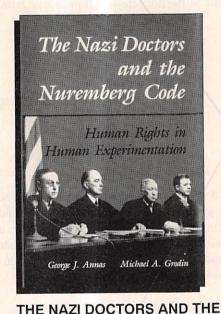
# Medical Ethics and the Nazi Legacy

Scholars are still debating the fate of medical knowledge gathered by evil means.



NUREMBERG CODE
Human Rights in Human
Experimentation
George J. Annas, Michael A.
Grodin, editors
New York: Oxford University Press, 1992
371 pp. \$29.95

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ow did the Nazi physicians, classically held to the Hippocratic precept, "Above all, do no harm," sink into the moral abyss of torturous experiments on human subjects, and is this descent relevant to current medical ethics?

The very ones entrusted with comfort, care, the relief of pain, and the restoration of health became the agents of callous indifference, torture, and death. Thus did Nazi doctors descend into the hideous destruction of the humanity that they were sworn to save. For three decades, German medicine had been the envy of the world and the model for American medical education, research, and clinical practice. Then, tried for war crimes by the military tribunal at Nuremberg, fifteen doctors of infamy were hanged or imprisoned.

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be sung by a woman, a contralto). Inasmuch as this work figures nowhere in the *Complete Works* catalog prepared by D. Kern Holoman, Fauquet's scholarship is a major contribution to Berlioz studies.

## "A lion in our path"

The concluding essay by Barzun, the dean of Berlioz scholars, happily brings us back to the formula that, as I said earlier, Berlioz himself had adopted in his Evenings with the Orchestra and that might be said to have antidipated this book. "Overheard at Glimmer glass" is a whimsy, a fanciful dialogue among three men who have just emerged from an evening's performance of Berlioz\opera Beatrice and Benedict. These three, a banker, a composer, and a music critic, argue amiably enough about all thinks Berliozian-the noisy Berlioz, the intimate Berlioz, the lyric and/or dramatic Berlioz, the vulgar and the sublime Berlioz. "I bet we none of us agree about this thing tonight," says one man. "Music's a thing, but it's powerful and fragile at the same time, so it always leads to arguments."

How true this is of Berlioz, who, if he leads anywhere, leads to arguments. Ironically, coming at the end of *Berlioz Studies*, this comment may illuminate one serious problem of the book. There are no opportunities for give-and-take and few signs of dispute about the various issues and works discussed. Indeed, the heat of enotion and confrontation—always there in Berlioz—is, with some exceptions in the essays by Bloom and

Reeve, singularly absent. There is too often a sober concord of analysis and too seldom the noise of bickering, vulgar laughter, and gunfire. Are the words of one of Barzun's speakers all too apt here? "We've gone crazy, turning everything into studies. It's not that we're stupid; we've simply lost our innocence, ruined our sensibility; we distrust it and ask for a theory, a system, critical essays, panel discussions, a handbook with bibliography, and a society with a newsletter."

Happily, the distinguished participants of *Berlioz Studies* have not let things go that far. After all, says Barzun, this is Berlioz He is a lion in our path.

'Music always leads to arguments.'

He will have his way, after all. I may be forgiven, then, if I imagine this splendid company concluding their labors with a toast—the same immortal toast to music (and to Berlioz) we heard at the conclusion of *Evenings with the Orchestra*:

"Here's to Music. . . . She protects the drama, dresses up comedy, glorifies tragedy, gives a home to painting, intoxicates the dance . . mows down those who oppose her progress; [and] flings out the window the representatives of routine."

# Racial hygiene

This book begins with chapters by two prominent historians, both concerned with how German physicians were attracted so early to the Nazi party, and vice versa. Robert Proctor, a leading American historian and author of the critically acclaimed book Racial Hygiene: Medicine under the Nazis (1988), argues persuasively that the physicians were not swept into the Nazi movement against their wills, duped victims of a political power. Rather, physicians were active leaders in the early formation of the Nazi movement, where they found deep support for their genetic theories of human perfection. At the end of the nineteenth century, German social Darwinists, fearful of the deterioration of the race, developed the theory of

racial hygiene, or purification, to be implemented by combating the breeding of "inferiors." American physicians in academic medical centers were deeply influenced by these ideas.

