BOOK REVIEWS

Science in the Federal Milieu

Politics on the Endless Frontier. Postwar Research Policy in the United States. DANIEL LEE KLEINMAN. Duke University Press, Durham, NC, 1995. xiv, 249 pp. $39.95; paper, $16.95.

A discussion of present-day struggles to reform federal science and technology policy ends Daniel Lee Kleinman's *Politics on the Endless Frontier*. Kleinman's main focus, however, is earlier—specifically, on the emergence during World War II and immediately afterward of a consensus that the country needed a National Research (eventually Science) Foundation and on the eight years it took to create something of the sort. This was, as almost everyone who has studied the period has recognized, a delay with enormous implications for subsequent research policy in the United States. Drawing on the existing historical accounts and filtering them through a large selection of political science writings (all of which are cataloged in a useful 24-page bibliography), Kleinman makes a number of key observations.

During World War II, leaders of the American academic science establishment developed or strengthened already close associations with their counterparts in technology-based industry. Kleinman describes how, following the war, many of these men came to occupy positions of enormous influence both within and at the periphery of governmental organizations. This "permeability" of national policy-making structures protected academic and industrial interests and severely constrained the kinds of reform that could be made (especially with respect to practices like peer review and issues like patent policy). Kleinman also provides an account of various personal and organizational splits within the Truman era government and within the evolving Democratic Party. He shows how those splits worked against Senator Harley M. Kilgore and his goal of creating one lead central agency in the federal government to "plan and coordinate" federal support of basic and applied research in the national interest.

It is much to the author's credit that in covering such well-trodden territory he highlights a number of important points that are not always recognized or given due emphasis. For instance, he points up the remarkable effectiveness of what he calls the "collective advancement project" of the American scientific community. Also noteworthy is his account of the role played in the science policy debate by "discourses."

The displacement of the New Deal rhetoric of planning and centralized coordination, according to Kleinman, by the rhetoric of scientific independence and self-governance (rhetoric given extraordinary power by the events of World War II and the public perception of scientists and their role within it) severely constrained the outcome of policy debates. For the most part, assertions about the relationship between scientist-controlled basic research and national prosperity and security went unchallenged, even as they radically limited government options.

The United States Congress and the White House are currently in the midst of a titanic struggle to redefine the size and role of central government in American society. The battleground is the federal budget. The process is extraordinarily messy and the result, more than likely, will be inconclusive. Lost in the scramble over entitlements and federal versus state control over social welfare programs, a number of important science policy issues also hang in the balance. What should the federal government's role be with respect to supporting, coordinating, and even planning scientific research? How should its activities be organized? And who should be in control?

Kleinman's book shows how, in the 1940s, contests over such seemingly narrow questions as patent policy and the consistency of placing geographical or other constraints on the National Science Foundation aside, it was such larger policy questions that were ultimately at issue. The book is quite useful, therefore, in placing the debate over American research in the context of American policy-making overall. Recent science policy initiatives, as Kleinman points out, are subject to many of the same forces (if aligned somewhat differently). Certainly scientists (outside and inside industry) continue to "permeate" government agencies, advisory bodies, and legislative staffs. And certainly deals continue to be made within and across political parties to advance or to block all manner of possible agreements or compromises. What is most different is the rhetoric (the discourses) that serves to shape the debate. Instead of prosperity and security we have "competitiveness." But we also have the often repeated, seldom questioned rhetoric of balanced budgets and "pay-as-you-go."

Politics on the Endless Frontier may well be most valuable as a reminder to a new generation of scientists that government policy toward them and toward their research careers must be viewed in context and that the context is hardly straightforward and rarely fully rational. The adoption of consistent, workable long-range plans for science, as for the federal government more generally, has always been extremely difficult except under extraordinary circumstances (of war or threatened economic collapse). And for good or for evil, optimal long-range planning at the federal level will likely remain beyond the reach of our established political institutions.

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Old World Herbivores

Colobine Monkeys. Their Ecology, Behavior and Evolution. A. GLYN DAVIES and JOHN F. OATES, Eds. Cambridge University Press, New York, 1995. xiv, 415 pp., illus. $79.95 or £50.

The Colobinae are a subfamily of Old World monkeys that includes the colobus monkey of Africa and the langur of India. Curiosity about these animals, which are commonly called "leaf monkeys," has centered on their unusual (for primates) fo-

"Banded leaf-monkey *Presbytis melalophos* leaping, West Malaysia." [From Oates, Davies, and Delson's chapter in *Colobine Monkeys*; photograph by John Fleagle]