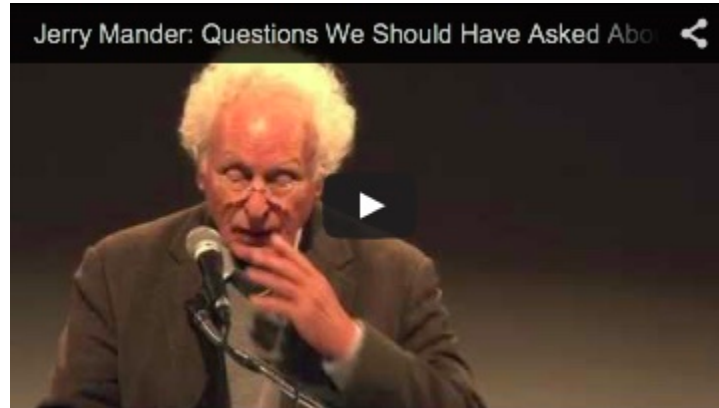


This document is online at: <http://ratical.org/ratville/AoS/JMander102514.html>

Editor's note: This hyperlinked transcript began with the copy at <http://www.resilience.org/print/2014-11-11/questions-we-should-have-asked-about-technology> and was made using the audio recording located inside: <http://ifg.org/v2/wp-content/uploads/2014/11/<IFG-JMander2014.mp3>> – to download the mp3 file to your machine.) This presentation of Jerry Mander was recorded at the [International Forum on Globalization's Techno-Utopianism & The Fate Of The Earth Teach-In](#) held in New York City on October 25-26, 2014.

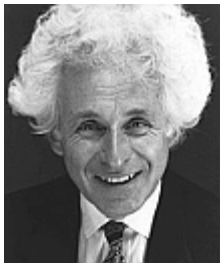


Jerry Mander: Questions We Should Have Asked About Technology

IFG Teach-In: Techno-Utopianism & The Fate of the Earth

Great Hall of the Cooper Union, New York City

October 25, 2014



Jerry Mander is the founder, former director, and presently distinguished fellow of the [International Forum on Globalization](#) (IFG), a San Francisco “think tank” focused since 1994 on exposing the negative impacts of economic globalization, and the need for economic transitions toward sustainable local economies. He was also, until recently, program director of the [Foundation for Deep Ecology](#). IFG has been widely credited as the principle organizer of [the immense protests against the World Trade Organization](#) (WTO) in [Seattle, 1999](#) [see also: [ratitor's journal](#)], and closing down the Doha round.

Mander was trained as an economist in the 1950s (Columbia University), but his early career was as president of a major commercial ad agency, [Freeman, Mander & Gossage](#), and then as founder of the country's first nonprofit ad agency in 1971, Public Media Center, which ran advertising and publicity campaigns for Sierra Club, Greenpeace, Friends of the Earth, and various indigenous and antiwar groups. These campaigns included the celebrated Sierra Club campaigns (with David Brower) that kept dams out of the Grand Canyon, established a Redwood National Park, and stopped production of the Supersonic Transport (SST).

Mander's most recent book (2012) is [The Capitalism Papers; Fatal Flaws of an Obsolete System](#) (local [PDF copy](#)). Prior books include international best-sellers [Four Arguments for the Elimination of Television](#) (1978), and [In the Absence of the Sacred, The Failure of Technology & the Survival of the Indian Nations](#) (1991, local [PDF copy](#), 6.8MB), both critiques of the growing negative power of technological systems. Other books include [The Case Against the Global Economy](#) (2001, with Edward Goldsmith), [Alternatives to Economic Globalization: A Better World is Possible](#) (2004, with John Cavanagh), [Paradigm Wars: Indigenous Peoples' Resistance to Globalization](#) (2006, with Victoria Tauli-Corpuz) and [The Superferry Chronicles: Hawaii's Uprising Against Militarism, Commercialism and the Desecration of the Earth](#) (2008, with Koohan Paik, see [2010 article description](#)).

Mander has been called “the patriarch of the anti-globalization movement” ([New York Times](#), 2007). He was cited among “The 100 Leading Visionaries of the 20th century” by [Resurgence Magazine](#).

