

# Technology Review

EDITED AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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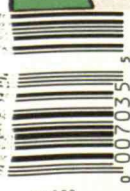
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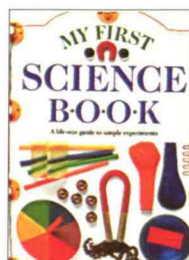
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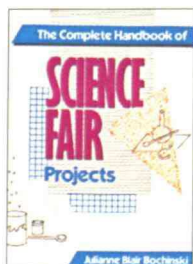


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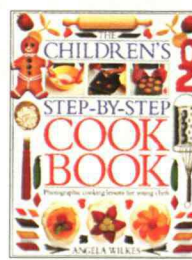


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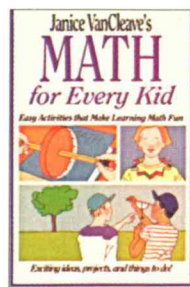


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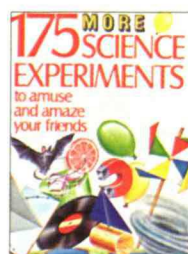


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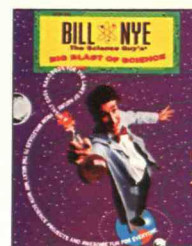
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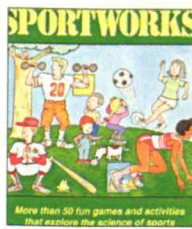


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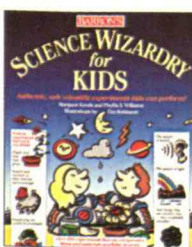


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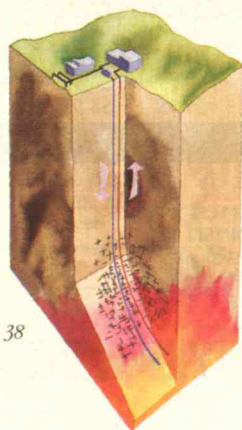
The creator of the comic strip "Dilbert" has made a career out of lampooning managers, marketers, and especially engineers stretched to their levels of incompetence. In an interview, the hero of cubicle workers everywhere shares his perceptions of a corporate culture that could use a dose of common sense, greater respect for people, and a good laugh.



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# First Line

## Beyond Horsefeathers

**O**KAY, okay. I'll admit it. We at *Technology Review*, as some readers have long suspected, are indeed Marxist-Lennonists.

In the sense first expressed, I believe, by Abbie Hoffman during the 1960s, we are Marxist not in the tradition of Karl but of Groucho, and Lennonist not after Vladimir but John. In the spirit of Groucho Marx and John Lennon, we try to present you not with orthodoxy and predictable discourse but with new ideas that are stimulating, skeptical of conventional wisdom, and filled with intellectual surprises.

We do not aim to convert you to any particular cause—our authors' politics in fact span a very wide range—but to sharpen your thinking wherever your own politics, opinions, and sympathies may lie. After all, if society is to develop and apply new technology, as well as adapt old technology, in the most creative and enlightened ways, we have to examine diverse and sometimes audacious options—including a few with which we may heartily disagree.

I am moved to say all this because of the many letters we received, most of them negative, in response to Gar Alperovitz's article, "Distributing Our Technological Inheritance," in the October issue. In a bygone TV commercial, the great mother of us all created a hell of a storm when confronted with a proposed substitute for good old-fashioned butter. "It's not *nice* to fool Mother Nature," she explained. Similarly, in the case of the Alperovitz article, it's obviously not nice to fool with the American Dream—or at least to be perceived as doing so. In this case, the reader stimulation we sought was actually irritating for most respondents, the intellectual surprises downright unpleasant.

Alperovitz questioned the traditional American belief that any person, if he or she is alert, astute, and persistent enough, should be allowed to grow rich virtually without bound. Observing that we all stand atop a Gibraltar of knowledge, accumulated over generations and con-

tributed to by numerous people, and that this common inheritance provides most of the basis of present-day advances, he argued that the resulting wealth should be more broadly shared.

Letter writers were "aghast" at this "profound foolishness" and "crackpot social theory," and many deemed Alperovitz to be "waving the red flag of socialism." "Calling for the end of property rights," he would purportedly "strip all individuals of the products of their work and deliver it to the mob," "have the

*Unconventional  
ideas are often the fuel  
of progress.*

government firehose it to nonproductive purposes," and "terrorize freedom-loving people everywhere." Did you fail to notice, asked one reader, "that a similar idea just killed tens and impoverished hundreds of millions of people in its 70-year reign in the Soviet Union?"

