New Directions for the National Science Foundation

On 22 June, the Subcommittee on Science, Research and Development opened the first comprehensive legislative review—as distinct from annual appropriations hearings—that the National Science Foundation has had since its establishment 15 years ago (Science, 11 June 1965). The hearings are sure to include an examination of the Foundation's programs and activities, its operational policies, and the extent to which it has met its large responsibilities. We hope that the committee members and the witnesses who appear before them will go beyond these matters to a consideration of the Foundation's future role.

The Foundation's record is, on the whole, a fine one and there is little point in taking up much time at the legislative hearings either in criticisms or compliments. Nor should overmuch attention be given to such topics as overhead rates, geographic distribution, or the relative merits of different forms of support, for although these matters still press for decision, they are already widely discussed.

There are other, newer, and more fundamental issues that concern the Foundation's future. One deals with scope. Should the Foundation, as a number of recent observers have recommended, assume a much larger fraction of the federal responsibility for supporting basic research, perhaps becoming the major source of federal funds for academic research, while the agencies with primary responsibilities of a more practical character become relatively less important in the support of basic research?

This is not the only possibility of change. The nation needs better means for seeing that new knowledge is put to civilian use. Should the Foundation expand in the direction of greater involvement in the applications of science to much needed technological developments such as weather control, solar energy, earthquake prediction, transportation improvement, and others in which Congress and the nation would welcome successful end items?

There is need for such work, but there are also arguments for keeping the Foundation as one major scientific agency that does not have responsibilities for practical missions. In fact, the Foundation might move in the direction of scientific purity. If it were to leave operations and technology to other agencies and were to relinquish some of its educational responsibilities to the increasingly vigorous U.S. Office of Education, it could concentrate its energies on the support and improvement of basic research and graduate education in the sciences. Such a retraction of scope seems unlikely but would be welcomed by some scientists.

As still another direction of change, the Foundation might evolve into an agency of broad responsibility for higher education, one that would fuse the strengths and techniques that have been developed by the Foundation with the almost overwhelming responsibilities of the Office of Education and the incipient activities of the prospective National Foundation on the Arts and Humanities. The science programs of the federal government have led the way in the establishment of stronger and broader interactions between the federal government and the total educational effort of the nation. The next step could be a union that would frighten some of the interested parties and appear to others to be a new frontier of intellectual leadership undreamed of when the National Science Foundation was planned or established.

The Foundation cannot take all of these diverging courses, but surely it will change, and its future may be as different from the present as the present Foundation is from the one envisioned 15 years ago. The current hearings provide an opportunity for some thoughtful speculation about how the Foundation can best meet future needs.—DAEL WOLFE