

DEAN RADIN<sup>2</sup>

## On Pathological Skepticism

### *Introduction*

At a conference at the University of Virginia in the late 1980s, I presented the results of a meta-analysis of hundreds of published experiments investigating the intentional influence of streams of random bits produced by truly random number generators (Radin & Nelson, 1989). In my talk, I concluded that the data indicated the presence of a genuine mind-matter interaction anomaly. Afterwards, I was stopped in the hallway by philosopher Paul Kurtz, founder of the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP). Kurtz was visibly angry. He asked how I reached that conclusion. I explained that the meta-analysis was based on the same statistical methods commonly used in many disciplines to estimate effect sizes and to judge whether effects are repeatable. The results, in my assessment, were clear.

Kurtz was irate because he felt that my conclusion might add support to the idea that psychokinetic (PK) abilities were genuine, and that my academic affiliation (Princeton University at the time) might be influential in promoting that idea. I was perplexed by Kurtz's emotional response to my talk because I was simply reporting an analysis of an intriguing set of experiments. I was not on a mission to promote PK. Later, I realized that unlike me, Kurtz was on a mission to shape and defend the “purity” of science, which in his view could not possibly include PK. His reaction was like an allergic response to an ideological contaminant (Ritter & Preston, 2011).

My interaction with Kurtz helped shape my opinion of CSICOP, and over the years I found few reasons to revise my initial impression. As described in Wunder's and Grams' articles in this issue of the journal, the stated goals of professional skeptical organizations are laudable, but that is not what some of these organizations actually do.

I have since encountered many others like Kurtz, who are only capable of understanding positive evidence for psi as either flaws or fraud. To give another example, Barry Beyerstein was

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2 **Dean Radin** PhD (psychology) is currently Chief Scientist at the Institute of Noetic Sciences and Associated Distinguished Professor at the California Institute of Integral Studies. He previously worked at AT&T Bell Labs, Princeton University, University of Edinburgh, and SRI International, has given over 500 invited presentations and interviews worldwide, and is the author or coauthor of over 250 technical and popular articles, 50 book chapters, and four best-selling books that have been translated into 15 languages: *The Conscious Universe* (1997), *Entangled Minds* (2006), *Supernormal* (2013), and *Real Magic* (2018).

a prominent skeptic and psychology professor at Simon Fraser University in British Columbia, Canada. In 2000, we were panelists on a television show called *Closer to Truth*, and the topic was parapsychology. Beyerstein said that he ran hundreds of psi tests on students in his classes, and he never saw any evidence for psi. I asked if he kept records of the actual results, because *never* obtaining a statistically significant effect (at  $p < 0.05$ ) after conducting hundreds of tests is in itself statistically very unlikely. So, he changed his story. Now it was not that he never got a significant result, but rather that he got the chance expected number of significant results. So, I asked again, did he keep records? He replied, no. Then I said, how can you be so sure that there was no psi in these tests if you did not evaluate the cumulative results? For that he had no answer, because he was already confident that he knew the “right answer.”

### ***Discussion***

There is no need to rehash what others have written about the disconnections between the stated and actual purposes of hyper-skeptical organizations, or about how the same dogmatic mindset has thoroughly infected generations of professors as well as *Wikipedia* articles on psi-related topics. So, I will offer just three comments and a half-baked speculation.

### ***Education***

An ongoing problem in science education is that the philosophy and sociology of science are not considered part of the essential core of an undergraduate science curriculum. By not placing science in its broader social and philosophical contexts, fledgling scientists naturally assume that the only valid way to understand nature is through materialism, the philosophical doctrine that says reality consists only of matter and (after Einstein) energy. For many scientific disciplines, materialism and its close cousins, mechanism and reductionism, have been highly effective ways of understanding how things work, so perhaps this is why sociology and philosophy are considered at best as elective courses, and at worst as unnecessary distractions.

This is a problem because when it comes to understanding subjective experience, i. e., consciousness, so far materialism fails to provide anything close to an adequate explanation. And when it comes to understanding subjective experiences that transcend the everyday boundaries of space and time – psi phenomena – it fails miserably. But rather than viewing these failures as intriguing and thus worthy of serious attention, rigid skeptics pronounce with great confidence that psi is impossible and not worth a second thought.

One consequence of this lack of education is that young scientists are inculcated into a worldview without understanding that it is a worldview. Nor do they realize that worldviews are

accompanied by blinders that determine what one can see. The worldview of materialism, which remains supreme within academic science, makes it extremely difficult to understand psi experiences, and so the psi-is-impossible myth is perpetuated in students, generation after generation.

