

Unreasonable Science

Science in an Age of Unreason, John Staddon, 2022, Regnery Gateway Press, pp. 303, \$29.99 hardbound.

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There is presently a lot of blather floating around about “science.” “Follow the science” is the familiar rallying cry, usually uttered by tedious people who have no clue what science is, little interest in practicing it, and even less interest in mastering it. Equal opportunity idiocy prevails. The left uses “science” to cloak its political agendas, especially where “following the science” will enrich themselves and their cronies. The right pronounces solemnly on “real science,” conflating science with the “scientific method” (when what they mean is the “experimental method”), not realizing that in so doing they are delegitimizing vast tracts of actual science, like paleontology, or zoology.

Rarely to be found in all this confusion is a proper sense of science, not

as a method, or as a practice, but as an Enlightenment virtue: the belief that the world and universe are ultimately sensible to the rational mind. The aim of science is to query nature about its secrets in a way that ensures nature gives us an honest answer, unfiltered by cultural, religious, or political dogma: “the gradual removal of all prejudices,” as Neils Bohr once put it. If there is a theology of the hydrogen atom, science must gradually strip it away. There are numerous ways the layers of prejudice can be peeled away. The experimental method is one way. Is the nucleus of the hydrogen atom like a tiny liquid drop? Or is it an assemblage of particles? An experiment can yield an answer. Shoot neutrons at hydrogen atoms, and see how they scatter. A drop will scatter them one way, and a particle will scatter them another. Another way is to painstakingly compile and assemble the innumerable pieces of a jigsaw puzzle, as in mapping out an evolutionary history from a fossil record. We can say with confidence that birds are the descendants of dinosaurs, even though no experiment was ever done to establish this, nor were any experiments even possible. What unites these disparate

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approaches is the Enlightenment faith that nature is sensible and rational, and has a story to tell. Without that presumption, you do not have science. By any objective measure, we no longer have that presumption.

To the contrary, we presently live in an age of profound *unreason*, in which we are increasingly compelled to believe and accept, even celebrate, patent absurdities, evidence or reason be damned. Which is why John Staddon's most recent book, *Science in an Age of Unreason* is timely.

Staddon is in a position to speak authoritatively on the topics of science and culture. He is a distinguished scholar, presently Emeritus James B. Duke Distinguished Professor of Psychology and Neuroscience. He has had a prolific career, peppered with numerous scientific publications and books on behavior and neurobiology. His retirement in 2017 has not slowed him down a jot. He writes frequently and pointedly on science, education, and public policy for the James G. Martin Center for Academic Renewal and for *Academic Questions*, among other outlets. His essays are lively and refreshing in their honesty.

In his book, Staddon explores how we have come to our present sorry state, in particular why science has failed to uphold the virtue of reason. Staddon's overarching argument is

that what we call "science" is actually a regressive *scientism*, which he identifies as a kind of scientific imperialism, marked not by an annoying tendency of scientists to pronounce on subjects they know nothing about. Rather, it is marked by arrogance, by which scientists give themselves permission to trample their way into a culture to dominate and subdue it. We cannot understand the present dominance of unreason, Staddon argues, without understanding the difference between the scientific world view, and its scientistic counterpart, how they compete for attention, and the incentives that reward one or the other. His sobering conclusion: it was science, to paraphrase Eliza Doolittle, what done itself in. His book lays out a series of case studies for how the deed was done.

Staddon's first case study is a particular interest of mine: evolutionism and Darwinism. Evolution has long been an arena where science and scientism have fought like gladiators. Most recently, the games have pitted the so-called "New Atheists," led by Richard Dawkins (once described by Simon Conway Morris as "England's most pious atheist") against the rest of us. The New Atheists style themselves as rationalist warriors against straw man forces of theocratic darkness. In this crusade, secular humanism

(based naturally on “science”) will be the savior, so the New Atheists claim. The claim only illuminates the unreason at its heart. Secular humanism is not a liberation from religion, but an ersatz religion itself. As a religion, secular humanism comes off as pretty weak sauce compared to the real thing, “covert morality masquerading as science,” as Staddon pithily phrases it. But secular humanism is easily tripped up by the naturalistic fallacy: that “is” should be a reliable guide to “ought.” Staddon here quotes the philosopher of science, Daniel Dennett: “If ‘ought’ cannot be derived from ‘is,’ just what *can* ‘ought’ be derived from?”

It’s a fair question, which turns out to be a frothy mixture of malleable “feelings,” that whatever feels right, is right. A “scientific,” that is to say a Darwinian, approach to ethics is not much of a guide, but a series of just-so stories, painted over with a thin scientific veneer. There is, for example, the burgeoning field of “evolutionary psychology,” which purports to use Darwinian principles to explain, and therefore guide human behavior. Which guides us—where, precisely? Subjugation of women? Infanticide when an infant is inconvenient to the tribe? To eugenics? All are sound theoretical predictions that stream from the Darwinian idea. Yet, as Thomas Huxley pointed out roughly 130 years

ago, or indeed as David Hume did nearly three centuries ago, they are no reliable guide to ethics. The New Atheists are nothing new, it seems.

