

Richard Sclove: The Democratic Uses of Technology

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Thought & Action: Is the current technological revolution, if there is one, out of control and dangerous? Does it threaten our way of life, both on campus and in society?

Richard Sclove: Yes, although I wouldn't use words like "technological revolution" or "out of control" in careless ways. It's fair to say there is a technological revolution, principally driven by the conjunction of swift innovation and rapid deployment in computers and telecommunications, biotechnology, and perhaps materials science.

Is it out of control? Well, in our

culture, technological change is always somewhat out of control, but not in the sense it's an autonomous driving force. Rather, technological change is a product of human activity and social institutions, but we have no master institution that oversees it and no common overseeing dialogue that informs it. So, while human beings create and carry out this revolution, there is no conscious human entity in the driver's seat.

But there are extraordinary economic interests at play behind the current technological transformation. And accompanying these economic developments is huge strategic anxiety throughout society, at both the personal level—with people feeling that their jobs and economic well-being are not on secure foundations—and on an institutional level—where many long-established institutions, including universities, are anxious about their strategic position in the new world.

Finally, coupled with economic interests and strategic anxiety, is a kind of a religious fervor among a potent minority of true believers in new technologies, who will brook no insult to the idea that the technologies they enjoy playing with are

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universally in the best interests of all human beings. To these technozelots, anybody who would criticize those technologies, the institutions guiding them, or the ways they're being developed, is dismissed as a reactionary Luddite.

The conjunction of these three forces—economic, strategic-emotional, and quasi-religious—has helped technological innovation substantially escape from meaningful political oversight or culturally informed guidance.

Thought & Action: Some see universal access to technology as improving the quality of everyone's life. What are your reservations about universal access to computers and the Internet?

Richard Sclove: In a qualified way, I also support universal access to these technologies, and I certainly support the values underneath the call for universal access. I don't support the corporate values that clamor for universal access primarily as a vehicle for promoting an infinitely expanding cybermarket. But I support the social values concerned about not creating new forms of class division in society and further disempowering already disadvantaged groups.

Nonetheless, I have reservations. I think a better goal than universal access would be universal voluntary access. There are many people who are not enamored of the

new technologies or who, if they want to be able to use them, would like to be able to use them under conditions and at times of their choosing.

In the current, socially unguided ways in which these systems are being deployed, many people are, or will be, coerced into using them at times, and in ways, that they do not want to.

This involuntary and coerced access is happening at workplaces, including college campuses, where computer use is a condition of employment, and increasingly, there likely is going to be coercion to use these technologies for shopping, business activities, and leisure. When using technology is an informed, personal choice, that's fine, but for many people, that's not the case.

Thought & Action: In your writings you've warned about the possibility of becoming "overwired." What does this mean?

Richard Sclove: An overwired world would be one in which virtual life and online activities increasingly crowd out traditional forms of social engagement, leisure activities, or time spent in the natural world, thus creating a pathological self-reinforcing dynamic.

For instance, people sometimes turn to online, virtual communities because their face-to-face, or neighborhood, or local friendships, have

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been eviscerated, both by technological processes and by other social and economic processes. As they do that, they become less available for face-to-face life, and that reinforces the dynamic of encouraging more and more people to turn to the virtual life as a compensation. This compensatory dynamic aggravates the initial loss of face to face social life and so on.

Thought & Action: You've written about technology's capacity to destroy communities. You've also written about technology's capacity to weaken local economies. Can you explain a little how this would come about?

Richard Sclove: The destruction of local economies, by which I mean local productive capacities to meet a fair share of local economic needs, sometimes referred to as "local economic self-reliance," pre-dates the new technologies.

The destruction has been continuous for a couple of hundred years. In our own lifetime, Wal-Mart has been used as a symbol for the malling of America, which has wiped out many individual Mom-and-Pop retail stores. So, regarding the destruction of local economies, I'm concerned about technology completing a task that was already well underway.

What I've written about is the danger of a "cybernetic Wal-Mart effect." To explain this, I'll tell a

hypothetical story about a traditional Wal-Mart, a version having nothing to do with telecommunications or electronics.

Imagine what happens when a Wal-Mart locates for the first time on the outskirts of a town. Over time, let's suppose, half the folks in the community start to do one-third of their shopping at Wal-Mart.