Thank you so much Ralph for that embarrassing introduction. It's great to be here and I appreciate so much the help we receive from the [New York Open Center](#) as well as our other partners in this project. Thank you. The New York Open Center was absolutely magnificent from the beginning to the end on this project and we really appreciate it very much.

Also our co-partners: [International Center for Technology Assessment](#) (that's Andy Kimbrell's organization) has been magnificent and [The Schumacher Center for New Economics](#) has been very involved as well and we appreciate it. There is also a list of 20 other organizations who have signed on to this project and have helped in various ways and you'll see those in your program.

So Welcome. Thanks so much for coming to this Teach-In – maybe we should really call it a marathon rather than a teach-in. There's going to be 50 speakers, over 22 hours on two days in a steady stream, covering as many nuances and aspects of this question as we could manage to fit. And very few breaks you might have noticed in the schedule.

I do believe this meeting is extremely urgent given the state of the climate and of the skies, the state of the oceans which are rapidly acidifying, coral disappearing, sea life disappearing. And now the news of the imminent Sixth Great Extinction – the expected loss of thirty to fifty percent of all wildlife species on the Earth by mid-century.

This is not to mention disappearing fresh water, disappearing fertile lands, forests, food supply, and much more, we will be reporting. This is definitely one of the gravest moments in history right now. And we're here to explore the role of technology in making this happen, and our attitudes and acquiescences that have contributed to it.

Producing this event has actually not been easy. We live in a techno-dazzled world, and there is considerable resistance to the very idea of challenging technology. In fact, as we were planning this event, I got a call from a very well known reporter at the *New York Times*, a very friendly, supportive guy, who has written beautifully about our anti-globalization events in the past.

He said he found the event very exciting. But he also said, the program seemed too biased against technology. Weren't we going to invite the other side? I had to tell him, No, we weren't.

I mean as we proceed some of us may express appreciation for some obvious benefits. I mean, I wrote about this conference on a very old, decrepit, ten year old laptop. It still gets the job done. That's good!

But before that I wrote some books with an Underwood manual typewriter, including some of my better ones, I might add. It was slow, but slow was good. Ideas pop up instead of ads and email

blips and texts. And let's see, I flew here on an airplane. I took a taxi from the airport, and I'm talking into a microphone. There are lights in the room. Even I use some technology, okay? How could I not?

But that is not the point. The point is to get clear on the systemic totality of impacts from all of it before it's too late. The plusses and the minuses. Besides flying me to New York, what else have airplanes brought us? Besides taxis from the airport, what else have automobiles brought? Pavement covering the world, massive non-stop oil development, resource depletion, not to mention climate change.

And now we have computers. They tie the world together. They accelerate communication. They make corporate globalization more likely and more effective. And they accelerate its negative impacts. They also separate us from ourselves and reduce real communications to tweets. Another writer calls it "digital nowhere." And Sherry Turkle, of whom I'm a great fan – I tried to get her to come – calls it "alone together." But we'll get more into that as we go.

I argued with my friend from *The Times*. I pointed out the fact that nearly all information we get about technology, comes from the people who invent, promote and sell it. We don't really need to hear from them at this event. We hear from them every day on TV, and on the Internet. We've been hearing from them for years.

U.S. corporations now spend about 200 billion dollars a year in advertising, telling us what to think about things, and to say what's great about their products and services. I doubt many people in this room spent even a billion to counter these messages, or much more than the 50 dollars it probably cost you to get in here.

Monsanto corporation, for example, doesn't really need to be here to respond to our panel a little bit later on genetics (later today), to tell us what's so great about GMOs. Over the last three years, Monsanto has already spent 402 million dollars arguing that GMOs are wonderful. Dow Chemical and Union Carbide spent similar amounts. General Electric doesn't really need to tell us about clean, safe nuclear energy. We've heard that. And we don't need Eric Schmidt to tell us about computers, driverless cars, and Google glass. We get it.

We want to discuss the rest of the story; what else do they bring? How do they unify our minds within a certain worldview? How do they envelope us within their frameworks? What are their hidden harms to the planet? And, how do we deal with the staggering information imbalance that exists right now in our country on these questions?

So, okay, let's get started. I'm already running out of time I see. We have 50 speakers this

weekend and we're each of us, allowed only 15 to 20 minutes. You're going to hear gongs go off when we proceed after 15 minutes. And I've already used at least five.

