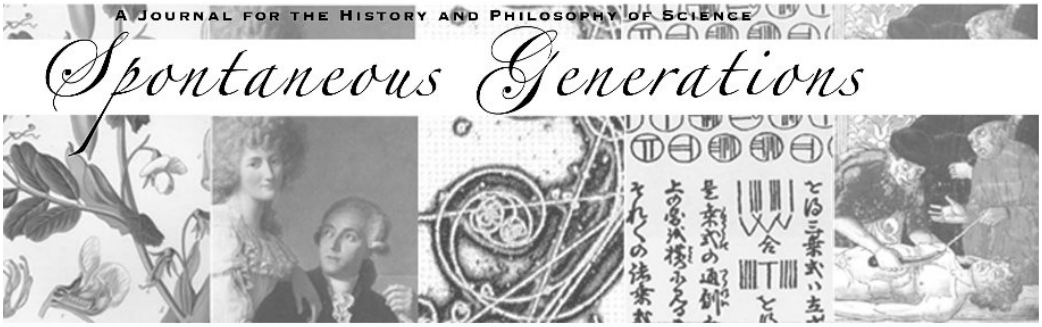

Going Public: A Cautionary Tale

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OPINIONS

Going Public: A Cautionary Tale*

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A colleague who was participating in one of the many Darwin bicentennial events on university campuses this year recently asked me, "What was Fuller thinking?" In reply, I sent him a copy of Steve Fuller's (2008) opinion piece, which had just come out in this journal. In it, Fuller attempts to explain why he decided to perform as an expert witness for the defense in *Kitzmiller et al. v. Dover Area School District* (US Federal Court, Eastern District of Pennsylvania, 2005). I doubt that his explanation put my colleague's question to rest.

The title of Fuller's opinion piece "Science Studies goes Public" is misleading. "Science studies" did not appear as an expert witness for the defense, Steve Fuller did. As Michael Ruse (2008, 47) says in the closing line of his review of Fuller's book on the subject, "[a]s a historian and philosopher of science, I can only hope that the science community does not judge us all by Fuller's example." Fortunately, few commentators have implicated "science studies" in Fuller's testimony. It helps that Fuller himself frequently distances himself from an imagined orthodoxy in philosophy, history, and social studies of science, thus making it more difficult to confuse his opinions with those in an entire academic field. For example, in his opinion piece, in addition to lacing into Ruse and other well-known philosophers of biology, he complains that his motives for appearing in *Kitzmiller* were misconstrued by "the editorial board of *Social Studies of Science*," apparently alluding to a series of comments, including one of his own, published in that journal (*Social Studies of Science* 2006).

Fuller's opinion piece recalls a debate about "the academic as an expert witness" (Ruse 1982, 1986; Laudan 1982; Quinn 1984), which ran for a few years following Ruse's testimony in *McLean v. Arkansas*,

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a landmark case in which the judge ruled against the state's effort to mandate the teaching of "creation science" in the biology classroom as an alternative theory to Darwin's. In the quarter century since then, the context for debating the question has changed. Creation science, with its transparent relationship to Biblical creationism, has been succeeded by Intelligent Design (ID), which has a less obvious, and more readily deniable, relation to religious doctrines. Unlike Ruse, who testified on behalf of the plaintiffs and was credited with furnishing the judge with a list of (loosely Popperian) criteria for distinguishing religion from science, Fuller testified on behalf of the defendants. Unlike Ruse, who was treated respectfully in the court but was later criticized by some academic colleagues for presenting what one of his critics called "effective bad arguments" (Quinn 1988: 398), Fuller's particular opinions on science and metascience did not go over very well during the trial. We could call them "ineffective bad arguments." The judge cited several statements of Fuller's out of context, in support of his ruling in favor of the other side, and some commentators described Fuller's performance on the witness stand as though it provided comic relief from the more serious moments in the trial (for example, Talbott 2005). Regardless of what Fuller may have intended to achieve with his performance, it seems that his testimony was, at best, ineffectual.

