

**Technology and the Politics of Knowledge, edited by
A. Feenberg and A. Hannay. Bloomington: Indiana
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xi + 288 pp., \$35.00.**

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Technology and the Politics of Knowledge describes itself as a survey of the converging fronts of critical social and political thought in the field of recent philosophy of technology. The philosophy of technology is not a new field, and indeed a good portion of the articles contained in the volume are reflections and analyses of earlier contributions to the field from Frankfurt School social theory, Heidegger, Arendt, and feminist thinkers. What makes the work in this volume new is philosophy's reconsideration of the centrality of technology itself, to both modernity and contemporary social transformations, and the need to engage technology at a deeper critical level than traditional Marxist and instrumentalist interpretations can provide. The contributors are predominately philosophers, the exceptions being Henaff and Winograd, who come from the fields of literature and computer science, respectively, though the group represents a broad range of perspectives from within the field. Academics and professionals familiar with the rapid pace and broad impact of information technologies on our society will be interested in this book not because it contains any startling revelations about technology, nor even a coherent perspective on it, but because it contains a stimulating and fairly broad view of the diverse perspectives addressing technology in philosophy today and can thus serve to point the readers to those discourses they find relevant to their own interests.

The volume is divided into seven sections—Technology as Ideology, Technology and the Moral Order, The Question of Heidegger, Media Theories: The Politics of Seeing, Feminist Perspectives: Knowledge and Bodies, Eccentric Positions, and The Human and the Non-Human—each with a short preface that does quite a good job of situating the wide array of articles into a coherent multivocal

presentation. The book is by no means a comprehensive survey, however, and is arguably a bit unbalanced, but these are just symptomatic of a field that hasn't quite stabilized. As for its claims to include the insights of the sociology of science and technology, it does little more than appropriate constructivism to argue for familiar philosophical positions. Missing is any thoughtful reflection on the significance of actor-network theory, cyborg sociology, or the comprehensive empirical socio-historical and macroeconomic work investigating the complexities of the forces, actors, and materials at work in technological change which has recently begun to emerge. The article by Latour, sole representative of the sociological field in the volume, addresses in an obtuse fashion the core insights of these approaches, but his application of them to a Belgian comic strip hides their critical promise. Also missing from the volume are any representatives of, or even mention of, the tradition of American Pragmatism that has been discussing technology and society since Dewey.

With three articles addressing Frankfurt School and neo-Marxist social theory, and three addressing Heidegger, one wishes something more substantial could be derived from these intellectual influences. These sections seemed to have more scholarly value than helpful analyses of *technology*, though the efforts to straighten out Habermas's and Marcuse's positions by Pippen and Vogel do disclose the roots of some deep intuitions our culture holds regarding technology and help to situate the rest of the volume. Rockmore's article promises to help clarify the relation of Heidegger's thought to technology and his personal involvement in the National Socialist movement, but leaves one feeling that Heidegger was uncertain of his own position concerning either.

Dreyfus's contribution goes some distance in straightening out the complexity of Heidegger's conception of technology, but leaves one wondering if the practical "gods" his conception calls for are really practical solutions to social problems and whether his conception of technology can offer a valuable contribution outside of its difficult theoretical framework. If it can, it will probably be from Heidegger's insights regarding the relation of humans to their tools, which have, as Winograd's article outlines, sparked several research trends among computer scientists.

Several of the contributions are summary pieces of larger works. Feenberg offers an elegant summary of his 1991 book *Critical Theory of Technology* (Oxford: Oxford University Press), which grapples with the positive and negative aspects of technological rationality and concludes that we can only obtain a free relation to technology when we design technology to operate democratically. Longino summarizes her feminist empiricist position from *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry* (Princeton, NJ: Princeton University Press, 1990), a position that has gained a great deal of respect from mainstream epistemology and philosophy of science, which have largely ignored feminist-standpoint epistemologies out-of-hand, and applies it deftly here to technological choice. Also included is a classic of feminist thought, Haraway's "Situated Knowledges," which has been reprinted in several places.

