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 WILLIAM W. RUBEY Alan T. Waterman H. BENTLEY GLASS MARGARET MEAD PAUL A. SCHERER, Treasurer DAEL WOLFLE, Executive Officer

Editorial Board

KONRAD B. KRAUSKOPF H. BURR STEINBACH EDWIN M. LERNER PHILIP M. MORSE

Editorial Staff

WILLIAM L. STRAUS, JR.

EDWARD L. TATUM

DAEL WOLFLE Publisher HANS NUSSBAUM Business Manager GRAHAM DUSHANE

Editor

JOSEPH TURNER Associate Editor ROBERT V. ORMES Managing Editor ELLEN E. MURPHY, Assistant Editor

NANCY TEIMOURIAN, Assistant to the Editor News: HOWARD MARGOLIS, BETHSABE ASENJO Book Reviews: SARAH S. DEES

Editorial Assistants: NANCY S. HAMILTON, EDGAR C. RICH, BARBARA SUTHERLAND, CONRAD YUNG-KWAI

Staff Assistants: PATRICIA D. PADDOCK, LOIS W. WOODWORTH

Advertising Staff

EARL J. SCHERAGO, Director

BERNICE SCHWARTZ, Production Manager Sales: RICHARD L. CHARLES (New York, N.Y., 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 SCIENTIF-IC MONTHLY, is published each Friday by the American Association for the Advancement of Science at National Publishing Company, Wash-ington, 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 or for the opinions expressed by contributors. For detailed suggestions on the preparation of manuscripts, see *Science* 125, 16 (4 Jan, 1957).

Advertising correspondence should be addressed to SCIENCE, Room 740, 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. If possible, furnish an address label from a recent issue. Give both old and new addresses, including zone numbers, if any.

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.

What Laymen Can Ask of Scientists

In one of the essays in his last volume, Resistance, Rebellion, and Death, Albert Camus considers the question of what unbelievers like himself can ask of Christians, and his answer is relevant to the question of what laymen can expect of scientists. Camus warns first against a certain kind of hypocrisy, the hypocrisy of the man who does not accept the Christian truth but who, nevertheless, expects more of Christians than he does of himself. Christians have many obligations, according to the essay, but it is not the province of the unbeliever to recall them for the believer. Camus concludes, however, that he may permit himself to demand certain responsibilities of Christians-he has in mind, among other points, the failure of Rome to speak out immediately and clearly against political executions in Spain-but these responsibilities can only be those that must be required today of everyone.

The relevance of Camus's question to the question of what laymen can ask of scientists begins with the presence of similar opportunities for hypocrisy. Here also persons who do not follow a certain pursuit have the chance to indulge themselves by expecting special things of persons who do. Laymen can persuade one another that it is a simple matter to be a scientist and, from the vantage point of no personal involvement, expect scientists to be more selfless and lofty of purpose than they themselves are. Scientists and former scientists, it is true, sometimes encourage such expectations by saying that such virtues play an essential role in the scientific enterprise. There is the claim, for example, that there is something moral in the very grain of science. Scientists rarely fake experiments, and the reason, so the argument runs, is not that they are afraid of being caught in a lie by other scientists who try to repeat their experiments, but that scientists cannot tell lies and still achieve their objective of getting answers to the questions they put to nature.

There is an opportunity, then, to regard scientists as just a bit more saintly than other men, and so to make special demands of them. At the same time, interestingly enough, there is also an opportunity to regard scientists as just slightly greater sinners than other men, and so to make the same demands again. Men who are not scientists expect special atonement by scientists for the role they have played in the creation of many of the ills that now beset us. They demand atonement especially for the creation of that Sword of Damocles that hangs over us all, the atom bomb and the missile to deliver it. And again scientists have encouraged such demands.

But let us not give one another opportunities to indulge in hypocrisy. On the one hand, scientists may practice truthfulness in their work as a welcome necessity, but this does not mean that they embrace truth with equal fervor when it comes to seeking funds and recognition. And, on the other hand, in the application of science to military technology, it was not scientists who invented the occupation to which their talents have been applied with such stunning effectiveness. Any group, it is granted, has the prerogative to hold itself accountable in special ways. To paraphrase Camus, if there is anyone who can make demands of the scientist, it is the scientist himself. But what can laymen ask of scientists? As in the answer Camus gives to his question, there are obligations laymen can require of scientists, but these can only be the obligations necessarily required of any human being today, scientist or not.-J. T.

SCIENCE