

might have taken her several months otherwise. She also discovered that "grass roots" are in the nation's capital as well as in "the provinces," and that environmentalists need not remain in less polluted or less populated sections of the country to make their impact on improving the quality of life. Politicians generally have two homes, one here and the other in their constituencies, she points out, and are able to see in both places what scientists need to do to cope competently with the big interrelated issues of energy, food, nutrition, education, and population.

Views on Time Lag

Mead's studies of time perspective of "primitives" have conditioned her awareness of how long it takes for an idea or an invention to start being operative in complex civilization. Even with telecommunications and electronics, humans today seem to have to wait 20 years for an innovation to take on, an observation she shared with the late Lawrence K. Frank. This is a dangerously long time when one is faced with the sudden impact of 400 years of inventions, she recently told the New York Academy of Sciences. But with typical cheer and hope, she is relishing the larger part the AAAS can play in the education of the pub-

lic, and in providing the atmosphere of a collegium where scientists can communicate across disciplines. The idea of scientists as an exclusive, priestly caste is anathema to her, though she has learned and can speak a number of specialized vocabularies used in different sectors of academia. During the Copernican quinqucentennial celebrations in 1973, she applauded John Archibald Wheeler's suggestion to incorporate interdisciplinary collegia into the symposium sponsored by the Smithsonian and the National Academy of Sciences. That scientists need to learn from one another and from persons in other callings is a fixed premise of her own behavior. Her numerous lectures around the United States are an essential part of her learning about the subtle and major shifts of opinions, style, and world views evolving inside and outside the academic establishment. Sol Tax has commented that on the road Mead is doing fieldwork most of the time. A clinical perspective, however, has not inhibited her capacity for friendship and empathy with an amazingly diverse group of humans. Her celebrity status is unknown to many she holds as close friends on various continents. Few of her intellectual friends have ever read all she has written. Yet even strangers, viewing the beautiful documentary TV film, "Margaret Mead's New Guinea Jour-

nal" have stood up to applaud the warmth of her communications with her informants. Mead the observer expects to be observed in return. Matthew Huxley has suggested that the National Portrait Gallery, when it decides to include Mead in its collection, should run some film loops from that documentary, within a gilt frame, to capture that capacity for friendship and to symbolize her patronage of photography as a tool of art and science.

The interest of Mead in the non-human universe grows out of a life-long inquiry into human conceptions of space and time, and how they are changed by new technology; she has long been an active supporter of space exploration. Thus the new president-elect of AAAS has proposed to the Smithsonian Institution and NASA that they cooperate in designing a ceremonial to say farewell to Pioneer 10 as it leaves our solar system and becomes, from the perspective of possible other creatures, an "unidentified flying object" which we Earth people will be able to authenticate. With the close of Roger Revelle's administration, the AAAS will enjoy some important continuity as Mead picks up his presidential competence in "thinking big" without losing sight of vital, small particulars (interrelated, of course) in the advancement of a very human science.

AAAS Council Meeting, 1974

William Bevan

The AAAS Council held its 1974 meeting on 1 March in San Francisco in the South Parlor of the San Francisco Hilton Hotel, with 54 of its 74 members in attendance at the morning session and 47 at the afternoon session. President Roger Revelle presided.

Leonard M. Rieser, retiring president and chairman of the Board of Directors, opened the meeting by calling to the Council's attention the responsibilities assigned to it by the As-

sociation's new constitution, particularly those of establishing the general policies governing all programs of the Association and of reviewing those programs, including meetings and publications.

The executive officer's report of 1973 activities, which had been distributed to Council members in advance of the meeting, is reproduced on page 496 of this issue of *Science*, together with the budget for 1974.

Elections

The Committee on Nominations reported the election, by mail ballot of the Council, of the following new committee members:

Committee on Council Affairs: Robert Berliner, Claire Nader, and William Sturtevant. (Other members of this committee are Margaret Mead, chairwoman, Daniel G. Aldrich, Jr., Dorothy E. Bliss, Edward C. Creutz, Garrett Hardin, Homer E. Newell, Roger Revelle, and George Sprugel, Jr.)

Council Committee on Fellows: Nancy S. Anderson, Lewis M. Branscomb, Ezra Glaser, Harlan Lewis, Robert T. Orr, Robert G. Page, Mary Louise Robbins, and Ruth D. Turner. (This is a new committee whose establishment was authorized by a bylaw amendment adopted by the Council at its Mexico City meeting on 26 June 1973.)

AAAS Fellows

The new AAAS bylaws provide that a member of the Association "who has produced a body of work on behalf of the advancement of science that is scientifically distinguished or socially highly significant, or both, may, by virtue of such meritorious contribution, be elected a Fellow by the Council upon recommendation of the Council Committee on Fellows." The committee is charged with selecting and presenting to the Council each year a slate of nominees, numbering up to three-tenths of 1 percent of the AAAS membership. Nominations may be made to the committee by the section committees, by the executive officer, or by any three Fellows.

