Science in the New Political Climate

In this October of 1964, the Cuban crisis of two years ago seems almost like a bad dream. The Nuclear Test Ban Treaty of a year ago has been quite effective in easing world tensions. While vestiges of apprehension remain, billions of people lead freer, happier lives in the new political climate. If this relaxation continues, a variety of adjustments will surely follow. For instance, the urgency for defense spending will diminish. At the same time, there will be a change in the public's attitude toward science.

For nearly 20 years, most people have identified science closely with defense. To a large degree these public attitudes were conditioned by wartime technological developments and especially by the atomic bomb. A measure of the extent of the people's faith in science as a shield was the reaction to Sputnik—not only at the time, but also subsequently. One indication was the suddenly enhanced position of scientists in the high councils of government; for example, elevation of the status of the President's Science Advisory Committee. A second and perhaps more significant measure was the grass-roots response with respect to education. This has produced changes in school curriculums and course content that may be the most important long-time residue of the event.

With imminent mortal peril receding from view, how will the public regard science? In a large measure this will depend on the values which, to scientists themselves, characterize their work.

There are practical reasons why science should have an honored place in society. The base of our present prosperity rests on science and associated technology. While our attention has been over-focused on military problems, new competition and new rivals have appeared. In international trade the Germans and the Japanese are increasingly successful as they skillfully exploit applied science. In this arena they leave the Russians far behind. I shall never forget the half-frightening impact of an international industrial fair at Frankfurt and conversations there with Americans who were in competition with West Europeans.

An especially important area where science will continue to be the servant of progress is medicine. All mankind faces deadly enemies in the disease processes which have killed and maimed far more individuals than have died in wars. While there have not been recent major dramatic practical consequences of medical research, our improving basic understanding of biological processes guarantees future benefits for all. At the same time, multiple small victories have lessened the menace of even such formidable enemies as cancer and cardiovascular disease.

The most neglected but perhaps the most important reason for carrying on scientific work lies in the spiritual sphere. Today most of the earthly land frontiers have been explored. Where can society look for innovation? For new challenges? We must change continuously to some degree, or we shall stagnate. One of our best sources of innovation is science and technology, for the spirit of science is innovation. One other value of science has not been discussed much of late. It stems from man's hunger to know. Even today we are faced with many unknowns. These represent an invigorating incentive to man and to science. When science drives back the frontiers of ignorance, it does so for all men, and all men can enjoy a greater sense of human dignity for it.

If we are to move forward toward a great society, we must have great challenges, great thinkers, and great innovators. Science can furnish its share of them.—PHILIP H. ABELOSON