German geneticists, psychiatrists, and other proponents of racial hygienics were not at first anti-Semitic, but shortly after World War I the conservative and nationalistic anti-Semitic press J.F. Lehmann Verlag took over publication of the major racial hygiene journal. By 1930, leading racial hygienists were praising Hitler as the first important politician to take their theories seriously. Nazi leaders in turn referred to national socialism as "applied biology," Proctor emphasizes that the physicians joined the Nazi movement eagerly and early. By 1933, before Hitler's rise to power, the National Socialist Physicians' League was thriving. "Doctors in



■ Facing their accusers: The eight defendants shown above at the 1946 Nuremberg war crimes trials were former Nazi doctors charged with conducting cruel and unethical medical experiments with concentration camp inmates. Of twenty-three defendants, fifteen were found guilty. Seven were hanged.

fact joined the Nazi party earlier and in greater numbers than any other professional group," concludes Proctor.

So it was that Jews and Gypsies, considered threats to genetic hygiene, fell into the hands of these men of medicine at Dachau, Auschwitz, and the other death camps. The physicians had, of course, grown accustomed to killing, for between October 1939 and August 1941, more than seventy thousand people with physical handicaps or mental retardation, along with other "useless eaters," were the victims of involuntary mercy killing under Hitler's order for forcible euthanasia. This was the physicians' dress rehearsal for the Holocaust. Christian Pross, a German historian and physician, follows Proctor with a chapter presenting strong evidence that, to this day, the German medical associations deny the intimate link between



Decompression experiment. The victim above is hanging from a harness in a decompression chamber at Dachau in 1942. Dr. Sigmund Rascher manipulated air pressure in the chamber to induce a state of oxygen deprivation, causing convulsive seizures, unconsciousness (as shown above), and frequently death. The experiments were intended to replicate conditions faced by German pilots flying at high altitudes.

medical science and Nazi leadership.

The historians are followed by a particularly significant testimony from Eva Mozes-Kor, a surviving victim of Nazi medical experimentation. She is the president of an international organization, Children of Auschwitz Nazi Deadly Lab Experiments Survivors (CANDLES). Mozes-Kor was, in her words, "a human guinea pig in the Birkenau laboratory of Dr. Josef Mengele." In 1944, at age nine, she and her twin sister were swept from

their native Transylvanian village into a world of Mengele's medicalized torture. Among other horrid deeds, Mengele "would inject one twin with the germ. Then, if and when the twin died, he would kill the other in order to compare the organs at autopsy." Mozes-Kor almost died after a series of germ injections, but survived with her sister for liberation. She provides this pointed description of atrocity, among others: "A set of Gypsy twins was brought back from Mengele's lab after they were sewn back to back. Mengele had attempted to create a Siamese twin by connecting blood vessels and organs. The twins screamed day and night until gangrene set in, and after three days they died." Mozes-Kor concludes part one of the book with an appeal to medical researchers to respect the dignity of human life and freedom at all costs, even when this delays so-called scientific progress.

The editors might have done more with the voices of victims. Readers might enter into the book more easily through testimonies from survivors highlighted at the very outset, for only they can present the faces of injustice that elicit immediate compassion. A scant six pages of one victim's testimony tucked away after the historians have waxed eloquent seems inadequate. The call of survivor testimonies must be the fit beginning of this journey into darkness, for what else could be nearly as appropriate?

#### The classic documents

Part two, "The Doctors' Trial and the Nuremberg Code," begins with a reprint of the classic opening statement of the prosecution, delivered on December 9, 1946, by American Brig. Gen. Telford Taylor. The editors do well to retrieve this document from the dust-covered volumes of Nuremberg proceedings. Crimes committed in the guise of scientific research are described, from the freezing (hypothermia) experiments to sterilization, including castration by powerful X rays. If Proctor and Pross are right, however, General Taylor erred when he stated that "the creeping paralysis of Nazi superstition spread through the German medical profession and, just as it destroyed character and morals, it dulled the mind." For it was the medical ideal of racial hygiene that spread through German politics and lent scientific credibility to the Nazi movement from the very outset.

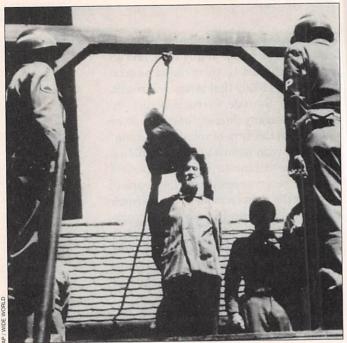
This is followed by a reprint of the judgment and sentencing from July 1947, including the Nuremberg Code of Research Ethics, articulated to define in ten principles the standards against which the defendants' actions were measured. These ten principles constitute the first code of research ethics in the entire history of medical science. Among the principles are these:

- "The voluntary consent of the human subject is absolutely essential."
- "The experiment should be such as to yield fruitful results for the good of society, unprocurable by other methods or means of study, and not random or unnecessary in nature."
- "No experiment should be conducted where there is an a priori reason to believe that death or disabling injury will occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects."

