20 May 1960, Volume 131, Number 3412 **SCIENCE**

SCIENCE, which is 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. The joint journal is published in the SCIENCE format. SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

Editorial and personnel-placement 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 and illustrations, see *Science* **125,** 16 (4 Jan. 1957).

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

Popularization of Science

The aims of the popularization of science are numerous and of considerable significance. It continues, corrects and fills the gaps in school education which inevitably lags behind the march of progress; it arouses the desire to take up research and is thus of direct benefit to creative science; it likewise benefits creative science by acquainting the public at large with its power and efficiency, thus providing science with a hearing and with the support of public opinion; it creates a link between specialists in different disciplines, since it is popularization which ensures that the physicist is not altogether unaware of what is happening in biology nor the biologist of what is going on in the realm of physics; it keeps—or could keep—politicians informed—and politicians have an ever greater need to be familiar with scientific developments.

But indeed it is undeniable that these various functions, however important, do not take into account the true and specific function of popularization which is purely and simply to introduce the greatest number of people into the sovereign dignity of knowledge; to ensure that the great mass of people should receive something of that which is the glory of the human mind and not be kept apart from the momentous adventure of our kind; to bring man closer to man by striving to reduce the terrible if invisible gulf of ignorance; to struggle against mental starvation and the resulting under-development by providing every individual with a minimum ration of spiritual calories. . . .

In a word, the ideal of the popularization of science (and here lies its moral value) is to develop and assist a community of thought. It is the reverse of Renan's aristocratic concept whereby an uncultivated multitude should become the ward of a handful of the "informed". . . .

Its mission is still more exacting and we must be that much more demanding with regard to the way in which it is carried out. We are entitled to expect a rigorous impartiality, an unfailing objectivity, an absolute philosophic honesty. There is no question of using the mantle of science to indoctrinate minds or force them to conform to a pattern; there is no question of implanting in them any cramping and constricting dogmas; it is a question of "converting them to unquestionable truths," as the philosopher Guyau so admirably put it, so that, using the basic materials honestly provided, each individual may freely build his own small universe.

Any distinction between the man of science and the ordinary man is no longer admissible, any more than a form of segregation based on an inequality of knowledge. Whether we like it or not, the laboratory henceforward opens right onto the street. Science not only affects us at any given moment of our day-to-day existence, it dogs us, it pursues us. Have we not, all of us, been transformed into involuntary guinea pigs ever since atomic fission, without asking our opinion, began to plant harmful particles in our bones?

The obligation to endure gives us the right to know.

The time is clearly coming when the man in the street will have his say with regard to the great social, national, international and moral issues latterly raised by certain applications of science; and it may be that the specialist himself, weary of bearing on his own the weight of his too-heavy responsibilities, will rejoice at finding understanding and support in public awareness.—JEAN ROSTAND

[*Excerpt from M. Rostand's address on the occasion of his accepting the 1959 Kalinga Prize for "outstanding contributions to the dissemination of scientific knowledge to the general public," 21 April 1960*]