problems of interest to more than one discipline, or to the scientific community as a whole, or to society at large. As he sees it, the AAAS meeting should serve the needs of a number of different kinds of people-research scientists, students (about one-fifth of those attending the 1970 meeting registered as students), teachers, administrators, and interested laymen. But the process of change is far from complete, and it is meeting with resistance. As a result, the AAAS meeting as now constituted is a bewildering hodgepodge. At one extreme, affiliated societies, such as the American Society of Zoologists, schedule sessions that consist of dozens of short, contributed papers on narrow technical topics. Grafted on top of this there are symposia, planned by the AAAS central office, on such broad topics as "Reducing the Environmental Impact of a Growing Population."

Autonomy of the Affiliates

A glaring weakness of the AAAS meetings at present is that there is little or no editorial control. Programs proposed by the various AAAS disciplinary sections are rarely turned down by the central office, and programs sponsored by the autonomous affiliated societies that meet with the AAAS are considered virtually untouchable. The result is that there is often a great proliferation of programs on the same topic (environmental issues were omnipresent at the Chicago meeting), and some of the sessions actually work at cross-purposes with the rest of the meeting (as when an affiliated society offers nothing but short technical papers). Fully 30 percent of those who arranged symposia at the Chicago meeting claimed that other programs overlapped theirs in content.

The editorial anarchy could probably be cured by a more hard-nosed attitude in the central office, and there are signs that such an attitude is developing. One plan under consideration is to refuse to subsidize the meetings of affiliated groups which don't integrate their programs into the overall AAAS program. It cost the AAAS an estimated \$35,000 to accommodate the affiliates at the 1970 meeting—a not inconsiderable contribution toward the overall meeting deficit of more than \$200,000.

The annual meeting suffers from some of the same problems that have afflicted *Science* as the AAAS becomes more interested in broad issues and less interested in detailed technical reports. Thus the meeting has been criticized for going overboard on social problems and for failing to attract enough reports on red hot scientific advances. A survey indicated that almost a fourth of the papers presented at the Chicago meeting had been previously reported publicly, usually in a journal article or at another scientific meeting. That seems like an extraordinary amount of rehashing of old material, but it is probably inevitable that most scientists will continue to present new findings to their specialty groups rather than to the AAAS. Perhaps the most worrisome criti-

cism of AAAS meetings is that too many of the sessions are dreadfully dull. The radicals who disrupted the 1970 meeting complained that most of the speeches were "boring" and "irrelevant," and even AAAS officials acknowledge that the quality is spotty. Berl estimates that of some 120 symposia at the 1970 meeting, perhaps 20 were "good" and another 50 were "fair." However, quality often depends on the direction from which you are looking, and there were many students, teachers, and young scientists who said they found the 1970 meeting stimulating, broadening, and full of extremely relevant analyses of social problems. "Maybe a second-rate paper in biology is just the right thing for a physicist," one explained.

For the future, AAAS officials are apt to try to develop more centralized control of the program so as to cut down the number of papers and ensure better coverage of topics. There is also talk of holding different kinds of meetings-perhaps on a regional basis or on specialized topics-in addition to the annual meeting. And the effort to expand the reach of the meeting through videotapes, audiotapes, television, and other means will undoubtedly expand. Berl also hopes that the AAAS meetings can increasingly interact with the city in which they are held. This was a stated goal of the meetings back when the AAAS was founded, but in recent years the interaction has amounted to little more than a few tours and an exhibit or two put up in local institutions.

The publication of *Science* and the holding of an annual meeting have long been the major functions of the AAAS. But the association has also taken on, particularly in recent years, an array of other activities as well. The most important, by a long shot, has been

the development of a new science curriculum for elementary schools, with the help of some \$2 million from the National Science Foundation. Entitled "Science: A Process Approach," the new curriculum is being produced and marketed by the Xerox Corporation. Though only barely on the market, it's being used this year by some 70,-000 elementary school teachers to instruct more than 2 million students.

The AAAS also conducts a host of smaller educational projects. It stages the popular Holiday Science Lectures at which eminent scientists address promising high school students in cities throughout the country. It holds seminars for congressmen, diplomats, school administrators, teachers, and others. It awards prizes for outstanding work in science and science journalism. It administers the Gordon Research Conferences, at which the very hottest of hot research is discussed. And it publishes bibliographies, symposium volumes, reports on public issues, Guide to Scientific Instruments, and other documents. All of these projects have their critics and their supporters, and all seem to prove useful to someone somewhere. But whether, taken as a whole, they add up to a significant program, is open to question. Many of these programs are undergoing review to determine whether they should be dropped, altered, or enlarged as the AAAS maps out an ambitious program for the 1970's. That program will be discussed in next week's article.

-Philip M. Boffey

RECENT DEATHS

Dillman S. Bullock, 92; director emeritus, El Vergel Agricultural School, Angol, Chile; 5 April.

Jack Chernick, 59; head, reactor physics division, Brookhaven National Laboratory; 8 April.

George E. Crofoot, 92; professor emeritus of mechanical engineering, University of Pennsylvania; 4 April.

Joseph K. Hill, 52; former president, Downstate Medical Center, State University of New York, Brooklyn; 19 April.

George F. Hunt, 51; professor of wildlife management, University of Michigan; 29 March.

Rollo J. Masselink, 66; former assistant professor of neurology, College of Physicians and Surgeons, Columbia University; 12 April.