

SCIENCE, TECHNOLOGY & ENVIRONMENT

The Transformation of Bioethics

A Survey of Recent Articles

An upstart young discipline born some 30 years ago, idealistically determined to grapple with the moral dilemmas posed by modern medicine and to give patients more say, bioethics seems to be flourishing today.

It's a required subject in medical schools, a mandatory feature in hospitals, a frequent attraction in the media; degrees and certificates are awarded in it; centers, departments, and government commissions, as well as professional organizations and journals, are devoted to it. Attending physicians in hospitals can now ask bioethics "consultants" to help critically ill patients or their families decide whether life-sustaining medical treatments should be withheld or withdrawn.

Yet for all this activity and apparent success, some observers wonder if bioethics hasn't lost the promise of its youth and perhaps even its way. They disagree, however, on just what that promise was and what the proper path should be.

In an issue of *Daedalus* (Fall 1999) on "Bioethics and Beyond," philosopher Daniel Callahan, a pioneering bioethicist who co-founded the Hastings Center, in Garrison, New York, in 1969, confesses that he is unhappy with "the general direction" the field has taken. From the start, he explains in *Daedalus* and in another essay in the *Kennedy Institute of Ethics Journal* (Mar. 1999), two powerful currents were at work in bioethics. Reacting to abuses of human research subjects and doctors' characteristic paternalism toward patients, an "autonomy" movement sought to promote "individual rights and choice." A "cultural" movement, drawing on theology, nonanalytic philosophy, and social science, sought "the social and cultural meaning of the biomedical developments." To Callahan's disappointment, the "autonomy" current—favored by lawyers and analytic philosophers, and very much in tune with American liberal individualism—has proven much the stronger.

But bioethics has not become all that early enthusiasts for "autonomy" dreamed, either.

It developed "as a critical enterprise, a response to felt inhumanities in our system of health care and biomedical research." But bioethics not only "questioned authority"—it has shored it up, observes Charles E. Rosenberg, a historian of science and medicine at the University of Pennsylvania, also writing in *Daedalus*. "As a condition of its acceptance, bioethics has taken up residence in the belly of the medical whale," there "serv[ing] ironically to moderate, and thus manage and perpetuate, a system often in conflict with [medicine's] idealized identity."

Many bioethicists today have been "rediscovering the virtues of paternalism," contends Ronald Bailey, science correspondent for *Reason* (Aug.–Sept. 1999). Instead of "doctor-knows-best," there is "bioethicist-knows-best." They "want to determine what patients need to know and what treatments they should get," he says. He cites a 1996 case in which doctors, following bioethicists' advice, initially refused to tell a patient what the results of her genetic test for breast cancer were.

"The fact that bioethicists [in the late 1960s and 1970s] spoke of what they were doing as restoring power to patients obscured the power they needed to [arrogate to] themselves to accomplish this task," notes Charles L. Bosk, a sociologist at the University of Pennsylvania's Center for Bioethics. But that fact, he adds in *Daedalus*, also obscured the limited extent to which patients may have "actually desired this decision-making power now conferred upon them."

Wanted or not, autonomy is "the driving force" behind "principlism" in practice, Callahan says. The leading theory in bioethics today, principlism, he explains, stresses "the principles of respect for persons (generally understood as respect for autonomy), nonmaleficence, beneficence, and justice. . . . In practice, the principle of beneficence gets the least play, probably because, to be taken seriously, it requires an

effort to understand what really advances the good of individuals and society”—which would conflict with “the liberal individualism of the left and the libertarianism of (some of) the right.”

But bioethics “is not simply a field of philosophy,” observes Alexander Morgan Capron, codirector of the Pacific Center for Health Policy and Ethics at the University of Southern California. It is “a practical discipline,” he writes in *Daedalus*, which “has been driven” by highly publicized medical controversies such as the Karen Ann Quinlan case of the 1970s, by infamous medical abuses (such as the Tuskegee syphilis study), and by dramatic medical advances.

Yet at its origins, bioethics did move more in the higher realms of philosophy and theology. According to Warren Thomas Reich, a bioethicist at Georgetown University’s Kennedy Institute of Ethics, writing in the *Kennedy Institute of Ethics Journal* (Mar. 1999), much of the energy infused into

bioethics three decades ago came from theologians who had been involved in “the then-increasingly futile church debates” on contraception, sterilization, and abortion.

Bioethics today is determinedly secular in outlook, notes Renée C. Fox, a Fellow at the University of Pennsylvania’s Center for Bioethics, writing in *Daedalus*. “Questions of a religious nature—concerning human origins, identity, and destiny, the meaning of suffering, and the mysteries of life and death,” she says, generally are “screened out” as inherently insoluble problems best left to the private beliefs of individuals, or else are “translated” into acceptably secular language. In this “resolute secularism,” bioethics, in Callahan’s view, “is out of step with much of American culture, even though it picks up (all too much) the individualism of that culture.” Bioethics, he believes, needs to expand its viewpoint and “dig more deeply into the way biomedical progress” can affect the meaning of human life.

Maglev’s New Promise

“Maglev: A New Approach” by Richard F. Post, in *Scientific American* (Jan. 2000), 415 Madison Ave., New York, N.Y. 10017–1111.

For decades, it’s been said that the maglev, or magnetically levitated train, would soon be arriving to whisk people off on silky-smooth rides at 300 miles per hour or more.



A test cart levitates above the track, with Halbach arrays of magnetic bars visible under the cart and suspended from its sides.

It hasn’t happened. The maglevs demonstrated in Germany and Japan have been too complicated and expensive—and not fail-safe. No full-scale commercially operating maglev system has been built. But now from Lawrence Livermore National Laboratory in California comes a new approach that Post, a senior scientist there, says may finally bring the maglev into the station.

In a maglev system, magnetic fields levitate the train while electricity or some other sort of power drives it forward. The Japanese system used superconducting coils to produce the magnetic fields (as two American scientists first proposed in the late 1960s). But because such coils must be kept very