Harlan Lewis, chairman pro tem of the Council Committee on Fellows, reported that the committee, which had held its first meeting on 27 February, intends to have a slate of outstanding nominees to present to Council at the 1975 annual meeting in New York. Its first task is the preparation of an appropriate nomination form. Each section committee will be invited to submit up to an assigned number of documented nominations, the number to be determined by the percentage of AAAS members enrolled in the electorate of the corresponding section.

New Affiliates

As new affiliates of the Association, the Council elected four organizations: American Academy of Neurology, Anthropological Society of Washington, Association for the Study of Man-Environment Relations, and Institutes of Religion and Health.

Section P (Industrial Science)

Margaret Mead, chairwoman of the Committee on Council Affairs, reported that the committee had studied the results of a survey conducted by the Central Office at the committee's request to ascertain the interest of Section P members in their section's continuation. (The survey had been authorized by the committee in response to a formal recommendation from the section's recently retired secretary that the section be dissolved.) Although the response in general was negative, the committee noted that a number of Sec-

tion P members had urged continuation of the section and that some had made excellent suggestions for its revitalization. The committee, therefore, was disposed not to recommend dissolution to the Council. Representatives of Section P who were present expressed satisfaction at the committee's decision and confidence in Section P's viability. The survey results have been transmitted to the section committee of Section P, together with the suggestions referred to above.

Resolutions

Dr. Mead reported that eight resolutions and one letter had been submitted to the Committee on Council Affairs for possible presentation to Council; that the committee had revised five of the resolutions and recommended their adoption; and that the committee also recommended adoption of a statement on international cooperation in science which Roger Revelle had drafted at its request. With changes in some cases, the Council adopted the five resolutions and Dr. Revelle's statement, as follows:

Forest Management

Whereas the American Association for the Advancement of Science in 1874 addressed a memorial to the Congress of the United States on the seriousness of the potential timber shortage in the United States, and

Whereas that communication alerted the nation, and its President, as well as Congress, to the critical situation, resulting in the creation of the Division of Forestry in the Department of Agriculture, to which Franklin Hough, who brought the matter to the attention of the AAAS, was adopted the first head, and

Whereas that memorial initiated a program of forest protection, management, and research that one hundred years later produces high yields of wood fiber while providing for abundant wildlife, water for man and industry, healthy range, and aesthetically pleasing landscapes, therefore

Be It Resolved that the American Association for the Advancement of Science takes note of this occasion by urging (1) that the policies of wise management and use of the national forests for long-term national needs that have been developed over the past 100 years be continued; (2) that these policies not be set aside for short-term political or economic considerations; (3) that the U.S. Forest Service and other concerned governmental agencies fully comply with the spirit and the letter of their legal obligations to prepare and publish environmental impact statements whenever significant changes in for-

est management policy are planned; (4) that biological and related research on forests be greatly intensified by the U.S. Forest Service and other governmental agencies; and (5) that in establishing and carrying out forest management policies, all governmental agencies give full consideration to the multiple use of the nation's forests for watershed protection, erosion control, recreation, aesthetic enjoyment, and wildlife habitation, as well as production of timber and other forest products.

Geneva Protocol

Resolved that the AAAS supports a broad interpretation of the Geneva Protocol. In so doing, it recommends that the United States be willing on the basis of reciprocity to refrain from the use in war of all toxic chemical weapons whether directed against humans, animals, or plants.

Chilean Scholars

Be It Resolved that the AAAS (1) urge the present government of Chile to guarantee safe exit to those who wish to leave the country and not restrict that exit by unreasonable bonds or other harassments, (2) urge its own members, affiliates, and the granting agencies and foundations to help find or to sponsor academic and research positions or scholarships for qualified scholars and students—Chilean and non-Chilean—who are being forced into exile or trapped in Chile awaiting political asylum, (3) authorize its Board of Directors to appoint an official liaison to the Emergency Committee to Aid Latin American Scholars (ECALAS) for the purpose of placing in science-related positions in the United States and elsewhere scholars and students now in Chile, and (4) direct its Board of Directors to publicize these resolutions and to bring them to the specific attention of U.S. and Chilean governmental authorities.

Eligibility for Grants and Fellowships

Whereas a number of funding agencies and foundations define eligibility for grants and fellowships in terms of criteria that have discriminatory effects, even though these effects may not be intentional, and

Whereas, specifically, the practice of using chronological age as a career-stage qualification for pre- and postdoctoral fellowships and grants tends to discriminate against members of social categories, especially women, whose career patterns may differ from the traditional pattern of white males because of differing life circumstances, backgrounds, and social roles, and

Whereas the practice of requiring award recipients to be formally affiliated with universities, museums, or research institutes discriminates against atypical individuals, younger professionals, minorities, and women by reinforcing the already existing effects of employment biases and aggravating the consequences of a shrinking job market,

Therefore Be It Resolved that the AAAS, through its Board of Directors (1) urge

all relevant granting agencies and foundations to eliminate consideration of chronological age for all categories of grants and fellowships, and (2) investigate ways of creating institutional connections for qualified scientists who may lack them but who wish to apply for research grants and fellowships.