From evolutionism, Staddon walks us through four more case studies of how deeply the cult of scientism has permeated our culture. He starts with the enterprise of science itself, which is perpetually hung on the horns of a dilemma: science is a profession, but it is also necessarily a career. The two are very different things. A profession is, ultimately, a declaration of faith, which in the case of the scientific profession, is the faith that the world is rational. Professing that faith means the acceptance of certain ethical norms, including elevating the pursuit of discovery to the highest value. The ethical imperative of a career, in contrast, is survival, advancement, and the pursuit of material rewards. Professions and careers are at all times pulled between the two. Scientists have always sought to strike a balance between the ideals of the scientific profession and the demands of the scientific career. When the sciences became effectively a client of the welfare state, a heavy thumb was placed on the scales which tilted the balance toward careerism, with all the incentives and disincentives that attend thereto. These include conformity, crowd-following,

and tribalism. Galileo might have muttered under his breath “*eppur si muove*” (“and yet it moves”), but in the present, such an act of defiance would be career suicide. Hence, we have a new class of heretics, “deniers” of various stripes that are relegated to the fringe, not because they are wrong, but because they threaten careers and must be cast out of the tribe.

Stephen Turner and Daryl Chubin¹ have argued that the conversion of science into a client of the welfare state has profoundly changed the very ethical foundation of science, from an “ethic of discovery,” to an “ethic of production.” In this new regime, scientists are judged not by the discoveries they make, but by how “productive” they are. Staddon’s next case study turns a gimlet eye to the major engine of science “productivity,” the scientific publishing industry. When science was motivated by discovery, the scientific paper was a modest medium of communication among scholars, carried out on modest scale with commensurably modest cost. Scientific publishing has now morphed into a multi-billion dollar racket whose main product is tokens that academic scientists can trade for promotion and tenure. What matters in this new marketplace no longer is discovery, but

productivity. The successful scientific career is measured by how many of these tokens a scientist can produce in a year. To accommodate the productivity, there are now tens of thousands of scientific journals, with new ones popping up weekly, and distributed at subscription rates that no individual can afford. The journal articles published each year in this fulminating growth number into the hundreds of thousands, perhaps millions (no one is entirely sure of the number).

To which a question must be asked. Does this mean that the frontiers of knowledge are being pushed back commensurably? Are we answering important questions about nature at an increasing rate? Are there really that many new questions to answer? No, says Staddon. There are large swathes of this flood of “scientific literature” that are never read, never replicated, and never held up to the standards of rationality we expect of science. That doesn’t really matter, though, because the point of the scientific paper is no longer to be read, but to unlock a revenue stream, in this case, to tap the public fisc, in the form of research grants, page charges, and perks for universities. One might expect the guardians of the purse would rein in such profligacy, but you will

1 S.P. Turner, D. E. Chubin, “The Changing Temptations of Science,” *Issues in Science and Technology* 36, no. 3 (2020): 40-46.

hope in vain. There is no shortage of keepers of the purse strings who are happy to exploit “the science” to advance their political ambitions. The abandonment of reason is the inevitable result. To quote Staddon, “Add more scientists, get more papers, maybe, but more knowledge? Maybe not.” (41)

He follows with this sobering message:

The growing number of pseudo-scientific missteps we have witnessed in recent years may be not just a testament to human frailty, but a signal that *the number of solvable scientific problems has not kept pace with the growing number of scientists*. This disparity is not disastrous. There are still answers to be found; advance continues. But the mismatch does mean that the ratio of unsuccessful to successful experiments will increase. (41) [emphasis mine]

In short, science is generating unreason at an increasing pace. The greatest spinner of unreason presently is the perpetually fraught issue of race, to which Staddon turns in his next case study. The unreason is generated by the considerable cognitive

dissonance at work here. On the science side, arguably the most robust and rigorously tested scientific finding of the social and human sciences is racial differences in mean IQ. Logic and reason also stand solidly behind this finding. Why should cognitive ability be the sole heritable trait that is immune from racial differentiation? On the other side, this scientific finding obviously conflicts with deeply held social ideals about the inherent equality of all humans. Our own Declaration of Independence clearly asserts that all are created equal, and are thereby endowed with unalienable rights. Resolving this conflict is obviously a civic obligation, not a scientific one. Nevertheless, science has decided to put its oar in, by embracing the essentially Identitarian ideology of “diversity,” “equity,” “inclusion,” embracing phantom phenomena such as systemic racism, micro-aggressions, and toxic whiteness. Pointing out the essential irrationality of this ideology is to court career suicide. Hence, the unreason.

As I was reading Staddon’s book, I was also reading Richard Rhodes’ fine historical account of *The Making of the Atomic Bomb* (1987). Roughly the first third of Rhodes’s book is a deep dive into the culture of nuclear physics in the interwar years. The contrast with our present scientific culture is

striking, and depressing. The same tension between professionalism and careerism was present then as it is now. Comparing the scientific culture then with the grubby, striving, mean-spirited cancel culture that prevails now, and one can't help but wonder: how did science come to its present sorry state? This is Staddon's core question: is science the victim of a societal reaction against reason, or is science the *cause* of our age of unreason?

Staddon's answer is a declaration of faith: everywhere to "commit . . . to those beliefs and practices that make science possible: curiosity, honesty, reason, open data and open debate, the ability to separate fact from passion, and the faith that these things will allow us to discover truths about an orderly natural world." (208) It is a bracing assertion of the scientific *ethos*. Relying on it to restore science to a state of reason rests on a dicey assumption, though: that there is a sufficient number of brave souls left in our degraded academies that could assert the *ethos* forcefully enough to reverse the rising red tide of unreason. Perhaps there are: faint flickers flare up occasionally enough to sustain the hope that it can. More likely, in my admittedly pessimistic view, is that the academies have been so thoroughly captured by the enemies of reason

that they are a lost cause. If Staddon's declaration of faith is to be lived, I'm afraid it will have to find sanctuary outside the academy.