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## Technology Can Be Damaging

Chellis Glendinning

Chellis Glendinning is a New Mexico psychologist and author of *When Technology Wounds: The Human Consequences of Progress*. In the following viewpoint, Glendinning describes how the Luddites of nineteenth-century England opposed the introduction of new technologies by destroying machinery. The Luddites, Glendinning notes, believed these technologies threatened the bonds of family and community. Aligning herself with an emerging neo-Luddite movement instigated by scientists, thinkers, and activists, she warns that technological progress is "out of control and desecrating the fragile fabric of life on Earth." Glendinning argues that dangerous technologies—nuclear, chemical, television, and others—should be dismantled and replaced with technologies that have a benign effect on the earth.

As you read, consider the following questions:

1. According to Glendinning, what does technology consist of?
2. What do technologies tend to be structured for, in Glendinning's opinion?
3. Which technologies does the author believe are best for "life on Earth"?

Chellis Glendinning, "Notes Toward a Neo-Luddite Manifesto," *Utne Reader*, March/April 1990. Reprinted with permission.

Most students of European history dismiss the Luddites of 19th century England as "reckless machine-smashers" and "vandals" worthy of mention only for their daring tactics. Probing beyond this interpretation, though, we find a complex, thoughtful, and little-understood social movement whose roots lay in a clash between two worldviews.

The worldview that 19th century Luddites challenged was that of *laissez-faire* capitalism with its increasing amalgamation of power, resources, and wealth, rationalized by its emphasis on "progress."

The worldview they supported was an older, more decentralized one espousing the interconnectedness of work, community, and family through craft guilds, village networks, and townships. They saw the new machines that owners introduced into their workplaces—the gig mills and shearing frames—as threats not only to their jobs, but to the quality of their lives and the structure of the communities they loved. In the end, destroying these machines was a last-ditch effort by a desperate people whose world lay on the verge of destruction.

### Barraged by Technologies

The current controversy over technology is reminiscent of that of the Luddite period. We too are being barraged by a new generation of technologies—two-way television, fiber optics, biotechnology, superconductivity, fusion energy, space weapons, supercomputers. We too are witnessing protest against the onslaught. A group of [University of California at] Berkeley students gathered in Sproul Plaza to kick and smash television sets as an act of "therapy for the victims of technology." A Los Angeles businesswoman hiked onto Vandenberg Air Force Base and beat a weapons-related computer with a crowbar, bolt cutters, hammer, and cordless drill. Villagers in India resist the bulldozers cutting down their forests by wrapping their bodies around tree trunks. People living near the Narita airport in Japan sit on the tarmac to prevent airplanes from taking off and landing. West Germans climb up the smokestacks of factories to protest emissions that are causing acid rain, which is killing the Black Forest.

### Desperate Neo-Luddites

Such acts echo the concerns and commitment of the 19th century Luddites. Neo-Luddites are 20th century citizens—activists, workers, neighbors, social critics, and scholars—who question the predominant modern worldview, which preaches that unbridled technology represents progress. Neo-Luddites have the courage to gaze at the full catastrophe of our century: The technologies created and disseminated by modern Western societies

are out of control and desecrating the fragile fabric of life on Earth. Like the early Luddites, we too are a desperate people seeking to protect the livelihoods, communities, and families we love, which lie on the verge of destruction.

### What Is Technology?

Just as recent social movements have challenged the idea that current models of gender roles, economic organizations, and family structures are necessarily "normal" or "natural," so the Neo-Luddite movement has come to acknowledge that technological progress and the kinds of technologies produced in our society are not simply "the way things are."

As philosopher Lewis Mumford pointed out, technology consists of more than machines. It includes the techniques of operation and the social organizations that make a particular machine workable. In essence, a technology reflects a worldview. Which particular forms of technology—machines, techniques, and social organizations—are spawned by a particular worldview depend on its perception of life, death, human potential, and the relationship of humans to one another and to nature.

