

smaller fraction of those elsewhere are using these textbooks. It is not too optimistic to hope that, from now on, an increasingly large number of young Americans will have at least a nodding acquaintance with biology as presented in one of the "versions." I should also mention that Glass was a participant in the so-called Pugwash conferences, and a member of the continuing committees of these conferences.

Glass has received numerous honors and kudos. He is a member of the National Academy of Sciences, the Amer-

ican Philosophical Society, and the American Academy of Arts and Sciences; a foreign member of the Czechoslovak Academy of Sciences; honorary member of the National Association of Biology Teachers; member of the board of directors of the American Association for the Advancement of Science (1959-66); vice president and chairman of AAAS Section F (Zoology) in 1956; member of the editorial board of AAAS (1959-66); and acting editor of *Science* and the *Scientific Monthly* in 1953. He has been president of the American

Association of University Professors (1958-60), American Society of Naturalists (1965), American Institute of Biological Sciences (1954-56), American Society of Human Genetics (1967), and Phi Beta Kappa (1967-70). Washington College, Baylor University, Western Reserve University, Cornell College, and Western Maryland College have all conferred on him honorary doctorates.

THEODOSIUS DOBZHANSKY
Rockefeller University,
New York, New York

AAAS Council Meeting, 1967

Dael Wolfe

The AAAS Council held its 1967 annual meeting in the New York Hilton Hotel beginning at 9:00 a.m. on 30 December. President Don K. Price presided. There were 233 members present at the morning session and 178 at the afternoon session. The business meeting was preceded by a panel discussion of "Basic Science and Its Application," which had been arranged by the Committee on Council Affairs. Walter Orr Roberts presided. The four speakers were William O. Baker, Lewis M. Branscomb, Richard M. Goody, and Gordon J. F. MacDonald. Discussion involving the speakers and members of the Council followed the presentation of the four prepared papers.

Alfred S. Romer presented the report of the chairman of the Board of Directors. He referred to a number of items that had already been reported to Council or that appeared on the agenda, and announced that the Board of Directors and the officers of the British Association for the Advancement of Science were planning a small, joint meeting that both associations hoped would be helpful in defining their responsibilities and planning their activities for the next few years. He also reported that the Board of Directors had voted to add two floors to

the present headquarters building and to purchase land near Washington, D.C., to which the headquarters could later be moved, if that seems desirable, or on which a building to house a portion of the Association office might be erected.

Romer then asked the president, Don K. Price, to review the action taken by the Board in response to a resolution adopted by Council at the 1966 annual meeting. The resolution expressed concern over the long-range consequences of the use of biological and chemical agents which modify the environment, asked that a committee to study such use be established, and offered the Association's cooperation to public agencies and government offices in determining the implications of programs and activities which modify the environment and affect the ecological balance on a large scale.

Price reviewed the appointment of an advisory committee under the chairmanship of René Dubos; the decision by the Board to consider separately (i) the use of herbicides and defoliants in Vietnam and elsewhere and (ii) the wider and more general problems of technological intrusions into the environment; the discussions he, the president-elect, and the executive officer had held with

officers of the United States Government concerning the first of these two areas of work; and the decision by the Director of Defense Research and Engineering to contract with the Midwest Research Institute for a review of existing knowledge and reports concerning the effects of the use of herbicides and defoliants. The resulting report, Price stated, was being reviewed by a committee of the National Academy of Sciences. The report itself and the comments by the National Academy of Sciences committee were scheduled to come to AAAS in January.

With respect to area ii, Price said the Board had asked the Committee on Science in the Promotion of Human Welfare to serve as a continuing committee to be alert to actions, developments, or proposals that seemed likely to result in major changes in the environment, and, as appropriate, to recommend to the Board of Directors the appointment of special commissions to analyze the nature and implications of particular problems and developments. In response to this request, the Committee on Science in the Promotion of Human Welfare recommended that a special committee be established and that the committee consider questions of population change as well as questions of alteration of the environment, for the two problem areas interact so intimately that they should be studied together. Price said that the Board of Directors and the Committee on Council Affairs had considered these matters and were agreed that it would be desirable to reverse the earlier decision to separate AAAS responsibility with respect to areas i and ii, and that the Board of Directors had therefore voted to establish a continuing Committee on Environmental Alteration, to instruct

the committee to carry on a continuing evaluation of the implications of technological intrusions on environmental processes and the interrelations between environmental changes and population changes, and, in view of the previously expressed concern of Council regarding the use of chemical and biological agents in Vietnam and elsewhere, to request the committee to consider these problems as its initial order of business.