The author in fact neither said nor implied any of the above. Using the renowned Bill Gates, America's wealthiest individual (with a net worth, recently estimated by *Forbes*, of \$9.35 billion), as an example, Alperovitz questioned whether the entrepreneur "should personally benefit to *such a degree*" (emphasis mine). He never said that Gates and others of his ilk shouldn't be rewarded for their accomplishments or shouldn't be rich.

Despite the irate reaction, Alperovitz's basic notions do not seem so radical to mainstream economists with whom I spoke. "It is standard," said Paul Krugman of Stanford University, "to try to regain for society [a good fraction of] some big private gain." Such an assumption "is built into the tax system, which is strongly progressive." And Lester Lave of Carnegie-Mellon University noted that society constantly wrestles with "pragmatic choices" on intellectual-property rights in its attempt to bal-

ance short-run gains to the innovator against long-run gains to the public. "Ask your readers," he said, "if they think we should make patents both broad and for eternity. Would they like to still be paying royalties to the heirs of James Watt for the steam engine?"

Some might well argue that capital should be exclusively controlled by a handful of elite private investors. But that's one kind of system, and an undesirable extreme, with the other being Soviet-style socialism. Surely there are numerous possibilities in between, with some potentially a lot more effective than any we've yet known. Just as technology innovators continually try to modify their designs to improve efficiency, reliability, and satisfaction for more and more users, why shouldn't creative people think about, and perhaps safely experiment with, economic ideas that might build on the present system to produce big improvements and greater opportunities for more potential entrepreneurs?

In any case, the Alperovitz article was not a call to action but a "think piece," aiming to stir readers' imaginations. In that goal it clearly succeeded, maybe too well. But we at *Technology Review* cannot dismiss the responses as merely visceral; they included plenty of legitimate criticism. And we must take both types of reaction seriously. Editors are supposed to stay slightly ahead of their readers, lest they bore them with what they already know; but editors must also avoid getting too far ahead of—or simply out of tune with—readers, which can disorient, annoy, and lose them.

Even Groucho Marx and John Lennon occasionally failed to please their audiences. In show business parlance, they could "lay an egg"—they sometimes "bombed"—for the simple reason that they regularly took risks and tried to push the limits of their craft and material. That chutzpah was what, most of the time, deeply satisfied the audience and led to a devoted following. At *Technology Review*, we try to innovate—and learn—in that spirit. ■

—STEVEN J. MARCUS



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# Letters

## JUST REWARDS

In "Distributing Our Technological Inheritance" (*TR* October 1994), Gar Alperovitz (correctly) lauds Albert Einstein for recognizing the value of his predecessors' work. But he then marches straight-away into a fog by concluding that "in fact, very little of what [Einstein] produce[d] can be said to derive from [his] work, risk, and imagination." Though Alperovitz states that our accomplishments stand "atop a Gibraltar of technological inheritance," he either intentionally omits or fails to perceive its logical twin: "Michael Jordon's athletic accomplishments stand atop a Gibraltar of genetic inheritance." Inequality is the inevitable result of humanity's genetic lottery.

The equal distribution of capital that Alperovitz clearly advocates is, fortunately, unachievable. Equal opportunity will necessarily yield unequal results since we are endowed with diverse abilities, drives, characters, and predilections. To seek equal results through force is antithetical to our country's founders' vision of life, liberty, and the pursuit of happiness.

MARK D. HEAD  
Dallas, Tex.

In my experience in a career in R&D, product development, marketing, and management, technological edge is seldom the determining factor in the success of a product or a company. The reward—market share or profit—goes to the organization that can put everything from technology and manufacturing to sales and marketing together. If someone can understand and implement all the essential elements, why shouldn't he or she reap and keep the rewards?

Gar Alperovitz's plan to raise inheritance taxes will severely diminish incentive to create anything. Even today's socialist societies are dispensing with high taxes, rules, and regulations in an effort to become more competitive.

WILLIAM TARASEN  
Santa Fe Springs, Calif.

"Distributing our Technological Inheritance" strives to portray itself as a proposal outside of the realms of traditional socialism and traditional capitalism. I heartily agree that it falls outside the latter, but I am having greater difficulty seeing how it falls outside the definition of traditional socialism. Alperovitz simply proposes another formula for redistributing wealth to those who have not earned it.

Certainly the exploration of our debt to our technological inheritance is a laudable avenue of thought that ought to be plumbed by those gifted enough to effectively build on that inheritance. Indeed, I will grant that in cases where individual wealth is directly built on government-funded innovations, a scheme whereby the "government of the people" can receive royalties to reinvest in research is reasonable. In a broader sense, people who build on the hazily definable mountain of pebbles ought themselves to make contributions to the community and to further technological advance, but ought not be compelled to by government or any other power.