In contrast to the worldviews of a majority of cultures around the world (especially those of indigenous people), the view that lies at the foundation of modern technological society encourages a mechanistic approach to life: to rational thinking, efficiency, utilitarianism, scientific detachment, and the belief that the human place in nature is one of ownership and supremacy. The kinds of technologies that result include nuclear power plants, laser beams, and satellites. This worldview has created and promoted the military-industrial-scientific-media complex, multinational corporations, and urban sprawl.

Stopping the destruction brought by such technologies requires not just regulating or eliminating individual items like pesticides or nuclear weapons. It requires new ways of thinking about humanity and new ways of relating to life. It requires the creation of a new worldview.

### Principles of Neo-Luddism

1. *Neo-Luddites are not anti-technology.* Technology is intrinsic to human creativity and culture. What we oppose are the *kinds* of technologies that are, at root, destructive of human lives and communities. We also reject technologies that emanate from a worldview that sees rationality as the key to human potential, material acquisition as the key to human fulfillment, and technological development as the key to social progress.

2. *All technologies are political.* As social critic Jerry Mander writes in *Four Arguments for the Elimination of Television*, technologies are not neutral tools that can be used for good or evil

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### Technology Has Failed Humanity

They hear the clank-and-whir of a garage-door opener and envision the obsolescence of skin-to-skin sex.

They see electronic books and imagine a planet encased in concrete, ruled by a handful of technological tyrants at computer-linked mega-corporations.

It's a vision of societal metamorphosis that has science fiction-fueled cyberpunks raising glasses of synthetic brain booster to toast the future: "Zoom!"

But a growing and increasingly vociferous group of skeptics say someone should have long ago hollered, "Stop!"

"Take a hard look at what technology has promised for the past 100 years—peace, universal health, economic equality, leisure, joy," says Jerry Mander, dean of what might be termed the neo-Luddite movement.

"Has it lived up to that?"

Most political, economic and historical observers will answer, "You bet"—at least relative to the way things used to be.

But neo-Luddites respond that society's perspective has been warped by surrounding technologies. They recite a litany of evidence—ozone holes, toxic pollution, disintegration of Eastern [European] nuclear reactors—to suggest that technological dependence may cause humanity to go the way of eight-track tapes.

Now, the skeptics say, another generation of gadgetry and tinkering—from video-telephones to computerized smart bombs—has pushed society to a watershed. We'd better look hard, they say, before we take this flying leap into the new "mega-technologies" that will fundamentally alter human existence.

"We have a hard time imagining life before television or cars. We do not remember a United States of mainly forests and quiet," says Mander, author of the book *In the Absence of the Sacred: The Failure of Technology and Survival of the Indian Nations*.

"As we move into these larger and larger technological forms, we're dealing with the complete takeover of nature . . . and in the end, probably the destruction of humanity as well."

Bob Sipchen, *Los Angeles Times*, February 25, 1992.

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depending on who uses them. They are entities that have been consciously structured to reflect and serve specific powerful interests in specific historical situations. The technologies created by mass technological society are those that serve the perpetuation of mass technological society. They tend to be structured

for short-term efficiency, ease of production, distribution, marketing, and profit potential—or for war-making. As a result, they tend to create rigid social systems and institutions that people do not understand and cannot change or control.

As Mander points out, television does not just bring entertainment and information to households across the globe. It offers corporations a surefire method of expanding their markets and controlling social and political thought. (It also breaks down family communications and narrows people's experience of life by mediating reality and lowering their span of attention.)

Similarly, the Dalkon Shield intrauterine device did not just make birth control easier for women. It created tremendous profits for corporate entrepreneurs at a time when the largest generation ever born in the United States was coming of age and oral contraceptives were in disfavor. (It also damaged hundreds of thousands of women by causing septic abortions, pelvic inflammatory disease, torn uteruses, sterility, and death.)

### Critiquing Technology

3. *The personal view of technology is dangerously limited.* The often-heard message "but I couldn't live without my word processor" denies the wider consequences of widespread use of computers (toxic contamination of workers in electronic plants and the solidifying of corporate power through exclusive access to new information in data bases).

