Democracy and Technology: An Interview with Richard Sclove from Beth Simone Noveck

RICHARD SCLOVE, Founder, The Loka Institute, Claremont, CA

Twenty-five years ago, Richard Sclove penned *Democracy and Technology*, his award-winning book, which long before today's debate around AI ethics called for all of us to pay greater attention to the development and regulation of new technology. "No innovation without participation," he wrote in the *Washington Post*, championing the need to create the mechanisms for everyday people to play a role in governing the technologies that have come to dominate our lives. We talked with Sclove about his vision and asked him to look back 25 years and ahead another 25 years to assess the impact of democracy on technology and technology on democracy.

CCS Concepts: • **Social and professional topics** → *Government technology policy*; • **Applied computing** → *E-government*;

Additional Key Words and Phrases: Commercial Internet impact on democracy, power asymmetry in design decisions about technology, U.S. Office of Technology Assessment

ACM Reference format:
Richard Sclove. 2020. Democracy and Technology: An Interview with Richard Sclove from Beth Simone Noveck. *Digit. Gov.: Res. Pract.* 1, 1, Article 5 (January 2020), 6 pages.
https://doi.org/10.1145/3368273

BSN: You did some of the earliest thinking about the impact of the Internet on democracy. For those who have not read your work, what were your views then for the future of democratic engagement that the Internet might make possible?

Sclove: Well, I knew that we weren't confronting a single fork in the road in which the Internet was either going to perfect democracy or destroy it. I anticipated that it could tilt in either direction, depending on policy choices and the decisions that various actors were making. But I focused more on the potential downside because with all the Utopian hype swirling around the Internet back then, I didn't have to worry about the upside—that was being well taken care of. So instead I probed into what could go wrong, because not too many people were asking that question.

In 1994, I coined a term—the *cybernetic Walmart effect*—that never gained much traction but that has proven somewhat prophetic. During the 1980s, Walmart and other big-box stores had begun to decimate the downtown

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2639-0175/2020/01-ART5 $15.00
https://doi.org/10.1145/3368273

shopping areas of many small towns and cities. And I foresaw that in the absence of countervailing policies, Internet commerce was going to deepen that dynamic, challenging not just mom-and-pop retail shops but local economies more generally.

Contrary to all the hype about how local businesses were going to thrive by selling globally, I wrote that before long online commerce would shake out into dominance by a few very large companies. That prediction came true.

BSN: Around that time in an article titled "Cybersobriety," you came up with a wonderful twist on an old nursery rhyme: "This little piggy went to market, Another piggy shopped online from home, The second piggy paid no sales tax, So why do both feel disempowered and alone?"

Sclove: Right. By "disempowered and alone," I was making the point that if Internet commerce is allowed to hollow out local economies, that's also hollowing out face-to-face social life and civil society generally, which are building blocks for a healthy democracy.

With online commerce and a commercially dominated Internet, more and more decisions that affect people are happening somewhere very far away, where Jane and José and everyone can basically have no meaningful impact on them. With a more localized economy, people have greater opportunity to influence the circumstances shaping their lives.

I also foresaw that our "choices" would not all be voluntary. For instance, as some people in a community begin to do some of their shopping online, local businesses take a financial hit. When some of them close down, that forces more people to go online in compensation, setting up a self-reinforcing, negative feedback loop. Before long, the local downtown is shuttered or its economic diversity is narrowed down to cafes and beauty salons. And yet nobody, not even the first people who opted to do some of their shopping online, wanted that outcome.

And that's not the only way in which we can be coerced into decisions that we falsely imagine reflect our free choice. For instance, as some people begin to turn from face-to-face social life into virtual worlds, that forces others to go online in compensation, because there is less opportunity to engage in a rich face-to-face social world.

I also knew that there were ways to prevent these kinds of coerced "choices" and unintended outcomes, and to hold virtual life and face-to-face life in some kind of healthy balance. One obvious solution would be to tax online commerce at a level sufficient to protect local economies and local social life from being undermined, perhaps using some of the proceeds to support local economic activity and civic life. But under the United States' current anti-tax, laissez-faire ethos, that wasn't going to happen.

BSN: What got you started on this line of work and thinking? What were the personal motivations that set you on this path and that made this the set of questions that captivated you?

Sclove: My entrée to technological issues was via nuclear energy politics. Back in 1971 when I was a freshman at Middlebury College in Vermont, the local electric utility company announced plans to build a nuclear plant on the edge of town and I got involved. Right away, I learned that there were local farmers and local folks who opposed the nuclear plant for a variety of reasons. But they couldn't say out loud what all of those reasons were, because the game was rigged: to participate in the decisions that the utility company and the Atomic Energy Commission were making, you had to adopt their criteria, which were limited to economic, environmental, and safety impacts.