Subjects are given the right to withdraw from any experiment at any time, and an experiment must be terminated as soon as it appears likely that injury will result. Throughout the code, the basic moral principle of autonomy (literally auto nomos, or self-rule) in the form of voluntary consent is coupled with nonmaleficence (avoiding harm). The utilitarian ethic of the ends of scientific progress justifying the means of violating the rights and life of the research subject is categorically rejected. Autoexperimentation, in which the researcher uses him-or herself as subject, is permitted on the presumption that the investigator is less willing to inflict pain on the self than on others.

Grodin summarizes the Nazi doctors' voluminous arguments in their defense. They pointed out that involuntary research on prisoners had a long history, having been done at U.S. penitentiaries.

One of the most thoughtful chapters is editor Michael Grodin's "Historical Origins of the Nuremberg Code." The history of medical ethical codes is mostly silent with regard to human experimentation. Horrid violation of prisoners through human vivisection (the dissection of a living human being) was a commonplace in Europe until the late 1700s. Only in the nineteenth century did anyone argue that no experiment should cause harm regardless of potential knowledge to be gained. The American Medical Association published no ethics code on human experimentation until after the horrors of Nuremberg were revealed. Ironically, the



Dr. Klaus Karl Schilling, seventy-four, stands on the gallows on May 28, 1946. He was convicted for using 1,200 Dachau concentration camp inmates to test his theories of malaria immunization.

most thorough and elevated research ethics emerged in Germany. The 1931 Reich Health Council Circular entitled "Regulations on New Therapy and Human Experimentation" required prior animal trials, unambiguous consent from the subject or the subject's legal representative if incompetent, and the consistent avoidance of harms. Remarkably, a 1933 Nazi law prohibited most research on animals. Grodin writes that "if this law for the protection of animals were seen as including human beings as a type of animal, most, if not all Nazi human experimentation would also have been outlawed." Grodin does not indicate just why the Reich circular had so little lasting impact, but one assumes it applied only to those of genetic and racial "superiority."

Very usefully, Grodin summarizes the

Nazi doctors' voluminous arguments in their defense. They pointed out that involuntary research on prisoners had a long history, having been done at U.S. penitentiaries; that the prisoners were already condemned to death; that physicians were only following orders; that there were no clear international ethical standards respecting research; that it is sometimes necessary to tolerate a lesser evil in order to achieve good; and that physicians who did not participate might be killed. Grodin does not systematically respond to these and other lines of defense. It should be noted that while evils had long been perpetrated on prisoners, the Nazis took this evil to a new order of magnitude; that the prisoners were already going to die did not justify physician complicity; while there were no clear ethical standards, the principle of "do no harm" is a restraint that is universally understood; the physicians were not tolerating evil to achieve good, but rather inflicting wanton harm without the least compunction; finally, even though death may result, it is still necessary to resist evil.

Part three, "The Role of Codes in International and U.S. Law," considers the legal impact of the Nuremberg Code and the later Declaration of Helsinki. Several authors point out that the Nuremberg Code was generally considered too restrictive of research on incompetent populations such as people with retardation, infants, or the demented. If voluntary consent is applied rigidly, then no research for the future benefit of infants would be permitted. The later Helsinki Declaration, while generally consistent with Nuremberg, allows for such research based on proxy consent and the avoidance of any harms. The Nuremberg Code did influence the 1974 National Commission for the Protection of Biomedical and Behavioral Research, which required all research institutions receiving federal funding to establish institutional review boards (IRBs) to review the ethical aspect of all experimental protocols. These chapters are the territory of legal historians.

