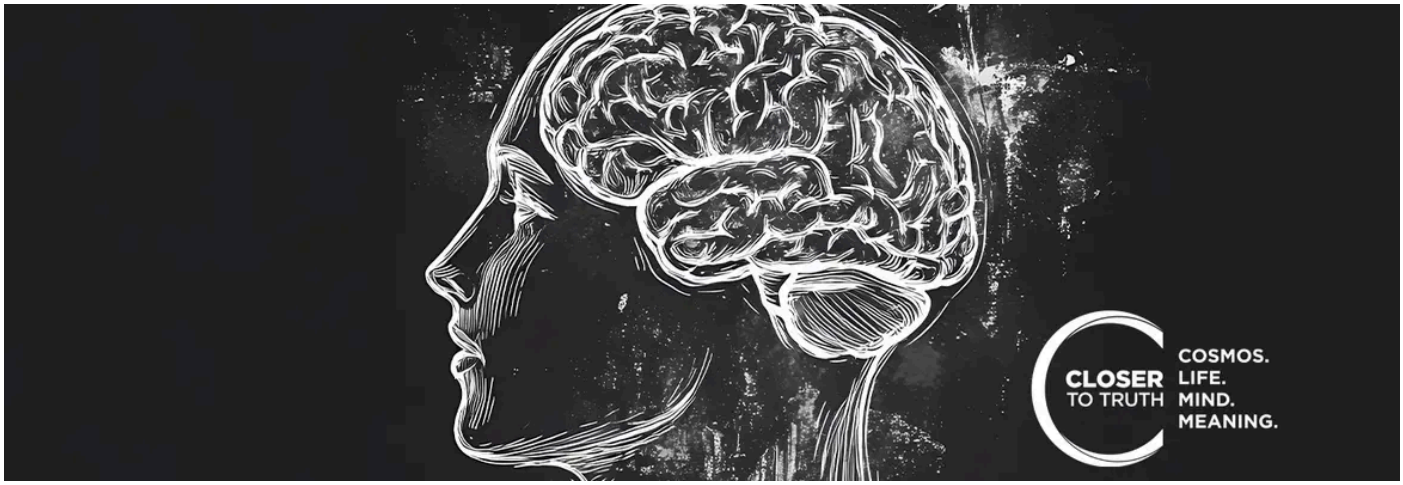
Materialism is holding science back

Some minds reach beyond their brains while others have their brains wide shut



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cite

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The philosophy of materialism has dominated theoretical physics and neuroscience for decades. In this article, theoretical physicist and neuroscientist Àlex Gómez-Marín argues that scientific gatekeeping of alternatives to materialism is the most dangerous type of pseudoscience. To make progress, he argues, we need to examine what we don't understand in our current theories.

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Half a century ago, a research letter entitled "Information transmission under conditions of sensory shielding" was published in *Nature*. The piece was a remarkable anomaly in the history of the journal. The results were anomalous as well.

The authors, the American physicists Russell Targ and Harold Puthoff, provided psychological and neurophysiological evidence that individuals can obtain detailed information about their environment via some means beyond any known sense. Under controlled laboratory conditions, talented subjects were able to describe pictures and scenes in remote locations, achieving performances whose probability of occurring by chance was astoundingly small. Take a look at the target pictures and responses drawn by Uri Geller (or at Pat Price's descriptions) under shielded conditions — they are astounding too!

Apart from ignorance, the default position is either one of indifference or ridicule. When these fail, virulent opposition comes next.

Such a putative extra-sensory perceptual (ESP) ability—referred to as "remote viewing", and extensively investigated at the Stanford Research Institute as part of the Stargate Project, a US Government-funded initiative to investigate such phenomena (many of whose officially declassified documents sit at the Archives of the Impossible)—defies our basic assumptions about what is *possible*. However, the scientific standards of the study were comparable to those deemed valid to accept an orthodox discovery that fits within accepted scientific paradigms, or to ingest a new drug advertised by a pharmaceutical company during a sports broadcast commercial.

