



“The lights of perverted science”

The Nazi war on cancer

Robert N. Proctor

Princeton, NJ: Princeton University Press; 1999
380 pp US\$49.50 (cloth) ISBN 0-691-00196-0
US\$16.95 (paper) ISBN 0-691-07051-2



But if we fail, then the whole world ... will sink into the abyss of a new Dark Age made more sinister ... by the lights of perverted science.

— Sir Winston Churchill, June 18, 1940

Historians of Nazi medical science, that “unfolding monstrosity,” in Robert Proctor’s words, that worked its way from “racial hygiene, sterilization, and racial exclusion to euthanasia, abusive experimentation, and the Final Solution” are faced with the unanswerable question of how such evils were possible. But at least they have the comfort of an unambivalent moral response. In *The Nazi War on Cancer*, an impressive sidebar to his *Racial Hygiene: Medicine under the Nazis* (1988), Proctor grapples with a more slippery demon: Nazi programs in health promotion that are oddly consonant with the values of today.

What are we to do with the fact that it was under Hitler’s regime that a causal link between smoking and lung cancer was first made, that Nazi anti-tobacco campaigns were ahead of their time, that Nazi physicians identified and attempted to control exposure to carcinogens such as asbestos, pesticides and food additives, advocated an organic, vegetarian diet high in fibre and low in fat, were the first to promote breast examination and that, the destruction of the Jewish intellectual and scientific community notwithstanding, managed to conduct a certain amount of “good” science, notably in epidemiology?

Of course, as Proctor reminds us, “Nazism took root in the world’s most powerful scientific culture.” By the 1930s Germany was in the lead of cancer research, and the German language was its lingua franca. Germany also had the

highest cancer rates in the world, and the Reich disliked the implications of this for economic productivity, military prowess and the protection of the “germ plasm” of a master race. Thus, “Cancer to many seemed to be a political disease, requiring a political solution.”

Solutions were attempted on the front of public health, in education campaigns, disease registers, mass screening programs and legislation. All of these efforts drew on the essence of Nazi ideology, which might be described as a counterfeit of reasonable desires: beauty, freedom, health, vitality. Proctor calls Nazism “a vast hygienic experiment designed to bring

about an exclusively sanitary utopia ... [A]sbestos and lead were to be cleansed from Germany’s factory air and water, much as Jews were to be swept from the German body politic.” The metaphors were powerful and replicated themselves in false and murderous equivalences: Judaism was a cancer, cancer was like the Jews. Surveillance, detection, control, eradication: these were activities applicable to diseases and to people equally.

Proctor’s account is a disquieting case study of how public health concepts are tied to ideology and, with apparent innocence, can support malign sociopolitical agendas. It also demonstrates, as Churchill was aware on the eve of the Battle of Britain, that science is blind to the motivations of its practitioners. Serving any master, any purpose, it marches on.

Anne Marie Todkill
CMAJ

Deathwork

Unbearable witness

They are a terrifying sight: exhausted, emaciated, eyes widened with fear, bruises marking their features, arms and necks chained. These are victims of the Cambodian genocide, photographed before they were tortured and executed at a secret prison known as S-21 by the Khmer Rouge, the Maoist forces led by Pol Pot in Cambodia during the reign of terror that lasted from 1975 to 1979. They are the subject of *Facing Death: Portraits from Cambodia’s Killing Fields*, an exhibition of 100 photographs on view until Jan. 14, 2001, at the Canadian Museum of Contemporary Photography in Ottawa, its only venue in this country. In 1998, as a curator at the CMCP, I was involved in the decision to bring this

painful exhibition to Ottawa. I argued then, and still believe, that we must not avert our eyes from these faces.

The Cambodian genocide remains one of the most horrific atrocities of the past century. In April 1975, following a bloody five-year civil war, Pol Pot’s forces seized control of the country and initiated a brutal campaign to reinvent Cambodian society. Among other strategies, they evacuated people from all towns and cities to serve as agricultural labourers, banned all printed materials and systematically persecuted Buddhists and ethnic Vietnamese. Students, intellectuals and professionals were particular targets. Only 40 of the approximately 270 physicians who remained in Cambodia after 1975 sur-

vived by 1979. In total, an estimated 1.5 million men, women and children — approximately one-seventh of the country's population — died as a result of working conditions, starvation, malnutrition and lack of medical care. Roughly 200 000 of that number were executed as enemies of the state. No Cambodian family was left unscarred.¹

The Khmer Rouge reserved what were perhaps their most gruesome tactics for S-21, the secret detention centre established at a former high school in Tuol Sleng, a suburb of Phnom Penh. In what had been classrooms, captives — largely party members accused of treason — were interrogated, tortured and executed as "counterrevolutionaries." Of the 14 200 men, women and children incarcerated at S-21, only 7 survived. The Khmer Rouge maintained detailed files on each detainee; these included a (forced) confession and an identification photograph.