Where to begin. Should we start with agriculture 5,000 years ago? How about monotheism? Or with the Enlightenment 300 years ago? Maybe we should. They're all relevant.

But I think I am going to start in 1936, the year of my birth, in the midst of the great depression, and just as World War II was getting underway. Hopefully it will lead us to a list of good questions we should have asked about technology, before this global mess ever got underway.

In 1936, there was still practically no commercial plane travel of the sort I just took. Jet airplanes were non-existent. There were no space satellites, no microwave ovens, no faxes or copying machines, no tape recorders. There were no stereo music systems in 1936. There was no television.

There was no *plastic* in 1936. No plastic. There was no air conditioning, nor were there freeways, shopping malls. There were no suburbs as we came to know them after Levittown was constructed a decade later.

There was no telephone touch dialing. No birth control pills. No Viagra. There were no credit cards. There were no pesticides or herbicides. No computers, no tweeting or texting. No nuclear weapons in space. That was 78 years ago. During my lifetime all that has changed.

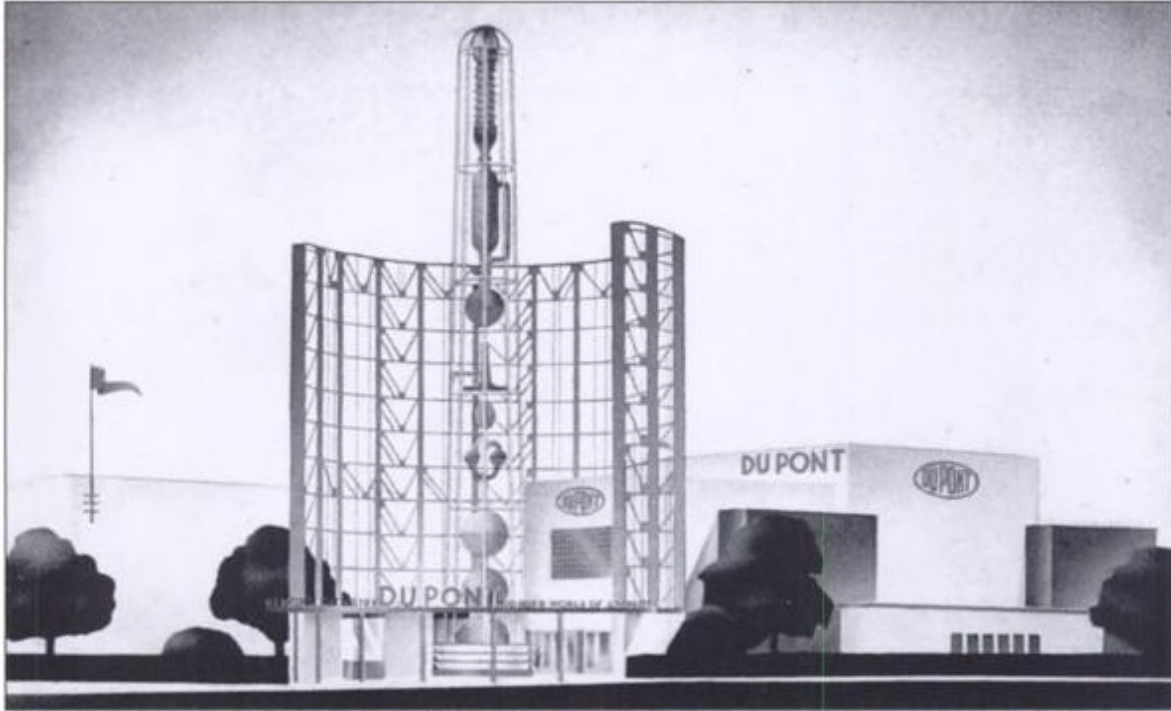
Four years later, in 1940, my family took me to the great New York World's Fair. More than any prior event, the New York World's Fair set out to create a techno-utopian, highly romantic vision that set the dominant expectations of the post-World War II 1940s and 1950s.

More than 45 million people visited the New York World's Fair during its two year tenure. That was over one-third of the country's population. It was a fabulous event. I remember it vividly.

More than any prior event it emblazoned in the public mind a new set of expectations for technology rising up over the horizon. The possibility that there could be negative effects on the planet, or on human society and welfare from any of the above, was never ever mentioned. And we didn't know to ask.

