief and Cure of Disease*. London: John Churchill.

- Braid, J. (1852). *Magic, Witchcraft, Animal Magnetism, Hypnotism, and Electro-Biology; Being a Digest of the Latest Views of the Author on these Subjects* (third enlarged ed.). London: John Churchill.
- Brancaccio, M. T. (2014). Enrico Morselli's *Psychology of "Spiritism"*: Psychiatry, psychology and psychical research in Italy around 1900. *Studies in History and Philosophy of Biological and Biomedical Sciences*, 48, 75-84.
- Braude, S. E. (2003). *Immortal Remains: The Evidence for Life After Death*. Lanham, MD: Rowman & Littlefield.
- Brayne, S., Farnham, C., & Fenwick, P. (2006). Deathbed phenomena and their effect on a palliative care team: A pilot study. *American Journal of Hospice & Palliative Medicine*, 23, 17-24.
- Broad, C. D. (1962). *Lectures on Psychical Research. Incorporating the Perrott Lectures given in Cambridge University in 1959 and 1960*. London: Routledge & Kegan Paul.
- Brush, S. G. (1974). Should the history of science be rated X? *Science*, 183, 1164-1172.
- Bud, R. (2014). Life, DNA and the model. *British Journal for the History of Science*, 46, 311-334.
- Cahan, D. (2012). Helmholtz and the British scientific elite: From force conversation to energy conservation. *Notes & Records of the Royal Society*, 66, 55-68.
- Cahan, D. (2018). *Helmholtz: A Life in Science*. Chicago, IL: University of Chicago Press.
- Cameron, E. K. (2010). *Enchanted Europe: Superstition, Reason, and Religion, 1250-1750*. Oxford: Oxford University Press.
- Cantor, G. (1993). *Michael Faraday: Sandemanian and Scientist: A Study of Science and Religion in the Nineteenth Century*. London: Macmillan.
- Carhart-Harris, R. L., Bolstridge, M., Day, C. M. J., Rucker, J., Watts, R., Erritzoe, D. E., . . . Nutt, D. J. (2018). Psilocybin with psychological support for treatment-resistant depression: six-month follow-up. *Psychopharmacology*, 235, 399-408.
- Carhart-Harris, R. L., Erritzoe, D., William, T., Stone, J. M., Reed, L. J., Colasanti, A., . . . Leech, R. e. a. (2012). Neural correlates of the psychedelic state as determined by fMRI studies with psilocybin. *Proceedings of the National Academy of Sciences of the United States of America*, 109, 2138-2143.
- Carrington, W. (1935). The quantitative study of trance personalities. II. *Proceedings of the Society for Psychical Research*, 43, 319-361.
- Carrington, H. (1933). *An Instrumental Test of the Independence of a Spirit Control*. New York: American Psychical Institute.
- Carter, C. (2010). "Heads I lose, tails you win", or, how Richard Wiseman nullifies positive results: A response to Wiseman's (2010) critique of parapsychology. *Journal of the Society for Psychical Research*, 74, 156-167.
- Casaubon, M. (Ed.) (1659). *A True & Faithful Relation of What passed for many Yeers Between Dr. John Dee and Some Spirits*. London: Maxwell & Garthwait.
- Cerullo, J. J. (1982). *The Secularization of the Soul. Psychical Research in Modern Britain*. Philadelphia, PA: Institute for the Study of Human Issues.
- Clark, S. (1999). *Thinking with Demons: The Idea of Witchcraft in Early Modern Europe*. Oxford: Oxford University Press.
- Collins, H. M. (1983). Magicians in the laboratory: A new role to play. *New Scientist*, 98(30 June), 929-931.
- Collins, H. M., & Evans, R. (2002). The third wave of science studies: Studies of expertise and experience. *Social Studies of Science*, 32, 235-296.
- Collins, H. M., & Pinch, T. J. (1979). The construction of the paranormal: nothing unscientific is happening. In R. Wallis (Ed.), *On the Margins of Science: The Social*

- Construction of Rejected Knowledge (Sociological Review Monograph, vol. 27)* (pp. 237-270). Keele: University of Keele.
- Collins, H. M., & Pinch, T. J. (1982). *Frames of Meaning: The Social Construction of Extraordinary Science*. London: Routledge & Kegan Paul.
- Collins, H. M., & Pinch, T. J. (1998). *The Golem. What You Should Know about Science. Second Edition*. Cambridge: University Press.
- Cook, E. W., Greyson, B., & Stevenson, I. (1998). Do any Near-Death Experiences provide evidence for the survival of human personality after death? Relevant features and illustrative case reports. *Journal of Scientific Exploration, 12*, 377-406.
- Coon, D. J. (1992). Testing the limits of sense and science. American experimental psychologists combat spiritualism. *American Psychologist, 47*, 143-151.
- Coudert, A. P., Popkin, R. H., & Weiner, G. M. (Eds.). (1998). *Leibniz, Mysticism and Religion*. Dordrecht: Springer.
- Courtier, J. (1908). Rapport sur les séances d'Eusapia Palladino. *Bulletin de l'Institut Général Psychologique, 8*, 407-578.
- Crabtree, A. (1988). *Animal Magnetism, Early Hypnotism, and Psychical Research, 1766-1925: An Annotated Bibliography*. White Plains, NY: Kraus International Publications.
- Crabtree, A. (1993). *From Mesmer to Freud. Magnetic Sleep and the Roots of Psychological Healing*. New Haven, CT: Yale University Press.
- Cunningham, A., & Jardine, N. (Eds.). (1990). *Romanticism and the Sciences*. Cambridge: Cambridge University Press.
- Darnton, R. (1968). *Mesmerism and the End of Enlightenment in France*. Cambridge, MA: Harvard University Press.
- Daston, L., & Park, K. (1998). *Wonders and the Order of Nature, 1150-1750*. New York: Zone Books.
- De Morgan, A. (1857). *On the Conservation of Force*. A lecture delivered by Prof. Faraday at the Royal Institution, February 27, 1857. *Athenaeum, 397-399*.
- De Morgan, A. (1859). *Experimental Researches in Chemistry and Physics*. By Michael Faraday. *Athenaeum, 349-351*.
- De Morgan, A. (1863). Preface. In C. D. D. M. S. Elizabeth] (Ed.), *From Matter to Spirit. The Result of Ten Years' Experience in Spirit Manifestation. Intended as a Guide to Enquirers* (pp. v-xlv). London: Longman, & Co.
- Dempsey, L. (2006). Written in the flesh: Isaac Newton on the mind-body relation. *Studies in History and Philosophy of Science, 37*, 420-441.
- Denton, M. J., Kumaramanickavel, G., & Legge, M. (2013). Cells as irreducible wholes: the failure of mechanism and the possibility of an organicist revival *Biology & Philosophy, 28*, 31-52.
- Devery, K., Rawlings, D., Tieman, J., & Damarell, R. (2015). Deathbed phenomena reported by patients in palliative care: Clinical opportunities and responses. *International Journal of Palliative Nursing, 21*, 117-125.
- Dingwall, E. J. (Ed.) (1986). *Abnormal Hypnotic Phenomena. A Survey of Nineteenth-Century Cases (4 vols.)*. London: J. & A. Churchill.
- du Bois-Reymond, E. (1872). *Über die Grenzen des Naturerkennens. Ein Vortrag in der zweiten öffentlichen Sitzung der 43. Versammlung Deutscher Naturforscher und Ärzte zu Leipzig am 14. August 1872* (second ed.). Leipzig: Veit & Comp.
- du Bois-Reymond, E. (1878). *Culturgeschichte und Naturwissenschaft. Vortrag gehalten am 24. März 1877 im Verein für Wissenschaftliche Vorlesungen zu Köln*. Leipzig: Veit & Co.