Given the outcome, one might expect that Fuller would admit that he made a mistake, but far from doing so, he begins his essay by asserting: "I believe that *tenured* historians, philosophers, and sociologists of science–when presented with the opportunity–have a professional obligation to get involved in public controversies over what should count as science" (Fuller 2008, 11). I'm troubled by this statement, and not because of what it expresses about Fuller, personally. Of course, he has a right to his opinion, but this particular opinion proposes what others of us (many of whom, as he acknowledges, do not see things his way) are *obliged* to do. While I think it is fine to debate the question of "what counts as science," and to question those who assert publicly that they know the answer, I see no reason to suppose that we are *obliged* to perform as experts in the public controversies we study, any more than that we are *obliged* to refrain from doing so. Fuller's assertion also presents a particular problem for those of us who hold a common, though contested, position in science studies: that "what counts as science" is subject to historical and situational variation and machination. Accordingly, to study the rhetorical moves, contingent alliances, and so forth, that establish "what counts as science" in specific historical, legal, and educational settings doesn't necessarily yield stable normative criteria for distinguishing science from religion or metaphysics (Gieryn 1983, 781).

Fuller happens to believe that it is possible to come forward with definite meta-scientific recommendations to assist or contest legal demarcation efforts. Having read a fair amount of what he has said on the subject (but, by no means everything–he seems to write faster than I can read), I remain unconvinced by his arguments–indeed, I find it difficult to locate coherent arguments in Fuller's writings. As his opinion piece exemplifies, he makes frequent bold assertions and occasional insightful remarks. Sometimes one can find the beginnings of arguments, but with astonishing rapidity these are succeeded by poorly supported historical claims, speculations, musings, and hostile pronouncements. For examples of the latter, take this specimen: "When philosophers like Ruse and Pennock contribute to this process, they effectively exchange their identities as metascientists for underlaborers. They are traitors to their training. Nevertheless, this intellectual treason is committed in the name of Thomas Kuhn, whose *Realpolitik* of scientific change legitimized a winner-take-all approach, whereby to gain control of a discipline's research agenda is also to gain control of its historical and philosophical self-understanding" (Fuller 2008, 15). Or take this chain of ad-hominem insinuations: "It is perhaps no accident that the philosopher credited with this finding, Barbara Forrest, is a scholar of Sidney Hook, a student of John Dewey's who was one of the foremost Redbaiters in the US philosophical establishment in the 1940s and '50s, who made life miserable for the émigré logical positivists" (Fuller 2008, 16-17). (As Fuller briefly mentions, Forrest produced textual evidence that linked ID to creationism; evidence that the judge and many commentators found especially persuasive.)

I suppose that such passages should not be taken seriously–that is, they should be appreciated as provocations, or perhaps even as attempts to entertain. Given the burden of argument that Fuller takes on, however, they provide little basis for feeling a strong sense of obligation to follow his heroic lead as a politically engaged intellectual. I agree that his example is instructive: Fuller's appearance in the Dover trial is an object lesson to the effect that academics should think twice before subjecting themselves to such tribunals. To be clear about this: when I say that one should "think twice," I do not mean that it is never advisable to present oneself as an expert in a public forum.

Fuller accepted an invitation by the Thomas More Law Center to appear as an expert witness in *Kitzmiller*; specifically, as an expert who was prepared to rebut the plaintiffs' arguments about the essential nature of science. At issue was a Dover School Board mandate to public schools in the district to read a statement to 9th grade students in biology classes, saying that Darwin's theory of evolution is a "theory, not a fact" and that ID provides an alternative theory. Given the precedent provided by

Federal Court and Supreme Court judgments two decades earlier, a question before the court was whether ID was akin to creation science, which previous rulings had defined as promoting religion contrary to the Establishment Clause of the US Constitution. In *Kitzmiller*, the American Association for the Advancement of Science and other major associations weighed in on the side of the plaintiffs, providing unequivocal statements to the effect that ID did not enjoy the status of a science, and that it was a disguise for, essentially, a religious doctrine. The trial raised some interesting and problematic questions for current history, philosophy, and social studies of science, but testifying as an expert witness for the defense wasn't necessarily the best way to engage with them. In addition, in his testimony (which is available, along with supporting documents, on the website www.talkorigins.org/faqs/dover/kitzmiller_v_dover.html) Fuller delved into a whole range of substantive matters, about which he often seemed poorly informed. His opinion piece in this journal is indicative. In support of his meta-scientific pronouncements, he makes numerous historical, sociological, and biological assertions about the relations between religion and science, the plausibility of certain arguments in favor of ID, the limited salience of neo-Darwinian theory in molecular biology, and the "anti-Christian bigotry" promoted by proponents of the "evolution" side of the debate. Other philosophers and historians of biology, including some who have devoted their careers to studying Darwinian theory, the creationist movement, and other relevant matters, have not treated his claims kindly. Although I too have doubts about the credibility of many of Fuller's assertions about biology and the history of science, what I find more incredible are the *political* grounds for his intervention.

