Privately Funded Exhibit Raises Scientists' Ire

It is the kind of exhibit the Smithsonian is famous for: a century-long look at the role of science in American life. Visitors to the exhibit, which opened in April, get a tour through the development of the birth-control pill, an examination of the role of the bomb in shaping public attitudes (including a complete family fallout shelter), a review of environmental problems such as the ozone hole, and a hands-on center where kids can conduct chemistry experiments. That's all very interesting, but the message some viewers have taken away from the exhibit is not what the American Chemical Society (ACS) had in mind when it gave the museum $5.3 million to develop the exhibit. In fact, some scientists are complaining that the Smithsonian's curators have used the ACS grant to attack science.

NATIONAL MUSEUM OF AMERICAN HISTORY

Thumbs up. The hands-on center in the recent Smithsonian exhibit on science in American life is the part the American Chemical Society likes best; they think much of the rest has a negative tone.

That perception led to a 5-year battle between an advisory committee appointed by the ACS and curators at the Smithsonian's Museum of American History. At the heart of the battle was the protrayal of science—and of chemistry in particular. Committee members say they fought to head off what they saw as an attack on chemistry and science; the final product "is not what ACS wanted or what the Smithsonian wanted," says committee chair William Nevill, a chemist from Louisiana State University. The exhibit's head curator, historian Arthur Molella, however, says he's proud of the product.

The exhibit points up the pitfalls of private funding just as the Smithsonian gets a new secretary, Ira Michael Heyman, who hopes to increase the level of private support (see box on p. 728). Heyman raised millions of dollars for science at the University of California, Berkeley; he now says he's aware of the potential for clashes between a sponsor's objectives and the need to preserve academic freedom. "You need rules that say, if corporations give you money, in what way are you going to honor them. If it involves a plaque, how large can that plaque be?"

But the disagreements over "Science in American Life" centered on more complex issues: the content of the exhibit and the tone of its message. ACS originally wanted to put together something like San Francisco's Exploratorium, a "hands-on" museum where people learn about scientific principles by moving magnets, pulling levers, and playing with the demonstrations, recalls ACS president Ned Heindel. In the 1970s, he says, the organization considered building an Exploratorium-style exhibit in its headquarters in downtown Washington, D.C. Feasibility studies quickly dampened that hope, however: "We didn't have a glimmer of the technical difficulties," he says. In the 1980s, however, a previous ACS president pointed out that the Smithsonian has the technical expertise to put together such an exhibit, and the idea for a Smithsonian exhibit was born.

In 1989, ACS signed a contract obligating it to pay the Smithsonian between $4 million and $5.5 million for "Science in American Life." Heindel says the Smithsonian agreed to build "interactive" exhibits and make sure the exhibit included the contributions of women and minority scientists. The contract also called for an advisory committee of 20 chemists and social scientists appointed by the ACS, but explicitly gave the Smithsonian's curators the final word on content. At that point, says Heindel, "we paid," and later, "we couldn't get out of our contract."

From the start, some advisory-committee members said they objected to what one describes as an "anti-science, anti-technology attitude" among the curators. A historian associated with the project in the early stages says the chemists came in for a rude shock. "They wanted something like the old Du Pont slogan—'better living through chemistry'—Molella and others wanted pollution and death."

Molella, who notes that the exhibit is in the Museum of American History, not a science museum, says, "The purpose wasn't to do something about the triumphs of science. What we did was show how society has changed and use that to show something about how science works." Molella says he considered the advice of the chemists helpful for getting the scientific details right, but made it a point to follow his own judgment on content: "We know it's important to preserve the integrity of the Smithsonian." Molella chose artifacts to illustrate the changing public perception of science from a naïve early faith in "progress" through the disillusionments that came with *Silent Spring*, Three Mile Island, Love Canal, and the exploding space shuttle.

Some members of the advisory committee say the curators' original script called for a much harsher treatment of science than what visitors to the exhibit now see. "We spent most of our political capital making sure it wasn't a complete exposé of the hazards of science," says committee member Spencer Weart, a historian working for the American Institute of Physics. Members say earlier versions had more pejorative captions attached to exhibits such as the atomic-bomb story and items on pollution. At some point, committee members admit there was talk of trying to pull out of the project. ACS and the Smithsonian both called their lawyers.

When the dust settled, an exhibit emerged that included some elements of compromise—but not enough to satisfy some prominent scientists. In June, Robert Park, the American Physical Society's public affairs director, blasted the exhibit in an electronic newsletter he circulates called "What's New." The chemical society's $5.3 million, Park wrote, went into an exhibit for which "the focus is not on the discoveries of science but on the public's changing perception—a view that's sure to worsen as a result of the exhibit."

Though still unhappy about some aspects of the exhibit, Heindel and other ACS chemists are putting the best face on things. They threw a party for the exhibit's opening and in public emphasize the parts they are happy with, especially the hands-on science experiments. Committee chair Nevill adds that the downsides of technology and the changing views of science are part of our history, like it or not. "We started with the '20s and '30s, when science was considered the final word—a scientific argument was truth," says Nevill. "... As we close the century we find that science does not have the answer to everything."

–Faye Flam