### *Academic Freedom*

Another consequence of the psi-is-impossible myth is that it is easier, as well as much safer for one's academic aspirations, to earn a doctoral degree in popular culture with a dissertation on (say) "The Hermeneutics of Buffy the Vampire Slayer" (Smith et al., 2002; South, 2011), than it is to study the possibility that some of the psi abilities portrayed on that popular television show are actually based on real phenomena. In the academic world today, with very few exceptions, it is only acceptable to study psi experiences as superstitious beliefs, or as deficits of perception, cognition, or personality (Betsch et al., 2020; Rogers et al., 2018).

Because academic freedom allows for the study of any topic, one might expect that strange experiences documented throughout history and across all cultures and educational levels would be a very popular topic. And yet, of more than 15,000 universities around the world, only about 50 have at least one faculty member who is actively engaged in the study of psychic phenomena.<sup>3</sup> This means that 99.7% of the world's universities studiously ignore what a majority of the world's population believes (Cardeña, 2018), where belief is largely driven by personal experience (Coltheart & Davies, 2021). That academia can ignore the study of experiences that permeate the world's entertainment industry and religious texts is itself worthy of study, as (remarkably few) sociologists have noted (McClenon, 2016; Pinch, 2013).

### *Journal Editors*

Yet another consequence of the psi-is-impossible myth is that it leads to an entrenched prejudice among some journal editors. For example, my colleagues and I once surveyed novice and advanced meditators to see how many had encountered psi-type experiences (Vieten et al., 2018). We asked this question because the literature on the *yoga siddhis* (Sanskrit for special "attainments" or "powers") states that these abilities are a natural outcome of meditative practice (Feuerstein, 1989; Simon, 2011). We found that a large percentage of meditators did indeed report psi experiences which they attributed to their practice. We submitted the paper to a mainstream journal, and it was summarily rejected. That papers are sometimes rejected is not remarkable, but this particular editor was so incensed by our paper that he explained why he rejected it:

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<sup>3</sup> [https://www.parapsych.org/section/34/university\\_education\\_in.aspx](https://www.parapsych.org/section/34/university_education_in.aspx)

Is it worth spending (public) research money and resources, as well as the scientists' time necessary for peer review (let alone misleading the public's and the media's attention) to test the hypothesis that  $1+1=3$ ? Or the hypothesis that pigs can fly? Or that water can be turned into wine?...

The editor's explanation was extraordinary because our paper simply reported a survey of meditators' experiences. We did not propose that their experiences were genuine psi. But the editor was so concerned that his readers might think his journal was sympathetic to psi (or that he was) that he ended his explanation with the following statement: "I will do everything in my power to avoid any public research grant money being spent in that direction."

In a similar vein, in response to a published article presenting the positive results of 10 meta-analyses of the experimental evidence for psi, comprising over 1,000 experimental studies (Cardeña, 2018), an article was later published in the same journal (Reber & Alcock, 2020). The theme of the latter article, which was presumably intended to demonstrate sound, critical thinking, was instead an anti-scientific screed. The authors wrote:

Our position is straightforward. Claims made by parapsychologists cannot be true. The effects reported can have no ontological status; the data have no existential value. We examine a variety of reasons for this conclusion based on well understood scientific principles. In the classic English adynaton, "pigs cannot fly." Hence, data that suggest that they can are necessarily flawed and result from weak methodology or improper data analyses or are Type I errors. So it must be with psi effects. (Reber & Alcock, 2020: 1)

This response deifies (largely antiquated physical) theory over empirical data. This is what one would expect of a religious polemic, not a scientific argument. That this article was published in a professional journal is an astonishing abandonment of the scientific spirit of open inquiry, but it is also exactly what one would expect when generations of academics are inculcated with the psi-is-impossible myth.

### *A Speculation*

After witnessing the "idea police" in action over the years, I have become interested in the psychology of pathological skepticism, especially given the steadily improving evidence that their dogmatic stance about psi is wrong. Inflexible beliefs that are demonstrably wrong can be found in many domains, from the belief that the Earth is flat, to conspiracy theories like QAnon (Sternisko et al., 2020), to Covid-19 is a hoax (Hughes & Machan, 2021). An interesting topic for a personality psychologist might be to compare the Big-Five trait of openness to new experience among pathological skeptics, militant atheists, religious fundamentalists, and conspiracy theorists (Digman, 1990). I speculate, and there is some evidence to support this idea, that they would score

quite low on openness as compared to the general population and, one hopes, also as compared to most scientists (Ashton & Lee, 2021; Streffeler & McNally, 1998; Uzarevic et al., 2017).

### **Conclusion**

The composer Jean Sibelius, responding to a critic, reportedly said: “A statue has never been set up in honor of a critic” (Torne, 2016: 27). I agree, which is why pathological skeptics can be annoying, obstructive, and anti-scientific. But in the long run, they are forgotten.

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