

AMERICAN ASSOCIATION
FOR THE
ADVANCEMENT OF SCIENCE

Board of Directors

CHAUNCEY D. LEAKE, *Retiring President, Chairman*
THOMAS PARK, *President*
PAUL M. GROSS, *President Elect*
HARRISON BROWN DON K. PRICE
HENRY EYRING ALFRED S. ROMER
H. BENTLEY GLASS WILLIAM W. RUBEY
MARGARET MEAD ALAN T. WATERMAN
PAUL A. SCHERER, *Treasurer*
DAEL WOLFE, *Executive Officer*

Editorial Board

KONRAD B. KRAUSKOPF H. BURR STEINBACH
EDWIN M. LERNER WILLIAM L. STRAUS, JR.
PHILIP M. MORSE EDWARD L. TATUM

Editorial Staff

DAEL WOLFE HANS NUSSBAUM
Publisher Business Manager

GRAHAM DUSHANE
Editor

JOSEPH TURNER ROBERT V. ORMES
Associate Editor Managing Editor

ELLEN E. MURPHY, *Assistant Editor*

NANCY TEIMOURIAN, *Assistant to the Editor*

News: HOWARD MARGOLIS, LILLIAN LEVY, PATRICIA D. PADDOCK

Book Reviews: SARAH S. DEES

Editorial Assistants: NANCY S. HAMILTON, OLIVER W. HEATWOLE, EDGAR C. RICH, JOHN E. RINGLE, BARBARA SUTHERLAND, CONRAD YUNG-KWAI

Staff Assistants: GENEVIEVE M. KIRBY, JEAN P. D. PIEKNIK

Advertising Staff

EARL J. SCHERAGO, *Director*

BERNICE SCHWARTZ, *Production Manager*

Sales: RICHARD L. CHARLES (New York, N.Y., PE 6-1858); C. RICHARD CALLIS (Old Bridge, N.J., CL 4-3680); HERBERT BURKLUND (Chicago, Ill., DE 7-4973); DILLENBECK-GALAVAN (Los Angeles, Calif., DU 5-3991)

SCIENCE, now combined with THE SCIENTIFIC MONTHLY, is published each Friday by the American Association for the Advancement of Science at National Publishing Company, Washington, D.C. SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

Editorial correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts. Opinions expressed by authors are their own and do not necessarily reflect the opinions of the AAAS or the institutions with which the authors are affiliated. For detailed suggestions on the preparation of manuscripts, see *Science* 125, 16 (4 Jan. 1957).

Advertising correspondence should be addressed to SCIENCE, Room 1740, 11 West 42 St., New York 36, N.Y.

Change of address notification should be sent to 1515 Massachusetts Ave., NW, Washington 5, D.C., 4 weeks in advance. Furnish an address label from a recent issue. Give both old and new addresses, including zone numbers.

Annual subscriptions: \$8.50; foreign postage, \$1.50; Canadian postage, 75¢. Single copies, 35¢. Cable address: Advancesci, Washington.

Copyright © 1961 by the American Association for the Advancement of Science.

Chinese Embargo

The newest volume in the AAAS symposium series is *Sciences in Communist China*. The volume and the symposium at the 1960 AAAS meeting at which the 26 papers were originally presented, some in shortened form, involved the cooperation of many people and organizations: a grant from the National Science Foundation, the joint planning of 10 scientific societies with the annual AAAS Conference on Scientific Communication, the scholarship of 30 authors, and the collection from many sources and the distribution to these authors of a quarter of a million pages of Chinese scientific literature of the past decade.

The result is a field-by-field summary that presents both some praiseworthy accomplishments and some failures to achieve the high hopes of Chinese government planners and scientific leaders. The symposium volume, the original literature (which is now on deposit at the Massachusetts Institute of Technology library), and the translations of a number of 10-year reviews written in Communist China by Chinese scholars, each summarizing advances of the past decade in a single field, make available a massive amount of material that hitherto has been scattered and, in the main, available only to persons who could read Chinese.

It is unlikely that there will be another such compilation in the near future, for the Chinese have virtually stopped exporting copies of their scientific journals. Only a trickle has come out since the end of 1959.

The embargo cuts both ways. It will be more difficult for the Western world to learn what is happening in the scientific institutions of Communist China. And it will be harder for Chinese scientists to keep up with Western literature since exchange arrangements have been cut off by the embargo. Clearly this means a loss to scientists in China. It also means some loss to scientists in other countries, and a loss, also, to that abstract entity science itself.

Commenting on the symposium presented in New York, the columnist Holmes Alexander—knowing that he was advocating an unpopular position—recommended continued isolation of Chinese scientists from the rest of the world because “as far down the road as anybody can see, our sworn enemies in Asia would have far more to gain from the exchange than we would.” When there is free scientific communication across a border, the less advanced group stands a greater chance of learning something new than does the more advanced group. But the more advanced group has a greater capacity to utilize any new findings gleaned from the other's literature. Which loss is the greater might be debated, but for the moment let us agree with Mr. Alexander that the Chinese have more to gain from a free exchange than we do. Why, then, have they ceased to export their own literature?

A semiofficial explanation is that paper is in short supply and that the number of copies printed does not allow for export, but some skeptics suggest that the real reason is that Chinese science has not advanced as rapidly as their national leaders predicted and that the embargo is to prevent loss of face.

Whatever the reason, the decision was probably politically determined. It is, therefore, not likely to be changed until China learns, as, we hope, the U.S.S.R. and the Western nations have learned, that a nation that attempts to isolate itself from international scientific communication loses more than it gains.—D.W.