Agenda for 1951

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THE PRESENT IS ALWAYS A DIVIDE between the past and the future, but the transition from the first to the second half of the twentieth century constitutes a watershed of extraordinary prominence. The events of 1950 have forced upon us the necessity for making a complete reappraisal of the relation of scientists to the future of America and the rest of the world during 1951 and subsequent years. The routine administration of the AAAS and the development of its well-established program will continue throughout the year, we hope, along the lines so ably set forth by my predecessor, Roger Adams, a year ago (*Science,* **111**, 129 [1950]). But no member of this body, representing as it does all aspects of modern science—physical, biological, and social—can escape the obligation to reconsider his program and personal commitments as he seeks to fulfill his duty to his science, his country, his fellow-men the world around, and perhaps most of all to his own best self.

Never before in the history of America have science and scientists been confronted with such grave dangers as those coming to the fore in 1951. Seldom if ever has it been so difficult for men to make wise decisions, to chart with confidence the road ahead. The pendulum of public opinion concerning scientists swings erratically from an extreme of adulation and awe, because of spectacular contributions to industrial developments, military materiel, and human health, to another extreme of suspicion and recrimination, because of new weapons of mass destruction and the obvious responsibility of science for swift and far-reaching changes in human relations that characteristically bring fear, suspicion, and greed in their train. The scientist himself is troubled by the twin ogres of concentrated power, competent to destroy even civilization itself, on the one hand, and the prospect, on the other hand, that any large group of persons may gain for themselves a high standard of living if they are able to use the skills, techniques, and implements that research has made available. The Frankenstein of potential abundance for all is just as ominous in the minds of many as the Frankenstein of widespread destruction of life and property.

Against that background there stands the stark reality of current events. The mobilization of American manpower, necessary for national defense, poses difficult problems to those who strive to find and apply wise principles of conservation of human resources—using the term conservation in its best and truest sense. (Here it would seem to me to be wise to make our plans in accord with the hypothesis that we are in for a long-drawn-out period of partial mobilization with a continuing state of extreme international tension, rather than that complete mobilization will promptly be required for the catastrophic explosion of global war.) Be that as it may, it would be folly not to take thought for the latter half of the decade of the fifties, because of hysterical anxiety for the first half of that interval.

The executive officers and Council of the AAAS have wisely proclaimed the nature of a guiding compass for the nation's representatives with respect to this particular problem. A resolution adopted at Cleveland affirms "that it would be a national calamity not to make maximum use in the present emergency of the scientific and technical skill possessed by our trained personnel, and that it would be equally calamitous not to assure an adequate continuing supply of such trained personnel." To this the members of the Council in attendance at the Cleveland meeting added the further suggestion that "universal *national* service for scientists is preferable to universal *military* service and that all scientific personnel should be allocated to such national service as their individual training and skills, as well as national needs, permit." Thus, scientists and scientists-in-training would be *assigned* to specific civilian or military duties, rather than *deferred* from immediate military duties. This is the program for which the executives of the AAAS will work, as opportunity develops, but little can be accomplished unless a large percentage of our members exert all the influence they can, both upon public opinion and upon their representatives in Congress.

It is by no means a foolproof program to meet both the emergency and the long-run requirements for national welfare, nor are its numerous operational details spelled out in regulatory proposals. Presumably there would be widespread agreement among scientists that assignments should be made by civilian boards on which adequately qualified scientists had effective representation. Likewise, every effort must be made to ensure safeguards against the regimentation of the youth of our land in ways analogous to those of the totalitarian autocracies whose methods we abhor. The crux of the matter is, however, the general recognition of the fact that service to one's country even in time of mobilization for survival involves much more than the commitment of the physically fit to the grim task of mounting military force to meet the foe. In raising the sights of their countrymen, the scientists of America may make a contribution to human progress of inestimable value.