Now, if you ask people in that community "Do you like having a vibrant downtown?" you would find out, by supposition, that half the people never go to the Wal-Mart, so, of course, they like having a vibrant downtown. The other half only go to Wal-Mart a third of the time. Two-thirds of the time, they want to be able to go downtown. So they like to have a vibrant downtown economy, too.

It turns out that there's 100 percent unanimity that it would be a good thing to have a vibrant, local downtown economy, and the cultural and community vibrancy that goes along with that. The problem is that if half the people do a third of their shopping at Wal-Mart, you've extracted 16.5 percent of the revenue from the downtown and transferred it to Wal-Mart. If profit margins aren't particularly high, that's enough to start shutting the downtown economy down.

But the free market ideology that's so prevalent right now says, "Oh, well, if Wal-Mart is beating

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out downtown, that's because people want it," when really what's going on is a perverse market dynamic—a closing down of the downtown that not a single person in the community wanted.

This is an involuntary, coercive self-reinforcing dynamic, because once the downtown starts to shut down, people who were going down there, by default have to now go to the Wal-Mart.

The cybernetic version, as more and more commerce goes online, continues this "Wal-Mart" dynamic, except it's worse in a couple of respects. Online, you're not just competing with the Wal-Mart on the outskirts of your town. You're competing with the full global marketplace. Wal-Marts basically were a threat to Mom-and-Pop retail shops. Online commerce can spread out into virtually every sector of the economy.

So local service providers—lawyers, stock brokers, insurance agents, travel agents, all those kinds of folks who formerly were competing with each other in local economies—are suddenly competing nationally or even globally. In my small town of Amherst, suddenly, the lawyers and the accountants are competing with Boston, New York, and L.A. And that's bad for the local economy.

That's a concern to me not primarily on economic grounds but

because it's bad for local cultural and community vibrancy. It's also bad for democracy, because as you weaken social bonds at the local level, people lose mutual understanding and the capacity for collective action, which are among the essential foundations of a workable democracy.

The destruction of local economies also means greater local dependence on national and global market forces and on distant corporate headquarters—powers that communities can't control. The locus of effective political intervention thus shifts toward more distant power centers. But because everyday citizens can't be as effective in these distant centers as in smaller political settings, democracy is further impaired.

Thought & Action: How are national policy decisions about the development and use of technology now being made?

Richard Sclove: The 50-year tradition, coming out of the Manhattan Project, has been that the producers of science and technology—meaning businesses, the military, government agencies, and research universities—are the only players making science and technology policy at the national level. Those who pay for these innovations—that's everybody through their tax dollars and consumer purchases—and those who are affected

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by it—which is also everybody—have, unless one happens to be in one of those producer groups, no representation whatsoever in the politics that determines these policies.

Sure, there's a problem of money having too much say in all policy areas. But in almost every other policy area, such as health or education or welfare, while money may be disproportionately influential, at least there's some kind of public interest representation.

In the case of science and technology policy making, it's quite normal for there to be zero popular or public interest group representation in these decisions. And that's quite extraordinary. The only other place I'm aware of where that happens is in some areas of national security policy making.

Thought & Action: You've written that if science and technology were responsive to democratically determined social and environmental concerns, we might arrive at a better balance between virtual life and traditional life. How might that happen?

Richard Sclove: I think there are a couple of things that would go in the right direction. The problem is that these are not going to happen merely because they're good ideas. It would take a lot of political struggle, because the zeitgeist of the big technology companies dri-

ving this is for there to be no social guidance or control over what they're doing.

One simple example would be to put a modest tax on Internet commerce and rebate at least some of that revenue to local governments for investment in reinvigorating local economies, community life and cultural vibrancy.

Ironically, current U.S. tax law has exactly the opposite bias. By exempting many out-of-state purchase from state and local sales tax, we put local economies at a disadvantage.

Thought & Action: Are there other ways to balance virtual and traditional life?

Richard Sclove: There's an interesting nonprofit group called TV-Free America, which has picked up on the idea of voluntary TV—watching moratoria. They have a week-long voluntary turn-off-your-TV week, and they provide materials to public schools and libraries to organize alternative events.

I'd like to extend the idea to use of the Internet. Instead of one week a year, we could try a voluntary moratorium on television and computer use one evening a week. Let us all unglue our eyes from the screen, and create common space for other activities.

This could be seen as recommending taking something away from people. But the current tech-

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nologies are also taking something from us. They're taking away opportunities for vibrant, local, social lives, and the vibrant democracy that can come with that. Already, polls show that Americans do regret the decline in face-to-face community life that has occurred over the past couple of decades.