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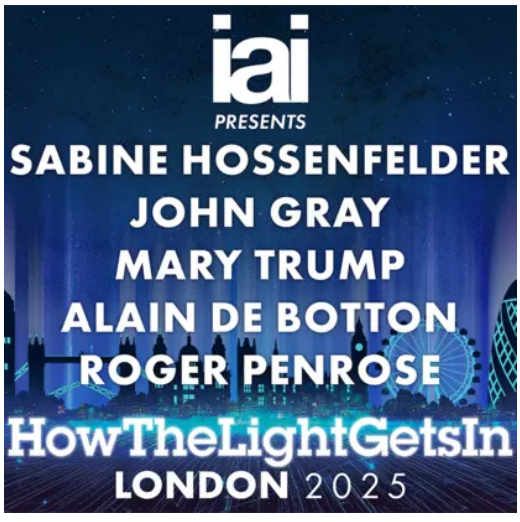
Fifty (one) years later, where are we? Nobody has a clue about the mechanisms of such a putative information channel (if there is one). Most scientists haven't even heard about this research and, if they have, they typically assume that such phenomena don't exist *because they can't*. Apart from ignorance, the default position is either one of indifference or ridicule. When these fail, virulent opposition comes next.

But what counts as an "extraordinary claim" and why? The dictum is too vague to be meaningful. And what counts as "extraordinary evidence"? Is there a difference in kind or in degree with "ordinary" evidence?

The skeptical warning, no doubt, comes to mind: "extraordinary claims require extraordinary evidence" (but also extraordinary patience, curiosity, and prescience). Such a catchy phrase was popularized by the great Carl Sagan and it is repeated, like parrots in a choir, by all dogmatic skeptics. The original quote, however, comes from a true skeptic, the American sociologist Marcello Truzzi, who, in the editorial of the first instalment of the legendary magazine *The Zetetic,* wrote that "where the claims are extraordinary, the burden of proof increases proportionately".

But what counts as an "extraordinary claim" and why? The dictum is too vague to be meaningful. And what counts as "extraordinary evidence"? Is there a difference in kind or in degree with "ordinary" evidence? Again, the injunction is empty-enough to allow for an ever-moving goal-post. Adapted from David Hume's Of Miracles, the dictum is a convenient protection of the belief system (and egos) of those who profess it – a catchy (and twitchy, snitchy, glitchy, witchy) quote whose translation amounts to this: "we always believed it this way and (in the name of science!) if you don't agree, there's the highway".



If the purpose of the mantra is to preclude "false positives", the requirement is, of course, a perfectly reasonable challenge. If instead it aims to undermine any advance that challenges the worldview received in our default academic training—typically the philosophy of materialism sold as science—then the reproach operates instead as a kind of *false* "false negative" edict that impairs the ability of science to do its very job.

science is a mistake

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SUGGESTED VIEWING

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As a reviewer of a follow-up piece by Targ and Puthoff published at the *Proceedings of the IEEE* in 1976 actually confessed, "this is the kind of thing that I would not believe in even if it existed". The editor, however, remarked that "the investigation of ESP is a legitimate scientific understanding, regardless of their belief in its ultimate existence". The reviewer was at least politely honest. This is not always the case.

Last year, a reviewer of a paper in the journal *Frontiers in Psychology* (ironically, on the very same topic) was allowed by the editor to send to the corresponding author of the manuscript, who has given me permission to share this, the following report: "This is pseudoscience. Remote Viewing is indistinguishable from random guessing. If Remote Viewing WERE successful, none of the de-classified CIA documents would have been de-classified". The viewer completed their job by adding the line "The request for 100 word review for rejecting pseudo-science is ABUSE of Reviewer time," copying and pasting the phrase twenty-four times, and then rounding off their rejection letter with "!!!!!!!!!!!!!!!!!!!!!!!!". Academic facts often surpass fiction. "Psi" (psychical research) Derangement Syndrome in the academic-industrial complex is very real. Another reviewer of the same manuscript wrote: "There is simply no good reason to take this seriously". Extraordinary rejections require extraordinary ignorance.

The story behind the *Nature* and the *IEEE* papers is a thriller of scientific bad blood and a testimony of the actual workings of *scientism* behind the scenes. In their book Mind-Reach: Scientists Look at Psychic Abilities, Targ and Puthoff speak about what they call "extreme members of the loyal opposition", particularly "The Amazing" (or, rather, The Amusing) Randi —"the man who destroyed skepticism"—, who claimed to explain all that Geller did by trickery. They remind us that "of course it is a logical fallacy to say that *if* it could have been done by magic, it *was* done by magic". In other words, the existence of infidelities doesn't prove that true love doesn't exist. However, for most professional magicians, "real magic" can only be fake and "fake magic" is the only one that is technically real.