Dael Wolffe, the executive officer, summarized the Association's financial status. The year 1967 ended with a deficit, but not as large a deficit as had been anticipated earlier. He reported that a major problem for AAAS and for a large number of other scientific

societies, as well as for universities, hospitals, and other nonprofit organizations, had been created by a new Internal Revenue Service regulation stating that these organizations are now liable for the payment of federal income tax on income derived from activities, engaged in on a regular basis, which the Internal Revenue Service considers unrelated to the objectives for which tax-exempt status was granted. The primary purpose of the new regulation, as announced by the Internal Revenue Service, is to curb unfair competition, and the primary target is the advertising revenue of several major national magazines that are published by nonprofit organizations. The regulation applies, however, to a very much larger number of institutions and associations. There is a substantial body of legal thought to the effect that the regulation would not be sustained if challenged in the courts, and it is quite possible that the regulation will be tested in the courts. If this is done, the matter will probably not be settled for several years, for it will almost certainly have to be carried to the Supreme Court for final decision.

Several members of Congress have introduced bills intended to nullify the IRS regulation, and a good many members of Congress have spoken in opposition to the new regulation. It is possible that Congress may hold hearings on one or more of these bills and bring them to the floor of Congress for vote.

Elections

The Committee on Nominations and Elections reported that, by mail ballot, Council had elected H. Bentley Glass (Distinguished Professor of Biology and academic vice president, State University of New York, Stony Brook) as president-elect; Leonard M. Rieser (dean, Faculty of Arts and Sciences, and provost, Dartmouth College) and Kenneth V. Thimann (professor of biology and provost, Crown College, University of California, Santa Cruz) as members of the Board of Directors; and Donald S. Farner (professor of zoophysiology and chairman, department of zoology, University of Washington), Lorrin A. Riggs (professor of psychology, Brown University), and Eugene B. Skolnikoff (associate professor of political science in charge of Science and Public Policy Program, Massachusetts Institute of Technology) as members of the Committee on Council Affairs. The

persons elected as vice presidents and vice presidents-elect of the Association are named on pages 754 and 755. By ballot during the meeting, Council elected three new members of the Committee on Nominations and Elections: John C. Reed (executive director of the Arctic Institute of North America), Albert C. Spaulding (professor of anthropology, University of California, Santa Barbara), and George Sprugel, Jr. (chief, Illinois Natural History Survey).

New Affiliates

Upon recommendation of the Committee on Affiliation and with the endorsement of the Board of Directors, Council voted to grant affiliation to the American Society of Range Management, the Biometric Society (Western North American Region), the Institute of Navigation, and the Missouri Academy of Science.

Committee Reports

Reports of the major standing committees of the Association were distributed with the agenda and, in a few cases, supplemented during the course of the meeting. No action was requested or taken.

Anatol Rapoport, chairman of the Council Study Committee on Ethics and Responsibilities of Scientists, supplemented the committee's written report with a recommendation that seminars and discussions of ethical issues be held to try to bring about greater agreement on the principles of ethics and the responsibilities of scientists. The Committee on Council Affairs announced that the study committee was being continued for another year.

The Council Study Committee on Population Explosion and Birth Control submitted its final report and made three recommendations. It recommended that the Association establish a standing committee on the population problem. The Committee on Council Affairs responded with the statement that the appointment of standing committees was a responsibility of the Board of Directors, and that it supported the Board's action in appointing the Committee on Environmental Alteration described above.

The study committee also recommended that one session of the 1968 Council meeting be devoted to a review

Table 1. AAAS budget for 1968

Revenue	
Dues of annual members	\$1,040,000
Journal subscriptions (Treasurer)	28,300
Nonmember subscriptions	245,000
Subscriptions: <i>Science Books</i>	25,000
Affiliated organization assessments	4,000
Advertising in <i>Science</i>	2,250,000
Sales: Symposium volumes	80,000
Back issues of <i>Science</i>	8,000
Binders and emblems	7,500
Book lists	20,000
Reprints from <i>Science</i>	110,000
Meeting and exposition	93,000
Rental receipts	2,600
Income from investments	65,000
Administration of projects	78,600
Other income	8,000
Total revenue	\$4,065,000
Expenses	
General administration	\$ 94,400
Board of Directors	10,000
Business office	246,950
Membership fulfillment	81,000
Symposium volumes	54,270
AAAS Bulletin—	
printing and mailing	16,300
Building maintenance	75,830
Depreciation of building and equipment	43,520
Membership recruitment	98,500
Editorial	443,200
News and Comment	135,500
<i>Science</i> —printing and mailing	1,940,000
<i>Science Education News</i>	2,600
Science bibliographies and library	56,500
<i>Science Books</i>	23,500
Book lists	14,500
Meeting and exposition	93,750
Section expense	7,900
Public understanding and press service	34,000
Committee on Science in the Promotion of Human Welfare	10,200
Other committees	10,000
Division allowances	23,500
Academy Conference	1,800
Advertising—cost of sales	562,500
Emblems and binders	5,000
Participation at exhibits of other societies	3,000
Contingencies and new activities	2,000
Total expenses	\$4,090,220
Deficit	\$ 25,220

Table 2. AAAS membership.