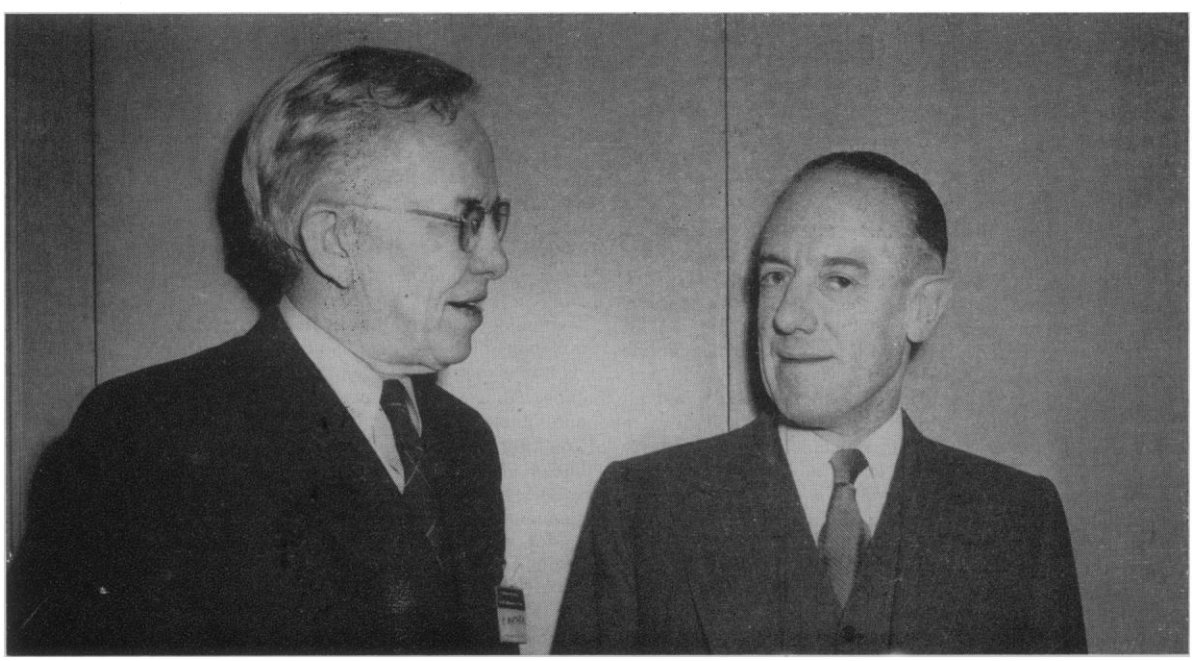
Of equal significance is the next item on our agenda. Science in America is seriously imperiled by rapidly increasing efforts to restrict the freedom for communication of ideas that is the very lifeblood of science itself. Security through secrecy has become

the utterly fallacious but eagerly accepted watchword of the day. Unnecessary restrictions placed upon exchange of scientific and technical information are already a roadblock on the highway of scientific achievement. Those of us who understand how essential freedom of thought and freedom of expression are to scientific progress, as well as how essential scientific progress is to national survival, must be alert and courageous to expose and thwart, if possible, the repressive measures rearing their ugly heads in so many quarters. Eternal vigilance is still the price of liberty. Freedom for the scientist to continue his research and his exchange of information and ideas with his fellow-scientists, untrammeled by fear, unlimited by military directives, unrestricted by senseless regulations, should be demanded for the good of the whole nation.

It is not easy to draw the line between information that should appropriately be kept under security wraps and information that should flow freely from man to man and place to place. The difficulty has increased rapidly in recent years, as war inevitably becomes total war, involving all aspects of the economy. But every informed scientist must know how grievous are the errors of judgment that have been made in the effort to play safe for security rather than to play safe for scientific progress. Is it too much of a hazard to assert that scientists are just as loyal and just as trustworthy as lawyers or business executives? The fact is that many more "military secrets" have been revealed by members of Congress in the past few years than by the scientists responsible for the development of new weapons or techniques. To secure just treatment and demand fair play for men of science may well be among our primary objectives.

Especially important here is the preservation of the international character of science. The Department of State has been exercising increasing control upon the movements of American as well as foreign scientists, both in and out of our country. The power to withhold passports and visas is a power which, when improperly used, may deal a serious blow to scientific progress. International gatherings of scientists are in grave danger of serious curtailment, both in America and abroad, because of the establishment of political and ideological tests of fitness to travel across national frontiers. The scientists of America must insist upon the recognition of the fact that science knows no political frontiers and that its concepts are either worldwide in their application or of no validity at all. The AAAS will continue during 1951 to work for the greatest possible freedom, consistent with intelligent principles of national security, for the unrestricted flow of ideas among the peoples of all nations.

All of which is to say that as we move forward into the second half of the twentieth century it becomes the imperative duty of every member of the AAAS to accept his responsibilities and exercise his rights as a citizen in a still relatively free society. Each of us must become "a scientist with a social conscience." Men of intelligence and goodwill, if aroused to the grave dangers and glorious opportunities of the new day in human history, may yet exert such an influence upon domestic and foreign policies as will greatly increase the chances of establishing a just and durable peace so that we shall not tumble stupidly over the precipice to destruction in another World War. Strenuous efforts to direct the application of the intelligence of science to human affairs, in ways determined by the spirit of brotherly love for all men everywhere, should have top priority on our agenda for 1951.



Dr. Mather and Dr. Bronk at the AAAS Meeting in Cleveland, Ohio, last December.