

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

1975

H. S. GUTOWSKY	DONALD LINDSLEY
N. BRUCE HANNAY	RUTH PATRICK
DONALD KENNEDY	RAYMOND H. THOMPSON
DANIEL E. KOSHLAND, JR.	

1976

ALFRED E. BROWN	FRANK PRESS
JAMES F. CROW	FRANK W. PUTNAM
HANS LANDSBERG	MAXINE SINGER
EDWARD NEY	ARTHUR M. SQUIRES

Editorial Staff

Editor

PHILIP H. ABELSON

Publisher

WILLIAM D. CAREY

Business Manager

HANS NUSSBAUM

Managing Editor: ROBERT V. ORMES

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

Assistant to the Editors: RICHARD SEMIKLOSE

News and Comment: JOHN WALSH, Editor; PHILIP M. BOFFEY, LUTHER J. CARTER, BARBARA J. CULLITON, CONSTANCE HOLDEN, DEBORAH SHAPLEY, NICHOLAS WADE. Editorial Assistant, SCHERRAINE MACK

Research News: ALLEN L. HAMMOND, WILLIAM D. METZ, THOMAS H. MAUGH II, JEAN L. MARX, ARTHUR L. ROBINSON, GINA BARI KOLATA, FANNIE GROOM

Book Reviews: KATHERINE LIVINGSTON, LYNN MANFIELD, JANET KEGG

Cover Editor: GRAYCE FINGER

Editorial Assistants: JOHN BAKER, ISABELLA BOULDIN, MARGARET BURESCH, ELEANORE BUTZ, MARY DOREMAN, SYLVIA EBERHART, JUDITH GIVELBER, CAITILIN GORDON, CORRINE HARRIS, NANCY HARTNAGEL, OLIVER HEATWOLE, CHRISTINE KARLIK, MARGARET LLOYD, JEAN ROCKWOOD, LEAH RYAN, LOIS SCHMITT, YA LI SWIGART, ELEANOR WARNER

Guide to Scientific Instruments: RICHARD SOMMER

Membership Recruitment: GWENDOLYN HUDDLE; Subscription Records and Member Records: ANN RAGLAND

Advertising Staff

Director

EARL J. SCHERAGO

Production Manager

MARGARET STERLING

Advertising Sales Manager: RICHARD L. CHARLES

Sales: NEW YORK, N.Y. 10036: Herbert L. Burkund, 11 W. 42 St. (212-PE-6-1858); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); CHICAGO, ILL. 60611: Jack Ryan, Room 2107, 919 N. Michigan Ave. (312-DE-7-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 11 N. La Cienega Blvd. (213-657-2772); DORSET, VT. 05251: Fred W. Dieffenbach, Kent Hill Rd. (802-867-5581)

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phones: (Area code 202) Central Office: 467-4350; Book Reviews: 467-4367; Business Office: 467-4411; Circulation: 467-4417; Guide to Scientific Instruments: 467-4480; News and Comment: 467-4430; Reprints and Permissions: 467-4483; Research News: 467-4321; Reviewing: 467-4443. Cable: *Advancesci*. Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. See also page xi, *Science*, 26 September, 1975. ADVERTISING CORRESPONDENCE: Room 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE-6-1858.

Detlev Bronk

For all of us, the death of Detlev Bronk means that a steady and generous source of illumination has been extinguished. But in our hearts and memories there remains a warm afterglow.

Det Bronk was one of the most sought after and influential men in science. He made original and fundamental scientific observations, he served as president of two major universities, he was president of the National Academy of Sciences for 12 years, and his contributions to this country were such as to deserve its highest civilian honor, the Medal of Freedom. What were the essential characteristics that set this man apart? We think an important one was that he enjoyed what he did; he valued the scientific life. Another was that he really cared about people, and they reciprocated. In his address on retiring from the presidency of the American Association for the Advancement of Science in December 1953, there is a glimpse of what science meant to him:

"As a scientist, I think of intellectual adventure in terms of scientific research and inquiry. As members of the greater community of scholars, we should think of science as encompassing all significant knowledge which enriches life. Science in that broader sense is a great odyssey of the human spirit. Because it is just that . . . the future I envision is one of glad, confident mornings of new days of greater satisfaction."

This indicates another of Bronk's characteristics. He took the broad view. As a beginning scientist, he felt that the pinnacle of his desire was the sanctuary of the laboratory, but he soon realized that he could not allow external forces to control the life and future of the scientific community. Again, his philosophy is expressed in his presidential address:

"Science shapes the lives and thoughts of men and the destiny of nations; many who are not scientists are thus tempted by the will to serve or by the lust for power to control the policies and conditions under which scientists must work. Scientific research and knowledge are essential elements of modern life; the changing patterns of civilization are influenced by and, in turn, have a profound effect on the nature and the course of scientific activity.

"This is justification for inclusion of some who are neither scientists nor professional scholars in any field among administrators and trustees who play a powerful role in guiding the affairs of science and its uses. It does not justify their lack of understanding of science and the conditions under which it can flourish. . . .

"Men of affairs and social influence need more knowledge of and appreciation of the traditions, ideals, and significance of science. Scientists are in part to blame for such lack of awareness. . . . we have emphasized too much our discoveries and their useful applications. We have inadequately revealed science as a great intellectual adventure. Unless this quality of science is more generally comprehended, we shall be subject to adverse pressures that result from lack of understanding."

As president of Johns Hopkins University in the McCarthy era, Bronk learned something about adverse social pressures, but it was another of his characteristics that he had courage and knew when to display it:

"Progress requires courage. If we are to fulfill our rightful role in the furtherance of science, we need abundant courage. For this we are fitted by tradition and by the nature of our calling, for we are discoverers and teachers of new knowledge which is usually challenged and disputed. And so, there is no place in science for timid men and women who are unwilling to defend their necessary freedom for inquiry and free unprejudiced discussion."

But Bronk was no arrogant dissenter. He was basically a shy person, and like many great men he was modest. He was aware of his own place and the place of science in the larger scheme of things. It is told that some time during his years as president of the Rockefeller University he received a gift of money, which his fellow scientists pressed him to use for some worthy investigation or other; instead he spent it on a flower garden.

—NEVA M. ABELSON AND PHILIP H. ABELSON