

SCIENCE

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EDITORIAL

Policies for Science and Technology

The annual AAAS Science and Technology Policy Colloquium features a distinguished group of speakers from government, academia, and industry. It draws an audience from Washington and across the land. This year the speakers were particularly well chosen, and there was a record-breaking number of attendees.

That the future shape of federally supported science and technology will undergo substantial change is painfully obvious to many. The end of the Cold War made drastic alterations inevitable. One consequence is that global competition and jobs are now in the spotlight. To that has been added uncertainties provided by a new administration. Thus the audience was particularly interested in seeing and hearing from speakers having access to the levers of power in Washington. Two of them were from the Executive branch and the other two from Congress. Academic scientists could find little comfort in their presentations.

Particularly striking was the contrast in views expressed by speakers from the Executive branch and from the Congress. Spokespersons from the Clinton Administration emphasized a pressing need for fostering technology to stimulate the economy, but Representative George Brown, Jr. (D-CA), chairman of the Science, Space, and Technology Committee of the House, raised questions about the societal value of new technology.

Early in his talk, Jack Gibbons, the President's Assistant for Science and Technology, read a letter for the meeting signed by Vice President Albert Gore, Jr. The fact that the letter came from Gore and not from President Clinton was interpreted by observers as indicating that de facto Gibbons is an assistant to Gore and not to Clinton.

The content of Gibbons's talk related closely to an official presidential statement entitled, *Technology for America's Economic Growth, A New Direction to Build Economic Strength*. This 36-page document was issued 22 February. In the document the need to foster technology is emphasized. In fact, the words "technology" or "technologies" appear in it so frequently as to be a virtual drumbeat. Correspondingly, Gibbons spoke of various means of nurturing technology, including extension services and a closer relation between government labs and industry. He also pointed to the need to reduce budget deficits and a requirement to close out some Cold War activities to pay for new activities. Gibbons mentioned as an Administration objective the maintenance of world leadership in research and development. He also stated that no decrease in basic research was projected by the Administration.

When George Brown spoke, there was food for thought, but essentially no encouragement for academic science. The influential chairman of the Science, Space, and Technology Committee directed his comments at technology. His remarks were a modified version of a statement he made in late 1992. At that time he asserted, "Global leadership in science and technology has not translated into leadership in infant health, life expectancy, rates of literacy, equality of opportunity, productivity of workers, or efficiency of resource consumption. Neither has it overcome failing education systems, decaying cities, environmental degradation, unaffordable health care, and the largest national debt in history."

A quotation illustrative of the softer tenor of his comments at the colloquium follows:

"Basic human needs—elemental needs—are intrinsically different from other material needs because they can be satisfied. Other needs appear to be insatiable, as the consumption patterns of the United States clearly demonstrate.

"...Once basic human needs are met, satisfaction with our lives cannot be said to depend on the amount of things we acquire, use, and consume.

"...[M]ore technology-based economic growth is not necessary to satisfy humanity's elemental needs, nor does more growth quench our thirst for consumption. In terms of the social contract, we justify more growth because it is supposedly the most efficient way to spread economic opportunity and social well-being. I am suggesting that this reasoning is simplistic and often specious."

Brown provided examples of what he stated were market-driven technology that had exacerbated societal inequity. He later stated, "High technology distorts the political process by offering inequitable solutions to difficult social problems."

Politicians usually are acutely aware of the directions in which winds are blowing. The fact that Brown spoke as he did indicates potential problems for the scientific enterprise.

Philip H. Abelson