

SCIENCE

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EDITORIAL

Postmodernism

An essay in a recent issue of *Time* magazine* begins with, "Scientists, it seems, are becoming the new villains of Western society." It goes on to say, "we read about them in newspapers faking and stealing data, and we see them in front of congressional committees defending billion-dollar research budgets. We hear them in sound bites trampling our sensibilities by comparing the Big Bang or some subatomic particle to God."

Does this reflect a growing antiscience attitude? If so, the new movie *Jurassic Park* is not going to help. According to both the writer and producer, the movie intentionally has antiscience undertones. Press accounts say that producer Steven Spielberg believes science is "intrusive" and "dangerous."

It is not only outsiders who are being critical. In recent speeches and publications, George Brown, chairman of the House Space, Science and Technology Committee, has seemed to question the very value of science. Brown has observed that, despite our lead in science and technology, we still have many societal ills such as environmental degradation and unaffordable health care. Science, he says, has "promised more than it can deliver." Freeman Dyson seems to share some of this view. In a recent Princeton speech, he stated, "I will not be surprised if attacks against science become more bitter and more widespread in the next few years, so long as the economic inequities in our society remain sharp and science continues to be predominantly engaged in building toys for the rich."

Are these just isolated events, or is something more going on? Harvard's Gerald Holton recently addressed this question from the historian's perspective in a Sigma Xi speech. Holton says "the discussion about science and values has been shifting in remarkable ways" and in this he sees a trend. The trend even has a name: The Postmodern Movement. It is decidedly antiscience. Holton acknowledges that today this movement represents "a minority view." However, he goes on to warn, "but a view held in prominent circles, among persons who can indeed influence the direction of a cultural shift."

What is the appropriate response? One's first reaction to all of this is apt to be indignation: How can science be blamed for all the ills of society, especially when science has contributed so much? But the perception remains that science has promised too much. *Time* puts it this way: "[Scientists] have silently acquiesced in the proposition that if we just keep writing checks and leaving them alone, science could solve the problems of the world."

Surely no informed person can doubt the essential importance of science to our future. Just imagine, for example, what society would be like today if it were not possible to test for HIV in blood. The public seems to understand the value of science, if only intuitively, as shown by polls that place science among the most admired professions. That status would be impaired, however, if the public starts perceiving science as yet another entitlement. Scientists need to be more careful to note when, as mathematicians would say, science is necessary but not sufficient.

This tack is taken in a new report from the three U.S. academies[†] (hereafter "the Academy") that acknowledges some of the perception problems mentioned above in what it refers to as the "changing context for science and technology." The Academy proposes a new "covenant" between science and society that is rooted in national goals, two for science and one for technology:

- The United States should be among the world leaders in all major areas of science.
- The United States should be the clear leader in some selected areas of science.
- The federal government should cooperate with the private sector to ensure U.S. leadership in selected technologies that promise major industrial and economic impact.

While not the sole answer, the Academy's report is responsive to some of the current debate. Most importantly, the report should help focus the discussion along constructive, rather than negative lines. The Academy concludes with some very good advice: "This country needs to explore how to ensure the progress of science and how to use new knowledge more effectively to meet human needs. If we succeed in doing so, human well-being will be greatly improved."

Richard S. Nicholson

*D. Overbye, *Time* 141, 74 (26 April 1993). [†]*Science, Technology, and the Federal Government: National Goals for a New Era* (National Academy Press, Washington, DC, 1993)