Even if we accept that Fuller agreed to testify because he saw the trial as an opportunity to conduct a metascientific tutorial in support of an "alternative paradigm," we still need to ask, "*Did he not know?*"

Did he not know with whom he would be allied? In his opinion piece he refers to "Christians" as the hapless victims of a concerted campaign by powerful pro-evolution forces. Aside from ignoring that such "Christians" exclude many major Christian denominations, Fuller fails to mention that these "Christians" are part of a large, highly organized and active political constituency in the US that vigorously promotes a broad socially conservative agenda. In an adversary trial in a highly polarized situation, did Fuller actually believe that he could simply use the witness stand to engage in an abstract discussion of "what counts as science," while remaining immune to the possibility that he would be aiding a political agenda that, by all indications, he does not support?

Did he not know that, given the political stakes, his adversaries would do all they could to discredit his testimony, attack his credibility, and make

him seem foolish? In this case, Fuller was on the spot, not only because he was appearing on the witness stand as an expert, but also because he was lending academic authority to the side in the contest that was sorely in need of it. Apparently, by his lights, he was taking a heroic stand against the legions of academic biologists, historians, and philosophers who lined up with the plaintiffs. Heroic or not, he was marked as one of a very few highly credentialed academics who took the side of ID, which concentrated the attention of his adversaries on the question of whether he was a visionary genius or a misguided crank.

Did he not know that skeptical critique of established science and politicization of evidence had lately become tactics wrested from their presumed alignment with emancipatory interests (Latour 2004)? Fuller fancies himself as a protagonist for the epistemic underdog, but what he calls his "affirmative action" stance unwittingly recalls a rather cruel (and in my view unfair) line voiced by Peter Slezak (2001, 14) in reference to constructionist science studies: "affirmative action for bullshit." His choice to align with the proponents of ID begs the question "Why them?" when there are so many unorthodox worldviews from which to choose.

Did he not know that, especially in the U.S. courts, questions about "what counts as science" are handled in a way that remains largely indifferent to the lessons from contemporary history, philosophy, and social studies of science? One can, perhaps, criticize the courts for promoting bad philosophy of science (Haack 2005), or one can credit them with a more pragmatic orientation that is wary of getting entangled in arcane philosophical disputes. Either way, it might seem that coming to the Dover School Board's defense was not likely to be an effective vehicle for persuading the U.S. Federal courts to revise its operative metascience.

Did he not know that the interrogative process would draw him into pronouncing upon topics that extended well beyond the more circumscribed grounds of (meta)expertise he professed? And, in light of the close attention given to such testimony by many philosophers and historians of biology, did he not know that many of his substantive historical and technical pronouncements would be written off as howlers?

It might be objected that such questions only seem compelling in retrospect, but I would argue that answers to them were (or should have been) obvious before Fuller agreed to take the stand. He could have gained some insight into what was in store for him by reading science studies scholarship on how courts handle expert evidence (Jasanoff 1995; Edmond & Mercer 2002; Lynch & Cole 2005), but it shouldn't have been necessary to do so. The situation was not marked by subtlety, and the political alignments were widely discussed in the press. Consequently, Fuller's *choice* (which was far from an obligation) remains baffling, though

as I mentioned earlier his reckless intervention is instructive.

The episode should not deter further efforts by science studies scholars to "go public," but it should alert us to the necessity to show some wisdom about where, when, and how we do so. It would be wise to be clear about the sources and limits of our particular "science studies" expertise. It would be wise to consider (even if we cannot fully know) how our opinions will be framed and understood, and above all used, by people and organized groups that may not share our own agendas. It would be wise to keep in mind that the language games of a public tribunal are unlike those of a seminar. It also would be wise not to confuse a public tribunal with a platform for advancing our own academic interests and ambitions. And, finally, it would be wise to keep in mind that we are not obliged to take up any and every opportunity to "go public."

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