http://www.tcm.phy.cam.ac.uk/~bdj10/

Theory D is more threatening to the academic mafia than the paranormal. Josephson plays the role of helping to silence Ivor Catt in order to stay within the mafia, who silence him with his paranormal, and exclude him from the mafia. Josephson's analysis of the academic mafia when they silence him, exactly describes his own behaviour in helping to silence Catt. The mafia don't understand Josephson, and Josephson does not understand Catt. - Ivor Catt, 3.3.2022

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Take nobody's word for it

You don't come across many Nobel prizewinners who believe in the paranormal, but **Brian Josephson** is one of them. After receiving the Nobel prize in physics for his research on superconductivity, his work has taken a very different direction. As well as using mathematics to describe how the brain carries out complex tasks, he is an advocate for cold fusion and other phenomena on the fringes of science. He talked to **Alison George** about why he thinks scientists have an irrational bias against unconventional ideas.

Why did you decide to give up your highly successful work on superconductors?

In the late 1960s I found my area of research less interesting, so I looked elsewhere for problems to work on. Investigating the mathematics of how the brain works is a much more difficult challenge. I also became interested in eastern philosophy and how that might fit in with physics. I read a book called *The Tao of Physics* by Fritjof Capra that pointed out the parallels between quantum physics and eastern mysticism.

I started to feel there was more to reality than conventional science allowed for, and some interesting ideas that it hadn't got round to investigating such as altered states of consciousness. At a conference in Toronto I saw demonstrations of psychokinesis – the influence of mind on matter – and it all pointed to some extension of what science knows at this time.

Did your Nobel prize allow you to investigate areas that are off-limits for other scientists?

It meant I was free to explore, and people felt less able to say "you can't work on that". However, I have had problems with getting funding for collaboration because of the areas I've chosen to work in.

You have become an advocate for unconventional ideas. How did that happen?

I went to a conference where the French immunologist Jacques Benveniste was talking for the first time about his discovery that water has a "memory" of compounds that were once dissolved in it – which might explain how homeopathy works. His findings provoked irrationally strong reactions from scientists and I was struck by how badly he was treated. To an extent, I realised that the way science is done by consensus could

get things completely wrong. I feel that it's important to try and correct the errors that scientists are making.

What errors are these?

I call it "pathological disbelief". The statement "even if it were true I wouldn't believe it" seems to sum up this attitude. People have this idea that when something can't be reproduced every time, it isn't a real phenomenon. It is like a religious creed where you have to conform to the "correct" position. This leads to editors blocking the publication of important papers in academic journals. Even the physics preprint archive blocks some papers on certain topics, or by certain authors.

Do you believe that cold fusion and the memory of water are real, or are you just open to the idea of their being real?

In both cases there is evidence that makes me accept them as almost certainly real. They're probably connected with aspects of organisation that are difficult to deal with in the usual scientific way. I'm pushing in that direction. I look very carefully at things before I accept them as real.

You draw the line in a very different place to most scientists when it comes to hard-to-prove phenomena such as telepathy and cold fusion.

Can I take you up on something? These things are not hard to prove, they're just hard to get accepted. The evidence for these phenomena would normally lead to them being accepted, but they have an additional barrier in that they are "unacceptable" and often unpublishable. Some people are extraordinarily hard to convince. In particular, people who work in an area in which the phenomena are highly reproducible cannot envisage situations such as cold

fusion where – as in many areas of materials science – things are not that reproducible. They take the illegitimate step from "hard to reproduce" to "non-existent". Science is often presented as an objective pursuit, but the history of science tells you that this is far from being the case.

Do you mean that scientists cannot accept these phenomena because it would ruin their view of the world?

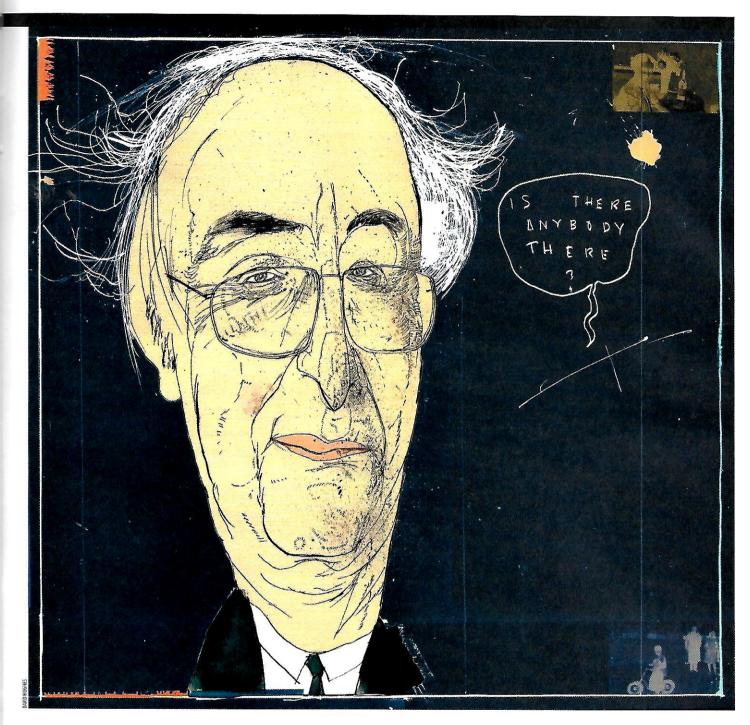
It would mean an admission of error. Instead, sceptics can always say that there must have been something wrong with these experiments. This means that you can never really prove anything, and a sceptic doesn't actually have to discover anything wrong to dismiss an experiment.

Is this why you've posted the motto "take nobody's word for it" at the top of your website? Yes. And the corollary of this motto is that if most scientists denounce an idea, this should not necessarily be taken as proof that the idea is absurd. It seems that anything goes among the physics community —cosmic wormholes, time travel — just so long as it keeps its distance from anything mystical or New Age-ish.

There are lots of pointers towards strange things, such as the quantum

Profile

Brian Josephson was awarded a Nobel prize for work on superconductivity he carried out as a 22-year-old graduate student at the University of Cambridge. The Josephson junction, which has many scientific and technical applications, is the legacy of this research. Today he leads the Mind-Matter Unification Project at the University of Cambridge (www.tcm.phy.cam.ac.uk/~bdj10).



interconnectedness of entangled particles, but physicists are very prickly about them, saying you shouldn't read anything into these results. There are in fact a lot of scientists who believe telepathy exists, but they keep quiet about it.

I take it that means you pay a price for speaking out about things like cold fusion, telepathy and the paranormal.

Yes. If you say you accept the reality of the paranormal then this automatically affects your reputation. It's assumed that if a person believes in this kind of thing then his views are not worth considering. It has led to certain people being very prejudiced against me and

assuming that there's something wrong with anything I do. I don't have the kind of support network that researchers usually have. But since I can do my research on the mathematics of the brain by myself this is less of a problem than it otherwise would be, though it slows down progress considerably.

Why do you speak out about these things when you know it causes difficulties for your own research career?

They are important for various reasons. For example, cold fusion may contribute significantly to solving the problem of generating clean energy. Had it not been ridiculed back in 1989, we'd probably all now

be using energy generated by cold fusion. So it's really important to speed up the process. I reckon that cold fusion will be accepted in the next year or so.

If the evidence about cold fusion is so convincing, why do so few people believe in it?

You have to look properly at the evidence typically blocked from publication by journals such as *Nature*, and few people are willing to put in the effort to do that. Even better, go along to a laboratory where the work is being done. It's also hard to change how people think. People have vested interests, and their projects and reputations would be threatened if certain things were shown to be true.