BOB MASON  
Santa Clara, Calif.

I have some disturbing news for Gar Alperovitz. Communism's dead.

ALAN KRIGMAN  
Philadelphia, Pa.

I was aghast to read "Distributing Our Technological Inheritance." Our inheritance tax is already quite high. When Bill Gates goes to his reward in the great beyond, and presuming he doesn't turn his fortune over to a nonprofit organization such as MIT, the government will take 55 percent, or \$4.4 billion, of his \$8 billion. Not a bad haul. His heirs won't be poor, but it would be difficult to say that a significant redistribution hadn't taken place. Further, to conclude that funds from those estates would be put to better use if the government appropriated them is not readily apparent to most of us who have been observing the government's ability to spend more than it takes in.

LARRY R. WAGNER  
Fort Bragg, Calif.



As both business executive and investor, Bill Gates has demonstrated extraordinary skill in selecting, developing, and nurturing products, services, markets, and people. In this endeavor, he has created 15,000-plus direct jobs (for Microsoft employees) and at least that many indirect jobs. Because Microsoft is a multinational enterprise, nearly everyone on earth benefits from Bill Gates's entrepreneurial skills—in particular, Microsoft's stockholders, employees, suppliers, and customers. Now, *that* is wealth distribution on a massive scale. Incidentally, Gates has publicly pledged to give away most of his personal wealth and bequeath "only" a few million to any offspring who survive him.

History teaches that it is government-directed wealth redistribution that is inherently "irrational and unjust." Communal ownership of capital has a spotty record, too. Historically, collectivism yields corruption and tyranny while free markets yield the greatest prosperity for the greatest number.

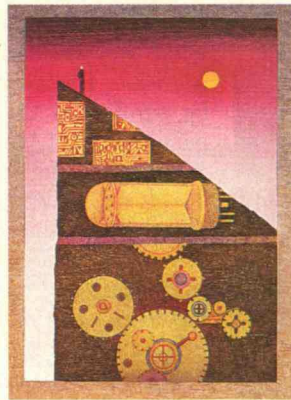
DAVE NELSON  
Corvallis, Ore.

Gar Alperovitz's theme is that "all citizens should share in the benefits of a common and prodigious legacy," which he identifies as the aggregate collection of knowledge. But we already share this legacy. Bill Gates's fortune has not been obtained at the expense of others, as Alperovitz implies. Rather, Gates has added greatly to our general wealth with a clever marketing plan that effectively created a standard operating system for personal computers. This standard has spawned inexpensive software that has profoundly eased the burdens of many professions, including my own (law).

MARK RILLINSON  
Leesburg, Va.

A resounding cheer for Gar Alperovitz's clear-eyed discussion of why we are morally obligated to distribute our technological inheritance and how that might happen. His ideas will infuriate people who insist that all good individ-

ual outcomes are achieved through hard work, wise investment, and careful household management, but his figures and logic are hard to refute. In a world where "smart machines" and globalization are steadily undermining developed nations' traditional dependence on large numbers of human workers, it is of the utmost importance to make clear, as Alperovitz does, that it is social investment (use of taxpayer money) in health, education, law and order, R&D, and infrastructure that has largely made possible the private accumulation of wealth.



We must find ways to recover and redistribute the vast wealth created by the commercialization of information technologies now and biotechnologies in the future. This is a challenge, not an impossibility, and failure to achieve the goal will leave us open to the sort of political strife that no number of prisons can contain. Alperovitz might have noted that we have only limited lead time to create more equitable societies, in the name of enlightened self-interest as well as of justice, before we face the stark possibility of a bladerunner world.

SALLY LERNER  
University of Waterloo  
Department of Environment  
and Resource Studies  
Ontario, Canada

I applaud *Technology Review* for raising the important question of what economic alternatives may lie beyond corporate capitalism and state socialism. The emotionally charged competition

between these two dominant systems has tended to obscure their common foundations in nineteenth-century industrialism and its legacy of environmental degradation and social ills that now threatens the planet. Alperovitz's criticism of the "irrationality of the present economic system" may easily stir conditioned reflexes in protection of a system no longer threatened—except by itself. As Alperovitz points out, we are finally beginning to hear of some alternatives to taxing and slashing in solving problems in education, health care, crime, and homelessness. The experiments in employee and community ownership and public investment he refers to deserve much closer examination.

As we move deeper into the postindustrial age of globalized transfers of money, patents on genetic manipulations, automated factories, ecological devastation and depletion of resources, and a world economy dominated by transnational corporations with budgets larger than those of many nations, perhaps it is time to rethink our definitions of wealth, property, work, and inheritance. Instead of holding old concepts sacred, it behooves us to start determining what really *is* sacred.

