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## Behind the President's Message

Reactions to President Nixon's 16 March message to Congress on science and technology have ranged from damnation to high praise, with several intermediate critics complaining that it fell far short of the advance billing of the New Technology Opportunities Program or that it added little to what had already been said in the 1973 budget or the State of the Union message. Generally, the critics have treated the special message (or the special message and related statements from the White House) as an isolated event.

It is a mistake to consider the 16 March message by itself, for that message constitutes presidential affirmation of some proposals for change in science policy that have been brewing for several years. The President's concern for innovation and some of his proposals for encouraging innovation parallel closely recommendations contained in *Technological Innovation: Its Environment and Management*, the 1967 report of an external advisory committee to the Secretary of Commerce.

Or again, the President called for "a new partnership in science and technology—one which brings together the federal government, private enterprise, state and local governments, and our universities and research centers in a coordinated, cooperative effort to serve the national interest." The statement that "A more effective use of these resources can be made by combining the talents of industry, government, and universities in a new type of research organization" sounds as if it came directly from the President's message; in fact, it came from the 1971 report of the National Science Board (NSB). Similarly, some of the recommendations of the 1972 NSB report, The Role of Engineers and Scientists in a National Policy for Technology, are repeated in the President's message. This support, be it noted, came from the 25 members of the NSB, 20 of whom must be classed as academics rather than as industrialists or government managers.

None of these documents presents a fully worked out program; all recognize the need for more detailed planning. The President says, "We must define our goals carefully," and the NSB calls for the careful establishment of priorities. This hard work remains to be done; we have an outline of new policy, but not yet the working drawings.

A similar situation existed from 1945 to 1950, when the basic science policies of the next quarter century were being formulated. The federal government then outlined broad scientific and technological goals, and it decided to support the private sector instead of using governmental institutions as the major performers of research and development. But details of planning and emphasis were left to evolve.

Now the President has announced a new turn in national policy for research and development: more central planning and "directed" research; more multidisciplinary team studies; more emphasis on social goals; and more university-government-industry cooperation. Presidential support for these changes is in itself important, but the ideas are what call for primary attention. Their objectives are social and economic, and hence inherently political, a fact that has important implications for all the scientists and institutions of higher education involved. The specific proposals therefore deserve searching debate, for, if they are adopted, the current period will be remembered as the time of the most significant turning point in national science policy since the late 1940's.—Dael Wolfle, Graduate School of Public Affairs, University of Washington, Seattle 98105