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Do We Need a Critical Theory of Technology? Reply to Tyler Veak [1]

by Andrew Feenberg

Let me begin by thanking Tyler Veak for his sharp critique of *Questioning Technology.* I am particularly interested in what he has to say as he has attacked my argument from the Left, a position I had hoped to occupy myself with a critical theory of technology.

Veak's criticism comes down to the charge that in focusing on local struggles for the democratization of particular technologies, I forget the larger framework of the world market which absorbs everything it touches into consumer capitalism. What is the point of democratizing this or that small corner of the vast human catastrophe that is global capitalism? Why criticize technology, when economics controls our destiny? Veak concludes that what we need is not a critical theory of technology but a critique of economic globalization.

So baldly stated, the principal flaw in Veak's position is obvious: these are all false dichotomies and nothing compels us to choose between them. Nowhere in my book do I propose that a critical theory of technology can replace all other forms of social criticism. In fact, as Veak himself is compelled to admit, I am no more enthusiastic about capitalism than he is. One whole chapter is devoted to the French May Events of 1968 and the demand for self-managing socialism that inspired that movement. Another chapter discusses Barry Commoner's early socialist environmentalism. I argue that these were among the many movements and debates that politicized the question of technology in the late '60s and early '70s, to which we owe our current critical consciousness of technology.

In the Preface to the book, I also acknowledge the importance of patriarchy, racism, and other forms of oppression that existed long before modern techology and survive within our society today. I do suggest that technology criticism is under-represented on the Left despite the fact that technology issues are increasingly central to many different types of protest. Surely this position is not harmful to progressive social movements! Why then the harsh critique?

Could it be that it is my lack of moral outrage that bothers Veak? It is a fact that although I mention many of the issues he considers important, I do not respond to them

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[1] Symposium on questioning technology by Andrew Feenberg
11th Biennial Conference of the Society for Philosophy and Technology, San Jose, California, 1999. Science, Technology and Human Values, Spring 2000, 238-242.

as he would like. I do not target Bill Gates as a villain, nor do I highlight the absolute misery of the poorest of the poor. Differences such as these have more to do with intended audience than substantive disagreement. *Questioning Technology* was not written with any pretention to value-free scientific objectivity, but I have tried to expose my commitments without bludgeoning my readers. I would like to be read by students and scholars interested in technology studies regardless of their politics.

These readers are certainly aware of the fall of the Soviet Union and share the widespread disillusionment with the type of socialism it represented. However critical they may be of multinational enterprise, they see no alternative. Denounciation of world capitalism is easier than providing a credible solution to the problems it causes. The call for a global oppositional strategy leaves many skeptical in the absence of significant global struggles. Verbal gesturing is no substitute for a politics, although it is quite popular on the academic Left.

Veak's gestures are no doubt honorable, but they are also particularly desperate. Everything is co-optable in his view. Even the most hopeful struggles, like that of AIDS patients for access to experimental treatment, ultimately fail.[15] The Internet will soon be totally commercialized.[16] Environmentalism has already been converted from a social movement into a marketing ploy. And so on. If all this is true, our choices are limited: we can either join the tragic struggle against the inevitable alongside the wretched of the earth, or watch the global disaster in the relative comfort of the Western academy.

As I write this, a little bell rings in my memory. I am transported back to the early '70s when some radicals denounced the peoples of the West for benefiting from world capitalism at the expense of the Third World. Reforms in the advanced countries were useless, serving only to strengthen an oppressive system. The true agent of the revolution was to be found in Africa, Latin America, Asia, where consumer society had not yet corrupted all classes of society.

Veak says this is not his position, but goes on to claim--inconsistently, it seems to me--that technical democratizations are "detrimental if those particular technologies are part of a larger context that is increasing the disparity between the haves and the have nots." My worst fears are confirmed when Veak condemns electricity for failing to achieve the liberation promised at its inception. No wonder he has doubts about the Internet! How can we accept Veak's pro forma assurances that he is in favor of local reforms when he seems so enthusiastic about condemning them for masking global problems? So despite his many disclaimers, I feel Veak drawing me back to the discredited politics of the old New Left.

Questioning Technology starts out from entirely different assumptions and problems. Veak would like us to turn to political economy for the serious business of social critique, but a great many fundamental questions of civilization cut across the distinction between economic regimes. Feminists and race theorists have made the point that equality is always an issue. Abolishing discrimination under capitalism will not abolish economic inequality, but it is just as true that a socialist reform of the economy can leave discrimination intact. Reforms dismissed as trivial distractions by some dogmatic revolutionaries have made a difference. And that process is far from over. The civil rights movement, women's movements, movements of the disabled, environmental movements continue to have impacts one would be foolish to discount.

The problems with Veak's uncompromising position extend further, to the model of socialism itself. The alternative to a process oriented politics based on reformist social movements is the old statist model of total transformation. In the Soviet Union, revolution, nationalization of capital, and economic planning did indeed abolish key state institutions and markets, but that was not sufficient to create a humane society. Authoritarian techniques of management and administration imitated from the West, combined with ferocious political and police oppression, turned out to be far more significant than ideological and economic innovations both for the daily life of individuals and for the long term prospects of the regime. Presumably, a similar disaster would follow the abolition of the global capitalism in favor of Soviet style socialism on a world scale. Who would want that?

