

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Science serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Editorial Board

ROBERT L. BOWMAN	EVERETT I. MENDELSON
JOSEPH W. CHAMBERLAIN	NEAL E. MILLER
JOHN T. EDSALL	JOHN R. PIERCE
EMIL HAURY	KENNETH S. PITZER
ALEXANDER HOLLAENDER	ALEXANDER RICH
WILLARD F. LIBBY	DEWITT STETTIN, JR.
GORDON J. F. MACDONALD	CLARENCE M. ZENER

Editorial Staff

Editor

PHILIP H. ABELSON

Publisher

DAEL WOLFLE

Business Manager

HANS NUSSBAUM

Managing Editor: ROBERT V. ORMES

Assistant Editors: ELLEN E. MURPHY, JOHN E. RINGLE

Assistant to the Editor: NANCY TEIMOURIAN

News and Comment: DANIEL S. GREENBERG, JOHN WALSH, ELINOR LANGER, LUTHER J. CARTER, MARION ZEIGER, JANE AYRES

Europe: VICTOR K. McELHENY, Flat 3, 18 Kensington Court Place, London, W.8, England (Western 5360)

Book Reviews: SYLVIA EBERHART

Editorial Assistants: ISABELLA BOULDIN, ELEANORE BUTZ, BEN CARLIN, GRAYCE FINGER, NANCY HAMILTON, OLIVER HEATWOLE, ANNE HOLDSWORTH, KONSLYNNIETTA HUTCHINSON, KATHERINE LIVINGSTON, DIRGHAM SALAH, BARBARA SHEFFER

Advertising Staff

Director

EARL J. SCHERAGO

Production Manager

RAYMONDE SALAMA

Sales: New York, N.Y., 11 W. 42 St. (212-PE-6-1858): RICHARD L. CHARLES, ROBERT S. BUGBEE
Scotch Plains, N.J., 12 Unami Lane (201-889-4873): C. RICHARD CALLIS

Chicago, Ill. 60611, 919 N. Michigan Ave., Room 426 (312-DE-7-4973): HERBERT L. BURKLUND

Los Angeles 45, Calif., 8255 Beverly Blvd. (213-653-9817): WINN NANCE

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phone: 202-387-7171. Cable: Advancesci, Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. ADVERTISING CORRESPONDENCE: Rm. 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE 6-1858.

Political Realities and Educational Needs

In September 1965 President Johnson issued an executive order aimed at achieving more even distribution of research funds. Change, however, has been slow. There has been little alteration in the situation outlined by Representative Green of Oregon in 1962: a few states and a few institutions get most of the money. Congressional impatience is increasing. This was evident in recent hearings on geographical distribution, before a subcommittee on Government Operations headed by Senator Harris of Oklahoma (*Science*, 5 August 1966). In his examination of the President's Science Adviser, Senator Harris accused both Dr. Hornig and Dr. Haworth, of NSF, of being patronizing and condescending in their treatment of his committee and of giving Congress the runaround. The bitterness of Senator Harris's attack seems excessive, but a look at the background makes his attitude more understandable.

Leaders of the Establishment have been slow to respond to important shifts in political attitudes arising from changing circumstances. Perhaps the most important is a revised evaluation of the Russians. During the 1950's Ivan was portrayed as a superhuman 12 feet tall. Following the 1962 Cuban confrontation Ivan's stature shrank. Today he is a midget (a dangerous assumption). This revised evaluation has had major effects on Congress. It has been a factor in the slowing of growth of funds for both research and development. It has removed an important restraint that previously kept allocation of R&D funds out of logrolling politics. During the period when we regarded ourselves as mortally pressed by the Russians, the patriotic and politically wise stance was to expand research and development where optimum performance could be obtained. Efforts to change geographical distribution of funds might not have become urgent had not many politicians become convinced that federal research and development funds are a key to economic progress. Politicians are aware of spectacular growth on the Coasts in contrast to stagnation in mid-continent areas that have not received large allocations. The contest for the new high-energy accelerator dramatized the issue. The effort also brought together scientists and politicians in the have-not states, initiating cooperation which in future days, on other battlefields, may bring successes.

Democrats and Republicans from have-not states find it easy to agree on the need for a "better" distribution of R&D funds. Senator Karl Mundt of South Dakota, ranking minority member of the Harris subcommittee, has strongly supported the chairman's position. He reminded the Senate that one state receives more R&D funds than the total received by the lowest 43.

In allocating money for research the granting agencies have compiled a more equitable record than that suggested by the figures cited by Senator Mundt. Nevertheless, the have-not states form a discontented majority. There is a painful contrast between the resources of their universities and those of the schools at the top of the list, and the current grants system serves to increase the disparity. The have-not institutions are especially deficient in modern instrumentation and accordingly can neither compete successfully in research nor educate properly. A new federal aid program responsive to political realities and educational needs is required. It should provide substantial sums, on a per capita basis, for attendance at science courses that meet minimal standards.—PHILIP H. ABELSON