BOOK REVIEW

Science and Psychic Phenomena: The Fall of the House of Skeptics by Chris Carter. Inner Traditions, 2012. 303 pp. \$18.95. ISBN 978-1594774515.

Only fools and charlatans know and understand everything.

—June 9 letter from Anton Chekhov to Scheglov

During a recent stroll through the Campo dè Fiori in Rome, few things could have been farther from my thoughts than writing this review. In the middle of the square, somewhere hidden between rows of fruit stands and tourists, however, stood Ferrari's monument to Giordano Bruno, the Dominican philosopher, mathematician, astronomer, astrologer, hermeticist, and mnemonist. Bruno was burned alive after the inquisitors inserted in his mouth an iron gag that pierced his tongue and palate. It goes beyond irony to read that in the year 2000 the second-ranking Catholic, Cardinal Sodano, remarked that the inquisitors who tried Bruno "had the desire to serve freedom and promote the common good and did everything possible to save his life" (Seife 2000).

Despite the continuing deadly religious fanaticism of some, humans can breathe a sigh of relief that organized religion is no longer the sole authority on reality and that in many if not most countries it cannot place literal or symbolic gags on those who want to express their opinion. The received wisdom is that science should have swept away the totalitarian, dogmatic, and censorious impulses of the past . . . or has it? Consider the following recent examples out of a much longer list:

- 1) Physicists Valentini and Towler initially disinvite the physicists Brian Josephson (Nobel prize-winner) and David Peat to a conference on the work of David Bohm because of their interest in parapsychology and synchronicity (Reisz 2010), even though Bohm himself discussed parapsychology favorably (e.g., Bohm 1986).
- 2) A peer-reviewed paper by an eminent psychologist that described various experiments providing evidence for precognition is published in one of the most important and demanding psychology journals (Bem 2011). A number of scientists, not known to have any experience or expertise on its

subject, are certain that Bem's results must be faulty. Do they then engage the scientific process and carry out studies or additional analyses showing the mistakes in Bem's study? No, they fulminate in *The Opinion Pages* of *The New York Times* that the article should not have been published, but since it had been, it should be ignored (Douglas Hofstadter), or that its mere publication is "an assault on rationality" (David Helfand, who also engaged in some precognition of his own by predicting that replications of this study will fail) (www.nytimes.com/roomfordebate/2011/01/06/the-esp-study-when-science-goes-psychic); (see also Cardeña 2011). In a published critique of the paper, Wagenmakers et al. (2011) confidently stated that Bem's results "conflict(s) with what we know is true about the world," drawing a parallel to the judgment of the religious authorities who were certain that the Copernican model that Bruno endorsed was wrong because it conflicted with what they knew to be true about the world.

3) On a more modest level, after my university's magazine wrote a story on a controlled experiment in which we found support for telepathy, more than 10 other professors at Lund University, none of whom as far as I can tell has any training on parapsychology or even in psychology, fulminated against the magazine for daring to report on our research. Although they did not raise the possibility of burning me alive, in a not-too-veiled threat they mentioned how someone else at Lund had been forced to resign. Later, the Chalmers Institute in Gothenburg had an event in which they discussed my and other research under the question of whether it is an innocent game or a dangerous parasite. This threatening and venomous rhetoric is not that uncommon among "skeptics," who forget to question their own assumptions (see also Cardeña 2011, Storr 2013). They also typically disregard the scientific method and do not carry out empirical analyses or studies to evaluate whether their pronouncements hold any water.

Which brings me to *Science and Psychic Phenomena: The Fall of the House of Skeptics* (SPP), a strong critique of the critics of parapsychology. Although there is no information about it on the cover, this book was originally published in 2007 as *Parapsychology and the Skeptics: A Scientific Argument for the Existence of ESP*. This version, except for minor changes, has not been updated. The change of the title, with a reference to Poe's tale *The Fall of the House of Usher*, is not explained. As much as I disagree with some of the critics mentioned in the book, to equate their perspective to a Gothic nightmare with morbid siblings perishing in the midst of their crumbling manor is wildly overdriven.

After describing some of the many idiocies that eminent scientists have

declared in the past, showing that prejudice has trumped actual enquiry, Carter focuses on critics of parapsychology, comparing their statements with the evidence from the scientific study of psi phenomena. The book is at its best in the chapters that follow historically the arguments and counterarguments of psi researchers and critics, and discuss how critics have at times misrepresented parapsychology research. For instance, the section on the ganzfeld debate describes the joint collaboration of psi researcher Charles Honorton and psi critic Ray Hyman in a paper discussing how methodological weaknesses of a research model using homogeneous sensory stimulation (ganzfeld) could be addressed in later research. After improvements were put in place, studies have continued to find evidence for psi (Storm, Tressoldi, & Di Risio 2010a), yet Hyman and others have provided tendentious critiques or failed to discuss the accumulated evidence (e.g., Storm, Tressoldi, & Di Risio, 2010b). Carter also shows that critics have at times misrepresented their own research when it favored the psi hypothesis (see also Carter 2010, strangely not mentioned in the book).

Carter's discussion of philosophy of science as it applies to parapsychological research, relying mostly on the work of Karl Popper who viewed science as conjectural rather than definitive, provides an antidote to the dogmatic, authoritarian stance of so many scientists, but his treatment of other topics is not as sure-footed. For instance, it is rather odd to define dendrites as "electric tentacles" or neurotransmitters as "drugs" (p. 229), and he uses a very broad brush trying to cover many complex topics including psychology, physics, history of ideas, philosophy of science and, of course, parapsychology. It is not completely fair, for instance, to regard Newton only within the context of determinism and ignore his mystical perspective (cf. Bakan 1973). I would also have appreciated a greater balance overall in the tome. Whereas Carter shines a devastating light on the weaknesses of the critics' arguments, he is mostly mute on the weaknesses of parapsychological research (e.g., little programmatic or integrative research, few attempts to integrate psi with "mainstream" phenomena, see Cardeña 2010) and on the puzzling nature of the data obtained. For instance, one of the most contentious issues in psi research is the commonly observed decline effect within and across psi experiments, in which initial supportive results may decrease or even disappear in later research, although it seems that this effect does not rear its mocking head only in psi research (Schooler 2011). The biggest weakness of SPP, however, is that much of the information is dated. For instance, there are frequent references to Helmut Schmidt as continuing to work on micropsychokines, although he died in 2011 and had not worked in the field for a number of years before his death. And various important meta-analyses and studies published in recent years are not covered. Thus, the volume is more

an account of this area from the early 2000s than an up-to-date analysis. It also fails to provide references for what seem to be factual statements or even quotations, for instance from the *Report of the Experiments on Animal Magnetism* (Colquhoun 1833:2).

Science and Psychic Phenomena is one of a number of recent books that have scrutinized the strange situation of some critics who have made a career of debunking parapsychology while very rarely conducting research to assess their alternative explanations. It also names scientists who pontificate about areas they have not studied or evaluated systematically, failing to do "the necessary homework," to cite Carl Sagan (1976:2). Randi's Prize (McLuhan 2010) covers a greater although less-focused scope than SPP, and The Heretics (Storr 2013) discusses debunkers within a larger context that attempts to understand why people engage in irrational beliefs. Despite its limitations, SPP brings attention to unfair and often unscientific practices by some critics of parapsychology and evidence that the same impulse that had the inquisitors gag Giordano Bruno is very much alive in our day, even though the iron spikes have been retired.

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