Targ and Puthoff also reveal some juicy sociological elements of the backstage of science (something laypeople hardly ever get to see because scientists and science communications tend to present a slicked-back version of the entire enterprise). They describe how an honest and sincere confidential letter of theirs was leaked to and by *Time* magazine senior editor Leon Jaroff. They lament that "we could hardly believe the lack of professional responsibility that would permit a straight line between a privileged visit to a laboratory involved in sensitive controversial work, not yet published, and the pages of a popular newsweekly." But there is more.

They continue: “we were to find that our initial negative experience with *Time* was only a taste of what was to come,” this time with Joe Hanlon from *New Scientist* visiting the SRI laboratory in January of 1974. Hanlon suggested Targ and Puthoff to consider publishing their results about Geller in *New Scientist*, asking to see an advance copy of their preliminary findings. When Hanlon got the information, he declined the invitation and then published a long, blazing story himself (his own “special investigation”) debunking Uri Geller’s psychic abilities and critiquing the SRI investigation, scheduling the piece to appear in *New Scientist* on the 17th October 1974, the day *before* Targ and Puthoff’s *Nature* publication. Some people try to bend spoons with their minds, while others simply break them with their own hands. Pick your grifter.

But how could such a miracle—a paper on “remote viewing” (scientific evidence that minds may reach literally beyond brains) published in a journal like *Nature*—happen? After the Time article, *Nature* had published an editorial entitled Challenge to Scientists defying the authors to publish their results, arguing that Geller had “clearly created a *prima facie* case for further investigation”. *Nature* was just taking a break from “the Maddox years” —the angry editor who recommended “a book for burning” in one of his editorials, and doubled down on the same book a few years later with the claim that “Not all books should be censured, only those whose influence is so compelling, and so pernicious, that they must be resisted” — when editor David Davies succeeded ultra-skeptic John Maddox before he came back six years later. Editors are necessary gatekeepers, but not necessarily truth-seekers.

Instead, psychical research offers a deluxe mirror to examine whether we live in a world where sci-ence thrives uncensored.

The October 18, 1974 *Nature* editorial entitled “Investigating the paranormal” is worth-reading too, as the editor remarks that the issue is “whether the evidence is of sufficient quality to be taken seriously”. A summary of the referee’s comments is also provided. As the molecular biologist Gunther Stent brilliantly explains in “Prematurity and Uniqueness in Scientific Discovery,” some discoveries are ahead of their time. Conversely, as Geller sarcastically told me, when asked about this whole story on a recent private exchange: “To all skeptics, you have been my best PR machine for decades. As long as you have spelled my name correctly, you gave me priceless publicity and for this you deserve this Oscar I especially created for you all”. And then he sent me a photo of a two-legged spoon with a spooned head and two arms, showing the finger. There is no such thing as bad publicity indeed.

Back to the science: as it turns out, we can now use the latest meta-analytical techniques to study hundreds of replicated psi studies across a dozen classes of experiments, demonstrating high levels of confidence both in the statistical significance and independent repeatability of some of these effects which, however, are typically small—as shown by Etzel Cardeña in his article “The experimental evidence for parapsychological phenomena: A review” published in the journal *American Psychologist* in 2018. Cardeña reviewed meta-analytic findings

for “anomalous cognition,” including Ganzfeld experiments (sensory deprivation studies); precognition (Bem-type studies); psi dream studies; and remote viewing. He also examined findings for “anomalous perturbation,” such as remote influence, non-contact healing studies, micro-PK or small-scale psychokinetic effects, global consciousness, etc.—in essence, all the elephants in the room of “a science of the impossible”: telepathy, clairvoyance, precognition, and psychokinesis.

But, again, the professional hecklers of true inquiry know in advance that such phenomena cannot occur. Psychologists Arthur Reber and James Alcock insist that such claims “cannot be true” and that “the data are irrelevant.” What an extraordinary thing for a so-called scientist to say! “Pigs cannot fly,” they insist, nor will they even try. On these topics, it is better not to spend much time reading *Wikipedia*, pervasively captured by the so-called “Guerrilla Skeptics”, with their covert conflicts of interest and overt interests in conflict. Instead, one should navigate the Psi Encyclopedia, a mature and well-curated collection of articles about the scientific investigation of psychic phenomena, created by the Society for Psychical Research in London. As Jonathan Schooler and colleagues put it, the healthiest attitude is “entertaining without endorsing” the possibility of such impossible phenomena.