- du Bois-Reymond, E. (Ed.) (1918). *Jugendbriefe von Emil du Bois-Reymond an Eduard Hallmann*. Berlin: Dietrich Reimer (Ernst Vohsen).
- du Prel, C. (1888). *Die monistische Seelenlehre. Ein Beitrag zur Lösung des Menschenrätsels*. Leipzig: Ernst Günther.
- du Prel, C. (1889). *The Philosophy of Mysticism (2 vols.)* (C. C. Massey, Trans.). London: George Redway.
- du Prel, C. (1892). An open letter to Alfred Russel Wallace. *Light*, 12, 149.
- Ego, A. (1991). „Animalischer Magnetismus“ oder „Aufklärung“. Eine mentalitätsgeschichtliche Studie zum Konflikt um ein Heilkonzept im 18. Jahrhundert. Würzburg: Königshausen & Neumann.
- Einstein, A. (1962). Preface. In U. Sinclair (Ed.), *Mental Radio* (second revised ed., pp. xi). Springfield, IL: Charles C. Thomas.
- Ellenberger, H. F. (1970). *The Discovery of the Unconscious: The History and Evolution of Dynamic Psychiatry*. New York: Basic Books.
- Elmer, P. (2013). *Miraculous Conformist: Valentine Greatrakes, the Body Politic, and the Politics of Healing in Restoration Britain*. Oxford: Oxford University Press.
- Evrard, R. (2017). Pierre Curie. *Psi Encyclopedia*, <https://psi-encyclopedia.spr.ac.uk/articles/pierre-curie>.
- Evrard, R., Gumpfer, S., Beauvais, B., & Alvarado, C. S. (2021). “Never sacrifice anything to laboratory work”: The “physiological psychology” of Charles Richet (1875-1905). *Journal of the History of Behavioral Sciences*, 57, 172-193.
- Evrard, R., Massicotte, C., & Rabeyron, T. (2017). Freud as a psychical researcher: The impossible Freudian legacy. *Imágó Budapest*, 6, 9-32.
- Fara, P. (1995). An attractive therapy: Animal magnetism in eighteenth-century England. *History of Science*, 33, 127-177.
- Faraday, M. (1853). Experimental investigation of table-moving. *The Athenæum* (1340, 2 July), 801-803 (reprinted from *The Times*, June 830, 1853, p. 1858).
- Faraday, M. (1859). *Experimental Researches in Chemistry and Physics*. London: Richard Taylor and William Francis.
- Fechner, G. T. (1851). *Zend-Avesta oder über die Dinge des Himmels und des Jenseits. Vom Standpunkt der Naturbetrachtung. Erster Theil. Ueber die Dinge des Himmels. Zweiter Theil. Ueber die Dinge des Himmels. Dritter Theil. Ueber die Dinge des Jenseits*. Leipzig: Leopold Voß.
- Fechner, G. T. (1879). *Die Tagesansicht gegenüber der Nachtansicht*. Leipzig: Breitkopf und Härtel.
- Fechner, G. T. (1888). (Posthum) Zöllners mediumistische Experimente. Aufzeichnungen aus dem Tagebuche. *Sphinx*, 5, 217-221.
- Fenwick, P., Lovelace, H., & Brayne, S. (2010). Comfort for the dying: five year retrospective and one year prospective studies of end of life experiences. *Archives of Gerontology and Geriatrics*, 51, 173-179.
- Feuer, L. S. (1979). The friendship of Edwin Ray Lankester and Karl Marx: The last episode in Marx’s intellectual evolution. *Journal of the History of Ideas*, 40, 633-648.
- Feyerabend, P. (1986). *Against Method. Outline of an Anarchistic Theory of Knowledge*. London: Verso.
- Fichman, M. (2006). *An Elusive Victorian: The Evolution of Alfred Russel Wallace*. Chicago, IL: University of Chicago Press.
- Fichte, J. G. (1835). Tagebuch über den animalischen Magnetismus. In I. H. Fichte (Ed.), *Johann Gottlieb Fichte’s nachgelassene Werke* (Vol. 3, pp. 295-344). Bonn: Adolph Marcus.

- Finkelstein, G. (2013). *Emil du Bois-Reymond. Neuroscience, Self, and Society in Nineteenth-Century Germany*. Cambridge, MA: MIT Press.
- Flaherty, G. (1992). *Shamanism and the Eighteenth Century*. Princeton, NJ: Princeton University Press.
- Ford, M. (1998). William James's psychical research and its philosophical implications. *Transactions of the Charles S. Peirce Society*, 34, 605-626.
- French, C. C. (2001). Dying to know the truth: visions of a dying brain, or false memories? *The Lancet*, 358, 2010-2011.
- French, C. C. (2003). Fantastic memories. The relevance of research into eyewitness testimony and false memories for reports of anomalous experiences. *Journal of Consciousness Studies*, 10, 153-174.
- Freud, S. (1914). *Die Traumdeutung* (fourth enlarged ed.). Leipzig & Vienna: Franz Deuticke.
- Freud, S. (1943). Untranslated Freud — (9) Some additional notes upon dream-interpretation as a whole (1925) [transl. James Strachey]. *International Journal of Psycho-Analysis*, 24, 71-75.
- Gantet, C. (2021). The dissemination of mesmerism in Germany (1784-1815): Some patterns of the circulation of knowledge. *Centaurus*, doi.org/10.1111/1600-0498.12396 (Epub ahead of print).
- Gardner, M. (2003). *Are Universes thicker than Blackberries? Discourses on Gödel, Magic Hexagrams, Little Red Riding Hood, and other Mathematical and Pseudoscientific Topics*. New York: W. W. Norton.
- Gauld, A. (1965). Mr Hall and the S.P.R. *Journal of the Society for Psychical Research*, 43, 53-62.
- Gauld, A. (1968). *The Founders of Psychical Research*. London: Routledge & Kegan Paul.
- Gauld, A. (1982). *Mediumship and Survival. A Century of Investigations*. London: Heinemann.
- Gauld, A. (1992). *A History of Hypnotism*. Cambridge: Cambridge University Press.
- Gibbes, E. B. (1937). Have we indisputable evidence of survival? *Journal of the American Society for Psychical Research*, 31, 65-79.
- Gieryn, T. F. (1983). Boundary-work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists. *American Sociological Review*, 48, 781-795.
- Goldstein, J. (1982). The hysteria diagnosis and the politics of anticlericalism in late nineteenth-century France. *Journal of Modern History*, 54, 209-239.
- Greeley, A. M. (1975). *The Sociology of the Paranormal: A Reconnaissance (Sage Research Papers in the Social Sciences, vol. 3)*. Los Angeles: Sage.
- Green, C., & McCreery, C. (1975). *Apparitions*. London: Hamish Hamilton.
- Gregory, F. (1977a). *Scientific Materialism in Nineteenth Century Germany (Studies in the History of Modern Science 1)*. Dordrecht: Springer.
- Gregory, F. (1977b). Scientific versus dialectical materialism: A clash of ideologies in nineteenth-century German radicalism. *Isis*, 68, 206-223.
- Greyson, B. (1983a). The near-death experience scale: Construction, reliability, and validity. *Journal of Nervous and Mental Disease*, 171, 369-375.
- Greyson, B. (1983b). Near-death experiences and personal values. *American Journal of Psychiatry*, 140, 618-620.
- Greyson, B. (1992-1993). Near-death experiences and antisuicidal attitudes. *Omega, the Journal of Death and Dying*, 26, 81-89.
- Greyson, B. (2007). Consistency of near-death experience accounts over two decades: Are reports embellished over time? *Resuscitation*, 73, 407-411.

- Greyson, B. (2010). Seeing deceased persons not known to have died: "Peak in Darien" experiences. *Anthropology and Humanism*, 35, 159-171.
- Greyson, B. (2014). Near-death experiences. In E. Cardeña, S. J. Lynn, & S. Krippner (Eds.), *Varieties of Anomalous Experience: Examining the Scientific Evidence* (second ed., pp. 333-367). Washington, D. C.: American Psychological Association.
- Greyson, B. (2021). Near-death experiences. In E. F. Kelly & P. Marshall (Eds.), *Consciousness Unbound: Liberating Mind from the Tyranny of Materialism* (pp. 17-56). Lanham, MD: Rowman & Littlefield.
- Griffiths, R. R., Johnson, M. W., Carducci, M. A., Umbricht, A., Richards, W. A., Richards, B. D., . . . Klinedinst, M. A. (2016). Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial. *Journal of Psychopharmacology*, 30, 1181-1197.
- Grosso, M. (1990). Fear of life after death. In G. Doore (Ed.), *What Survives? Contemporary Explorations of Life After Death* (pp. 241-254). Los Angeles: Jeremy Tarcher.
- Gurney, E. (1887). Peculiarities of certain post-hypnotic states. *Proceedings of the Society for Psychical Research*, 4, 268-323.
- Gurney, E., Myers, F. W. H., & Podmore, F. (1886). *Phantasms of the Living* (2 vols.). London: Trübner.
- Hacking, I. (1988). Telepathy: Origins of randomization in experimental design. *Isis*, 79, 427-451.
- Hagner, M. (2000). *Homo Cerebralis. Der Wandel vom Seelenorgan zum Gehirn*. Frankfurt a.M.: Insel.
- Hall, G. S. (1887). *Proceedings of the English Society for Psychical Research*. From July, 1882, to May, 1887. *Phantasms of the Living*. By Edward [sic] Gurney, M.A., Frederick [sic] W. H. Meyers [sic], and Frank Podmore. Two Vols. 1886. *American Journal of Psychology*, 1, 128-146.
- Hall, G. S. (1910). Introduction. In A. E. Tanner (Ed.), *Studies in Spiritism* (pp. xv-xxxiii). New York: D. Appleton.
- Hall, T. H. (1964). *The Strange Case of Edmund Gurney*. London: Gerald Duckworth.
- Hamilton, T. (2009). *Immortal Longings: F.W.H. Myers and the Victorian Search for Life After Death*. Exeter: Imprint Academic.
- Hamilton, T. (2016). Smith and Blackburn. *Psi Encyclopedia*. Retrieved from <http://psi-encyclopedia.spr.ac.uk/articles/smith-and-blackburn>
- Hamilton, T. (2017). *Arthur Balfour's Ghosts: An Edwardian Elite and the Riddle of the Cross-Correspondence Automatic Writings*. Exeter: Imprint Academic.
- Hansen, G. P. (1992). CSICOP and the skeptics: an overview. *Journal of the American Society for Psychical Research*, 86, 19-63.
- Haraldsson, E. (1987). The Iyengar-Kirti case: an apparitional case of the bystander type. *Journal of the Society for Psychical Research*, 54, 64-67.
- Haraldsson, E. (1991). Children claiming past life memories: Four cases in Sri Lanka. *Journal of Scientific Exploration*, 5, 233-262.
- Haraldsson, E. (1995). Personality and abilities of children claiming previous-life memories. *Journal of Nervous and Mental Disease*, 183, 445-551.
- Haraldsson, E. (2000a). Birthmarks and claims of previous-life memories: I. The case of Purnima Ekanayake. *Journal of the Society for Psychical Research*, 64, 16-25.
- Haraldsson, E. (2000b). Birthmarks and claims of previous-life memories: II. The case of Chatura Karunaratne. *Journal of the Society for Psychical Research*, 64, 82-92.
- Haraldsson, E. (2003). Children who speak of past-life experiences: Is there a psychological explanation? *Psychology and Psychotherapy: Theory, Research and Practice*, 76, 55-67.