Thought & Action: In what ways can technology oppress rather than liberate workers?

Richard Sclove: It's not so much the hardware as it is the social context in which the technology is being implemented. Given weak U.S. labor law and economic globalization, corporations increasingly tell workers, "Oh, you know, we really wish we could give you an office at work, but we can't afford the overhead so you're going to have to get your own computer and find another place to work." In most cases, that means people will have to work at home because that's all they can afford.

But the corporation will then say, "By the way, don't think because you're not here that you can slack off and not work hard, because, of course, we can remotely monitor and pace exactly what you're doing."

We've been taught that exploitation of labor primarily impacts the proletariat, the working class, but that professionals don't confront exploitation.

But as far as I can tell anecdotally, professionals are sometimes as badly exploited today as anyone else. With fax machines and E-mail, work time takes over all other aspects of life, including home life and leisure activities. With cellular phones, people can't even escape work in the bathroom or on the road.

People are working longer and longer hours. Juliet Schor's book, *The Overworked American*, points out that in America people are working tremendously long hours now, in many cases longer than people worked on farms a few hundred years ago.

Thought & Action: How does this coercive potential apply in the higher education workplace?

Richard Sclove: Faculty certainly are pressured to be more responsive to administrators and students at all times of day and night, from E-mail. You've got a version of an unfunded mandate. It's like the federal government telling the states, "We want you to do this new, wonderful social welfare activity. Good luck finding the money or the time to do it."

Faculty are told, "We're not reducing any other aspect of your professorial responsibilities. You still have to be on committees. You still have to be in the classroom. You still better publish plenty. But, by the way, you also have to now be

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accessible to students and administrators and colleagues on E-mail.” Who created the extra three hours in the day where you’re supposed to be able to do that?

Thought & Action: What about the effects of technology on the education process itself?

Richard Sclove: Even though there’s been little definitive research yet, I’m concerned. We use a fair number of interns at the Loka Institute, including some from very prestigious institutions of higher learning. These are wonderful, well-intentioned people. But only a small fraction of them can write a decent English paragraph.

It’s almost as though they have been doing very little reading, except hypertext—those poorly edited things appearing on the Internet by the screen-full—because that’s how they write. They cannot construct good sentences, and they can’t construct a logical, consistent argument that starts off, tells you where it’s going to go, goes there, and tells you where you went. That’s troubling to me.

I also worry because I, too, get a fair amount of my information from the World Wide Web. I’m building off of intellectual capital, meaning the books and courses I took 10 and 20 years ago when reading a serious book sometimes took a couple of weeks, and required lots of marginal notes. But you can’t do that

by the screen-full on the Internet.

I find the Web is useful when I have a conceptual framework built up already, and I just need a few little factoids to plug in to illustrate points. The Web is marvelous for that. But it’s not a vehicle for building up depth of intellectual understanding. The extent to which students rely on the Web as their primary learning vehicle is deeply troubling.

The most important professors and teachers for me were effective much more because of their emotional excitement and how they conveyed it, and the emotional bonding they had with students, and not simply because of their intellectual knowledge.

The professors were creating an exciting, emotionally engaged learning experience, and I’m willing to be proven wrong, but, in my own experience, that exchange has got to be face-to-face. I’ll be surprised if we don’t find that a move towards more online learning means a loss of those admirable special and exciting qualities of a good education.

I don’t, on the other hand, want to romanticize traditional universities. I don’t think universities are a system that “ain’t broke” and therefore shouldn’t be fixed. I think, in various ways, universities have a lot of problems and are not serving society well. But I doubt technology

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will solve their problems.

Thought & Action: Faculty and staff aren't much involved in thinking through what technology's role should be in higher education. Do you think that they should be involved in the design and evaluation of technology, as they are in terms of the curriculum?

Richard Sclove: I do, very much. The people affected need an opportunity for informed influence within those decisions. I would also say I don't know why involvement should be limited to faculty and staff. I don't know why students shouldn't be involved, too.

To the extent that universities are important actors in the wider world—or where the university is having a major impact that spills over beyond the university—I think there would even be times when there should be broader social representation in these university decisions. I don't believe everybody should be involved in every decision for its own sake, but I think the degree of representation should be roughly proportionate to the degree you're affected.