It became clear to me from hanging around with local folks that one of their objections was that powerful outside institutions were telling this little town what was going to happen and they didn't have any say over it. The idea that a big centralized technology was shifting authority away from local government was not a concern that you were allowed to express in formal hearings. So it was clear from the get-go that there was a flaw in democratic process.

BSN: You took a turn somewhere to combine that interest in energy policy with what was happening in terms of the evolution of technology more generally. Was there a moment when that dawned on you?

Sclove: It happened in several steps. One was that when I was 24, I landed a dream job as a research assistant for a national energy policy study assembled by the Ford Foundation. The senior team members included Nobel

laureates, a bevy of Harvard professors, and the former directors of several federal agencies. It was a heady time for me, marred only by my dawning recognition that the group's methodologies of policy analysis, such as cost-benefit analysis and risk assessment, made no allowance for all of the many noneconomic social repercussions of alternative technologies and technology policies.

So after that project, I found my way to MIT's political science Ph.D. program. At a seminar introducing my proposed doctoral research on energy technology and democracy, another grad student asked me why I was focusing only on energy technology—why not pick a second case study, like manufacturing? So I thought about it and decided why limit myself to just two cases studies? Instead I'll investigate democracy and technology more generally. Thirteen years later, that resulted in my book, *Democracy and Technology*. And that gave me the background—informed by having studied the social evolution of many kinds of technologies—to bring a critical eye to the Internet as it was being introduced into the wider society.

BSN: As we reflect on the evolution of the Internet and its impact on democracy, in what ways do you think your ideas turned out right or wrong?

Sclove: At a time when life in cyberspace was being glorified and captivating the popular imagination, one thing that I got right was to see that the most important social effects of the Internet were going to be felt outside in the wider society, not inside cyberspace itself.

Among other things, I explained some of the ways that a commercially dominated Internet could become a threat to democratic civil society. I feel pretty happy that I said that in general terms. But some of the specifics I completely didn't see; I didn't see social media coming. I certainly didn't anticipate Russians exploiting Facebook to try to manipulate a U.S. election. Many of us did see some looming privacy threats, but not at all to the extent that they've emerged.

As far as anticipating how the Internet could adversely affect electoral processes, I wasn't thinking about that at all. Actually, I was trying hard not to think about that. Back when I was writing my Ph.D. thesis in the 1980s, if I told someone at a cocktail party that I was interested in democracy and technology, they assumed that I must be studying voting machines. But that is only a tiny sliver of the infinite ways that technologies influence democracy. And besides, at that time there were no serious problems in tallying up votes. So I was interested in studying everything about how technologies influence democracy except voting processes.

BSN: Has your work helped to shape the discourse and shift it from understanding democracy to be narrowly about voting to covering other kinds of thicker more ascriptive forms of deliberation and participation?

Sclove: Academics and progressive activists have for a long time understood that there is more to democracy than voting. Many of them are interested in who gets to participate in democratic deliberation and in setting political agendas and more generally in the kinds of social conditions needed to support a healthy democracy. And I guess I've played a role in bringing that kind of thinking into the technological domain.

But I don't know that there's much of a sense in our general culture that democracy means anything beyond elections. Meanwhile, it's dismaying that in public discourse, the term *consumer* is often treated as being interchangeable with *citizen*. In reality, those are two very different ways of characterizing who a person is. As consumers, we're typically on the lookout for the best deal; as citizens, it's our task to play our part in discerning and advancing the common good.

I also believe that it's been pretty calamitous for the health of our society that just as the World Wide Web was coming into being, and before online commerce was strongly under way or social media and smartphones were invented, the U.S. Congress, under the leadership of House Speaker Newt Gingrich (Republican from Georgia), saw fit to abolish the U.S. Office of Technology Assessment (OTA). In the words of Howard Rheingold, closing the OTA was like smashing your car's headlights just before jamming down on the accelerator and racing off into the night.

A healthy technology assessment capability would have counterbalanced the toxic optimism emanating out from Silicon Valley—the enduring conceit that whatever makes me into a billionaire is, by a handy miracle,

guaranteed to be of incalculable benefit to society. I've written about how and why we could bring back an updated version of the OTA.