## Contemporary medical ethics

The fourth and final section of this book, "The Nuremberg Code: Ethics and Modern Research," is a worthwhile collection of writings by medical ethicists. In a very significant chapter, psychoanalyst and law school professor Jay Katz argues that modern research ethics has strayed somewhat from the firm language of Nuremberg regarding informed consent. Reviewing the Nuremberg record, Katz rightly points out that American physicians Leo Alexander and Andrew Ivy were wrong in testifying that the Nazi experiments were aberrational departures from Western medical practice. At Nuremberg, Ivy reluctantly admitted that a pronouncement published by the American Medical Association on research ethics followed only after the Nazi atrocities became wide public knowledge. But more generally, the Nuremberg tribunal overlooked the fact that "the history of human experimentation has also been a history not of ravages, but of injuries, inflicted on human beings without their voluntary consent." The Nazis, concludes Katz, were more massive and fiendish than any in history, but the difference is one of degree rather than kind.

The book concludes with chapters on the moral universality of the Nuremberg principles, the use of the Nazi analogy in bioethical debate, and AIDS research. There is a chapter by Marcia Angell, executive editor of the *New England Journal*  of Medicine, which, as a policy, categorically refuses to publish any scientific research in which ethics violations are suspected. This brings to mind the wider question of what to do with unethically obtained data. Since it was the publication of hypothermia data that sparked much of the renewed attention to Nuremberg and the Nazi doctors over the past five years, I will make some further comments here.

Even ardent moral relativists acknowledge that the actions of Nazi doctors during the Holocaust should be universally condemned. But what should be the fate of scientific data retrieved from the

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abyss of cruelty and torture, assuming that some such data is empirically valid? Should Nazi data, or any other data gained from atrocity, be left untouched by science? Or can atrocity be, in some sense, redeemed and transcended by salvaging some human benefit from its ashes? Are the victims of atrocity best commemorated by the use of data or by the rejection of all use?

Within the Jewish community, opinion on Nazi data usage is divided. Mark Weitzman of the Simon Wiesenthal Center writes in *Second Opinion: Health, Faith, and Ethics* (July, 1990) that "as the primary victims of Nazism, Jews have a particular stake in questioning the morality of any profit gained from that system."



Brig. Gen. Telford Taylor led the team of U.S prosecutors at the trials of the Nazi doctors.

Weitzman points out that some Jewish thinkers believe using Nazi data makes current researchers "accessories to the crime," relativizes the sense of absolute evil associated with nazism, and could "encourage further inhumane experiments." But Weitzman's own view is that Jewish law (halakhah) emphasizes the "priority of the ethical," and particularly of the principle that each individual human life is sacred and worthy of preservation. Therefore, if the Nazi data can save a life, it must be used, although the victims should be remembered and the atrocities condemned. Weitzman's position is grounded in Deuteronomy 30:19, "Therefore, choose life," which he thinks should override the deep emotional repugnance that is felt about using anything associated with the Nazis. "I must acknowledge, however, the clear tension between my emotional response and my intellectual position," he notes. I highlight Weitzman's perspective as an example of respectful disagreement on an issue that permits no obvious consensus.

At a recent conference, a survivor of Dr. Mengele's notorious twin experiments argued against data usage because "it is so easy for scientists to step over the edge and make science a God." The survivor warned against the worship of precision, accuracy, and "almighty datum." To use Nazi data is to fail to deter future scientists from further unethical research, as Angell argues.

Judging from history, it is easy for researchers to "step over the edge." With respect to human experimentation, the practices of the Nazi doctors were rather consistent with Western medicine, as Katz emphasizes. Atrocity in human experimentation neither began nor ended with Nazi medicine. In 1865 Claude Bernard detailed this sad history in his classic An Introduction to the Study of Experimental Medicine, pointing out that from Galen to Celsus, vivisection inflicted on criminals for the benefit of innocent multitudes was thought appropriate. Bernard provided a host of examples in which physicians experimented with poisons and antidotes on those no longer considered innocent of wrongdoing. He pointed out that "the Grand Duke of Tuscany had a criminal given over to the professor of anatomy, Fallopius, at Pisa, with permission to kill or dissect him at pleasure." In the first known ethical argument against such practices, Bernard constructed this moral rule:

The principle of medical and surgical morality, therefore, consists in never performing on man an experiment which might be harmful to him to any extent, even though the result might be highly advantageous to science, i.e., to the health of others. But performing experiments and operations exclusively from the point of view of the patient's own advantage does not prevent their turning out profitably to science.

Bernard insisted that the ground of ethics lies in not "doing ill to one's neighbor," and that this prohibition should hold even though scientific progress might be blocked as a result. The Nuremberg Code followed Bernard in granting nonmaleficence clear lexical priority over even the most well-intentioned efforts to bring about medical and human betterment. To repeat: "No experiment should be conducted where there is an a priori reason to believe that death or disabling injury will occur; except, perhaps, in those experiments where the experimental physicians also serve as subjects."