The exhibits were produced by the biggest corporations of the day. I saw seven-tiered technocities, monorails transporting people at 300 miles per hour; drone-like things whirling between 500-story buildings; humans flying with little rocket packs on their backs while robots, at street level, walked the dogs.

A young Ronald Reagan was speaking out as the voice of General Electric. And the Dupont exhibit offered their slogan, “Better Things For Better Living—Through Chemistry.”



THE DU PONT EXHIBIT. Advertising “Better Things for Better Living—Through Chemistry,” the Du Pont building featured rayon yarn, cellophane, and futuristic stockings made from nylon, “the spectacular new chemical product made basically from coal, air and water.” The building was designed by Walter Dorwin Teague, R. J. Harper, and A. M. Erickson. (Author’s collection).

The cities of twenty years hence – that would have been 1960 – had eliminated all slums, were filled with parks featuring controlled climate – always a good day. Controlled climate.

There were happy Americans living in domed environments on other planets. Another exhibit showed how, with modern air conditioning, we’d soon be living underground.

Another exhibit predicted the conquering of all disease, the extension of our lifespan to hundreds of years, the elimination of insects by pesticides, and the total end of poverty.

45 million people experienced what was essentially an advertisement for a future techno-paradise that we would all love. Wouldn’t everyone want a fully automated household, and voice-activated shopping? Doesn’t everyone love cute little robots? New technology would bring happiness, prosperity, peace, the American Dream, never before so passionately sold.

As a child of those times I found the images thrilling. They became a mental blueprint that I carried into the future, in common with most of my generation.

That the vision was merely a corporate representation of the future never occurred to people. That there might be downside problems for some of these visions was never explored. That it could have deleterious effects on nature, never mentioned.

It was a one-sided story, meant to promote corporate profits and ferocious economic growth. Where was the other side?

Another key moment came as World War II was ending. The U.S. economy had saved itself from the great depression by massive wartime buildup, military production, and employment. But with the war nearly over, and the troops coming home, and the factories still building tanks and jeeps and bombs – what next?

In the 1950s came a new focus on consumer products, much of it rooted in war-related technical advances: cheaper, faster air travel, chemicals, pharmaceuticals, and pesticides for home use, washing machines, refrigerators, hi-fis, fancy cars, as well as radars and sonars.

And two other dramatic new technologies suddenly appeared: one was computers, though still at that point for military and industrial use, for the most part. But maybe most important of all, television.

TV had actually been invented decades before, but suddenly had a higher purpose. TV could merge with advertising to lead the transformation of American society into a consumerist society. Television became the greatest delivery system for advertising ever invented. And it still is.

Between 1945 and 2013, U.S. corporations spent 500 trillion dollars in advertising, by far most of it in television, all celebrating the same world view via by promoting different products.

Over the last fifty years, including right now, the average American watched television for four and a half hours per day. Those are the statistics for right now, too. That means *half* the population watches *more* than that. Computer use has *not* replaced television watching. It has massively *added* to our “screen time.” A problem in itself – disembodiment, “alone together.”

The average person receives about 30,000 commercials per year projected into our brains. So technology-driven consumer society was born, featuring mass production, non-stop economic growth, planned obsolescence, and techno-utopianism. We began to equate technological evolution with evolution itself. The homilies became “Technology brings progress. Progress is good. There’s no turning back.”

The environment still had no visible place in the story. At least not until the 1960s, when [Rachel](#)

Carson wrote [her great book about pesticides](#), and David Brower came along to rock the boat with the Sierra Club. But the downside of the story rarely got out very far. The opposition movements didn't have the money to tell the opposition story.

There was still no legal process of formal disclosure of dangers of these lifestyles; no fairness doctrine, except very briefly; no assumption of guilty until proven innocent; no precautionary principle; no downside information at all, except for the occasional nuclear catastrophe. Mostly, we stayed on a national joy-ride. You get to go to Walmart or Home Depot and say yes or no. That's the democratic process as far as technology is concerned.

Meanwhile, the process goes on. Corporations are proceeding to convert military drones to corporate and consumer drones. Later today we'll learn more of the big battles against the redesign of molecular structures of the planet, nanotechnology. We will hear more about geo-engineering emerging to so-called block climate change creating *new skies* to offset climate change. Wouldn't we rather keep the older, bluer skies? I would.

