

Janet A. Kourany

Philosophy of Science after Feminism.

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In the 1970s, Paul Feyerabend famously challenged philosophers (and scientists) to look to the history of science as a source of transformative, critical engagement with the practices and institutions of science. Science, he argued, could be an ally of freedom, and philosophy of science could challenge it to fulfill that goal. While his injunction is not mentioned until the end of Janet Kourany's latest book (120), it is clear from the outset that her message for philosophers of science shares an affinity with Feyerabend's: philosophers of science "can help promote a science more socially engaged and socially responsible than the science we have now" (vii). For her, this would benefit both the life of science and the people who must live with the knowledge science produces. Yet, as Kourany shows, philosophy of science continues, for the most part, to fail as a force for change in science, and thus for social good. Implicit throughout this book is Kourany's concern—fleshed out explicitly toward the end—about the relative, and as she illustrates it, striking, absence of philosophers of science from the realm of public intellectuals, despite the high degree of respect the subject receives *within* the philosophical community. In her analysis, philosophers of science continue to miss opportunities to engage both with science and in public debate, and Kourany links this absence with a failure to recognize science as inextricably social and politically embedded. The book, however, is a hopeful one, in which Kourany's certainty that this failure is unnecessary underlies her argument that feminist philosophy of science has already provided a new set of circumstances from which to redevelop streams of what she calls "socially responsible science" (SRS).

Kourany argues that the precondition for any philosophy of SRS (and for any socially responsible philosophy of science) is the reconceptualization of science as an endeavor. What she suggests is not simply a turning away from the study of scientific rationality, but a turning toward understanding what is—and has always been—socially located or contextualized science. On this view, any consideration of scientific rationality will misunderstand it to the extent that it takes science to comprise an undertaking or way of thinking/knowing that is separable from the values of the societies, technologies, funding bodies, institutions, and individual scientists' lives from which it grows and to which it contributes. Likewise, modeling itself on the ideal of value-free science often prevents philosophy of science from engaging in discussions about the social role of science or the challenges regarding financial and political contributions to science. It prevents philosophers of science from understanding their own roles and responsibilities in the social and intellectual realms which sustain them.

Reflecting Kourany's long contribution to feminist philosophy of science, the first chapter of this book is rightly titled a "feminist primer" for philosophers of science. Science, we see in this first chapter, is socially located in that it reaches out to human life; it *matters* in and for human lives, and not only for the theoretical reasons that philosophers often find interesting. Moreover, science has mattered disproportionately in women's lives and the lives of non-white

people. Kourany illustrates this through examples (from archaeology, biology, psychology, economics, and medicine), which are familiar to feminist thinkers in philosophy of science and in most other disciplines, but which could, by now, be familiar to anyone well-read in the history of science. Kourany describes each of these with insight and detail; in each, it is clear that scientific research is thoroughly socially situated. Not only has the ideal of value-neutral, socially segregated science been compromised at the outset (there are values at play in these sciences), science contributes to and perpetuates social values in human life. Many outcomes of the research she lists are tenets of Western belief; quoting A. J. Heschel, Kourany notes, “We become what we think of ourselves” (14). Kourany shows the ways in which science could be, but often is not, a “powerful ally” (12) of better lives for women (and men). And she suggests that in light of the hard work done by feminist philosophers and historians of science to expose the examples she uses, the failure of mainstream 20th-century philosophers of science to notice such shortcomings is all the more conspicuous.

Chapter two is a nicely critical introduction to philosophy of science in the twentieth century. Beginning with Hans Reichenbach’s use of the distinction between the contexts of discovery and justification, and more importantly, with his assertion that it is science and *not* scientists that are of interest to philosophers, Kourany offers a diagnostic history of the philosophical emphasis on the context of justification and on “scientific rationality” as a “rational reconstruction” (38) of what is going on in science (in the absence of the deliberations of scientists). This history is also, for Kourany, a way of explaining or “diagnosing” “our persistent failure [as philosophers of science] to situate science within its wider social context” (38). If the social contexts and implications of science are understood to stand outside of what is really going on in science, then the questions of SRS remain remote or excluded from philosophical consideration. And that has serious consequences for those who see philosophy of science as a potential contributor to both public debate and scientific knowledge. Kourany notices, for instance, that in the most recent (2004) large-scale public discussion (“science wars”) about the politicization of science in the United States, a debate with significant moral and epistemological questions about the nature of science, philosophers were almost nowhere to be found.

In chapter three, Kourany turns from feminist critiques of particular scientific programs of study considered in chapter one to consider contributions *from* feminist philosophers of science, concerned primarily with epistemological-ethical features of scientific thinking. While she asserts (69) that most feminist philosophy of science currently aims at SRS, Kourany highlights the significant differences of approach within this body of work, showing that not just any feminist philosophy of science will do to meet the demands of SRS. Invoking Carolyn West’s recent research program in psychology, which deals with domestic violence in the United States, Kourany argues that instead of ignoring the social values that arise in science and eventually in scientific results we could *choose* the set of values with which we begin based on social need, “including the justice-related needs of society” (68).

In chapter four, Kourany considers the challenges that the idea of choosing values scientific values will meet, judging that philosophers of science are likely to face the conclusion of the argument from chapter three with “reluctance” (79). Here, she reviews five traditional kinds of justification for such reluctance: epistemological (the free operation of skilled and

technical experts without societal interference); historical (invoking the disastrous results of past social engagement with science—Nazi and Stalinist science, most prominent among them); sociological (the specific importance of social and cognitive norms within the institutions of science) and economic (scientific institutional norms have been highly productive, and thus societal engagement is unnecessary); and political (invoking the freedom of scientists to thought and speech, social interference infringing upon that freedom). This is one of the most insightful chapters of the book, and Kourany's response to the historical and political justifications are particularly engaging and weighty, the latter dealing in detail with declarations, charters, codes of practice from disciplinary-specific bodies and international coalitions of scientists. In her analysis, these documents often display a conflict between concern with the responsibilities of scientists to contribute to the social good and the need for scientists to think and practice freely.

In her final chapter, Kourany suggests some more practical avenues that philosophers of science might take in the future—or, more pointedly, she suggests areas of philosophical work that might be included in mainstream philosophy of science in the future, areas which would deeply alter its current constitution. Included, for example, would be work by those trained as philosophers of science (not necessarily ethicists) as consultants to and critics of the formation of ethics codes. In this case, she points out the skills that are central to the best sort of philosophical training: skilled analysis, breadth of interest and knowledge in a number of diverse areas, and a willingness to ask hard questions.

While some readers are sure to notice the absence of any substantial discussion of physical or chemical science, Kourany's ease with the history and (particularly 20th-century) philosophy of science allow her to fill the pages of her book with an impressive breadth and diversity of examples (research in primatology, psychology, biology; on HIV/AIDS, cancer, premenstrual syndrome, domestic violence; in Nazi Germany, Stalinist Russia, and contemporary liberal democracies, to name a few). All this makes this a slim but weighty volume. Kourany's generally optimistic approach creates an interesting and fruitful tension: while her diagnosis and prescription are grounded in feminist philosophy of science, she does not shy away from criticism (e.g., of Helen Longino's ideal of social value management in science) and shows feminist philosophy of science to be a terrain of significant dissent and internal richness. At the same time, she is critical of traditional philosophy of science's emphasis on scientific rationality, but never at the expense of the discipline or its significant history and potential. This is an excellent introduction to philosophy of science as a *challenged* and challenging terrain, and a rallying call for the return, or proliferation, of the public intellectual.

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