- Haraldsson, E. (2011). A perfect case? Emil Jensen in the mediumship of Indridi Indridason. The fire in Copenhagen on November 24th 1905 and the discovery of Jensen's identity. *Proceedings of the Society for Psychical Research*, 59, 195-223.
- Haraldsson, E., & Abu-Izzeddin, M. (2002). Development of certainty about the correct deceased person in a case of the reincarnation type in Lebanon: the case of Nazih Al-Danaf. *Journal of Scientific Exploration*, 16, 363-380.
- Haraldsson, E., & Abu-Izzeddin, M. (2004). Three randomly selected Lebanese cases of children who claim memories of a previous life. *Journal of the Society for Psychical Research*, 68, 65-85.
- Haraldsson, E., Fowler, P. C., & Periyannanpillai, V. (2000). Psychological characteristics of children who speak of a previous life: A further field study in Sri Lanka. *Transcultural Psychiatry*, 37, 525-544.
- Haraldsson, E., & Matlock, J. G. (2016). *I Saw a Light and Came Here. Children's Experiences of Reincarnation*. Guildford: White Crow Books.
- Haraldsson, E., & Samararatne, G. (1999). Children who speak of memories of a previous life as a Buddhist monk: Three new cases. *Journal of the Society for Psychical Research*, 63(857), 268-291.
- Haraldsson, E., & Stevenson, I. (1974). An experiment with the Icelandic medium Hafsteinn Björnsson. *Journal of the American Society for Psychical Research*, 68, 192-202.
- Haraldsson, E., & Stevenson, I. (1975a). A communicator of the "drop in" type in Iceland: the case of Gudni Magnusson. *Journal of the American Society for Psychical Research*, 69, 245-261.
- Haraldsson, E., & Stevenson, I. (1975b). A communicator of the "drop in" type in Iceland: the case of Runolfur Runolfsson. *Journal of the American Society for Psychical Research*, 69, 33-59.
- Harrington, A. (1987). *Medicine, Mind, and the Double Brain. A Study in Nineteenth-Century Thought*. Princeton, NJ: Princeton University Press.
- Harrington, A. (1996). *Reenchanted Science: Holism in German Culture from Wilhelm II to Hitler*. Princeton, NJ: Princeton University Press.
- Harrington, A. (2009). The brain and the behavioral sciences. In P. J. Bowler & J. V. Pickstone (Eds.), *The Cambridge History of Science. Volume 6. The Modern Biological and Earth Sciences* (pp. 504-523). Cambridge: Cambridge University Press.
- Hart, H. (1956). Six theories about apparitions. *Proceedings of the Society for Psychical Research*, 50, 153-239.
- Hart, H., & Ella, B. (1933). Visions and apparitions collectively and reciprocally perceived. *Proceedings of the Society for Psychical Research*, 41, 205-249.
- Hartmann, E. v. (1869). *Philosophie des Unbewußten. Versuch einer Weltanschauung*. Berlin: Duncker.
- Hartmann, E. v. (1885). *Der Spiritismus*. Berlin: W. Friedrich.
- Hassler, D. (2013). A new European case of the reincarnation type. *Journal of the Society for Psychical Research*, 77, 19-31.
- Hatfield, G. (1995). Remaking the science of mind: Psychology as natural science. In C. Fox, R. Porter, & R. Wokler (Eds.), *Inventing Human Science: Eighteenth-Century Domains* (pp. 184-231). Berkeley, CA: University of California Press.
- Hegel, G. W. F. (1845). *Encyklopädie der philosophischen Wissenschaften im Grundrisse. Dritter Theil. Die Philosophie des Geistes* (L. Boumann Ed.). Berlin: Duncker und Humblot.

- Helmholtz, H. (1878). *Das Denken in der Medicin. Rede gehalten zur Feier des Stiftungstages der militärärztlichen Bildungsanstalten am 2. August 1877* (second revised ed.). Berlin: Hirschwald (original publication in 1877).
- Henry, J. (2002). *Knowledge is Power. How Magic, the Government and an Apocalyptic Vision inspired Francis Bacon to create Modern Science*. Cambridge: Icon.
- Henry, J. (2008). The fragmentation of Renaissance occultism and the decline of magic. *History of Science*, 46, 1-48.
- Hess, D. J. (1992). Disciplining heterodoxy, circumventing discipline: parapsychology, anthropologically. In D. J. Hess & L. Layne (Eds.), *Knowledge and Society Vol. 9: The Anthropology of Science and Technology* (pp. 191-222). Greenwich: JAI Press.
- Hess, D. J. (1993). *Science in the New Age. The Paranormal, Its Defenders and Debunkers, and American Culture*. Madison, WI: The University of Wisconsin Press.
- Heyd, M. (1995). "Be Sober and Reasonable". *The Critique of Enthusiasm in the Seventeenth and Early Eighteenth Centuries (Brill's Studies in Intellectual History, 63)*. Leiden: Brill.
- Hodgson, R. (1892). A record of observations of certain phenomena of trance. *Proceedings of the Society for Psychical Research*, 8, 1-167.
- Hodgson, R. (1898). A further record of observations of certain phenomena of trance. *Proceedings of the Society for Psychical Research*, 13, 284-582.
- Hodgson, R., & Davey, S. J. (1887). The possibilities of mal-observation and lapse of memory from a practical point of view. Experimental investigations. *Proceedings of the Society for Psychical Research*, 4, 381-495.
- Holden, J. M. (2009). Veridical perception in near-death experiences. In J. M. Holden, B. Greyson, & D. James (Eds.), *The Handbook of Near-Death Experiences. Thirty Years of Investigation* (pp. 185-211). Praeger/ABC-CLIO: Santa Barbara, CA.
- Honorton, C. (1993). Rhetoric over substance. The impoverished state of skepticism. *Journal of Parapsychology*, 57, 191-214.
- Hooke, R. (1705). Lectures of Light. Explicating its Nature, Properties, and Effects, &c. In R. Waller (Ed.), *The Posthumous Works of Robert Hooke* (pp. 71-147). London: Smith and Walford.
- Hoppen, K. T. (1976). The nature of the early Royal Society. *British Journal for the History of Science*, 9, 1-24, 243-273.
- Hübbe-Schleiden, W. (1887). Zöllners Zurechnungsfähigkeit und die Seybert-Kommission. *Sphinx*, 4, 321-328.
- Hume, D. (1750). *Philosophical Essays concerning Human Understanding* (second ed.). London (first ed. 1748): A. Millar.
- Hunter, M. (2000). *Robert Boyle (1627-91): Scrupulosity and Science*. Woodbridge: Boydell.
- Hunter, M. (2001). *The Occult Laboratory. Magic, Science and Second Sight in Late Seventeenth-Century Scotland*. Woodbridge: Boydell.
- Hunter, M. (2011). The Royal Society and the decline of magic. *Notes and Records of the Royal Society of London*, 65, 103-119.
- Hunter, M. (2020). *The Decline of Magic: Britain in the Enlightenment*. New Haven, CT: Yale University Press.
- Huxley, L. (1903). *Life and Letters of Thomas Henry Huxley (3 vols.)* (second ed.). London: Macmillan and Co. (first ed. 1900).
- Huxley, T. H. (1874). On the hypothesis that animals are automata, and its history. *Fortnightly Review*, 16, 555-580.
- Huxley, T. H. (1889, 1 January). Spiritualism unmasked. *Pall Mall Gazette*, pp. 1-2.
- Huxley, T. H. (1892). *Essays upon some Controverted Questions*. London: Macmillan and Co.