Two articles in the volume stand out in my mind as representative of the recent trend toward a cultural studies of technology that blends theory and application by deriving its philosophical tensions from the cultural milieu rather than a theoretical framework. Ihde's "Image Technologies and Traditional Culture" begins with some keenly prosaic observations about the nature and use of visual images in traditional scientific and contemporary popular culture and derives critical yet sensitive questions regarding the impact of MTV and mass communication on the evolving world "pluriculture," which often escape more romantic or radical approaches. Hénaff's piece on the writings of the Marquis de Sade makes a similar move in a much different cultural context by examining the expressions of French Enlightenment thought in the Sadian libertine's mechanization of bodies and rationalization of sexual pleasure. Both pieces provide powerful and stimulating insights into the ways in which a culture's understanding and use of its technology is reflected back upon its understanding of itself.

Overall, this book is an important move toward bringing together philosophical perspectives that have something to gain from a mutual engagement, an engagement one hopes will continue to expand. In short, this book is a valuable addition to the library of any academic interested in broadening their perspective of technology, and any professional interested in an introduction to the ongoing philosophical analysis of technology and society.

Alternative Modernity: The Technical Turn in Philosophy and Social Theory, by A. Feenberg. Berkeley: University of California Press, 1995. ISBN 0-520-08986-3. xi + 251 pp.

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The past half century has seen a large body of literature growing around a core of themes that now make up a familiar twentieth-century intellectual genre called “the philosophy of technology.” Its seeds go back to nineteenth-century American Transcendentalists, whose ambivalence toward technology can be seen reflected today in popular culture from television’s *Star Trek* to Apple Computer’s commercials about “Big Brother.” The genre routinely revolves around Baconian utopias, Marxist criticisms of industry, or dark dystopian Jeremiads from Aldous Huxley, Jacques Ellul, or Martin Heidegger. Andrew Feenberg’s new book reviews and revises the genre, even to the point of suggesting that the phrase “philosophy of technology” might be redundant today. Our society is so immersed in technology that any thinking worthy of the name now belongs to what was formerly a rather narrow genre.

Alternative Modernity wants to preserve the momentum of the earlier philosophy of technology, but without the familiar themes and without with the implied distance suggested by the phrase “philosophy of technology.” In its heyday, philosophy was not philosophy of ethics nor of logic nor of knowledge. Philosophy was instead constituted by ethics, logic, and epistemology. Philosophy was not about these things; thinking about these themes was philosophy. Similarly, Feenberg wants to show intellectually what our general culture recognized instinctively some time ago: philosophy and technology are not logically remote items like eyeglasses and peanut butter, but philosophy and technology indeed belong together like telescopes and stars. To do philosophy today is to think about technology, and to reflect on daily life immersed in technology is to philosophize.

Feenberg’s book seeks to break the pendulum swing of the philosophy of technology. Instead of vacillating

between utopia and dystopia, he focuses on specific phenomena belonging to technological practice. The book’s subtitle “The Technical Turn in Philosophy and Social Theory” might just as well read “The Technological Turn in Philosophy and Social Theory,” for Feenberg writes not about the technical, analytic mask worn by mainstream twentieth-century academia, but he writes about the techno-logic that runs through mainstream twentieth-century culture, and by doing so, he joins philosophy to the mainstream debate in contemporary society.

A slew of books fuel that debate. The role of the Internet computer network, for example, stands at the center of contemporary debate. One need only browse through some of the book titles published between 1993 to 1995 to glimpse the critical thinking applied by mainstream culture to computer technology: *Resisting the Virtual Life* by James Brook and Iain Boal, *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution* by Kirkpatrick Sale, *Media Virus* by Douglas Rushkoff, *Data Trash* by Arthur Kroker and Michael Weinstein, *Silicon Snake Oil: Second Thoughts on the Information Highway* by Clifford Stoll, *The Age of Missing Information* by Bill McKibben, *The Gutenberg Elegies* by Sven Birkerts, *War of the Worlds: Cyberspace and the High-Tech Assault on Reality* by Mark Slouka, and *The Future Does Not Compute* by Steve Talbot.