JEFFREY BARBER  
Integrative Strategies Forum  
Washington, D.C.

It seems "irrational and unjust," Alperovitz says, that our society should permit a class of privileged citizens to grow whose advantages derive solely from the luck of the draw at birth and not from their own talent and hard work. Yes, indeed. Bravo! It is precisely the energy of individual entrepreneurs, creators, and innovators, motivated often by the hope of achieving great honor or wealth, that drives this democratic free market he wishes to tear down. Strange that he should twist the value of individual initiative into a call for leveling and state-imposed mediocrity.

Bill Gates owes none of us a red cent. Some in the business have questioned his style and the ethics of some of his dealings. These are separate issues that



can be fairly debated. None, however, doubt the drive and determination and brilliance of the man who has helped create an industry that employs thousands and provides vast benefits to the whole of society. So he's garnered \$8 billion and counting. Fine by me. More power to him. We should all be so lucky.

William Cooper  
Chicago, Ill.

### THE PROPER STUDY OF VIOLENCE

Much of Jane Ellen Stevens's article "Treating Violence as an Epidemic" (*TR August/September 1994*) is sheer nonsense and conjecture unhindered by fact.

Just because one uses medical terms like "epidemic" and "prevention," it does not follow that the nature of and reasons for violence have somehow miraculously changed. The article fails to note a single instance where this new approach has materially reduced violent acts.

Also, the article claims that from 1975 to 1989, when prison terms tripled, crime rates increased. But I have seen other statistics that demonstrate the opposite: as jail time decreased for crimes, many repeat offenders returned to the streets, where they committed violent crimes again.

It is time we faced the fact that the breakdown of social structures is the major contributor to violence. I would prefer a community that has high moral standards, strict laws, and swift punishment for crimes over one that promotes understanding and counseling.

RALPH T. SOULE  
Bremerton, Wash.

How odd that automobile accidents don't qualify for the new approach to studying violence. But then, hardly anything does—evictions that make families homeless, plant closings accompanied by the end of pension plans, and the release of toxic substances on an unsuspecting public are all outside the new purview.

Violence, as defined by government and independent "experts," occurs mainly among the poor and results from drugs, poor upbringing, or some mixture of the two. The "violence as an epidemic" concept is determined to ignore about 99 percent of the violence and violent institutions in the world today.

TERRY SCOTT  
Seattle, Wash.

Because alcohol is closely linked with violent behavior, banning alcohol advertising on radio and television would seem reasonable. After all, the beliefs of children are shaped to no small extent by

what they see daily on television. The law might be similar to the one passed in 1971 banning cigarette advertising in the name of reducing tobacco-related morbidity and mortality. However, after spending years trying to convince our legislators to do so, I can only report with sadness that our Washington lawmakers seem to have no desire to place the health

and lives of our youth above the private interests of this nation's alcohol and broadcasting industries.

CYRUS J. STOW  
Conyers, Ga.

Stevens seems to studiously avoid the issue of gender. Yet gender can be read in the author's mentions of violent crime statistics: "rape per 100,000 women" and "female abuse by male partners" (which is so common that it is listed per 1,000 couples as opposed to the per 100,000 scale for other crimes). Also, the violent Dutch family members Stevens cites appeared to be all males. In spite of this, her only reference to sexism is in a laundry list of possible causes of violence.

While *some* women do perpetrate violence, and *some* men do not, we are largely talking about a male problem. And in approaching the problem socially, politically, and biologically, an

analysis of gender (including feminism, patriarchy, and male culture) is essential.

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To blame crimes of violence on the ownership of arms by law-abiding citizens is like blaming intravenous drug abuse on the possession of hypodermic syringes by insulin-dependent diabetics. If, as the article states, the Center for Disease Control and Prevention has "almost no information about what works and what doesn't work" in preventing violence, how can we be so sure that gun control is the answer? It is easy to demonize an inanimate object when we need to undertake the real and unpleasant measures necessary to turn back the rising tide of violence.

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In pointing out that some communities are less violent than others, Jane Ellen Stevens fails to draw the conclusion that individual regard, personal respect, self-esteem, a strong code of personal responsibility and community service, and other positive values are central factors in preventing violence. Violence prevention has also been linked to the institutions that help define our communities such as our schools, universities, hospitals, local businesses, churches, and government. If these entities teach or exemplify callousness, indifference, disregard, and uncaring attitudes, then these negative values are transmitted to the community. This is why *Healthy People 2000*, which sets national goals for health promotion activities and disease prevention to be met by the turn of the century, treats violence as a public-health issue.

Violence-prevention strategies are cheaper and more effective in the long run than incarceration that costs up to \$100,000 per inmate and entails terrible loss of life.

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