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A Matter of Perspective

Coming after a period of anguished debate over an apparent national disenchantment with science and technology, the President's budget request for fiscal year 1972 is heartening.

The budget by no means removes the need for belt tightening. Inflation eats up some of the increase. But, more importantly, changes in emphasis that reflect major concerns of today—the environment, natural resources, food, cities, transportation, and the quality and durability of our society—will have the effect of lessening support to many areas that have over the past decade become accustomed to increasing budgets. What is important to recognize, however, is that the overall support to science remains high.

Thus the impassioned pleas of the last years appear to have had an effect. In my view, however, there was never a real threat to substantial support for science. The prime questions have been: How does one rationally establish the appropriate level for support to science? How does one set priorities? How does one choose among different problems or areas for emphasis or expansion? How can administrators and legislators foster the maximum beneficial returns from the national investment in research? These have been the real questions—not whether to support science and technology.

And these continue to be the questions. The scientific community must in the years ahead apply its utmost in expertise, wisdom, and statesmanship in working with our national leaders to develop understandable and acceptable answers to these important questions. If they do not, the turmoil of the recent past is bound to continue into the indefinite future.

It will be particularly important to give careful attention to the last question: How does the nation maximize the benefit that it should receive from its investment in basic research? In addressing this question, it will be especially critical to present our total national effort in its true perspective. Often, because of their spectacular and newsworthy nature, research activities like space science, underseas exploration, huge accelerators, Antarctic expeditions, and projects to drill deeply into the earth appear to be receiving all the attention, while major societal problems are so vexing, difficult, and clearly unsolved that they appear to be wanting for attention. But, if dollars are at least some measure of attention, such is not the case.

The funding proposed for 1972 for basic science ($2.4 billion), or even that for the entire space exploration program ($3 billion), is a very small fraction of the funding that is proposed for efforts to ameliorate societal problems today ($90 billion). The real need is not so much for additional dollar attention as it is for attention of a different kind. Ideas, new approaches, and new insights into the wise management and utilization of our human and natural resources are what is required. Many of the solutions will rest squarely on modern science and technology, and this is a fundamental reason why society should continue, as it has in the past, to invest in these two related areas.

But science and technology are only the tools. The wielder of the tools must give wise and careful thought to how they may best be applied. This responsibility is one that rests on every citizen who would serve society, but, in today's world, it rests especially heavily on scientists and engineers whose careers are supported by society and whose talents and capabilities are an essential ingredient in the total overall perspective in which, quite properly, science and technology are made to serve the needs of mankind.—HOMER NEWELL, *Associate Administrator, National Aeronautics and Space Administration, Washington, D.C.*