Thought & Action: Do you have any sense of what the blending of traditional and virtual life that you talked about earlier might look like on campus?

Richard Sclove: The good form? My own limited imagination would say that what universities

really need to do to improve themselves has nothing to do with technology. They have to be more engaged in the wider society, doing more community-based research, for example. The Loka Institute is promoting this sort of research by creating a nationwide Community Research Network.

Before seeking a technological fix for anything, I would worry about faculty reward structures. Basically, professors are still rewarded for publishing in refereed scholarly journals—I know this is mildly hyperbolic—but that's a crazy reward system from a social point of view. It means that most faculty publish in journals with a paid circulation of maybe 300 to 400 people. This means that the average article might be read by 20 or 30 people.

In the social sciences where I am, you're rewarded for new ideas, but very few of us ever have new ideas. So academics disguise the fact that they aren't saying anything new by inventing new languages. You have this escalation of impenetrable esoteric jargon, concealing the fact that you aren't saying anything that couldn't be said in ordinary language in a lot less space, but that wouldn't do for tenure or promotion.

Now the public makes a substantial contribution financially to this enterprise through tax subsidy

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and direct funding of university research. I think it's a scandal, when there are urgent social problems, where socially engaged research by faculty and students would be a real social boon, and instead we're doing this other thing because of the reward structure.

This seems like a much more important area to work on before you throw billions of dollars of computers at universities thinking that's going to improve anything.

Now, to get to your question. I'd work on more emotionally engaged exciting teaching, and more socially engaged forms of research, and change the faculty reward structure. On top of that, using the Web and some limited Internet communications as complements can be enriching. But if technology is used as a substitute for engaged, exciting research and teaching, it's going to be detrimental.

Thought & Action: Could models of democratic decision making about technology be created on campuses and then transferred to society at large?

Richard Sclove: In principle, anybody could be the democratic vanguard, but in general, it wouldn't have occurred to me to think that universities are likely to be effective laboratories of democracy because I think they're already behind. In general, the U.S. is democratically behind a

number of other nations, especially in northern Europe. But also I think that grassroots groups and various independent nonprofit organizations have been developing interesting alternative models for technology use and democratic decision making.

There are some university examples. Professor Jim Fishkin at the University of Texas, Austin has developed a deliberative poll that is one interesting participatory model. And there are a number of community-based research centers at universities that are interesting. But, in general, universities are very hierarchic institutions, extraordinarily so. And to think that's going to be a promising social foundation for developing new democratic models seems to me unlikely.

I would welcome it when it happens. I think, in many cases, though, universities and professors need to adopt an attitude of some humility and open up to co-learning with other social groups, because I think that, as far as democracy goes, universities have very much to learn—as much to learn from other parts of society as they have to teach.

Thought & Action: So if the university were more involved and more participatory with the community around it, it would be—?

Richard Sclove: Well, universities aren't, even internally, very

democratic. There's an extraordinary hierarchy—full professors are the ones who have the most influence; untenured professors have almost none. Graduate students are lower than worms, and undergraduates have a little more stature than graduate students, but not much. Secretarial support and custodians are invisible.

I'm exaggerating, but largely that's true, and given that context, universities have a long way to go to model democracy internally, although they have a social obligation to do that, because one of the important functions of the university in a democratic society is to educate students for citizenship, and poor role modeling in the university's internal decision-making is not a good way to do that.

Thought & Action: My final question is, are you optimistic or pessimistic about the possibility that we, as a society, will be able to take control of this technological phenomenon, and make it work for society as a whole?

Richard Sclove: More pessimistic than optimistic. I'm opti-

mistic in terms of understanding, as I've said earlier, that it's humanly, institutionally, and socially possible to develop and use technologies in a more humane, just, wise, democratic, and environmentally sustainable way. All of this is possible.

But it's politically improbable, given the cultural zeitgeist at the moment, the lingering infatuation with laissez-faire economics, the weakening of the welfare state, the pressures of economic globalization, and the dominance of Wall Street investment mania over a lot of technology decisions. Huge power and money is invested in making sure these decisions are not made in a democratic way and that they are instead oriented primarily towards strategic positioning in the economy and maximizing profits. Thus, at best, such decisions will be of social or democratic value only accidentally. That's not strong grounds for a lot of optimism.

On the other hand, I think it's my obligation as a citizen to try to increase the odds of a better outcome. So that's what I try to do. ■