- Huxley, T. H. (1894). The order of nature: Miracles. In *Hume: With Helps to the Study of Berkeley* (pp. 152-164). London: Macmillan and Co.
- Hyman, R. (1985). A critical historical overview of parapsychology. In P. Kurtz (Ed.), *A Skeptic's Handbook of Parapsychology* (pp. 3-96). Buffalo, NY: Prometheus Books.
- Hyslop, J. H. (1901). A further record of observations of certain trance phenomena. *Proceedings of the Society for Psychical Research*, 16, 1-649.
- Hyslop, J. H. (1907). Preliminary report on the trance phenomena of Mrs. Smead. *Proceedings of the American Society for Psychical Research*, 1, 525-722.
- Hyslop, J. H. (1910). A record and discussion of mediumistic experiments. *Proceedings of the American Society for Psychical Research*, 4, 1-785.
- Hyslop, J. H. (1911). President G. Stanley Hall's and Dr. Amy E. Tanner's studies in spiritualism. *Journal of the American Society for Psychical Research*, 5, 1-98.
- Hyslop, J. H. (1912). A record of experiments. *Proceedings of the American Society for Psychical Research*, 6, 5-976.
- Hyslop, J. H. (1918). The Smead case. *Proceedings of the American Society for Psychical Research*, 12, 11-667.
- Jacob, M. C. (1978). Newton and the French prophets: New evidence. *History of Science*, 16, 134-142.
- James, F. A. J. L. (2010). *Michael Faraday. A Very Short Introduction*. Oxford: Oxford University Press.
- James, F. A. J. L. (Ed.) (1991-2012). *The Correspondence of Michael Faraday (6 vols.)*. London: Institution of Engineering and Technology.
- James, W. (1869, 10 March). Review of E. Sargent, *Planchette: or the Despair of Science*. *Boston Daily Advertiser*.
- James, W. (1887). Phantasms of the Living (review). *Science*, 9, 18-20.
- James, W. (1889). Notes on automatic writing. *Proceedings of the American Society for Psychical Research (Old Series)*, 1, 548-564.
- James, W. (1890a). *The Principles of Psychology (2 vols.)*. New York: Henry Holt.
- James, W. (1890b). A record of observations of certain phenomena of trance. (5) Part III. *Proceedings of the Society for Psychical Research*, 6, 651-659.
- James, W. (1890c). To the Editor of the American Journal of Psychology. *American Journal of Psychology*, 3, 292.
- James, W. (1892). A plea for psychology as a 'natural science'. *Philosophical Review*, 1, 146-153.
- James, W. (1896). Psychical research. *Psychological Review*, 3, 649-652.
- James, W. (1897). *The Will to Believe and other Essays in Popular Philosophy*. London: Longmans Green and Co.
- James, W. (1898). Psychical research. 'A further record of observations of certain phenomena of trance' by Richard Hodgson. *Psychological Review*, 5, 420-424.
- James, W. (1905). Introduction. *The Little Book of Life After Death*, by Gustav Theodor Fechner (pp. vii-xix). Boston: Little, Brown, & Co.
- James, W. (1909a). The confidences of a "psychical researcher". *American Magazine*, 68, 580-589.
- James, W. (1909b). The doctrine of the earth-soul and of beings intermediate between man and God. An account of the philosophy of G. T. Fechner. *Hibbert Journal*, 7, 278-294.
- James, W. (1909c). Report on Mrs. Piper's Hodgson-control. *Proceedings of the Society for Psychical Research*, 23, 2-121.
- James, W., & Carnochan, M. (1886). Report of the committee on hypnotism. *Proceedings of the American Society for Psychical Research (Old Series)*, 1, 95-102.

- Janet, P. (1889). *L'Automatisme psychologique. Essai de psychologie expérimentale sur les formes inférieures de l'activité humaine*. Paris: Félix Alcan.
- Jastrow, J. (1886). The psychology of spiritualism. *Science*, 8, 567-568.
- Jastrow, J. (1889). The psychology of spiritualism. *Popular Science Monthly*, 34, 721-732.
- Jastrow, J. (1900). *Fact and Fable in Psychology*. Boston and New York: Houghton, Mifflin, and Co.
- Johnson, A. (1899). Coincidences. *Proceedings of the Society for Psychical Research*, 14, 158-330.
- Jones, E. (1957). *The Life and Work of Sigmund Freud, vol. 3*. New York: Basic Books.
- Josephson-Storm, J. A. (2017). *The Myth of Disenchantment: Magic, Modernity, and the Birth of the Human Sciences*. Chicago, IL: University of Chicago Press.
- Jung, C. G. (1921). The psychological foundations of belief in spirits. *Proceedings of the Society for Psychical Research*, 31, 75-93.
- Kant, I. (1766). *Träume eines Geistersehers, erläutert durch Träume der Metaphysik*. Königsberg: Johann Jacob Kanter.
- Kant, I. (1873). An Fräulein Charlotte von Knobloch über Swedenborg (1763). In J. H. v. Kirchmann (Ed.), *Immanuel Kant's vermischte Schriften und Briefwechsel* (pp. 277-284). Berlin: Heimann.
- Kastrup, B., & Kelly, E. F. (2018). Misreporting and confirmation bias in psychedelic research. What do images of the brain under psychedelics really tell us about its relation to the mind? *Scientific American Blog*, <https://blogs.scientificamerican.com/observations/misreporting-and-confirmation-bias-in-psychedelic-research>.
- Keil, J. (1991). New cases in Burma, Thailand, and Turkey: A limited field study replication of some aspects of Ian Stevenson's research. *Journal of Scientific Exploration*, 5, 27-59.
- Keil, J. (2010a). A case of the reincarnation type in Turkey suggesting strong paranormal information involvements. *Journal of Scientific Exploration*, 24, 71-77.
- Keil, J. (2010b). Questions of the reincarnation type. *Journal of Scientific Exploration*, 24, 79-99.
- Keil, J., & Stevenson, I. (1999). Do cases of the reincarnation type show similar features over many years? A study of Turkish cases a generation apart. *Journal of Scientific Exploration*, 13, 189-198.
- Keil, J., & Tucker, J. B. (2000). An unusual birthmark case linked to a person who had previously died. *Psychological Reports*, 87, 1067-1074.
- Keil, J., & Tucker, J. B. (2005). Children who claim to remember previous lives: cases with written records made before the previous personality was identified. *Journal of Scientific Exploration*, 19, 91-101.
- Kelly, E. F., Crabtree, A., & Marshall, P. (Eds.). (2015). *Beyond Physicalism. Toward Reconciliation of Science and Spirituality*. Lanham, MD: Rowman & Littlefield.
- Kelly, E. F., Kelly, E. W., Crabtree, A., Gauld, A., Grosso, M., & Greyson, B. (2007). *Irreducible Mind. Toward a Psychology for the 21st Century*. Lanham, MD: Rowman & Littlefield.
- Kelly, E. W. (2007). Psychophysiological influence. In E. F. Kelly, E. W. Kelly, A. Crabtree, A. Gauld, M. Grosso, & B. Greyson (Eds.), *Irreducible Mind. Toward a Psychology For the 21st Century* (pp. 117-239). Lanham, MD: Rowman & Littlefield.
- Kelly, E. W., & Arcangel, D. (2011). An investigation of mediums who claim to give information about deceased persons. *Journal of Nervous and Mental Disease*, 199, 11-17.