Motivating Minority and Women High School Students in Science and Mathematics

Whereas the AAAS has officially committed itself to the principle of equal opportunity for all people in the sciences and the applied professions at all levels, and

Whereas the extent to which this commitment is realized depends on the Association's assumption of the national leadership necessary to develop meaningful programs towards this end, and

Whereas one of the most crucial requirements for the promotion of minorities and women to greater participation in science is science education, as evidenced by the recent studies which have documented the great deficiencies in the early training of minorities and women, and

Whereas insufficient encouragement of minorities and female students in basic mathematics at the high school level often precludes their participation in a college course of study that would lead to a career in the sciences, and

Whereas numerous pilot projects over the past ten years give every indication that thoughtful and bold new approaches are possible to the problem of motivating minority and women high school students in science and mathematics,

Therefore Be It Resolved that the Association shall, as a part of its effort to develop rational and effective science education policies and programs, give high priority to the education and training of minorities and women in the sciences and applied professions.

International Cooperation in Science

The members of the American Association for the Advancement of Science are eager to cooperate with scientists of other countries, in the belief that the search for truth and benefits for human welfare will best be accomplished if the scientific enterprise can be truly international. Although they have sometimes worked for national or private interests, their ideal has been that truth is universal and its discovery should serve mankind. It is in this spirit that many scientists in the

United States today seek to work with their colleagues in other parts of the world.

American scientists are convinced that these cooperative efforts will be most effective if the cooperation is carried out in a spirit of freedom and mutual trust. They believe profoundly that the advance of science rests on freedom for individual scientists: freedom to exchange ideas and data with others; to publish research results; to move from place to place and from country to country; to choose research problems; and to find collaborators who have complementary interests and skills. They will be eager to work with scientists in other countries who share these ideals, but they will be hesitant to enter cooperative programs in which scientific freedoms are stultified.

Intergovernmental agreements for scientific cooperation will result in little substance unless the scientists of both sides can confidently exercise the freedoms that experience has shown are essential in finding the truth.

Council then adopted the following resolution, which had been introduced from the floor.

Soviet Scientists

Whereas the elected Council of the American Association for the Advancement of Science, representing a constituency of over 125,000 scientists in 284 affiliated societies and academies, is gravely concerned about the violation of internationally recognized scientific norms in the USSR, and

Whereas we have learned with dismay that many scientists have lost their professional positions, have been deprived of scientific affiliations and associations, have had their books removed from scientific libraries and their names withdrawn from their published works because they asked for permission to leave the Soviet Union or expressed unpopular opinions, and

Whereas we understand that some of these colleagues, particularly the distinguished Drs. M. Azbel, V. Brailovsky, A. Lunts, K. Plyushch, K. Lyubarsky, and A. Voronel, have been threatened with prosecution for "parasitism" although their unemployment is not of their choosing, and

Whereas the integrity of scientific collaboration and exchange is damaged by these repressive policies because scientific cooperation depends upon the trust and goodwill of individual scientists, and there

is increasing concern among scientists in the United States about the treatment of Soviet scientists singled out for punishment and denied the right to emigrate,

Therefore Be It Resolved that the Council request the President of the American Association for the Advancement of Science to transmit to the President of the Academy of Sciences of the USSR our concern that Soviet policies and practices be changed to permit freedom of emigration for those scientists who seek it and to grant human rights intrinsic to the advancement of world science.

New Business

In response to a suggestion from the floor that at each future meeting the Council take up one well-defined area within its constitutional charge "to review all programs of the Association, including meetings and publications, and to propose actions to the Board of Directors," the Council passed a motion instructing the Committee on Council Affairs to place on the agenda for the next meeting that topic which it regards to be of most vital concern and to allow extended time for its discussion and for action by the Council. In addition, the committee was asked to examine ways to evaluate the actions taken by the Council and by the Association in terms of their effectiveness in accomplishing the Association's objectives.

By acclamation, the Council then voted three resolutions of appreciation:

1) To the local committees for the San Francisco meeting, to the general co-chairmen, and to the staff of the Association who had organized the meeting, singling out for special recognition Richard Trumbull for his efforts—far beyond the call of duty—to assure the success of the meeting.

2) To the officers of the Association for their effective work during the past year.

3) To William Bevan, the retiring executive officer, for his outstanding leadership during an exceedingly difficult period of transition in the Association's history.