

Subverted by the Bomb

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The United States assumed the mantle of Western civilization immediately after blasting Japan with atomic weapons on August 6 and 9, 1945. Scientists created those weapons. By that act, scientists made science dangerous and changed themselves, America, and the world forever.

IN 1963, DAVID LILIENTHAL, chairman of the US Atomic Energy Commission, the precursor to the Department of Energy, raised grave doubts about science and scientists because of the bomb. He said the bomb brought large amounts of money to scientists at universities, diverting them from research and teaching, making them exclusive experts on weapons of war. This new function diluted "the spirit of independent inquiry," making scientists "uncritical advocates and even lobbyists for various huge 'programmatically' technical enterprises." This was especially manifest in the behavior of the atomic scientist who birthed the bomb.

According to Lilienthal, the atomic scientist took "some of the attributes of his world-shaking creation; there was, in the public mind, something unearthly, something superhuman, something uncanny about him."

Lilienthal said that giant programs engulfing science have a corrosive influence on the independence of scientists, how they view themselves and how lay people view them, as well. He described the new, post-bomb "infallible" scientists as "organization men," and science as "a hot stock market item, a growth stock." [1]

More than 30 years later, Sir Joseph Rotblat, a 1995 Nobel Laureate in Peace, confirmed the uneasiness—indeed, the fear—that Lilienthal expressed concerning the bomb-made scientists. He said that nuclear bombs subverted not merely the scientists, but the creativity of science, making its application the "detriment of mankind." Rotblat accuses scientists of becoming a major force in the nuclear arms race, which is "a complete perversion of the lofty ideals of science."

Rotblat did not explain what those ideals might be, but he expressed concern that advances in science or unrestricted scientific research may lead to wholesale destruction, including the end of human life on earth. To avoid such a disaster, he recommended the imposition of restraints in physics and biology research. In addition, he said, scientists ought to take a kind of Hippocratic oath not to use scientific knowledge for the detriment of mankind. [2]

Science is potentially lethal because, in many instances, it does not serve the well-being of citizens. Instead, it is a subsidiary to war; it fuels a medical system based on drugs rather than healing; it supports industrialized agriculture hooked on broad-spectrum toxins (biocides) that poison humans, wildlife and the country's food and drinking water. Science is the bread and butter of numerous other hazardous industries.

In 1974, Elting E Morison, a Massachusetts Institute of Technology professor, raised doubts that modern science and engineering fulfilled human needs. He was almost certain that "the stream of new artifacts" would clash with human nature. As a result, he said: "There seems ...to be a developing mismatch between our extending knowledge of what we can do with the

materials and forces in the world around us and our older, but less certain, understanding of what we have to do to be ourselves. And in this mismatching—such is the power in our machinery and such is the confusion about our real needs—we are likely to come away losers—ground down, blown up, twisted out of shape, crammed into computer-designed compartments, bored to death.”[3]

This dangerous and tragic dilemma complements and results from the twisted values the bomb infused into science and technology. Nuclear power plants, the civilian partners of the bomb, illustrate the human predicament in the 21st century. Take, for example, the San Onofre Nuclear Generating Station of Southern California Edison.

Ace Hoffman, a software developer and writer on nuclear issues for several decades, is convinced the San Onofre plant is unsafe and ought to be shut down immediately. On January 10, 2010, he explained why:

Nuclear power is not cheap, it’s not carbon-free, and it’s not safe. The waste problem is intractable. A meltdown, which can contaminate an area the size of Pennsylvania, can occur at any moment, at any plant. Huge amounts of money are spent in backdoor ways to keep nuclear power plants operating. Huge amounts of water and other natural resources are wasted every day, and huge amounts of coal and oil are burned to mine and mill the fuel that is used in nuclear power plants. Just look at the cleanup bills for our weapons sites, such as Hanford, Washington, to get an idea of what the real cleanup costs for nuclear power plants (which create even MORE waste than our military programs) will be. Over the past four decades, San Onofre has created millions of pounds of deadly radioactive waste. These are poisons whose dangers are not diminished by baking, burning, cooling, compressing, decompressing, mixing, shocking, shaking, liquefying, gasifying, or solidifying. [These are] [p]oisons which physically destroy any container you put them in ...There is no reason to keep San Onofre open any longer, and many good reasons to shut it down forever—including the 500 NEW pounds of high-level nuclear waste it creates every day it remains operational.[4]

Government and the nuclear industry ignore these legitimate concerns and keep the fragile nuclear factories in place. It’s possible they are locked into this deadly policy in order to maintain their control over nuclear weapons.

Barack Obama campaigned for the presidency with a healthy skepticism of nuclear power. Yet, in his State of the Union speech on January 27, 2010, he promised government subsidies to build “a new generation of safe, clean nuclear power plants.”

This kind of reversal of values on the part of Obama, and the tragedy and mistakes that are certain to follow from the country’s nuclear path, come out of a complex of powerful economic and military interests, all revolving around the idea and manipulation of science, which was wedded to the bomb. One realizes—and Lilienthal spoke about it vigorously—that science in America, especially in the case of nuclear weapons and energy, is big and dangerous.

The nuclear catastrophe in Japan in March 2011 adds urgency to the sense that this military game of camouflaging nuclear bombs with the lipstick of nuclear power plants has gone far enough. Time is right for the abolition of this deadly nuclear danger.

The World Council for Renewable Energy, centered at the University of Liechtenstein, urged the world on March 13, 2011, to, "terminate reliance on and trade in this incredibly dangerous technology.... It is 'five past twelve' when it comes to turning away from toxic, deadly nonrenewable energy resources, one of the very banes of humanity. "[5]

Indeed, ending nuclear energy would be the first step to freeing humanity from the bomb. Solar energy is both feasible and inexhaustible. Germany is moving on that path.

Equally important, the absence of the nuclear threat would liberate science to return to its roots, explore the cosmos and improve the well being of people. Science would, finally, divorce itself from the bomb. □□□

References :

1. David Lilienthal, "Change, Hope, and the Bomb" (Princeton, NJ: Princeton University Press, 1963) 61-72, 76.
2. Joseph Rotblat, "Science and Humanity in the Twenty-First Century" Nobelprize. org.
3. Elting E Morison, "From Know-How to Nowhere: The Development of American Technology" (New York: New American Library, 1977) 137.
4. Personal communication from Dr Janette Sherman, January 11, 2010. Ace Hoffman is the author of "The Code Killers." See www.acehoffman.org.
5. Peter Droege, University of Liechtenstein, www.wcre.org. Source: Marx Laboratory, Aug 8, 2011