- Kerr, C. W., Donnelly, J. P., Wright, S. T., Kuszczak, S. M., Banas, A., Grant, P. C., & Luczkiewicz, D. L. (2014). End-of-life dreams and visions: A longitudinal study of hospice patients' experiences. *Journal of Palliative Medicine, 17*, 296-303.
- Kirsten, C. (Ed.) (1986). *Dokumente einer Freundschaft. Briefwechsel zwischen Hermann Helmholtz und Emil du Bois-Reymond, 1846-1894*. Berlin: Akademie-Verlag.
- Klein, D. (2007). The virgin with the sword: Marian apparitions, religion and national identity in Alsace in the 1870s. *French History, 21*, 411-430.
- Klein, L. E., & La Vopa, A. J. (1997). Enthusiasm and Enlightenment in Europe, 1650-1850. *Huntington Library Quarterly, 60*, 1-203.
- Klemenc-Ketis, Z. (2013). Life changes in patients after out-of-hospital cardiac arrest. *International Journal of Behavioral Medicine, 20*, 7-12.
- Kottler, M. J. (1974). Alfred Russel Wallace, the origin of man, and spiritualism. *Isis, 65*, 144-192.
- Kripal, J. J. (2019). *The Flip: Epiphanies of Mind and the Future of Knowledge*. New York: Bellevue Literary Press.
- Kugel, W. (1994). Ohne Scheuklappen: Albert Einstein und die Parapsychologie. *Zeitschrift für Parapsychologie und Grenzgebiete der Psychologie, 36-7*, 59-71, 117.
- Kuhn, T. S. (1970). The function of dogma in scientific research. In B. A. Brody (Ed.), *Readings in the Philosophy of Science* (pp. 356-373). Englewood Cliffs, NJ: Prentice-Hall (first published in 1963).
- Kuhn, T. S. (1996). *The Structure of Scientific Revolutions* (third ed.). Chicago, IL: University of Chicago Press.
- Kurtz, P. (1986). *The Transcendental Temptation: A Critique of Religion and the Paranormal*. Buffalo, NY: Prometheus Books.
- Laborie, L. (2015). *Enlightening Enthusiasm: Prophecy and Religious Experience in Early Eighteenth-Century England*. Manchester: Manchester University Press.
- Lakatos, I., & Musgrave, A. (Eds.). (1970). *Criticism and the Growth of Knowledge. Proceedings of the International Colloquium in the Philosophy of Science, London, 1965, volume 4*. Cambridge: Cambridge University Press.
- Lamont, P. (2013). *Extraordinary Beliefs. A Historical Approach to a Psychological Problem*. Cambridge: Cambridge University Press.
- Lang, A. (1911a). Open letter to Dr. Stanley Hall. *Proceedings of the Society for Psychical Research, 25*, 90-101.
- Lang, A. (1911b). Presidential address. *Proceedings of the Society for Psychical Research, 25*, 364-376.
- Laudan, L. (1983). The demise of the demarcation problem. In R. S. Cohen & L. Laudan (Eds.), *Physics, Philosophy, and Psychoanalysis: Essays in Honor of Adolf Grünbaum (Boston Studies in the Philosophy of Science, 76)* (pp. 111-127). Dordrecht: Reidel.
- Le Maléfan, P., & Sommer, A. (2015). Léon Marillier and the veridical hallucination in late-nineteenth and early-twentieth century French psychology and psychopathology. *History of Psychiatry, 26*, 418-432.
- Leaf, W. (1890). A record of observations of certain phenomena of trance. (3) Part II. *Proceedings of the Society for Psychical Research, 6*, 558-646.
- Lenoir, T. (1982). *The Strategy of Life. Teleology and Mechanics in Nineteenth Century German Biology*. Dordrecht: Reidel.
- Lightman, B. (1987). *The Origins of Agnosticism. Victorian Unbelief and the Limits of Knowledge*. Baltimore, MD: Johns Hopkins University Press.
- Lodge, O. (1890a). A record of observations of certain phenomena of trance. (2) Part I. *Proceedings of the Society for Psychical Research, 6*, 443-557.

- Lodge, O. (1890b). A record of observations of certain phenomena of trance. (4) Index to Items in parts I. and II. Specially difficult to explain by direct thought-transference: i.e., by any agency exerted by the sitter. *Proceedings of the Society for Psychical Research*, 6, 647-650.
- Lodge, O. (1894). Professor Heinrich Hertz. *Journal of the Society for Psychical Research*, 6, 197-199.
- Lodge, O. (1924). For and against survival. The possibility of survival from the scientific point of view. *Proceedings of the Society for Psychical Research*, 34, 113-129.
- London_Dialectical_Society. (1871). *Report on Spiritualism by the Committee of the London Dialectical Society: Together with the Evidence, Oral and Written, and a Selection from the Correspondence*. London: Longmans, Green and Co.
- Lyons, H. (1944). *The Royal Society 1660-1940*. Cambridge: Cambridge University Press.
- Magee, G. A. (2008). Hegel and mysticism. In F. C. Beiser (Ed.), *The Cambridge Companion to Hegel and Nineteenth-Century Philosophy* (pp. 253-280). Cambridge: Cambridge University Press.
- Marshall, M. E., & Wendt, R. A. (1980). Wilhelm Wundt, spiritism, and the assumptions of science. In W. G. Bringmann & R. D. Tweney (Eds.), *Wundt Studies: A Centennial Collection* (pp. 158-175). Toronto: Hogrefe.
- Martin, B. (2021). Policing orthodoxy on Wikipedia: Skeptics in action? *Journal of Science Communication*, 20(02), <https://doi.org/10.22323/22322.20020209>.
- Mashour, G. A., Frank, L., Batthyany, A., Kolanowski, A. M., Nahm, M., Schulman-Green, D., . . . Shah, R. C. (2019). Paradoxical lucidity: A potential paradigm shift for the neurobiology and treatment of severe dementias. *Alzheimer's & Dementia*, 15, 1107-1114.
- Massey, C. C. (1887). Zöllner. An open letter to Professor George S. Fullerton, of the University of Pennsylvania, member and secretary of the Seybert Commission for investigating modern spiritualism. *Light*, 7, 375-384.
- Matlock, J. G. (1990). Past life memory case studies. In S. Krippner (Ed.), *Advances in Parapsychological Research, Vol. 6* (pp. 187-267). Jefferson, NC: McFarland.
- Matlock, J. G. (1997). Review of *Reincarnation: A Critical Examination* (1996) by Paul Edwards. *Journal of Scientific Exploration*, 11, 570-573.
- Matlock, J. G. (2019). *Signs of Reincarnation. Exploring Beliefs, Cases, and Theory*. Lanham, MD: Rowman & Littlefield.
- Mattiesen, E. (1936-39). *Das persönliche Überleben des Todes. Eine Darstellung der Erfahrungsbeweise (3 vols.)*. Berlin: Walter de Gruyter.
- Mauskopf, S. H., & McVaugh, M. R. (1980). *The Elusive Science. Origins of Experimental Psychical Research*. Baltimore, MD: Johns Hopkins University Press.
- McCabe, J. (1920). *Spiritualism: A Popular History from 1847*. New York: Dodd, Mead and Co.
- McClenon, J. (1984). *Deviant Science: The Case of Parapsychology*. Philadelphia, PA: University of Pennsylvania Press.
- Micale, M. S. (1985). The Salpêtrière in the age of Charcot: An institutional perspective on medical history in the late nineteenth century. *Journal of Contemporary History*, 20, 703-731.
- Midelfort, H. C. E. (2005). *Exorcism and Enlightenment: Johann Joseph Gassner and the Demons of Eighteenth-Century Germany*. New Haven, CT: Yale University Press.
- Mills, A. (1988). A comparison of Wet'suwet'en cases of the reincarnation type with Gitksan and Beaver. *Journal of Anthropological Research*, 44, 385-415.
- Mills, A. (1989). A replication study: Three cases of children in northern India who are said to remember a previous life. *Journal of Scientific Exploration*, 3, 133-184.

- Mills, A. (2004). Inferences from the case of Ajendra Singh Chauhan: The effect of parental questioning, of meeting the “previous live” family, an aborted attempt to quantify probabilities, and the impact on his life as a young adult. *Journal of Scientific Exploration*, 18, 609-641.
- Mills, A., Haraldsson, E., & Keil, J. (1994). Replication studies of cases suggestive of reincarnation by three different investigators. *Journal of the American Society for Psychical Research*, 88, 207-219.
- Mills, A., & Tucker, J. B. (2014). Past-life experiences. In E. Cardeña, S. J. Lynn, & S. Krippner (Eds.), *Varieties of Anomalous Experience: Examining the Scientific Evidence* (second ed., pp. 303-332). Washington, DC: American Psychological Association.
- Milner, R. (1999). Huxley’s bulldog: The battles of E. Ray Lankester (1846-1929). *The Anatomical Record*, 257, 90-95.
- Mithoefer, M. C., Wagner, M. T., Mithoefer, A. T., Jerome, L., & Doblin, R. (2010). The safety and efficacy of 3,4-methylenedioxymethamphetamine-assisted psychotherapy in subjects with chronic, treatment-resistant posttraumatic stress disorder: the first randomized controlled pilot study. *Journal of Psychopharmacology*, 25, 439-452.
- Moody, R. L. (1946). Bodily changes during abreaction. *Lancet*, 248, 934-935.
- Moody, R. L. (1948). Bodily changes during abreaction. *Lancet*, 251, 964.
- Moreman, C. M. (2003). A re-examination of the possibility of chance coincidence as an alternative explanation for mediumistic communication in the cross-correspondences. *Journal of the Society for Psychical Research*, 67, 225-242.
- Münsterberg, H. (1889). *Gedankenübertragung. Vortrag gehalten in der Akademischen Gesellschaft zu Freiburg i. B. am 10. Januar 1889*. Freiburg: J. C. B. Mohr.
- Murphy, G. (1961). *Challenge of Psychical Research. A Primer of Parapsychology*. New York: Harper & Brothers.
- Muthukumaraswamy, S. D., Carhart-Harris, R. L., Moran, R. J., Brookes, M. J., Williams, T. M., Erritzoe, D., . . . Nutt, D. J. (2013). Broadband cortical desynchronization underlies the human psychedelic state. *Journal of Neuroscience*, 33, 15171–15183.
- Myers, F. W. H. (1884). On a telepathic explanation of some so-called spiritualistic phenomena. *Proceedings of the Society for Psychical Research*, 2, 217-237.
- Myers, F. W. H. (1885). Automatic writing. Part II. *Proceedings of the Society for Psychical Research*, 3, 1-63.
- Myers, F. W. H. (1887). Automatic writing. - III. *Proceedings of the Society for Psychical Research*, 4, 209-261.
- Myers, F. W. H. (1888). Further cases of automatic writing. *Journal of the Society for Psychical Research*, 3, 230-233.
- Myers, F. W. H. (1889). On recognised apparitions occurring more than a year after death. *Proceedings of the Society for Psychical Research*, 6, 13-65.
- Myers, F. W. H. (1890a). A defence of phantasms of the dead. *Proceedings of the Society for Psychical Research*, 6, 314-357.
- Myers, F. W. H. (1890b). A record of observations of certain phenomena of trance. (1) Introduction. *Proceedings of the Society for Psychical Research*, 6, 436-442.
- Myers, F. W. H. (1891). Professor William James’s “The Principles of Psychology”. *Proceedings of the Society for Psychical Research*, 7, 111-133.
- Myers, F. W. H. (1893). *Science and a Future Life with other Essays*. London: Macmillan and Co.
- Myers, F. W. H. (1921). *Collected Poems. With Autobiographical and Critical Fragments*. London: Macmillan.