This high-profile critical debate reinforces Feenberg’s point:

Philosophy of technology is adjusting gradually to the emergence of technical politics. Until recently it polarized around two contrary positions: we were obliged to choose between uncritical acceptance of the claims made for technology or uncompromising rejection of its dystopian powers. This dichotomy depended in turn on the sharp distinction

between technology and society that used to be shared by both advocates and adversaries of technical progress. Today this distinction has broken down. (p. 2)

The breakdown of this distinction means, for Feenberg, that theory must now serve the democracy of debate. The debate about technology infiltrates every area of life, just as the influence of the computer permeates everything from astronomy to sports. The very fact that groups from feminists to environmental activists have recently influenced the social application of science means, for Feenberg, that technology belongs to the underdetermined dimension (Duhem-Quine). Technology is determined neither to be our nemesis nor our messiah. Technology is underdetermined and so belongs to democratically open public debate.

The influence of Herbert Marcuse runs through *Alternative Modernity*. When Feenberg addresses the nature of debate about technology, he appeals to democratic movements, to liberation. Throughout, Feenberg makes a consistent effort to bring along and then modify twentieth-century philosophy of technology as advanced by Europeans. The Frankfurt School, Habermas, and J. F. Lyotard appear frequently in Feenberg as both support and foil in his effort to transcend the philosophy of technology. Yet European culture always seems to swing between the blind love/blind hate relation to technology. The argument Feenberg has with these European theorists—all deeply indebted to G. F. W. Hegel—tends to pull Feenberg back from his fundamental insight, which is that global, Hegelian generalizations about technology carry little weight in a culture that is completely immersed in technology. Even Lyotard's rejection of the Big Picture seems misinformed precisely because his observations lack the practical insights of direct observation. A culture immersed in technology needs specific, focused, highly practical critiques rather than broad-brush love/hate approaches to technology.

Where Feenberg remains faithful to his fundamental insight, he digs into pragmatic specifics. Half his book

presents concrete case studies that move from actual practices to reflections on how malleable technology has proved in the past and how up-for-grabs the significance of technology will remain in the future. His case studies discuss the early image of nuclear disaster in post-World War II science fiction, the dystopian themes in the popular spy films of the 1960s, the impact of AIDS on medical experimentation on human subjects, the surprising success of the Minitel network in France, and the Japanese response to modernization as illustrated by Yasunari Kawabata's novel *The Master of Go*. These concrete analyses—along with discussions of science fiction writers like Ursula Le Guin, Philip K. Dick, Stanislaw Lem, William Gibson, and many others—never manifest analysis for its own sake but serve to build a case for Feenberg's point about the flexible, changing relationship societies have to technology and the way technology gets shaped by public debate. These concrete studies come closer to the pragmatic phenomenology implied by the book, and these were my favorite sections of the book, especially the ninth chapter's fascinating treatment of the Japanese game of Go in the context of the Japanese high-tech economy.

Providing the reader with case studies and then also with arguments about European theorists, Feenberg moves decisively toward American pragmatics—not the Pragmatism that blindly championed the scientific method à la John Dewey, but the new pragmatism that reflects on existential issues arising from our technologically enhanced environment. Feenberg shows that Western culture has already moved away from scientism and has embarked on a voyage to find itself where it actually exists today. That voyage begins where the philosophy of technology fades before the realization that high-tech tools directly influence our psyches and bodies. We can hope that Feenberg continues refining his two-pronged approach to theory and practice so that from his hand we may one day receive something like a unified phenomenology of our electronically designed environments.