Science, Technology & Human Values

http://sth.sagepub.com

The online version of this article can be found at:

http://sth.sagepub.com

Published by:

$SAGE

http://www.sagepublications.com

On behalf of:

Society for Social Studies of Science

Additional services and information for *Science, Technology & Human Values* can be found at:

Email Alerts: http://sth.sagepub.com/cgi/alerts

Subscriptions: http://sth.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

Book Review

Questioning Philosophers of Technology

Olsen, Jan-Kyre Berg, and Evan Selinger, eds. 2007. *Philosophy of Technology: 5 Questions*. New York: Automatic Press/VIP.

In their book *Philosophy of Technology: 5 Questions*, Jan-Kyre Berg Olsen and Evan Selinger pose the same five questions to twenty-four leading voices in the field. Intriguing general themes, and also telling contrasts, emerge from the variety of viewpoints advanced in these interviews. Those interviewed include Joseph Agassi, Albert Borgmann, Mario Bunge, Harry Collins, Paul Durbin, Andrew Feenberg, Joan H. Fujimura, Peter Galison, Allan Hanson, Donna J. Haraway, N. Kathrine Hayles, Don Ihde, Ian C. Jarvie, Bruno Latour, Bill McKibben, Carl Mitcham, Andrew Pickering, Daniel Sarewitz, Evan Selinger, Dan A. Seni, Peter Singer, Susan Leigh Star, Isabelle Stengers, and Lucy Suchman. Here, I consider the value of this volume as both a contribution to, and a shaping force within, the developing field of philosophy of technology. I then examine some common themes that can be abstracted from the collected interviews.

Philosophy of Technology: 5 Questions seems required reading for those working within this field, as major figures take stock of current trends and reflect on their own contributions. Students of philosophy of technology will find many of the interviews to usefully accompany their studies since many of the essays are written in an approachable and often casual style—a helpful contrast to more formally written primary texts. It is not hard to imagine a number of these essays used by instructors as supplementation to assigned articles or books, contextualizing authors' particular claims within the larger views expressed in these interviews.

As a field of study, the philosophy of technology remains in its developing stages. A typical way for the field to be cast is in terms of a history of major early twentieth-century thinkers who each offered a gloomy view of how advancing technology is changing humanity. Karl Jaspers, Jacques Ellul, Herbert Marcuse, Hans Jonas, and Martin Heidegger among others, are often depicted this way. The late twentieth century saw the emergence of a number of figures that could be called philosophers of technology, each with an independent perspective, such as Carl Mitcham, Don Ihde, Andrew Feenberg,

140

Donna Haraway, Mario Bunge, and Paul Durbin, all contributors to this volume. However, the state of philosophy of technology as an established area of study remained debatable. In his interview, Mitcham, an authority if any, observes, ''In the modern period philosophy has been prolonged into a number of regionalized fields such as philosophy of science, of religion, of art, and of history—each bearing on what are taken to be semi-autonomous realms of the cultural system. Philosophy of technology aspires to join the fold'' (pp. 141-2). There is reason to suggest that twenty-first–century philosophy of technology is on its way to becoming a fully fledged area of specialization.

Olsen and Selinger pose the following five questions to each participant:

1. Why were you initially drawn to philosophical issues concerning technology?
2. What does your work reveal about technology that other academics, citizens, or engineers typically fail to appreciate?
3. What, if any, practical and/or social-political obligations follow from studying technology from a philosophical perspective?
4. If the history of ideas were to be narrated in such a way as to emphasize technological issues, how would that narrative differ from traditional accounts?
5. With respect to present and future inquiry, how can the most important philosophical problems concerning technology be identified and explored?

The broadness of the questions enables the interviewees to approach the same general themes from their very different backgrounds and viewpoints and to address these themes in their own ways. For example, to the first question that asks how the interviewee was drawn to philosophical issues concerning technology, Harry Collins begins his answer with, ''I wasn't: I'm a sociologist'' (p. 31). One of Donna Haraway's answers is composed mainly by a long list of questions. The broadness of these five questions also means that the interviews have a variety of strengths, depending on how each participant chose to focus her or his answers. For example, Mitcham and Albert Borgmann's essays provide helpful evaluations of the field. Susan Leigh Star and Peter Singer's entries offer concrete and detailed descriptions of just how deeply our lives are interwoven with technologies. Essays by Collins, Peter Galison, and Lucy Suchman give particularly useful introductions to these figures' bodies of work.