As Mander points out, producers and disseminators of technologies tend to introduce their creations in upbeat, utopian terms. Pesticides will increase yields to feed a hungry planet! Nuclear energy will be "too cheap to meter." The pill will liberate women! Learning to critique technology demands fully examining its sociological context, economic ramifications, and political meanings. It involves asking not just what is gained—but what is lost, and by whom. It involves looking at the introduction of technologies from the perspective not only of human use, but of their impact on other living beings, natural systems, and the environment.

### Program for the Future

1. As a move toward dealing with the consequences of modern technologies and preventing further destruction of life, we favor the dismantling of the following destructive technologies:

- nuclear technologies—which cause disease and death at every stage of the fuel cycle;
- chemical technologies—which re-pattern natural processes through the creation of synthetic, often poisonous chemicals and leave behind toxic and undisposable wastes;
- genetic engineering technologies—which create dangerous

mutagens that when released into the biosphere threaten us with unprecedented risks;

- television—which functions as a centralized mind-controlling force, disrupts community life, and poisons the environment;
- electromagnetic technologies—whose radiation alters the natural electrical dynamic of living beings, causing stress and disease; and
- computer technologies—which cause disease and death in their manufacture and use, enhance centralized political power, and remove people from direct experience of life.

### Technology by and for the People

2. *We favor a search for new technological forms.* As political scientist Langdon Winner advocates in *Autonomous Technology*, we favor the creation of technologies by the people directly involved in their use—not by scientists, engineers, and entrepreneurs who gain financially from mass production and distribution of their inventions and who know little about the context in which their technologies are used.

We favor the creation of technologies that are of a scale and structure that make them understandable to the people who use them and are affected by them. We favor the creation of technologies built with a high degree of flexibility so that they do not impose a rigid and irreversible imprint on their users, and we favor the creation of technologies that foster independence from technological addiction and promise political freedom, economic justice, and ecological balance.

3. *We favor the creation of technologies in which politics, morality, ecology, and technics are merged for the benefit of life on Earth:*

- community-based energy sources utilizing solar, wind, and water technologies—which are renewable and enhance both community relations and respect for nature;
- organic, biological technologies in agriculture, engineering, architecture, art, medicine, transportation, and defense—which derive directly from natural models and systems;
- conflict resolution technologies—which emphasize cooperation, understanding, and continuity of relationship; and
- decentralized social technologies—which encourage participation, responsibility, and empowerment.

4. *We favor the development of a life-enhancing worldview in Western technological societies.* We hope to instill a perception of life, death, and human potential into technological societies that will integrate the human need for creative expression, spiritual experience, and community with the capacity for rational thought and functionality. We perceive the human role not as the dominator of other species and planetary biology, but as integrated into the natural world with appreciation for the sacredness of all life.

We foresee a sustainable future for humanity if and when Western technological societies restructure their mechanistic projections and foster the creation of machines, techniques, and social organizations that respect both human dignity and nature's wholeness. In progressing towards such a transition, we are aware: We have nothing to lose except a way of living that leads to the destruction of all life. We have a world to gain.

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*"A number of trends seem to converge on the year 2000 as a turning point when the IT [information technology] Revolution will become the dominant force governing modern societies."*

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## Information Technology Is Revolutionary

William E. Halal

The year 2000 signals the beginning of a new information millennium, according to William E. Halal. He argues that numerous trends in information technology since the 1970s—including more powerful computers, sophisticated software, and the growth of global communications networks—are likely to converge by the turn of the century and revolutionize the way Americans live and work. Halal warns that although information is a strategic resource, new technologies must be introduced cautiously because they always produce new dangers as well as gains. Halal is a professor of management science at the George Washington University School of Business and Public Management. A director of the World Future Society, Halal currently heads its World 2000 project.

As you read, consider the following questions:

1. How do neural networks function differently from traditional computer processes, according to Halal?
2. In the author's opinion, why are information services unlikely to replace direct human interaction?
3. What are the dangers of the information age, in Halal's opinion?

William E. Halal, "The Information Technology Revolution," *The Futurist*, July/August 1992. Reproduced with permission from *The Futurist*, published by the World Future Society, 7910 Woodmont Ave., Suite 450, Bethesda, MD 20814.