Why has medicine had such difficulty abiding by the fundamental ethical principle of "do no harm" in the context of human experimentation? Perhaps it is because the goal of medical progress is so compelling. Abiding by nonmaleficence requires that some scientific knowledge simply may never be had, at least not in a moral world. In an ethical society, progress attained through harmful means is off-limits, so that progress must occur more gradually, if at all in some cases.

To a large extent, our culture is utilitarian, and utilitarian empirical scientific reasoning is remarkably powerful. Nevertheless, such reasoning must be restrained, since it so easily allows the

ends to justify the means. As Angell elsewhere concludes,

And finally, refusal to publish unethical work serves notice to society at large that even scientists do not consider science the primary measure of a civilization. Knowledge, although important, may be less important to a decent society than the way it is obtained.

Presumably, no researcher will "step over the edge" knowing that there is absolutely nothing to be gained by it for professional or scientific advancement.

Weitzman argues if the Nazi data can save a life, it must be used, although the victims should be remembered and the atrocities condemned.

It is the widespread concern that medicine has not yet fully and categorically resolved the tension between increasing knowledge and the rejection of harmful means that makes the Nazi data issue so heated. This concern is heightened by recent historical studies of medicine under the Nazis.

As a final comment, it would be useful for the editors of this book to have looked at the Japanese context. It is significant that while twenty-three German physicians were tried at Nuremberg for crimes against humanity, with seven condemned to death, no similar fate awaited Japanese researchers who carried out equally barbarous experiments in Manchuria between 1930 and 1945. Japan, which was developing sophisticated germ warfare techniques, conducted experiments on prisoners of war to mea-

sure physical response to infections. Installations existed in Harkin and near Changchun and Nanjing. As reported in "Japan's Biological Weapons: 1930–1945" (Bulletin of the Atomic Scientist, 1981), experiments were conducted on the response to

anthrax, botulism, brucellosis, cholera, dysentery, hemorrhagic fever, plague, smallpox, syphilis, tick encephalitis, tsutsugamushi, tularemia, typhoid, and typhus. Other experiments included prolonged exposure to X rays, freezing body parts to try various methods of thawing, pumping the body full of horse blood, and vivisection.

American officials did not prosecute because the Japanese investigators agreed to cooperate with their captors:

A similar fate [to that of the Nazi doctors at Nuremburg] did not await Japanese researchers. . . Indeed, the existence of these abuses was not even generally known for more than thirty-five years because, in exchange for not being publicly tried and punished, the Japanese investigators agreed to cooperate with their American captors and share information they had gathered about biological warfare through their experiments with Chinese captives.

The Japanese physicians were responsible for the deaths of tens of thousands, and their methods were as pernicious as those of the Nazis.

One possibility for further deterrence against unethical research has been described by William Seidelman in the *Hastings Center Report* (Dec. 1989). "It has recently been revealed," he writes, "that the remains of victims of Nazi state terror

and medical murder have been continuously preserved for anatomical study by some German universities." The institutions involved include the universities of Tübingen, Heidelberg, and Cologne, and the Max Planck Institute of Brain Research. Medical student inquiries are responsible for bringing this fact to public attention. Seidelman calls for burial of the anatomical parts of Nazi victims, an occasion for the "medical community worldwide to confront this legacy and the profession's ongoing potential for evil." It is only now, four decades past Nuremberg, argues Seidelman, that medical science has begun to consider "the ethical implications of using research derived from victimized subjects." Seidelman adds that all medical students and professors in Germany should attend the burial, and that every medical school in the world should observe the day appropriately on an annual basis. Such an annual ritual would help deter unethical research, but it is highly unlikely that it will ever take place. After all, Hartmut Hanauske-Abel, M.D., was recently barred from medical practice by the German Chamber of Physicians for writing "From Nazi Holocaust to Nuclear Holocaust" in the English journal Lancet (Vol. 271, 1986).

When we look back at medical experimentation throughout the course of history, when we reflect on centuries of torture, when we consider the actions of physicians in this century in particular, the only reasonable response is "Never again." In order to ensure a better future for society and for the medical profession, it is necessary to hold, as an absolute maxim, that no unethically obtained data shall see the light of publication. Only this message raises moral standards within medicine so high that no physicians will again fall so low.