A collection of interviews such as this presents an opportunity to pinpoint trends in the contemporary discussion. Points of disagreement are especially interesting. Below, I consider one point of agreement: the position that

technologies are nonneutral in their effects on society. I also identify two points of discord: the issue of the viability of the term "technoscience" and the issue of the lasting influence of the work of Martin Heidegger.

One point of general agreement is the notion that technologies play a nonneutral role in society. Technologies do more than innocently work toward the desired ends of their users, they actively shape the worlds in which they are used. The various interviewees maintain different understandings of how technologies have effects on their users, on society, and on the world. These authors also focus on different parts of society that are shaped by technology, with some, for example, concentrating on scientific practice, others considering issues of gender, political discourse, or the environment. Nevertheless, there is general agreement that innovative theorizing and increased awareness are necessary for integrating advancing technologies into society in a responsible manner. Even the block of Popperian philosophers included here, such as Joseph Agassi, Mario Bunge, and Ian C. Jarvie, who work to strongly demarcate science from technology, treat technology as nonneutral. Agassi claims, "The argument that a piece of technology, for example, a handgun, is good or bad depending on its serving the law or the lawbreaker is obviously true; the conclusion that technology is morally neutral does not follow" (p. 3). The interviewees all struggle to find ways to conceptualize this nonneutrality and work to articulate the resulting moral questions and public policy concerns.

One point of disagreement echoing within the interviews regards the legitimacy of the notion of "technoscience." A number of participants casually use this term in their interviews or feature this term in the titles of the articles and books listed their bibliographies. The term technoscience is often used to emphasize the relationship between scientific research and technological development or to call attention to the roles of laboratory technologies in scientific investigation. However, not all of the thinkers interviewed here are in agreement on the merits of this notion, and some (very different) thinkers gripe about its growing popularity. Mario Bunge argues against the use of technoscience, claiming it obscures the important differences between scientific practice and technological advance. He says, "Whereas scientists study the world, technologists help alter it—for better or worse. Shorter: Science is about truth, technology is about utility" (p. 18). Bruno Latour, a thinker strongly associated with the term technoscience, in his interview works to distance himself from it. Latour claims, "The worst philosophy has been done by people using the word "technoscience" as if the two were the same domain (I have used the terms however in *Science in Action* and very much regret it)" (p. 125).

Another striking feature of contemporary thought on technology that emerges from the collective interviews of *Philosophy of Technology: 5 Questions* is the looming influence of the work of Martin Heidegger. While the impact of the pantheon of early twentieth-century philosophers offering global negative interpretations of technology has waned, the individual weight of Heidegger's work remains significant and conspicuous. Of all the entries in the book's index, Heidegger's name gathers the most page references. Yet, this should not be taken to imply that contemporary philosophy of technology is populated mostly by Heidegger's followers (though the field certainly contains some). Heidegger, it seems, plays a role in this field analogous to the one played by René Descartes in the philosophy of mind: the figure against which one's own position is defined. Where philosophers of mind often challenge Descartes' ''dualistic'' understanding of the substances of mind and matter, philosophers of technology challenge Heidegger's alleged totalizing and grim portrait of technology's grip on society and his romanticizing of simple country life. Of course, the relationships between Heidegger and these interviews are varied. Several participants review their own analyses of Heidegger or the place of Heidegger's works in their philosophical education. Mitcham and Andrew Pickering spend time in their interviews reflecting on some of Heidegger's particular claims. Bunge includes Heidegger with those he dismisses as pseudophilosophy. Latour casts Heidegger as the most extreme ''technoscientific'' thinker, the kind of thinking Latour criticizes.

In summary, these interviews collectively present an informative and engaging cross section of the field of philosophy of technology, and at the same time, they contribute to establishing this field as a pluralistic and interdisciplinary discussion.

Robert Rosenberger
Georgia Institute of Technology

Robert Rosenberger is an assistant professor of philosophy at Georgia Institute of Technology. He has written on a variety of topics in science studies, including imaging technologies, prejudice reduction, the conventions of scientific debate, the phenomenology of everyday technologies, and the epistemology of computer simulation.