If the Khmer Rouge intended these photographs as evidence that their "enemies from within" had been crushed,

tion for such "misdeeds" as missing their families.² These were ordinary people trapped in a nightmare.

We know about the making of these photographs largely from Nhem Ein, S-21's chief photographer, who discussed his experiences with Robin McDowell of Associated Press.³ The son of poor bean farmers, Nhem Ein joined the Khmer Rouge at age 10. Five years later he was sent to Shanghai to be trained as a photographer, filmmaker and cartographer. On his return, at age 16, he was named chief photographer at Tuol Sleng, in charge of five apprentices.

Over the course of less than three years, he photographed and oversaw the documentation of thousands of people. Among them was a close relative, whom Nhem Ein, fearing for his own life, did not acknowledge. He was also charged with photographing some prisoners after their deaths and producing propagandistic images of Cambodian society.

According to Nhem Ein, captives were brought to Tuol Sleng in blindfolds and chained or roped together. An identification number was pinned on each prisoner. (These numbers do not represent a catalogue of S-21's entire human sacrifice: they were recycled every 12 hours. Consequently, the same numbers are repeated in numerous photographs.) Immediately before a photograph was taken, the captive's blindfold was torn off, adding to his or

her sense of disorientation and fear. As many as 600 people arrived at S-21 daily and, as Nhem Ein confirmed, "Those who arrived at the facility had no chance of living." Nhem Ein exposed, developed and printed film against a background of incessant — and unanswered — screams and pleas.



Photographic Resource Center, Boston University

Untitled. From *Facing Death: Portraits from Cambodia's Killing Fields*.

The identification photograph would eventually be added to the prisoner's file, a tidy summary of a life destroyed. The Khmer Rouge's emphasis on bureaucratic record-keeping and Nhem Ein's story exemplify what Hannah Arendt famously described as the "banality of evil" in *Eichmann in Jerusalem*.⁴ Whereas evil had previously been framed as deviance, Arendt suggested — more disturbingly — that it could be produced by the mindlessly obedient actions of ordinary people.

In 1979, after Vietnamese forces drove the Khmer Rouge from power, the former high school was transformed once again, this time into the Tuol Sleng Museum of Genocide. Interrogation rooms were left intact, blood still staining the walls and floors; maps, paintings depicting torture, extracts of forced "confessions," photographs, victims' clothing, torture devices and mounds of bones fill the compound.

But, in the intervening years, the detailed files were dispersed, rendering the subjects of many of the photographs anonymous. The approximately 7000 negatives left at Tuol Sleng were covered with mildew and dust in old file cabinets. Between 1993 and 1996 two American photographers, Christopher Riley and Doug Niven, working in association with Cornell



Photographic Resource Center, Boston University

Untitled. From *Facing Death: Portraits from Cambodia's Killing Fields*.

today they stand as one of the most visceral condemnations of Pol Pot's regime. The victims portrayed are often young; most are men, but women and children were also executed at Tuol Sleng. According to historian David Chandler, the majority were rank-and-file party members drawn under suspi-

University, cleaned, catalogued and printed the negatives. They subsequently presented them in a range of journals, the 1996 book *The Killing Fields*⁴ and in the current exhibition, which has been shown in Europe and the United States.

Thus, over the past four years, these tragic images have been brought to a wide public. Along the way, they have also engendered a good deal of controversy. Largely, critics have been concerned either that the exhibition diminishes the gravity of the subject by presenting the photographs as art or, by reproducing them, effectively replicates the Khmer Rouge's subjugation of its victims. It does neither. Instead, *Facing Death* informs a wide public about those atrocities and, equally, functions

as a critique. The exhibition acknowledges that photographs operate at a number of levels, not solely as aesthetic works (although art itself can be a powerful means of critique). Reproducing photographs or words is not tantamount to endorsing their original message: all forms of expression are open to multiple interpretations. In this case, the anguish and fear apparent in these photographs provides a devastatingly vivid account of the Cambodian genocide. Moreover, the publication and exhibition of these photographs provide important — if wrenching — resources for people of Cambodian descent who want to find information about missing family members and to address the nightmare of those years. In short, *Facing Death* tries to fulfil the moral imper-

ative articulated by the Primo Levi in his memoirs of Auschwitz: to tell the story, to bear witness.

