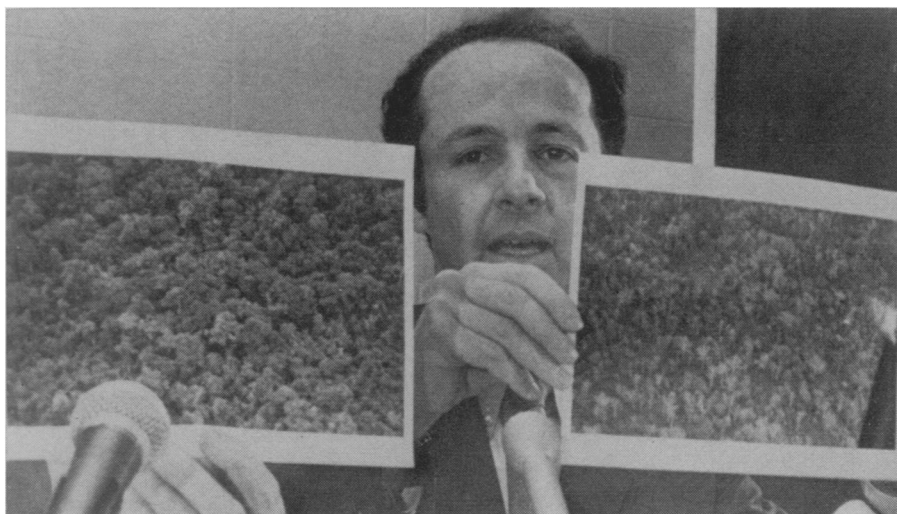


AAAS: Conflict, confrontation, consideration

The world's largest general scientific meeting, once a setting for erudite presentations, has evolved into a forum for social debate



Wide World

Dr. Meselson reporting severe damage to Vietnam ecology from defoliation.

Is population growth responsible for the environmental crisis in the United States? A knotty question.

"Yes and no," Dr. Paul Ehrlich declared dryly in succinct response at a symposium designed to elicit opposing views. The session was one of many on broad ranging topics with a common thread—the interface between science and society—that dominated the 137th meeting of the American Association for the Advancement of Science between Christmas and New Year's in Chicago.

Dr. Ehrlich, professor of biology at Stanford University and author of "The Population Bomb," went on to say, however, that even though just controlling population will not solve the problem of pollution from power plants and such, control of population is essential to environmental preservation. The time to begin, he said, is now.

A second panelist generally shared Dr. Ehrlich's emphasis on a halt of population growth as a solution to environmental devastation. Dr. Garrett Hardin, an ecologist at the University of California at Santa Barbara, argued that as human numbers double, rates of crime and cost of services, such as support of Government, quadruple. "We have all been sold on the economy of scale," he asserted, "and it doesn't always work."

Impassioned opposition was heard, as

anticipated, from Dr. Barry Commoner, director of the Center for the Biology of Natural Systems at Washington University in St. Louis. "There is no ecological population problem in the United States," he announced definitively. "The issue is the nature of our technology and not the size of our population."

In the end, though neither side was totally converted to the other's view, the planned confrontation served its appointed goal of airing and, perhaps, clarifying the issues. And it drew a large audience from the 6,000 persons, including 1,500 speakers, attending the convention.

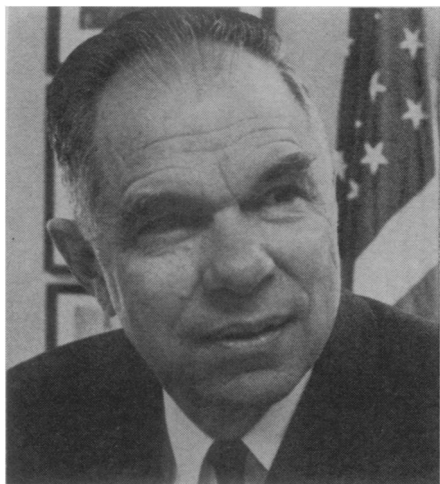
But the well-ordered and pre-planned confrontation that emerges from formal debate was not the only source of conflict in Chicago. Some 250 dissidents, generally young scientists or ex-scientists, most at least loosely associated with what is known as the "Science for the People" movement, gathered to press their view that the AAAS is an establishment organization that fails to respond to societal needs, and that in electing Atomic Energy Commission Chairman Glenn T. Seaborg as incoming president (SN: 12/19, p. 460) it is taking a turn for the worse.