<i>Changes during 1967</i>		
New members		23,615
Losses:		
Deaths	447	
Resignations	4,859	
Dropped for non-payment of dues	11,147	
		16,453
Net increase during 1967		7,162
<i>Totals as of 31 December 1967</i>		
Annual members in good standing	110,030	
Graduate student members	3,349	
Life and emeritus members	3,777	
Total active membership	117,156	

of the activities of affiliated societies and other organizations as they relate to the population problem. The Committee on Council Affairs replied that it would consider that recommendation when plans were made for the 1968 annual meeting. The study committee's third recommendation was that the study committee be terminated. The Committee on Council Affairs accepted this recommendation with thanks to the members of the study committee for the work they had done, and stated that the report of the committee was being transmitted to the new standing Committee on Environmental Alteration.

Constitution and Bylaws

The Council voted to approve a rather completely rewritten constitution and bylaws. The revision was intended to remove awkward and inconsistent expressions, to simplify wording, and to bring about better organization and greater consistency among the several parts. Only one important change of substance was involved: abolition of the Committee on Affiliation and the transfer of its responsibilities to the Committee on Council Affairs.

Time of Annual Meeting

Alfred S. Romer, chairman of the Board of Directors, summarized the results of a poll of Council members which had been requested by Council at the 1966 annual meeting. The poll showed a clear preference for continuing to have a meeting once a year instead of twice a year or once every second year, but showed no clear preference between holding that meeting in December and holding it in June.

The Board had considered other factors, Romer said, such as the costs involved, and, in view of the lack of a clear preference for an alternative time and the greater economies to be had by meeting on the traditional December dates, planned to continue to meet at that time.

There was general discussion of the possibility of finding other dates, and several straw votes were held. The alternative that seemed to have most general appeal was to move the dates slightly, so that the meeting might begin on 28 or 29 December and end on 1 or 2 January. A substantial majority of the Council members present expressed approval of such a change. The change cannot be made for the Dallas meeting, but will be explored for later years.

Balance of Council Membership

Walter Orr Roberts, chairman of the Committee on Council Affairs, presented data in response to an earlier request from Council that Council membership and attendance at Council meetings be analyzed in terms of scientific disciplines. The report showed Council attendance of persons from pure and applied physical sciences to be substantially smaller than the percentage of AAAS members from these fields, while Council attendance of representatives of pure and applied biology was appreciably larger. No action was taken.

Resolutions

Two resolutions were presented by the Committee on Council Affairs. The first was written by the committee on the basis of a resolution submitted by the American Society for Horticultural Science. Several amendments were made by Council. Some of these were to improve the wording. The major change in meaning was the addition in several places of the words *and water*, or an equivalent expression, to make clear that the resolution was directed to the conservation and use of water as well as land resources. As amended and adopted by Council, the resolution read:

Whereas valuable agricultural land, precious mineral and water resources, sites of unusual scenic beauty or rare geological, botanical or zoological significance, etc., are frequently arrogated for, or are impaired by, highway and dam construction,

urbanization, industrial development, and other similar public and private uses; and

Whereas satisfactory alternative sites or methods of development are often available for these essential public and private land and water uses, as, for example, by the use of less productive agricultural land, by the removal of valuable sand and gravel (with land-fill replacement) prior to suburban development, by the selection of alternative modes of river development, etc.; and

Whereas preservation and wise use of these natural assets is in the national interest; and

Whereas irretrievable damage often threatens these interests before there is opportunity for adequate expression of public concern through public hearings or studies, as in the case of various projected dams and other construction projects; therefore

Be it resolved that the American Association for the Advancement of Science recognizes the long-range consequences to the nation from continued loss of superior land and aquatic habitats for production of food and fiber to feed and clothe future generations, and the analogous long-term costs to society from careless land and water utilization in other domains; and

Be it further resolved that the American Association for the Advancement of Science Council recommends to the Board of Directors the establishment of a continuing committee or committees to foster a better understanding of the long-term alternatives facing our nation in the development of land and water uses; and

Be it further resolved that the American Association for the Advancement of Science volunteers to cooperate with other concerned scientific societies and public agencies toward the adoption of policies related to land and water utilization that will best serve the national interest.