- Nahm, M. (2012). *Wenn die Dunkelheit ein Ende findet. Terminale Geistesklarheit und andere ungewöhnliche Phänomene in Todesnähe*. Amerang: Crotona.
- Nahm, M., & Greyson, B. (2009). Terminal lucidity in patients with chronic schizophrenia and dementia. A survey of the literature. *Journal of Nervous and Mental Disease*, 197, 942-944.
- Nahm, M., Greyson, B., Kelly, E. W., & Haraldsson, E. (2012). Terminal lucidity: A review and a case collection. *Archives of Gerontology and Geriatrics*, 55, 138-142.
- Newbold, W. R. (1898). A further record of observations of certain phenomena of trance. Part II. *Proceedings of the Society for Psychical Research*, 14, 6-49.
- Newton, I. (1733). *Observations upon the Prophecies of Daniel, and the Apocalypse of St. John* (B. Smith Ed.). London: J. Darby and T. Browne.
- Nicholson, D. J. (2014). The return of the organism as a fundamental explanatory concept in biology. *Philosophy Compass*, 9, 347-359.
- Nicol, F. (1966). The silences of Mr. Trevor Hall. *International Journal of Parapsychology*, 8, 5-59.
- Noakes, R. (2004). The “bridge which is between physical and psychical research”: William Fletcher Barrett, sensitive flames, and spiritualism. *History of Science*, 42, 419-464.
- Noakes, R. (2019). *Physics and Psychics: The Occult and the Sciences in Modern Britain*. Cambridge: Cambridge University Press.
- Olson, P. R., Suddeth, J. A., Peterson, P. J., & Egelhoff, C. (1985). Hallucinations of widowhood. *Journal of the American Geriatrics Society*, 33, 543-547.
- Osis, K. (1986). Characteristics of purposeful action in an apparition case. *Journal of the American Society for Psychical Research*, 80, 175-193.
- Osis, K., & Haraldsson, E. (1986). *At the Hour of Death. Revised edition*. New York: Hastings House.
- Osis, K., & McCormick, D. (1982). A case of collectively observed apparitions and related phenomena. In W. G. Roll, R. L. Morris, & R. A. White (Eds.), *Research in Parapsychology 1981. Abstracts and Papers from the Twenty-fourth Annual Convention of the Parapsychological Association, 1981* (pp. 120-123). Metuchen: The Scarecrow Press.
- Pasricha, S. K. (1990). Cases of the reincarnation type in Northern India with birthmarks and birth defects. *Journal of Scientific Exploration*, 12, 259-293.
- Pasricha, S. K. (1992). Are reincarnation type cases shaped by parental guidance? An empirical study concerning the limits of parents' influence on children. *Journal of Scientific Exploration*, 6, 167-180.
- Pasricha, S. K. (2011). Do attitudes of families concerned influence features of children who claim to remember previous lives? *Indian Journal of Psychiatry*, 53, 21-24.
- Pasricha, S. K., Keil, J., Tucker, J. B., & Stevenson, I. (2005). Some bodily malformations attributed to previous lives. *Journal of Scientific Exploration*, 19, 359-383.
- Pasricha, S. K., & Stevenson, I. (1987). Indian cases of the reincarnation type two generations apart. *Journal of the Society for Psychical Research*, 54, 239-246.
- Pattie, F. A. (1993). *Mesmer and Animal Magnetism: A Chapter in the History of Medicine*. Hamilton, NY: Edmonston Publishing.
- Perrault, F. (1658). *The Devil of Mascon. Or, A true Relation of the chiefe things which an uncleane Spirit did, and said at Mascon in Burgundy, in the House of Mr Francis Pereaud, Minister of the Reformed Church in the same Towne*. Oxford: Hen, Hall, Rich & Davis (original French publication in 1653).
- Peterson, A., Clapp, J., Largent, E. A., Harkins, K., Stites, S. D., & Karlawish, J. (2021). What is paradoxical lucidity? The answer begins with its definition. *Alzheimer's & Dementia*, <https://doi.org/10.1002/alz.12424> (Epub ahead of print).

- Phillips, D. M. (1991). Importance of the lay press in the transmission of medical knowledge to the scientific community. *New England Journal of Medicine*, 325, 1180–1183.
- Pick, D. (1989). *Faces of Degeneration. A European Disorder, c. 1848-c. 1918*. Cambridge: Cambridge University Press.
- Pinch, T. J. (1979). Normal explanations of the paranormal: The demarcation problem and fraud in parapsychology. *Social Studies of Science*, 9, 329-348.
- Pinch, T. J., & Collins, H. M. (1984). Private science and public knowledge: the Committee for the Scientific Investigation of the [sic] Claims of the Paranormal and its use of the literature. *Social Studies of Science*, 14, 521-546.
- Playfair, G. L., & Keen, M. (2004). A possibly unique case of psychic detection. *Journal of the Society for Psychical Research*, 68, 1-17.
- Podmore, F. (1898). Discussion of the trance-phenomena of Mrs. Piper. I. *Proceedings of the Society for Psychical Research*, 14, 50-78.
- Porter, R. (1999). Witchcraft and magic in Enlightenment, Romantic and liberal thought. In B. Ankarloo & S. Clark (Eds.), *Witchcraft and Magic in Europe. Volume 5. The Eighteenth and Nineteenth Centuries* (pp. 191-282). Philadelphia, PA: University of Pennsylvania Press.
- Porter, R., Nicholson, H., & Bennett, B. (Eds.). (2003). *Women, Madness and Spiritualism (2 vols.)*. London: Routledge.
- Price, H. (1931). The R101 disaster (case record): Mediumship of Mrs. Garrett. *Journal of the American Society for Psychical Research*, 25, 268-279.
- Priestley, J. (1791). *Letters to the Members of The New Jerusalem Church, Formed by Baron Swedenborg*. Birmingham: J. Thompson.
- Prince, W. F. (1922). Certain characteristics of veridical mediumistic phenomena compared with those of phenomena generally conceded to be telepathic. In C. Vett (Ed.), *Le compte-rendu officiel du Premier Congrès International des Recherches Psychiques à Copenhague 26 Aout - 2 Septembre 1921* (pp. 101-122). Copenhagen: Internationale des Comités pour les Recherches Psychiques.
- Principe, L. M. (2011). *The Scientific Revolution: A Very Short Introduction*. Oxford: Oxford University Press.
- Reber, A. S., & Alcock, J. E. (2020). Searching for the impossible: Parapsychology's elusive quest. *American Psychologist*, 75, 391-399.
- Rees, W. D. (1971). The hallucinations of widowhood. *British Medical Journal*, 4, 37-41.
- Rees, W. D. (2001). *Death and Bereavement. The Psychological, Religious and Cultural Interfaces* (second ed.). London: Whurr.
- Reill, P. H. (2005). *Vitalizing Nature in the Enlightenment*. Berkeley, CA: University of California Press.
- Renz, D., Reichmuth, O., Bueche, D., Traichel, B., Schuett Mao, M., Cerny, T., & Strasser, F. (2018). Fear, pain, denial, and spiritual experiences in dying processes. *American Journal of Hospice & Palliative Medicine*, 35, 478-491.
- Richet, C. (1923). *Thirty Years of Psychical Research. Being a Treatise on Metapsychics* (S. De Brath, Trans.). New York: Macmillan (original French ed. 1922).
- Richet, C. (1924). For and against survival. The difficulty of survival from the scientific point of view. *Proceedings of the Society for Psychical Research*, 34, 107-113.
- Ring, K., & Franklin, S. (1981). Do suicide survivors report near-death experiences? *Omega*, 12, 191-208.
- Rivas, T. (2003). Three cases of the reincarnation type in the Netherlands. *Journal of Scientific Exploration*, 17, 527-532.