Considering the massive size of the meeting, incidents of disruption by radicals were hardly legion, but those that occurred were dramatic and highly vis-

ible, setting the tone, if not the substance, of the convention. First came opposition to an address by Dr. Edward Teller, invited to speak at a symposium on the generation gap. While the nuclear physicist spoke, two dissidents stood on the stage displaying signs condemning him as a war criminal for his role in building the atomic and hydrogen bombs (SN: 1/2, p. 5). And at one point a member of the audience boomed out, "Are you a stooge for the Nazis?" Replied Dr. Teller, "Please defer your polite and well considered question until I have finished speaking."

Then there was the knitting needle incident. At a morning session on crime, violence and social control, Mrs. Garrett Hardin lost hers when a group of radicals surged forward to usurp the microphone. Dropping a couple of stitches, Mrs. Hardin thrust her knitting needle into the arm of Frank Rosenthal, a graduate student in nuclear physics at Columbia, as he moved to the front of the room. The incident was the talk of the meeting for the rest of the week.

And finally, there was the disruption of a speech scheduled to be delivered by incoming president Dr. Seaborg. It was held—or almost held—in a small, overheated room jammed with reporters, dissidents and only a few scientists. As loud yawns disrupted an



AEC

Dr. Seaborg: Controversial president.

address by Dr. Robert Q. Marston, director of the National Institutes of Health, who preceded Dr. Seaborg on the program, Herbert Fox took the microphone and began reading an indictment of Dr. Seaborg for the crime of "science against the people." Meanwhile, prompted by other AAAS officials, Dr. Seaborg left the crowded room by a side door without attempting to make his remarks.

Fox, a leader of the radical faction, works for the Cambridge, Mass., firm of Bolt, Beranek and Newman, Inc. The Bolt of the company is Dr. Richard H., a member of the AAAS board of directors and the man who ran against Glenn Seaborg for the AAAS presidency.

Contrary to previous reports that Dr. Seaborg won election by a landslide margin of 10-1, the race was, in fact, very close. The AAAS refuses to release the actual count of the some 350 ballots cast by members of its council, but it officially concedes that reports of a wide margin of victory are inaccurate and says that, "It was a fairly close race." Though Dr. Bolt has been unavailable for comment, several scientists who have discussed the election with him report that he, himself, cites losing by only 30 votes.

Assessing the meeting at the end of the week, outgoing AAAS president Athelstan Spilhaus called it "the best session we've ever had," and said that in spite of the disruptions, "Our discussions with the young scientists here have been fruitful and, in the end, to the net good." Nevertheless, Dr. Spilhaus took issue with the philosophy of disruption. "I deplore bad manners," he declared, "because they inhibit discussion. I deplore knitting needles. I deplore any form of violence."

Dr. Spilhaus also challenged the view that the AAAS lacked relevance, citing the nature of its meeting topics in general and its direct consideration of the issue of defoliation in Vietnam as examples of its successful handling of



AAAS

Dr. Spilhaus: The best meeting ever.

current problems. At its meeting a year ago, in response to previous debates, the AAAS council named Harvard biologist Matthew Meselson to head an investigation of the damage herbicides have caused the ecology, economy and health of the people of Vietnam. It charged him with responsibility for appointing a team of co-investigators and allocated \$80,000 for their study. This

NIXON SIGNS BILL

Action toward cleaner air

Washington takes action against the automobile: Clean Air Act may require reduced use of autos in the central city.

APCO



Last week in Chicago, during the annual meeting of the American Association for the Advancement of Science, air pollution was severe. Air pollution control authorities suggested on radio stations that citizens reduce their use of automobiles and that industries limit emissions by curtailing production during the critical period. There was no noticeable reduction in pollution, and factories continued to belch great plumes of black smoke that flattened out against the inversion layer

year, Dr. Meselson and his team reported that in spite of claims by the United States military that its herbicide spraying operations have been designed to avoid harm to civilian populations and nonmilitary areas, damage in Vietnam is widespread. Defoliation has damaged the nation's mangrove forests and hardwood trees to the extent that it will take at least a generation of regrowth for restoration. Enough crop land has been destroyed so that food resources sufficient for 600,000 persons for a year no longer exist. And though the damage to health cannot be accurately assessed, an increased rate of birth defects and stillbirths has been recorded in some provinces.

Largely as a result of joint efforts by Dr. Meselson's team and the AAAS, use of the deadly herbicide Orange has been banned by the White House and new regulations for phasing out all herbicide usage have been announced (see p. 29). Speaking before the council meeting, Dr. Commoner cited the organization's action in this area as an example of its influence. "When we take action we can get real results in the real world," he said, urging more of the same. □

hovering over Chicago.

But another event of last week may cause some radical changes in citizen and industry behavior regarding air pollution: President Nixon signed the 1970 Clean Air Act.

The new law provides for far-reaching changes in the way air pollution standards are enforced. And the intense political competition engendered by the environmental crisis—antipollution has become nearly as sacred as the flag and motherhood—may mean