And then there is the genetic reinvention of humans and other species, and the invention of small nuclear bombs as well. That's all before we get to the total envelopment and immersion of our lives by digital and cyber tech.

Is this what we want? Did anyone ever ask us? Can we please have a vote on this?

Before I close, I think I need to say a bit more about the role of advertising. It's a subject we don't usually discuss at events like this. But I think we should. I'll be quick about it.

I am [a former advertising executive](#). So let me tell you that advertising imagery, which we all tend to think of as dumb and stupid, [is very powerful and persuasive](#), especially in that kind of volume that I've mentioned.

We don't think about it much, but advertising is a process of [projecting very powerful imagery over and over directly into your brain](#). Most people scoff at the notion that such images have power. We like to think our intelligence protects us. But advertising has nothing to do with intelligence. It is simpler than that. [It is image implantation](#).

Look, if I say Energizer Bunny, or Taco Bell Chihuahua, or, how about Geico Gecko? Did a picture of those little animals appear in your head? Did you know you were carrying them around? Can you *unsee* those images?

My late partner in the advertising business, Howard Gossage, once said, "There's a dirty little

secret about advertising that nobody understands. That once the images are in your head, they *never* go away.” They are yours forever. The image lives in your head and in your brain, **and really becomes you**. Especially if you don’t make efforts to actively study what’s being said and figure out what you think about it.

If it’s coming at you at the rate of 200 billion dollars per year, with the average person watching 4-and-a-half hours of television per day, well, it explains a lot. The information imbalance in our society is vast and tragic. 200 billion dollars a year, by the way, the average viewer sees 30,000 commercials every year.

How can we protect ourselves from this?

So, in conclusion, I will read you a short summary list: eight recommended attitudes about technology that I propose we should agitate for, get them codified, maybe discuss as we go over the weekend.

- One – **The precautionary principle**. Since nearly all of what we are told about technology comes from its proponents, **be deeply skeptical of all the claims**. What’s been left out of the story? We can no longer assume that new technology is innocent until proven guilty. The opposite should be the case – guilty until proven innocent. That’s the precautionary principle. It must be codified.
- Two – **Never judge technology by the way it benefits you personally**. Always seek a holistic view of its impacts on nature, on resources, on people, on the future. The operative question is not whether it benefits *you*, but who benefits most and to what ends, and with what consequences?
- Three – **Get rid of the idea that all technology is ‘neutral,’ that it can be used for good or bad**. Every technology has inherent, identifiable social, political, cultural, and environmental consequences. Langdon Winner calls it *Autonomous Technology*. If society accepts automobiles, you get the roads covering the land, the oil development, and so on. There is no way around that. **The idea that technology is neutral is itself not neutral**. It ignores intrinsic dangers and puts blame solely on users.
- Four – Remember that **individual technologies are only one piece of a larger web of integrated technologies, megatechnology**. Every technology is built upon the scaffolding of prior tech invention. Your cell phone may seem harmless, but for that little

bit of radiation, but the lithium in the batteries resulted from years of horrible mining practices on indigenous lands in Africa, still going on, [as Anuradha will report](#).

- Five – **Make distinction between technologies that primarily serve the small community**, let's say local solar and local small scale farming, **and those that inherently operate on a large scale**, like nuclear fossil fuels. Always favor the former.
- Six – **Do not accept the homily that once the genie is out of the bottle, you can't put it back**. All it takes is public discussion and empowerment. Let's start that today.
- Seven – **In thinking about technology, always emphasize the negative**, as I'm doing, because that's what's usually left out of the discussion. This brings balance. Negativity is positive.
- Finally, my last point. **We need to ask some direct questions about the continued viability of any economic system, that has an obvious, *intrinsic* need to drive the kind of destructive behavior we are here to discuss; use of technology to drive constant growth on a finite planet, motivated by self-interest and profit, and amorality in the face of obvious devastation**. Such a system may have been viable at a much earlier time on this planet when resources and nature were abundant. But it's now clearly obsolete.

It is time to start experiencing and outlining the ingredients of something new and relevant that starts with and is bound by respect for nature, its limits, and its wildlife, as well as people. We will hopefully have a good discussion about all this over the weekend.

And I've got to stop there. So, thanks so much for your attention.