that these incredible forces would presently be tamed for nonmilitary use, the magnitude of our break with the past became visibly greater and greater.

"We are just beginning to see that even these advances, tremendous as they are, constitute the signal, rather than the substance, of what is to come. Our successful probing into the nucleus of the atom is but an example of the clear fact that science is entering a new and accelerated stage of advancement, which will give to man the possibility of control over his environment, over himself, and over his destiny, which we have as yet only vaguely sensed. By probing the atom, man is exploding into the universe. With prospects that are—just as they were in the case of nuclear energy—both marvelous and frightening, we are on the threshold of an equally revolutionary probing of the cell and of the mind.

"Man is breaking with the past, its limitations and its safeguards. The prize is greater than ever before—so are the risks. The question is not, 'Do we like this?' The question is, 'What role do the people of the United States wish to play in the drama of the future?' We cannot hide. We must not relax. How can we play a noble part?

"What concerns us here is far and away larger than any question about a satellite, or even about a battery of long-range guided missiles, although these dramatic devices have precipitated discussion, and have produced a readiness to consider drastic action.

"We are in fact saying that man is on the very edge of a new relation to the atom, to the cell, to himself, and to the universe in which he is set. Many forces have been active, but clearly it is science which has been chiefly instrumental in bringing about this new relation. The new relation will place new demands on all man's resources—especially on his capacity to handle this new power with restraint and decency.

"This scientific revolution will totally dwarf the industrial revolution and the other historical instances of great social change. It will be more compelling, and will pose more urgent problems, due both to the pace and the magnitude of the changes which now impend.

"What faces man is not, in any restricted sense, a scientific problem. Scientific issues are vitally and almost universally involved. The special knowledge of the scientist is necessary, to be sure; but that knowledge would be powerless or dangerous if it were not effectively pooled with the contributions of social scientists, humanists, statesmen, and philosophers and brought to the service of all segments of our society.

"What on earth—excuse us, it is difficult to adjust—what in the universe ought we to do? The scientists certainly have no arrogant illusion that they have the answers. But they do want to help. At the very least, they have the duty of briefing their colleagues in other fields. They are, moreover, convinced that the time is overripe for a more understanding collaboration between their special profession and the rest of society.

"Because it is urgent for scientists to organize their own thinking about the problems raised in the preceding paragraphs, and urgent for society to understand those problems and their implications, the Council (the legislative body) of the American Association for the Advancement of Science decided that the Association should convene a special meeting, widely representative of all fields of science, to consider certain definite and pressing aspects of the current problems. For obvious practical reasons, the discussion will be largely restricted to actual proposals for increasing support for science and improving education."

Exchange of Scientists

During the 5-year period 1952–56, 6108 scientists participated in the State Department's international educational exchange program. Of the total number of persons exchanged during that period, one out of every five was a scientist.

Of the nearly 5000 scientists who came to the U.S., the largest number were in the field of medicine; others were in engineering, chemistry, physics, mathematics, and biochemistry.

More than 1200 American scientists went abroad to lecture, study, or conduct advanced research. The largest groups were in physics, chemistry, engineering, and mathematics.

The range of scientific pursuits which relate to peaceful uses of atomic energy has grown tremendously in the last few years. During 1956, 183 exchanges under the State Department's program were related to such endeavors.

Research in Human Behavior

A citizens' group of 15 people closely associated with behavioral science urges a national effort to expand research in human behavior as a means of fostering improved international relations and strengthening national defense. In a 7000-word statement the group describes the perils of inaction in the "sciences of man" and outlines a series of recommendations for action by both governmental and private agencies.

The group, which is a temporary body, was organized some 3 months ago by James G. Miller, director of the Mental Health Research Institute at the University of Michigan. It came into being following a discussion with Vice President Richard Nixon. The proposed program was also discussed with James R. Killian, Jr., special assistant to the President for science and technology, and with members of his committee. The Ford Foundation awarded a grant to the AAAS to support the group's work.

The statement, which may be obtained from Dr. Miller, says, in part:

"The present situation facing our country calls for an evaluation of the role and potential contribution of behavioral science. This is the combined endeavor of many fields, investigating all aspects of behavior leading to understanding of human beings as individuals and in social relations.

"Behavioral science therefore includes many studies in the fields of anthropology, biochemistry, ecology, economics, genetics, geography, history, linguistics, mathematical statistics, neurology, pharmacology, physiology, political science, psychiatry, psychology, sociology, and zoology.

"Applications ramify into advertising, business administration, education, government, human engineering, labor relations, law, medicine, military science, operations research, personnel selection, public relations, and many other aspects of human endeavor. Some of these sciences are still in early stages of development, but American research in them at the moment has a clear lead over Russian, which is constricted by Communist dogma.

"Behavioral science has demonstrated its usefulness to human welfare and national security. Its further development could increase its contribution in areas of international relations, military defense, and national vigor.

"To accomplish these goals, the following recommendations are offered:

"I. Formation of an advisory panel of behavioral scientists to work closely with the special assistant to the President for science and technology. There is need for more understanding, backing, and use of behavioral science throughout the government and by the people of the United States, and for encouraging the scientists themselves in their research tasks.

"II. Provision of increased funds for behavioral science research, training, and facilities in the National Science Foundation, the Department of Defense, the National Institutes of Health, the Atomic Energy Commission, and other appropriate governmental and private agencies, in order to: (i) establish additional university programs or institutes to conduct research in designated crucial areas; (ii) finance more fellowships, both predoctoral and postdoctoral, especially in all the social sciences; (iii)