- Roe, S. (2003). The life sciences. In R. Porter (Ed.), *The Cambridge History of Science. Volume 4. The Eighteenth Century* (pp. 397-416). Cambridge: Cambridge University Press.
- Roe, S. (2010). Biology, atheism, and politics in eighteenth-century France. In D. R. Alexander & R. L. Numbers (Eds.), *Biology and Ideology from Descartes to Dawkins* (pp. 36-60). Chicago, IL: University of Chicago Press.
- Rosen, D. H. (1975). Suicide survivors: A follow-up study of persons who survived jumping from the Golden Gate and San Francisco-Oakland Bay Bridges. *Western Journal of Medicine*, 122, 289-294.
- Ross, S. (1962). *Scientist: The story of a word*. *Annals of Science*, 18, 65-86.
- Rutkin, H. D. (2018). Galileo as practising astrologer. *Journal for the History of Astronomy*, 49, 388-391.
- Sabudeco, P., Evans, C., & Hayes, J. (2020). Perceiving those who are gone: Cultural research on post-bereavement perception or hallucination of the deceased. *Transcultural Psychiatry*, doi:10.1177/1363461520962887 (Epub ahead of print).
- Sagan, C. (1995). *The Demon-Haunted World: Science as a Candle in the Dark*. New York: Random House.
- Schaffer, S. (2010). The astrological roots of mesmerism. *Studies in History and Philosophy of Biological and Biomedical Sciences*, 41, 158-168.
- Schelling, F. W. J. v. (1804). *Philosophie und Religion*. Tübingen: Cotta'sche Buchhandlung.
- Schelling, F. W. J. v. (1865). *Clara oder Zusammenhang der Natur mit der Geisterwelt. Ein Gespräch* (second ed.). Stuttgart: Cotta.
- Schiller, F. C. S. (1901). Do men desire immortality? *Fortnightly Review*, 70, 430-444.
- Schiller, F. C. S. (1904). The answers to the American branch's questionnaire regarding human sentiment as to a future life. *Proceedings of the Society for Psychical Research*, 18, 416-453.
- Schmidt, A. (1930). Experimente mit dem Metagraphologen Otto Reimann-Prag. Im Auftrage der „Berliner Aerztlichen Gesellschaft für parapsychische Forschung“. *Zeitschrift für Parapsychologie*, 5, 600-615.
- Schopenhauer, A. (1874). *Parerga und Paralipomena. Kleine philosophische Schriften (2 vols.)*. Leipzig: Brockhaus (first ed. 1851).
- Schouten, S. A., & Stevenson, I. (1998). Does the socio-psychological hypothesis explain cases of the reincarnation type? *Journal of Nervous & Mental Disease*, 186, 504-506.
- Schwartz, H. (1980). *The French Prophets. The History of a Millenarian Group in Eighteenth-Century England*. Berkeley, CA: University of California Press.
- Shapin, S. (2018). *The Scientific Revolution* (second updated ed.). Chicago, IL: University of Chicago Press.
- Shapin, S., & Schaffer, S. (2011). *Leviathan and the Air-Pump. Hobbes, Boyle and the Experimental Life*. Princeton, NJ: Princeton University Press.
- Sharma, P., & Tucker, J. B. (2004). Cases of the reincarnation type with memories from the intermission between lives. *Journal of Near-Death Studies*, 23, 101-118.
- Shermer, M. (2002). *Why People Believe Weird Things: Pseudoscience, Superstition, and Other Confusions of our Time* (revised and expanded ed.). New York: Freeman/Owl.
- Shermer, M. (2010). Introduction to "Testing the Claims of Mesmerism. The First Scientific Investigation of the Paranormal Ever Conducted". *Skeptic*, <http://www.skeptic.com/eskeptic/10-09-22/#feature>.
- Shushan, G. (2011). *Conceptions of the Afterlife in Early Civilizations: Universalism, Constructivism and Near-Death Experience*. London: Bloomsbury.
- Shushan, G. (2018). *Near-Death Experience in Indigenous Religions*. Oxford: Oxford University Press.

- Sidgwick, E. M. (1900). Discussion of the trance phenomena of Mrs. Piper. II. *Proceedings of the Society for Psychical Research*, 15, 16-38.
- Sidgwick, E. M. (1911). "Studies in Spiritism" by Amy E. Tanner. *Proceedings of the Society for Psychical Research*, 25, 102-108.
- Sidgwick, E. M. (1915). A contribution to the study of the psychology of Mrs. Piper's trance phenomena. *Proceedings of the Society for Psychical Research*, 28, 1-652.
- Sidgwick, H., Johnson, A., Myers, F. W. H., Podmore, F., & Sidgwick, E. M. (1894). Report on the Census of Hallucinations. *Proceedings of the Society for Psychical Research*, 10, 25-422.
- Skrupskelis, I. K., & Berkeley, E. M. (Eds.). (1992-2004). *The Correspondence of William James (12 vols.)*. Charlottesville, VA: University of Virginia Press.
- Smith, R. (1972). Alfred Russel Wallace: Philosophy of nature and man. *British Journal for the History of Science*, 6, 177-199.
- Smith, R. (1992). *Inhibition: History and Meaning in the Sciences of Mind and Brain*. Berkeley, CA: University of California Press.
- Smith, R. (2013). *Free Will and the Human Sciences in Britain, 1870-1910*. London: Pickering & Chatto.
- Smith, S. (1964). *The Mediumship of Mrs. Leonard*. New York: University Books.
- Snobelen, S. D. (2004). Lust, pride, and ambition: Isaac Newton and the devil. In J. E. Force & S. Hutton (Eds.), *Newton and Newtonianism: New Studies* (pp. 155-181). Dordrecht: Kluwer Academic.
- Society_for_Psychical_Research. (1882). Objects of the Society. *Proceedings of the Society for Psychical Research*, 1, 3-6.
- Society_for_Psychical_Research. (2019). American Society for Psychical Research. *Psi Encyclopedia*. Retrieved from <https://psi-encyclopedia.spr.ac.uk/articles/american-society-psychical-research>
- Sommer, A. (2012). Psychical research and the origins of American psychology: Hugo Münsterberg, William James and Eusapia Palladino. *History of the Human Sciences*, 25, 23-44.
- Sommer, A. (2013a). *Crossing the Boundaries of Mind and Body. Psychical Research and the Origins of Modern Psychology*. (PhD thesis), University College London, London.
- Sommer, A. (2013b). Normalizing the supernormal: The formation of the "Gesellschaft für Psychologische Forschung" ("Society for Psychological Research"), c. 1886-1890. *Journal of the History of the Behavioral Sciences*, 49, 18-44.
- Sommer, A. (2013c). Spiritualism and the origins of modern psychology in late nineteenth-century Germany. The Wundt-Zöllner debate. In C. M. Moreman (Ed.), *The Spiritualist Movement: Speaking with the Dead in America and Around the World* (Vol. 1, pp. 55-72). Santa Barbara, CA: Praeger.
- Sommer, A. (2014). Psychical research in the history and philosophy of science. An introduction and review. *Studies in History and Philosophy of Biological and Biomedical Sciences*, 48, 38-45.
- Sommer, A. (2016). Are you afraid of the dark? Notes on the psychology of belief in histories of science and the occult. *European Journal of Psychotherapy & Counselling*, 18, 105-122.
- Sommer, A. (2019). A "metaphysics of the dunces" [review of Josephson-Storm, *The Myth of Disenchantment*]. *History of the Human Sciences*, <https://www.histhum.com/metaphysics-of-the-dunces>.
- Sommer, A. (2020). James and psychical research in context. In A. Klein (Ed.), *The Oxford Handbook of William James*. Oxford: Oxford University Press. DOI: 10.1093/oxfordhb/9780199395699.013.37 (Epub ahead of print).