The issue here is not so much whether remote viewing is true or not. This is not the place to go in depth into the historical aspects, scientific experiments, and further applications of remote viewing (nor to rejoice in a sort of victim mentality). Instead, psychical research offers a deluxe mirror to examine whether we live in a world where science thrives uncensored. What is at stake here is not so much the legitimacy of the results or their conclusions but the legitimacy of the very act of carrying out the studies and trying to share the results with the scientific community without being ostracized.

AI assistants are perhaps the next pervasive censoring frontier, as they are typically trained with the orthodox, sometimes dogmatic, consensus view:

Covert pervasive censorship is hidden in plain sight. Wikipedia is a silent battlefield, where people can’t get in (take a look at the “deletion log” of controversial theoretical physicist Nassim Haramein) or can’t get out (people need to pay “digital mercenaries” to fight “ogre lords” so that the prefix “pseudo” does not appear a dozen times in their Wiki entries). Blacklisting also takes place on preprint services. No less than a Nobel laureate, the physicist Brian Josephson, denounced “covert censorship by the physics preprint archive”. I wouldn’t be surprised if the same took place in conferences and in grant reviews. With the pretext of submissions being “out of scope”, even “guest editors” themselves are censored by profit-making publishing machines too.

AI assistants are perhaps the next pervasive censoring frontier, as they are typically trained with the orthodox, sometimes dogmatic, consensus view: I asked ChatGPT whether remote viewing is pseudoscience and, of course, it replied “yes,

remote viewing is widely considered pseudoscience", adding that it "has been thoroughly investigated and found lacking by the scientific community. While it remains popular in paranormal circles and some conspiracy theories, it does not meet the criteria of scientific validity, making it a textbook example of pseudoscience". But see this, or that, and other previous studies that offer a different scientifically informed opinion. Once more, *Wikipedia* would not cite a single of these successful replications attempts, spending most of the entry highlighting the "debunker bros", categorically dismissing the phenomenon and giving the impression that the case is nonsense and closed. Once more, better ask the PSI Encyclopedia.

At the end of the day, I am concerned that what could have become one of *Nature*'s landmark papers of all time has fallen into (undeserved?!) oblivion. Not only that, but it is quite likely that the pressure of organised groups like the ones mentioned above on the editors of glamorous journals not to publish more psi-related research, or only negative results, is stagnating free inquiry and real cutting-edge science. Do young scientists have the incentive to try to empirically replicate and theoretically explore such potentially ground-breaking findings? I am afraid they don't. As a post-doctoral researcher privately confessed to me after an online seminar I gave on scientific freedom, "you're right Alex but, at the end of the day, one must get the next grant and move on". Career building sadly (and understandably) supersedes truth pursuing.

But there is light at the end of the tunnel, and it is not another scoffer dazzling us with their ideological gaslight. A recent editorial dealing with similar topics (this time putative mind-to-matter interactions, as opposed to ESP) was entitled "Why we publish papers reporting findings we may not believe" (Della Sala & Grafman, *Cortex*; 2024). Kudos to such scarce brave editors.

Sometimes data seems indeed impossible "in theory". However, Robert Lawrence Kuhn's monumental Landscape of Consciousness –now as a comprehensive, authenticated and up-to-date usable website– offers us a long menu of non-materialist theories that allow "the impossible" to be "conceivable" first (thus, possible), and perhaps empirically testable later (thus, scientific). As physicist and Nobel laureate Richard Feynman put it, we should try "to prove ourselves wrong as quickly as possible, because only in that can we find progress". The two-alternative forced choice between "flaw or fraud" is an intellectual scam.

One wonders how science became so unscientific. The sociology of the science of such potential human abilities is no less interesting than their disputed reality. Ideology trumps methodology. Regardless of "psi" effects being typically small (but statistically strong), scientists are ridiculed simply for taking such phenomena seriously and studying them. And so are laypeople. But who cares? Clairvoyance, telepathy, and (much weirder!) experiences are very real for many people. They are often hyper-real and uncanny! To be honest, most "experiencers of the impossible" couldn't care less about p-values and peer-reviewed papers. They may appreciate scientific "validation" of what they already know to be true (for better or worse, science has becomes today's religion), but "skeptics" shoot themselves in the foot when yelling at them, constantly arrogantly reminding us that we are stupid or even crazy for taking these experiences seriously; experiences, by the way, that are not only hard to measure or mathematize, but even to verbalize. Remote viewing is just

the tip of the iceberg of a wonderful sea of wild and weird intangible realities, including "seeing without eyes" and "the sense of being stared at".