Carole Payne

Assistant Professor
School for Studies in Art and Culture
Carleton University
Ottawa, Ont.

References

1. Sharp B. *The Banyan tree: untangling Cambodian history*. Available: allithai.mekong.net/cambodia/banyan3.htm
2. Chandler D. *Voices from S-21: Terror and history in Pol Pot's secret prison*. Los Angeles: University of California Press; 2000.
3. McDowell R. Khmer Rouge 10 000 posed before killing fields. Associated Press wire story, 16 Feb 1997.
3. Arendt H. *Eichmann in Jerusalem: a report on the banality of evil*. New York: Viking Press; 1963.
4. Riley C, Chandler D, Niven D. *The killing fields*. Santa Fe, NM: Twin Palms Publishers; 1996.

Room for a view

Instinct and survival: an exchange of letters between Einstein and Freud

I have seen the future, brother;
it is murder.

—Leonard Cohen, "The Future"

In 1931 the International Institute of Intellectual Co-operation was instructed by a committee of the League of Nations to arrange for an exchange of letters, intended for publication, between representative intellectuals to promote discussion of the concerns of the league. One of the first to be approached was Albert Einstein; the person he, in turn, chose to correspond with was Sigmund Freud. Einstein had met Freud five years earlier in Berlin, at the home of Freud's youngest son, and they had discussed their work and respective fields. Einstein believed that Freud could shed light on "a question which seems the most insistent of all the problems civilization has to face." And so it was that in 1932 the scientist who redefined for 20th-century humanity its understanding of the physical world posed the following question to the

physician who had changed its perception of the psychological one: "Is there any way of delivering mankind from the menace of war? It is common knowledge that modern science has come to mean a matter of life or death for civilization as we know it." Although the building of the atomic bomb was still some years away, Einstein had already discovered the science that would make it possible and feared its catastrophic potential. He asked Freud "to bring the light of [his] far-reaching knowledge of man's instinctual life to bear upon the problem" and hoped that his "most recent discoveries might blaze the trail for new and fruitful modes of action."

Einstein was concerned about the role of elites in promoting war, the "small but determined groups, active in every nation, composed of individuals who, indifferent to social considerations and restraints, regard warfare, the manifestation and sale of arms, simply as an occasion to advance their personal interests and enlarge their personal author-

ity." This phenomenon was later termed the "military-industrial complex" by US President Dwight Eisenhower. In Einstein's view, the elites were able to wield power because "the schools and press, usually the church as well [were] under its thumb" and so were able to "whip up the hatred and destruction of the masses into a collective psychosis." Thus Einstein invoked the language of psychiatry and madness to describe the propaganda machine already operating in Nazi Germany. He proposed the establishment, "by international consent, of [a] legislative and judicial body to settle every conflict arising between nations" but lamented that "we are far from possessing any supranational organization competent to render verdicts of incontestable authority and enforce absolute submission to the execution of its verdicts." However, as Einstein observed, there are "strong psychological factors" that "paralyse" efforts to enforce the peaceful coexistence of nations. And so he sought Freud's counsel.