- Sommer, A. (2021a). Conflicts and complexities: Medical science, exceptional experiences, and the perils of simplistic history. In A. Moreira-Almeida, B. P. Mosquero, & D. Bhugra (Eds.), *Spirituality and Mental Health Across Cultures (Oxford Cultural Psychiatry)* (pp. 47-59). Oxford: Oxford University Press.
- Sommer, A. (2021b). Max Dessoir. *Psi Encyclopedia*, <https://psi-encyclopedia.spr.ac.uk/articles/max-dessoir>.
- Stevenson, I. (1960). The evidence of survival from claimed memories of former incarnations. *Journal of the American Society for Psychical Research*, 54, 51-71, 95-117.
- Stevenson, I. (1964). The blue orchid of Table Mountain. *Journal of the Society for Psychical Research*, 42, 401-409.
- Stevenson, I. (1965). The case of the “teddy bear” suit. *Journal of the Society for Psychical Research*, 43, 92-93.
- Stevenson, I. (1968). The substantiality of spontaneous cases. *Proceedings of the Parapsychological Association*, 5, 91-128.
- Stevenson, I. (1970). A communicator unknown to medium and sitters. *Journal of the American Society for Psychical Research*, 64, 53-65.
- Stevenson, I. (1973). A communicator of the ‘drop-in’ type in France: The case of Robert Marie. *Journal of the American Society for Psychical Research*, 67, 47-76.
- Stevenson, I. (1974). *Twenty Cases Suggestive of Reincarnation* (second, revised & enlarged ed.). Charlottesville: University Press of Virginia (first ed. 1966).
- Stevenson, I. (1983a). American children who claim to remember previous lives. *Journal of Nervous and Mental Disease*, 171, 742-748.
- Stevenson, I. (1983b). Do we need a new word to supplement “hallucination”? *American Journal of Psychiatry*, 140, 1609-1611.
- Stevenson, I. (1995). Six modern apparitional experiences. *Journal of Scientific Exploration*, 9, 351-366.
- Stevenson, I. (1997). *Reincarnation and Biology. A Contribution to the Etiology of Birthmarks and Birth Defects (2 vols.)* Westport, CT: Praeger.
- Stevenson, I. (2003). *European Cases of the Reincarnation Type*. Jefferson: McFarland & Company.
- Stevenson, I., & Haraldsson, E. (2003). The similarity of features of reincarnation type cases over many years: a third study. *Journal of Scientific Exploration*, 17, 283-289.
- Stevenson, I., & Keil, J. (2000). The stability of assessments of paranormal connections in reincarnation-type cases. *Journal of Scientific Exploration*, 14, 365-382.
- Stevenson, I., & Keil, J. (2005). Children of Myanmar who behave like Japanese soldiers: a possible third element in personality. *Journal of Scientific Exploration*, 19, 171-183.
- Streit-Horn, J. (2011). *A Systematic Review of Research on After-Death Communication (ADC)*. (Ph.D. Ph.D.), University of North Texas, Denton, TX.
- Sudduth, M. (2016). *A Philosophical Critique of Empirical Arguments for Postmortem Survival*. Basingstoke: Palgrave Macmillan.
- Surman, J. (2021). Julian Ochorowicz’s experiments with Eusapia Palladino 1894: The temporality of mass media and the crisis of local credibility. *Journal of the History of the Behavioral Sciences*, DOI: 10.1002/jhbs.22119 (Epub ahead of print).
- Tanner, A. E. (1910). *Studies in Spiritism*. New York: D. Appleton.
- Taylor, E. (1983). *William James on Exceptional Mental States. The 1896 Lowell Lectures*. New York: Charles Scribner’s Sons.
- Taylor, E. (1996). *William James: On Consciousness Beyond the Margin*. Princeton, NJ: Princeton University Press.
- Taylor, G. (2010). How Martin Gardner bamboozled the skeptics. *Darklore*, 5, 195-221.

- Temkin, O. (1946). Materialism in French and German physiology of the early nineteenth century. *Bulletin of the History of Medicine*, 20, 322-327.
- Thomas, C. D. (1935). A proxy case extending over eleven sittings with Mrs. Osborne Leonard. *Proceedings of the Society for Psychical Research*, 43.
- Thomas, J. F. (1929). *Case Studies Bearing Upon Survival*. Boston, MA: Boston Society for Psychic Research.
- Thomas, J. F. (1937). *Beyond Normal Cognition. An Evaluative and Methodological Study of the Mental Content of Certain Trance Phenomena*. Boston, MA: Boston Society for Psychic Research.
- Thorndike, L. (1923-1958). *A History of Magic and Experimental Science (8 Vols.)*. New York: Macmillan (vols. 1-2) and Columbia University Press (vols. 3-8).
- Tompkins, M. L. (2017). He blinded us with seance. *New Scientist*(17 June), 42-43.
- Tompkins, M. L. (2019). *The Spectacle of Illusion. Magic, the Paranormal, and the Complicity of the Mind*. London: Thames & Hudson.
- Tucker, J. B. (2000). A Scale to Measure the Strength of Children's Claims of Previous Lives: Methodology and Initial Findings. *Journal of Scientific Exploration*, 14, 571-581.
- Tucker, J. B. (2021). *Before: Children's Memories of Previous Lives*. New York: St. Martin's Press.
- Tucker, J. B., & Keil, J. (2013). Experimental birthmarks: new cases of an Asian practice. *Journal of Scientific Exploration*, 27, 263-276.
- Tucker, J. B., & Nidiffer, F. D. (2014). Psychological evaluation of American children who report memories of previous lives. *Journal of Scientific Exploration*, 28, 583-594.
- Tuckett, I. L. (1911). *The Evidence for the Supernatural*. London: Kegan Paul, Trench, Trübner & Co.
- Turner, F. M. (1974). *Between Science and Religion. The Reaction to Scientific Naturalism in Late Victorian England*. New Haven, CT: Yale University Press.
- Turner, F. M. (1978). The Victorian conflict between science and religion: A professional dimension. *Isis*, 69, 356-376.
- Tyndall, J. (1876). Science and the 'spirits'. In *Fragments of Science: A Series of Detached Essays, Addresses and Reviews* (fifth ed., pp. 314-322). London: Longmans, Green, and Co.
- Tyrell, G. N. M. (1973). *Apparitions*. London: Society for Psychical Research.
- Van Lommel, P. (2004). About the continuity of our consciousness. *Advances in Experimental Medicine and Biology*, 550, 115-132.
- Van Lommel, P., Van Wees, R., & Meyers, V. (2001). Near-death experience in survivors of cardiac arrest: a prospective study in the Netherlands. *The Lancet*, 358, 2039-2045.
- Verrall, M. d. G. M. (1906). On a series of automatic writing. *Proceedings of the Society for Psychical Research*, 20, 1-432.
- Vickers, B. (Ed.) (1984). *Occult and Scientific Mentalities in the Renaissance*. Cambridge: Cambridge University Press.
- Vidal, F. (2009). Brainhood, anthropological figure of modernity. *History of the Human Sciences*, 22, 5-36.
- Vidal, F., & Ortega, F. (2017). *Being Brains. Making the Cerebral Subject*. New York: Fordham University Press.
- Vogt, C. (1874). *Physiologische Briefe für Gebildete aller Stände* (fourth enlarged and improved ed.). Gießen: J. Ricker'sche Buchhandlung (first edition in 1846).
- Wadge, E. (2006). A fair trial for spiritualism? Fighting dirty in the *Pall Mall Gazette*. In D. Clifford, E. Wadge, A. Warwick, & M. Willis (Eds.), *Repositioning Victorian Sciences. Shifting Centres in Nineteenth-Century Scientific Thinking* (pp. 95-106). London: Anthem.

- Walker, D. P. (1958). *Spiritual & Demonic Magic from Ficino to Campanella*. London: Warburg Institute.
- Wallace, A. R. (1875). *On Miracles and Modern Spiritualism. Three Essays*. London: James Burns.
- Wallace, A. R. (1891). What are phantasms, and why do they appear? *Arena*, 3, 257-274.
- Wallace, A. R. (1905). *My Life. A Record of Events and Opinions (2 vols.)*. London: Chapman & Hall.
- Webster, C. (1982). *From Paracelsus to Newton. Magic and the Making of Modern Science*. Cambridge: Cambridge University Press.
- Weidman, N. N. (1999). *Constructing Scientific Psychology. Karl Lashley's Mind-Brain Debates*. Cambridge: Cambridge University Press.
- Weingart, P. (1998). Science and the media. *Research Policy*, 27, 869-879.
- Weld, C. R. (1848). *A History of the Royal Society, with Memoirs of the Presidents (2 vols.)*. London: John W. Parker.
- Williams, J. P. (1984). *The Making of Victorian Psychical Research: An Intellectual Elite's Approach to the Spiritual World*. (PhD thesis), University of Cambridge, Cambridge.
- Williams, J. P. (1985). Psychical research and psychiatry in late Victorian Britain: trance as ecstasy or trance as insanity. In W. F. Bynum, R. Porter, & M. Shepherd (Eds.), *The Anatomy of Madness. Essays in the History of Psychiatry. Volume I. People and Ideas* (Vol. 1, pp. 233-254). London: Tavistock.
- Williamson, C. J. (1982). A collective phantasm. *Journal of the Society for Psychical Research*, 51, 257-258.
- Winter, A. (1998). *Mesmerized: Powers of Mind in Victorian Britain*. Chicago, IL: University of Chicago Press.
- Wolf, S. (1993). *Brain, Mind, and Medicine: Charles Richet and the Origins of Physiological Psychology*. New Brunswick, NJ: Transaction.
- Wolfram, H. (2012). Hallucination or materialization? The animism versus spiritism debate in late-19th-century Germany. *History of the Human Sciences*, 25, 45-66.
- Wundt, W. (1879). Spiritualism as a scientific question. An open letter to Professor Hermann Ulrici, of Halle. *Popular Science Monthly*, 15, 577-593.
- Wundt, W. (1888). Zur Erinnerung an Gustav Theodor Fechner, Worte gesprochen an seinem Sarge am 21. November 1887. *Philosophische Studien*, 4, 471-478.
- Wundt, W. (1892). *Hypnotismus und Suggestion*. Leipzig: Wilhelm Engelmann.
- Wundt, W. (1901). *Gustav Theodor Fechner. Rede zur Feier seines hundertjährigen Geburtstages*. Leipzig: Wilhelm Engelmann.
- Young, R. M. (1990). *Mind, Brain and Adaptation in the Nineteenth Century. Cerebral Localization and its Biological Context from Gall to Ferrier* (second ed.). New York: Oxford University Press.
- Zusne, L., & Jones, W. H. (1989). *Anomalistic Psychology: A Study of Magical Thinking*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.