BSN: Unlike many others, you have thought about the dangers of technology for democracy, likening it to another technology: the automobile. Although the car enabled great freedom, it also created traffic jams, noise, pollution, and social dislocation. "Most real life experience on the interstate is banal and uneventful," you wrote, a harbinger of the bland commercialization of the Web. So I'm also curious—which technologies today [do] you see as being potentially the most dangerous or the most positive for democracy?

Sclove: About 25 years ago, Katie Hafner, a journalist for the *New York Times*, was interviewing me about something or other. I prefaced my answer by explaining that "the range of technologies that interest me is quite broad." And she said, "Oh yeah, me too, anything with a chip." Well, I pay attention to more than chip-enabled technologies. I'm interested in what anthropologists call *material culture*—basically, all physical artifacts and the practices and beliefs that accompany their creation and use. That means that I'm as interested in washing machines, automobiles, and screwdrivers as I am in computers and mobile telecommunications. I'd say that generally today, there's little awareness that any technologies except computers, the Internet, AI, biotech, and other cutting-edge high-tech matter. But what about all the other artifacts that surround us that are playing a role in shaping who we become, and what we can do, and how we interact?

One example: A little over 100 years ago, window screens were invented. In terms of social relations, what could be more innocuous, right? Well, before that, Americans sat out on their front porches or stoops to catch the breeze and they socialized while doing it. Window screens were a big improvement: Suddenly you could go inside to escape the mosquitoes and still feel the breeze. Yay! Except that now people no longer sat on their porches schmoozing with folks who walked by. Community life took a hit.

I'm not saying we should toss away our window screens. But when technologies play a role in dismantling community life, then if we are going to adopt them we have to have a way to come up with compensatory measures.

BSN: Well, let me just push you a little bit on the sort of specific technologies in mind here?

Sclove: Perhaps you're hoping I'll say something like "I'm worried that robots will destroy jobs on an unprecedented scale, but I'm excited about online deliberation and voting." But I'm not going there. Instead I think we're overdue for dialing our technologies back a few notches.

On that score, I've been influenced by *Technology and the Character of Contemporary Life*, a book published in 1984 by a philosopher of technology named Albert Borgmann. He draws a nice distinction between modern technical devices and what I call *integral practices*.

For instance, automobiles make it easy to get from here to there fast. But there's a paradox. The devices that disburden and empower us can also isolate us. Driving my car, I'm often alone. In contrast, in many other parts of the world, mass transit is better developed; traveling on trains in Europe and India, I've had many great conversations with people with vastly different life experiences. Bicycling to work on Copenhagen's incredible network of bikeways is healthy, great fun, and there's a kind of comradery.

For an instructive contrast with today's technical devices, Borgmann invites us to think about a relatively self-sufficient 18th-century American farm. There was a lot of very hard work. Think about a wood-fired hearth. In order to cook or heat water for a bath, a family had to cut trees down by hand, care for the oxen needed to haul the logs, chop and stack the wood, carry water to the house in a bucket, and so on. It was arduous.

Then again, pulling off all of these tasks meant that an extended family, including the kids, had to work together interdependently. The hearth also provided a natural focal point—a source of heat, light, and emotional warmth—that drew people together at night. And people had to work interdependently not only with one another but also with animals. Experientially, they were integrated into the natural world. Managing a hearth is an example of an integral practice. Yes, it is burdensome, but it is also integrating people with one another, animals, and the natural world.

Today, technical devices have eliminated almost all of the 18th century's physically onerous work. And in some ways that's clearly a blessing. But it comes at a social cost. Think about central heating in our homes. It's wonderfully comfortable and convenient. But now instead of gathering nightly around a hearth, family members often disperse into separate rooms.

Or think about how most of our jobs involve minimal physical exertion. To limit the harm that comes from being too sedentary, we use some of our earnings to spend hours a week at a health club where we cycle in place, run in place, and lift heavy objects so that we can put them down again. Is that obviously better than using our bodies to accomplish something meaningful in the world?

Most of today's technical devices depend on large-scale infrastructural systems that we know little about while we are using them—electricity grids, gas pipelines, highways, supertankers, global supply chains, and so on. You have clean water in your house because somebody somewhere is providing it through pipes, managing sewage systems, and all that stuff. You can cook with gas because energy companies are fracking in Pennsylvania. As a result, at least in physical terms our lives are vastly less burdensome, but we have no direct engagement with all the people working far away in the background who make this possible.

Technologies—the ones I call *integral practices*—that are not enabled by remote infrastructures tend to be physically more taxing. But they come with their own satisfactions, and they bring us together and integrate us into the natural world—an experience that can be healthy as well as soul nourishing.