There is a hidden war on consciousness and we must talk about it. As it turns out, scientism is the most dangerous kind of pseudoscience because it is an inside job (its dangerous dogmatism "in the name of science")

We should not halt scientific progress by throwing *stigma upon enigma*. Such anomalies are an invaluable gift because they suggest that our current theories are too limited. As the polemic mathematician and public intellectual Eric Weinstein put it in a tweet: "The invisible world is first detected in the visible world's failure to close." Let us thus seek a virtuous middle between naïve believers' "woo(w)-woo(w)" and angry debunkers' "poo(h)-poo(h)". Censorship is the wielding of power to prevent the dissemination of ideas. Isn't scientific censorship an oxymoron? Well, as it turns out, it "appears to be increasing". Is it really some sort of "benevolent protection" whose benefits "may sometimes outweigh costs"!?

To alleviate such a tension between the new and the old, between "outsiders" and "the academy" (or between great misunderstood revolutionaries and "ossifying fools"), Curt Jaimungal has recently proposed the beginning of a remedy against the "collapsing" of all discrepancies into the moniker "crackpot": a taxonomy that distinguishes the cringe, the fringe, and those that impinge. To unhinge and astringe is to infringe indeed.

Let's relax and play. Check the International Remote Viewing Association out. Contemplate Joe McMoneagle's astounding remote viewing drawings (he's one of the most remarkable remote viewers ever, involved in hundreds of "intelligence missions" applying his distinctive talents), at the new exhibit at the National Cryptologic Museum. Watch the Third Eye Spies documentary. Dare to learn to remote view! Leaving "protocols" aside (boundary conditions to do science on the phenomenon), there are two main remote viewing methods: "extended remote viewing" (ERV), using deep states of consciousness and taught by Joe McMoneagle at the Monroe Institute, and "coordinate remote viewing" (CRV), invented by Ingo Swan at SRI and taught by Paul Smith, among others. There are also weekly remote viewing sessions on twitter. Whether you disbelieve in it or not, why not give it a try? Do you have psi abilities ("got psi?")? Wanna take pare in the "psi games"? It is fun and meaningful.

There is a hidden war on consciousness and we must talk about it. As it turns out, scientism is the most dangerous kind of pseudoscience because it is an inside job (its dangerous dogmatism "in the name of science"). And materialism is its faithful quire. But it is time to seriously examine what we don't understand. Only then will we step into the unknown. The English mathematician and philosopher Alfred North Whitehead put it beautifully: the world "craves for novelty and yet is haunted by terror at the loss of the past." Science is no different.

And remember, even if we face “ontological shock”—an expression coined by the liberal Protestant theologian Paul Tillich and later popularized by Harvard psychiatrist John Mack—it is not the end of the world because, as I like to put it, when Einstein came along, Newton’s apples continued to fall. We don’t need to throw the science baby out with the materialist bathwater. As the historian of religions Jeff Kripal puts it, we should learn to “think impossibly”. Some minds reach beyond their brains; others have their brains wide shut. It is time to turn “impossible science” into “a science of the impossible”.

Àlex Gómez-Marín
16th September 2025

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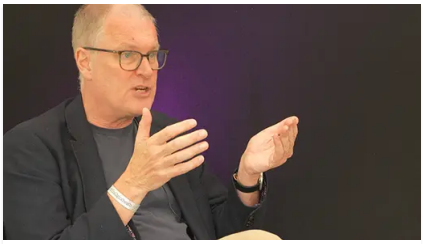

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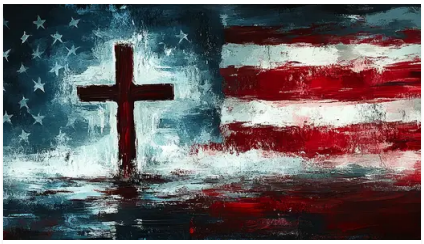

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