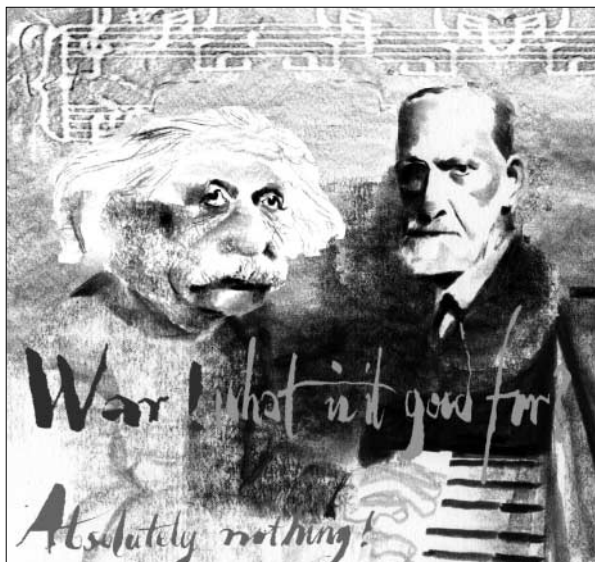
Replying to Einstein's letter, Freud expressed his surprise that, as a physician and psychoanalyst, his advice regarding a social rather than clinical problem had been sought. However, he wrote that he agreed with everything Einstein had said, "particularly the need for a central authority." He described war as futile. "The results of conquest are as a rule short-lived," he wrote, "the newly created units fall apart once again, usually owing to a lack of cohesion between parties united by violence." He, too, was concerned that the League of Nations lacked "the necessary power to act, and shared Einstein's apocalyptic sense that "a future war might involve the extermination of one or perhaps both of the antagonists." Freud then went on to outline for Einstein his theory of Eros, the life instinct that "seeks to preserve and unite" and of Thanatos, the death instinct. For Freud, aggression was the manifestation of Thanatos and thus an essential element of human nature. For that reason, he characterized Russian communism as "an illusion trying to make human aggression disappear."

What Freud offered Einstein by way of an answer were "indirect methods of combating war." These were, first, education to create "independent minds not open to intimidation and eager in the pursuit of truth." Second was a sense of "identification," that is, of "whatever leads men to share important interests" and thus creates a "community of feeling." Third, Freud suggested that "cultural attitudes and the justified dread of the consequences of a future war may result within a measurable time in putting an end to the waging of war itself."

As events unfolded, Einstein left Germany for the US in 1933, and Freud left Austria for England in 1938. Einstein found himself drawn into doing what he most dreaded. Fearing that Nazi scientists would develop an atomic bomb, he helped to initiate the Manhattan Project. He would live his last

years working for disarmament and global government, anguished by his impossible, Faustian decision.

Despite Einstein's efforts, the atomic bomb has since its nefarious birth during World War II metastasized into the current proliferation of nuclear arms, propelled, as Einstein himself had predicted, by propaganda



and profit. As the 21st century begins, the bulk of the world's population has for the first time in history been raised under the threat of possible extinction by its own hand. Although nuclear war has receded from public consciousness this past decade, the situation is in a number of ways more precarious than it was during the Cold War.

Freud used the concept of Thanatos as a means of explaining recurring patterns of self-defeating and self-destructive behaviours, which he called "repetition compulsion." The term in current vogue — "reenactment" — understands repetition in interpersonal rather than instinctual terms: the acting-out of past tragic dramas through wilful blindness, which seeks comfort and control in punitive ways. In the spinning of vicious circles, the solution is the problem. Thus children from violent homes may become, more often than by chance, violent parents themselves, and the poison of substance abuse passes from one generation to the next. At a sociopolitical

level, we also see recurring patterns. Nowhere are these so disastrously self-destructive as in war. While we pray for peace, it is always combat we prepare for. With the invention of nuclear weapons, this affliction has reached its ultimate suicidal possibility.

We must understand that there is no dark beast that we must tame, other than ourselves. The malevolence of war and the cancer of nuclear weapons that it has borne are within us. As Einstein understood, the answers to the puzzle we must solve to ensure our survival do not lie in the physical sciences and their technical creations. Rather, they can be found in Freud's field of inquiry: the mysteries of human feeling and behaviour. The answers lie in how we, as individuals and as societies, counterbalance our fears and aspirations, our drive to compete and our need for care, our desire to be connected and to be free, our wish to trust and our fear of harm. They lie in how we determine the currency of conflict and in the ways we seek its resolution. We can succeed to the degree that we understand and become reconciled with our individual and collective pasts and accept our flawed and often forgotten common humanity. The more we are at peace within ourselves, the more we can make peace with each other. As citizens of the world, Einstein would have us reach for the tablets of Moses rather than perish as Samson, who took his own life to annihilate his enemies. If we are to survive, it will not be by our wits but by our wisdom.

Mark Leith

Department of Psychiatry

University of Toronto

Board Member, Science for Peace

Past Board Member, Canadian Physicians for Global Survival

Reference

1. Strachey J, editor. "Why war?" In *The standard edition of the complete psychological works of Sigmund Freud*, vol 22. London: Hogarth Press; 1964. p. 197-215.