So by "dialing back technologies," I don't mean living in a cave. I'm not romanticizing the past, and I'm not a Luddite (although if you know what the Luddites were really about, it's not entirely a bad thing). I mean shifting the balance between devices and integral practices a bit more toward the latter.

We already have a certain number of integral practices. Riding a bicycle, cooking with friends, knitting, and gardening can be integral practices. Even in New York, I've been to the farmers market down in Union Square, and that's at least putting you into face-to-face contact with somebody who's got their hands in the dirt. That has an element of a richer engagement than you're going to get if you order groceries online from Amazon. And relying somewhat more on integral practices doesn't mean turning off innovation. For instance, bicycles keep improving, and northern European bike paths are fantastically better designed than their relatively few American counterparts.

Once you understand the distinction between devices and integral practices, you can become more self-aware about some of the implications of our technical choices. And I'm not speaking only about personal choices. I'd say that as a society, we overshot on building highways rather than good mass transit systems; safe bike paths; and co-locating homes, workplaces, gathering places, and public parks. More recently, we've overshot on the Internet and mobile telecommunications. The Nielsen Company reports that in 2018 the average American adult spent more than 11 hours a day using electronic media. We've evolved a world in which it is increasingly difficult to live our lives without spending hours a day on our electronic devices. It's like building an interstate highway system with a million on-ramps and no off-ramps. Psychologists such as Jean Twenge and Sherry Turkle have begun to document the steep mental, emotional, and social price that we are paying for living this way. And that can translate into a political price.

BSN: Are you optimistic? There's a whole new generation of platforms that are expressly designed for citizen deliberation and engagement and again some are about engaging online and some are used to coordinate offline activity.

Sclove: I'm kind of agnostic about it—I mean skeptical, but open-minded enough to say "Show me." My general sense is that face-to-face deliberations have characteristics that can't be replicated online. Of course, I'm saying that as someone who came of age participating in a New England town meeting. But it can also be time consuming, difficult, and expensive for people to get together physically. So there are trade-offs. But I've always been optimistic about combining face-to-face processes with online processes, because I think that if you're grounded in a face-to-face process, then complementing that with online can be really effective.

I don't think there's any particular technical barrier to having a reasonably effective democracy. I think the barrier is imbalanced political power. There are powerful institutions and individuals who don't want there to be a robust and fair democracy. Technology alone is not going to make the power imbalance go away.

In the late '90s, there was a decisive turn where an Internet that had been entirely about facilitating research and civil-society endeavors became overwhelmingly dominated by the commercial pursuit of profit. I started using email in 1987, and until about '95, if anybody posted a commercial come-on of any kind to a listserv discussion, it was instantly labeled spam. Whoever sent it was "flamed"—harshly criticized and shunned. The idea that there would ever be a commercial Internet was largely inconceivable.

But it didn't have to go the way it did, and if we wanted to we could adopt policies that would reset that balance between commerce and civic life. I mean, do we really want social media designed and governed by powerful corporations whose bottom line mission in life is to make money, not advance the common good?

I remember writing 20 years ago that corporations already had a lot more data about us—and it was clear they were going to get more—than we had about them. There are limits to corporate transparency because they have trade secrets and employee nondisclosure agreements. That produces a tremendous power asymmetry in decisions about technology, because the really important decisions are often the design decisions that set the agenda of what you're later going to be able to deliberate about in public settings. Corporations know months or years ahead of everyone else what's coming down the pike.

Generally, I'm the kind of person who sees the social downside more than the upside. I turn on commercial television for 5 minutes if I'm in a hotel, and I see reality show participants screaming at each other, or no-nothing pundits pontificating, or somebody trying to sell me something that I don't need and that is unlikely to work as advertised. And I just look at my wife and she looks at me, and we say "We're going down as a civilization, we're going down." Or just think about climate change, refugee crises, today's worldwide stockpile of 13,000 nuclear warheads, or the rise of authoritarian nationalism. Today, the people taking us backwards aren't technology critics; it's the Donald Trumps and Mitch McConnells of the world doing as much as they can to dial back on democracy. How optimistic can you be?

But then there's 1989. That year, the Soviet Union—and with it the Cold War—collapsed relatively bloodlessly. Apartheid in South Africa ended relatively bloodlessly. Nobody saw that coming.

So that's just a way of saying that while I'm more pessimistic than optimistic, there's also this humility in which I realize that I've been wrong sometimes in the past. I hope that this is one of those times.

Received October 2019; accepted October 2019