If Veak is representative, it is time to refocus the discussion among radical theorists. Technology studies can contribute to that task. After all, Marx may be considered the first serious student of modern technology. He observed that the technical mediation of work accelerated economic growth but also created new social hierarchies and devastating economic crises. At the same time, Marx argued, technology had brought into being a new kind of lower class capable of democratizing the economy and resolving its problems. Over a century later, we see technical mediation reaching far beyond the domain of production into every aspect of social life, whether it be medicine, education, child rearing, law, sports, music, the media, etc. And, while the economic instability of market capitalism has been reduced significantly, everywhere technology goes, centralized, hierarchical social structures follow. In this context, the issue of domination through technology has come to the fore in many domains.

Struggles against the arbitrary exercise of technocratic power have been going on since the 1960s, beginning in the universities and extending to other insitutions, but often it is difficult to classify the resulting movements. Similarly, social movements have challenged specific technical designs in fields such as computers and medicine without waiting for the blessing of the Left. Technology studies has contributed to our understanding of these unprecedented movements. Steven Epstein's book on AIDS, *Impure Science,* shows how much we can learn from research on social conflict over the technical framework of our lives.

Questioning Technology is situated in this context. It is an attempt to make sense of the political consequences of generalized technical mediation. The book argues that technology is emerging as a public issue out of a variety of struggles in something like the way in which environmentalism emerged at an earlier date from hitherto separate issues such as population control, pollution control, nuclear protests, and so on. The enlargement of the public sphere to encompass technology marks a radical change from an earlier consensus which held that technical issues should be decided by technical experts without lay interference.

Is it unrealistically optimistic to hope for positive developments from this change? Perhaps, but I make fairly modest claims for what has been accomplished thus far. The point is not that struggles over technology will do the work of world revolution, but that they exist at all. Veak is the optimist if he thinks that we are ready to take on the capitalist world market. I am concerned with something more basic, *the survival of agency* in technocratic societies, and more particularly, the ability of modern men and

women to act as agents in the technical sphere from which the technocracy draws its force.

Contrary to Veak's claims, this approach does not privilege local struggles at the expense of global ones. As of now, there are no global struggles around technology, if by "global" one means the sort of total challenge we associate with the socialist opposition to capitalism. There is no reason to assume that feminists trying to improve childbirth procedures or protesters opposed to nuclear power detract from the fight against multinational oil companies in Nigeria, assuming, as Veak appears to, that the latter can be considered more "global" than the former.

Technical politics today involves a variety of struggles and innovations with significant consequences for the structure of major technical institutions and the self-understanding of ordinary people. We need to develop theory to account for the increasing weight of public actors in technological development. That world capitalism will survive this or that technical change should no more surprise us than its ability to survive the women's movement or the civil rights movement.

Nevertheless, there is a difference and it is perhaps this difference that explains the vehemence of Veak's challenge and his interest in my work despite sharp disagreements. Although capitalism and socialism perpetuate to one degree or another such pre-existing phenomena as racism and sexism, they can--and we hope they will--learn to live without these abberations. But modern technology is essential to their existence. Hence any major change in technology raises fundamental questions of economic organization.

Capitalism is still about extracting surplus labor from a work force with no interest in generating profits for capitalists. To the extent that that inherently conflictual situation is stabilized through specific technical choices, other technical choices can destabilize capitalism. In recent years, technocratic ideology and management have emerged as an effective approach to maintaining subordinate masses under the rule of capital. By the same token, to be worthy of our continuing interest in the post-Soviet era, an alternative to capitalism must be about democratizing technical adminstration and technical choices under economic conditions which permit the extension of democracy to the world of work.

The core institutions of modern societies are thus at stake in technical development. A broad democratizing trend that undermined technocratic ideology in society at large would weaken capitalist hegemony and block Stalinist backsliding on the part of the Left. If a critical theory of technology contributes to this trend, surely that should suffice to justify its existence even to the most politically committed of critics.

References

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[5] In addition, Feenberg explains how "essentialist" philosophies of technology have argued mistakenly for an essence of technology, because of their exclusive focus on the meta-level of culture. If one ignores the contingency evidenced at the secondary level of design, as essentialist theories of technology do, it is easy to see how technology can be misconstrued as being an autonomous-rational-deterministic force. Feenberg rightly argues that it is not "technology" per se that evinces this at times unilinear trajectory, but the interests of particular actors.

[6] Or becoming "concretized" to use Feenberg's term.

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[10] I believe Feenberg's unfounded optimism is largely due to his reliance on Habermas' conception of a democratically ideal community that is limited both temporally and geographically.

[11] I am in no way discounting the achievements of social reform movements over the last one-hundred plus years. My point of contention is primarily concerned with Feenberg's emphasis, which I discuss in more detail below.

[12] While Hughes admits that "load factor" was a technological limitation driving the direction of the electrical utility industry, he also concedes that the industry would look considerably different in a society that did not count "capital cost"--i.e., if the industry was driven by values other than utilitarian efficiency and the "bottom-line" of the market (463).

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[14] See the works of Timothy W. Luke, David Harvey, and David Pepper as examples that both critique capitalism and attempt to formulate some kind of environmental politics. In addition, a number of eco-feminist (i.e., of the socialist brand) authors have also made similar arguments: see for example the works of Mary Mellor, or Carolyn Merchant.

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