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1984: Science's Multicolored Coat

At the AAAS Colloquium on R & D Policy on 24 and 25 March, before a record attendance, President Reagan's 1984 budget proposals for research and development were searched diligently for meanings and long-range import. There could be no doubt that the budget for science had been crafted with care and deliberation by its architects in government. Nor could there be any mistaking the centrality of research and development in the Administration's economic and defense strategies. But what was striking about this colloquium was its sobriety, the reflectiveness with which the participants took the news about growth and priorities, and the absence of hubris.

The explanation lies in the magnitude of the expectations implicit in the government's assumptions and dispositions, in the conspicuous roles assigned to research and development for regenerating industrial growth, and in the preemptive priority accorded to weapons research and development. By coincidence, the colloquium was in progress when the President chose the medium of television to summon the full talents of scientists to an antimissile race with the Soviets, a risky and possibly fateful mobilization of competitive science and technology of prolonged duration. No wonder, then, that this colloquium had its hands full.

Meanwhile, at the other end of town the House was overriding the Administration's spending targets by voting a budget resolution that fattened the research and development totals for civil functions while decreasing amounts for defense. Moreover, Congress showed that it was in a mood to cure all the ills of science and engineering education with a huge injection of federal appropriations, whether or not the nation's educational system had its act together. With such blessings from both the executive and legislative heavens arriving in profusion after years of dwindling rations, scientists and educators alike could be pardoned for pinching themselves.

Political gusto aside, the budget itself stood out as a remarkable performance in policy-making by the Administration. In the face of appalling fiscal problems with worse still to come, science and technology not only were spared the pain of the freeze on nondefense spending but emerged with a major increase for basic science and an overall hike in the totals for research and development, even if the latter is defense-driven. It is a robust budget, one with both internal and external logic, and in the current climate it stands an excellent chance of surviving the fiscal wars.

Still, preferential treatment places research and development in the uneasy position of being hostage to political expectations. The 1984 budget is not an unconditional gift. It is moored to an intricate public policy which favors certain areas of basic science at the expense of others, which seeks to enhance military assets while at once inducing economic resurgence and overtaking our world competitors, which seeks to rehabilitate science education and stimulate job creation, and yet aches to block channels of scientific communication and technology transfer. When government is out to do all these things at the same time it is not merely taking on a tall order but it is enmeshing the scientific and engineering communities in the toils of political accountability to a degree that we have not previously experienced. The point is only sharpened by the resurrected controversy involving an antimissile defense commitment.

Might this budget have been shaped with more altruism, more hope for a downbeat world? Might it have spoken more generously to the conscience of science? On these scores there is still much to be said. But it is in the nature of things that the budget reflects the country's times and troubles, cast in the construct of an Administration's political values. Though science has emerged a certified winner in the Administration's budgetary struggles, the matter does not end there. What bears thinking about is the escalating instrumental function of the sciences in the business of the state, and what, in the long run, may come of it.—WILLIAM D. CAREY