The second resolution had been submitted to the Committee on Council Affairs by the Kentucky Academy of Science. Several amendments were made from the floor to improve or clarify wording. Following these amendments, Council voted to adopt the resolution in the following form:

Whereas a unique natural area of geological, botanical and zoological significance, valuable in research and instruction as well as providing rare scenic beauty, would be destroyed by the construction of the Red River Dam in Kentucky; and

Whereas man, though able to build laboratories, can never recreate a natural area that has been annihilated; and

Whereas alternative means of flood control and water storage may be found; and

Whereas the dam was authorized and funds were appropriated without adequate consideration of the intangible value of the area to be lost; therefore

Be it resolved that the Council of the American Association for the Advancement of Science appeal to the President of the United States to direct the Water Resources Council to study the advisability of

the Red River Dam in Kentucky and to delay construction until a more thorough study can be made; and

Be it further resolved that copies of this resolution be sent to the President of the United States; to the Director, Bureau of the Budget; the Secretary of the Army; Secretary of Agriculture; Secretary of the Interior; and the Governor of the Commonwealth of Kentucky.

Finances

Dael Wolfle reported that the Board of Directors had adopted the budget that appears in Table 1. The budget for 1968 shows an expected deficit, despite the fact that dues and subscription charges for *Science* were raised effective 1 January 1968. Members in large numbers took advantage of the op-

portunity to renew before the end of 1967 at the old rate. The effect of the increased dues will therefore be slight in 1968. In 1969 and later years it should not be necessary to budget a deficit. Membership changes during 1967 are shown in Table 2.

New Business

It was moved from the floor that the Board of Directors attempt to develop methods of effectively answering attacks on the scientific community made in the public press or elsewhere. The motion was seconded but failed to carry.

Concern was expressed from the floor over the reductions in the amount of money available for research grants and

the withholding of such grants by government agencies. No proposal was put in the form of a motion, but the suggestion was made that the appropriate AAAS committee investigate the effects and report its findings.

In concluding the meeting, the president expressed the appreciation of the officers and the Association to Detlev W. Bronk, who had served as general chairman of the New York meeting; to Gerard Piel, the vice chairman; and to Morris Meister, whose arrangements with New York schools had secured the services of a number of students as messengers and helpers throughout the days of the meeting. He concluded by expressing appreciation to the retiring chairman of the Board, Alfred S. Romer.

AAAS Officers, Committees, and Representatives for 1968

Officers of the Association and its three regional divisions, members of the Editorial Board and of AAAS committees, and representatives to other organizations for the year 1968 are listed below. The years in which terms of election or appointment expire are indicated in parentheses.

General Officers

Retiring President and Chairman of the Board of Directors: Don K. Price, Harvard University

President: Walter Orr Roberts, National Center for Atmospheric Research, Boulder, Colorado

President-Elect: H. Bentley Glass, State University of New York, Stony Brook

Other Members of the Board of Directors

Barry Commoner (1970), Washington University, St. Louis

Hudson Hoagland (1969), Worces-

ter Foundation for Experimental Biology, Shrewsbury, Massachusetts

Gerald Holton (1970), Harvard University

Mina S. Rees (1968), City University of New York

Leonard M. Rieser (1971), Dartmouth College

H. Burr Steinbach (1969), University of Chicago

Kenneth V. Thimann (1971), University of California, Santa Cruz

John A. Wheeler (1968), Princeton University

Paul E. Klopsteg (ex officio), 828 Apple Tree Lane, Glenview, Illinois

Dael Wolfle (ex officio), AAAS

Vice Presidents and Section Chairmen

Mathematics: A. H. Taub, University of California, Berkeley

Physics: Stanley S. Ballard, University of Florida, Gainesville

Chemistry: Ralph Shriner, Southern Methodist University, Dallas

Astronomy: Thornton Page, Wesley-

an University, Middletown, Connecticut

Geology and Geography: Claude C. Albritton, Jr., Southern Methodist University, Dallas

Zoological Sciences: Vincent Dethier, Princeton University

Botanical Sciences: Warren H. Wagner, University of Michigan, Ann Arbor

Anthropology: (to be appointed)

Psychology: Delos D. Wickens, Ohio State University, Columbus

Social and Economic Sciences: Guy E. Swanson, University of Michigan, Ann Arbor

History and Philosophy of Science: Robert Bruce Lindsay, Brown University, Providence

Engineering: Paul Rosenberg, Paul Rosenberg Associates, Pelham, New York

Medical Sciences: Shields Warren, New England Deaconess Hospital, Boston

Dentistry: Barnet M. Levy, University of Texas Dental Branch, Houston

Pharmaceutical Sciences: André Archambault, University of Montreal

Agriculture: Daniel G. Aldrich, Jr., University of California, Irvine

Industrial Science: Donald W. Collier, Borg-Warner Corporation, Chicago

Education: Willard J. Jacobson, Teachers College, Columbia University

Information and Communication: J. C. R. Licklider, Massachusetts Institute of Technology

Statistics: Chester I. Bliss, Connecticut Agricultural Experiment Station, New Haven