

BOOK REVIEW

Consciousness: Confessions of a Romantic Reductionist

By Kristof Koch

2012 MIT Press 181 pages

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If you're like me — and the fact that you're reading a review of a book about consciousness in *JUNE* suggests that you might be — you've been down this road before. In fact, your bookshelves probably include a number of titles that could easily be mistaken for this one, at least at a glance. But here's why I was motivated to write this review: I don't believe I have ever read a book quite like this one before, at least not on this topic. Koch is like the Wizard of Oz only, in this case, he is eager to step out from behind the curtain. This is a deeply personal book written in such a way as to expose the author's own vulnerabilities, intellectual and otherwise. This is the book that I wish Koch's long-time intellectual partner, Francis Crick, would have written his own version of. Yet, I suspect that the reason Crick never did was because he believed he never should. This is perhaps what I appreciate most about this book. One gets a clear impression that Koch is very confident. But in writing this book we also see evidence of courage, and confidence and courage are not the same things.

Like the accessible books of Oliver Sacks, V. S. Ramachandran, and others that came before this one, Koch's book is full of interesting stories about the brain, its functions and dysfunctions. Indeed, it's full of many of the same stories: binocular rivalry and blind spots, face blindness and split brains, visual agnosia and the tricks of attention. Well, of course it is. Could it be any other way for a book on this subject? As interesting as much of that material is, however, for me the book really starts to find its stride when the discussion turns to topics like the freedom of the will and the nature of consciousness. His discussions of these topics are enhanced by a number of anecdotes. Although he tends not to dwell on these personal illustrations very long, they serve their purpose. Take, for example, his experience serving on a jury in Federal Court that heard a case of the drug-related execution of one gang member by another. It's because of the nature of certain forms of privilege, and their contributions to our subjective conscious experiences, that we find it hard to appreciate the lives of others that differ markedly from our own. Are their shades of freedom? What does a more nuanced appreciation of freedom mean for the idea of legal responsibility? At present, it seems, very little; in the future, perhaps, much more.

As with any book on a topic as contentious as consciousness, this one is not without its detractors. Indeed, upon its initial release several years ago the book attracted a fair amount of interest, motivated in part by a critical review by the philosopher, John Searle, that appeared in the *New York Review of Books* (2013).

[Unfortunately, Searle's original review is partially hidden behind a paywall, though the subsequent exchange is not (Koch and Tononi, 2013).] Searle takes issue with the panpsychism that seems to be found in Koch's description of Giulio Tononi's integrated information theory (IIT) which is addressed near the end of the book. Panpsychism is the position that consciousness, rather than being a mysterious property of the brain, is a mysterious property of everything, not unlike charge or gravity. In Koch's own words:

"I believe consciousness is a fundamental, an elementary, property of living matter. It can't be derived from anything else; it is a simple substance, in Leibniz's words." (p. 119).

For Koch and Tononi, any integrated system with even a modicum of "information" within it has at least a modicum of consciousness. So forget just worrying about whether your dog is conscious, and start worrying about whether your thermostat is. This is just the kind of idea that will cause the hair to stand up on the necks of many neuroscientists. "It's mysticism!" they'll charge. But here's my confession: for me, the merits of this book depend very little on whether my thermostat actually knows whether it's warm or cold in this room as I am writing this review. Actually, I think the book more valuable because of this debate.

Let me explain. If I am going to use a book in class, and I think this book might work very well in an undergraduate class at the intersection of neuroscience and philosophy, I want some controversy. When I mentioned how much I enjoyed this book to a colleague with whom I have co-taught a course in neurophilosophy, she admitted that she, too, had read it and considered it as a replacement for our current reading, Gerald Edelman's *Wider than the Sky: The Phenomenal Gift of Consciousness* (2004). That book has proven useful not because we believe everything Edelman says is true, but because it has provided fodder for our exploration of the interesting issues in the neuroscience of consciousness. In the present case, I honestly don't yet know enough about Tononi's work to decide whether Searle's criticism is valid. I have long been resistant to the idea of panpsychism, and I'm only now starting to come to terms with why. For all I know, panpsychism will be just one more radical idea in a long line of radical ideas including heliocentrism and evolution by natural selection. Like those other revolutions, panpsychism can feel like a demotion for humanity. If it makes us feel better, we could think of it as a promotion for all of the other integrated

information systems out there. (Never mind, it still hurts.) But maybe it's the demotion we deserve. That's part of what makes consciousness so interesting and it's one of the reasons why I picked this book up in the first place. Consciousness may be one of the last bastions of "humans-are-special" thinking among scientists. Whatever the future holds for panpsychism (or, in this case, Tononi's IIT), the fact remains that an accessible introduction to some of its issues is now available and the way in is clear for anyone looking for one. According to Koch, "If it turns out to be wrong, it will be wrong in interesting ways that illuminate the problem" (2012, p. 134). In many ways, consciousness is the holy grail of neuroscience. In the work of Koch and others we see the possibility that this is one grail we might someday come to terms with.

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