



To arrive at the edge of the world's knowledge, seek out the most complex and sophisticated minds, put them in a room together, and have them ask each other the questions they are asking themselves.

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The Hard Problem

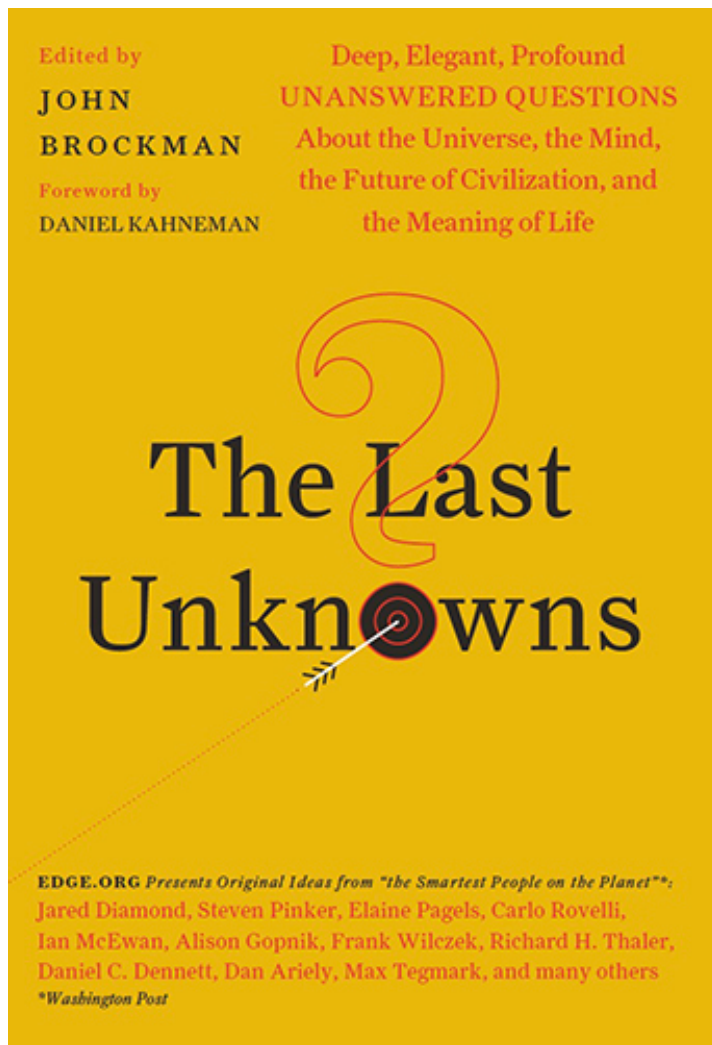
One might object that the Hard Problem of consciousness (so dubbed by philosopher David Chalmers in his 1996 book, *The Conscious Mind*) isn't a scientific idea at all, and hence isn't an eligible candidate for this year's question, but since the philosophers who have adopted the term have also persuaded quite a few cognitive scientists that their best scientific work addresses only the "easy" problems of consciousness, this idea qualifies as scientific: it constrains scientific thinking, distorting scientists' imaginations as they attempt to formulate genuinely scientific theories of consciousness. (I won't give examples, since we are instructed to go after ideas, not people, in our answers.)

No doubt on first acquaintance the philosophers' thought experiments succeed handsomely at pumping the intuitions that zombies are "conceivable" and hence "possible" and that this prospect, the (*mere, logical*) *possibility of zombies*, "shows" that there is a Hard Problem of consciousness untouched by any neuroscientific theories of how consciousness modulates behavioral control, introspective report, emotional responses, etc., etc. But if the scientists impressed by this "result" from philosophers were to take a good hard look at the critical literature in philosophy exploring the flaws in these thought experiments, they would—I hope—recoil in disbelief. (I am embarrassed by the mere thought of them wading through our literature on these topics.) You see, the arguments implicit in the simple, first-pass thought experiments don't go through without some shoring up. We have to define not just conceivability, but ideal conceivability, and then ideal positive conceivability (as distinct from ideal negative conceivability, etc., etc.). Are perpetual motion machines imaginable but ideally inconceivable, or ideally positively conceivable? It makes a big difference, one is told, whether one can "modally imagine" a zombie. What can *you* modally imagine, and are you sure? And Frank Jackson's intuition pump about Mary the color scientist prevented from seeing colors has to be embellished with imaginary gadgets that prevent her from dreaming in color, or perhaps she's born color blind (but otherwise with an entirely normal brain!) or perhaps she's fitted with locked-on goggles displaying black and white TV to her poor eyeballs. And that's just a fraction of the complicated fantasies that have been earnestly proposed and rebutted. I am not recommending that scientists do this homework, but if they are curious to see what

contortions philosophers will inflict upon themselves in order to "save" these retrograde intuitions, they could consult the superhumanly patient analysis and dismantling of the whole tangled mess in UNC's Amber Ross in her 2013 PhD dissertation, "Inconceivable Minds."

Is the Hard Problem an idea that demonstrates the need for a major revolution in science if consciousness is ever to be explained, or an idea that demonstrates the frailties of human imagination? That question is not settled at this time, so scientists should consider adopting the cautious course that postpones all accommodation with it. That's how most neuroscientists handle ESP and psychokinesis—assuming, defeasibly, that they are figments of imagination.

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