

Rabinowitch Awarded Kalinga Prize

If the ordinary reading American has developed in the past 20 years more than a visceral understanding of the changes symbolized by the atomic blast over Hiroshima, a major share of the credit goes to Eugene Rabinowitch, Russian-born biophysicist at the University of Illinois, who has devoted himself with unflagging single-mindedness to education for the atomic age. Hence it seems especially appropriate that Rabinowitch should be awarded UNESCO's annual Kalinga Prize for popularization of science.

In the strenuous autumn of 1945, when scientists tried to provide legislators with a new set of facts and a new concept of military destruction, two courses were advocated. Leo Szilard called for intensive pressure on key individuals; the scientists' lobby, which helped to establish civilian control of atomic energy, was a collective exercise in this technique. Rabinowitch, while supporting this crash program, argued that the radical change in patterns of political behavior required by the new weapons would be achieved only by the long, painfully slow process of education. This education must begin with the scientists themselves, for, said Rabinowitch, the scientists had a lot to learn about how to handle political and social evidence as scrupulously as they used laboratory data, and how to think politically with the same blend of imagination and rationality that they applied to scientific questions. Although James Franck and Leo Szilard prodded and inspired their younger colleagues at the Chicago Metallurgical Laboratory to think about the future control of atomic energy, it was Rabinowitch who did much of the actual writing of the wartime reports and the first postwar pronouncements. It was he who always emphasized the desperate need for education: "to study and inform" became a principal plank in every action proposal of the mushrooming organizations that eventually formed the Federation of American Scientists.

The Bulletin of the Atomic Scientists, which was to become the chief instrument of this dual educational effort, was founded in December, 1945, by Rabinowitch and H. H. Goldsmith. Beginning as the newsletter of the Chicago Scientists' group, it quickly became the forum for discussion of science and public policy that its founders had envisioned. The *Bulletin* never attempted to reach a popular audience directly, but in a period when little published information about atomic energy was available, reporters and commentators turned to it for elementary instruction and insight into how scientists were adjusting to their new prestige and influence. The *Bulletin's* unpaid authors, accustomed to writing for the *Physical Review* or the *Political Science Quarterly*, made few stylistic concessions in articles on federal sponsorship of research, isotopes in medicine, or dispersion of cities, and Rabinowitch's closely reasoned editorial evaluations of legislation or control negotiations did not, as a rule, make for lively reading. Yet taken as a whole, these columns of unrelievedly solemn prose are packed with drama—the drama of the scientists' hopes for a better world and their slow disenchantment; the crises of a

maturing profession as reflected in the debate on secrecy in science and the defense of individuals—Condon, Astin, Oppenheimer—against political attack; new threats of self-destruction in radiation and biological warfare. The *Bulletin* was not always the first to pick up an issue, but its pages encompassed the aspirations and the agony of a particular segment of mankind at a particular period in a way that few publications can match.

All but a few of those who once seemed deeply committed to the cause of atomic education have dropped by the wayside—discouraged by the failure of control negotiations, mounting nuclear armaments, or the valid demands of science. When Hyman Goldsmith died in 1949, Rabinowitch lost the one colleague whose dedication to the specific goal of the *Bulletin* equalled his own. Brushing aside the suggestions of friends that the *Bulletin* had perhaps served its purpose, Rabinowitch picked up the one strand in the atomic scientists' program that had *not* become inextricably entangled in political difficulties, namely, the reestablishment of the prewar international community of science, which its members saw as a useful intermediary in reaching political agreement and an indispensable agent in promoting human welfare on a world scale. For the past 10 years, Eugene Rabinowitch has extended the *Bulletin's* coverage to include problems of world health, food supply, and population control, never allowing these matters to be submerged by growing concern with deterrence, stalemate, or nuclear strategy.

Along with the *Bulletin* and his own important research on photosynthesis, Rabinowitch has somehow found time, along with the British physicist, Joseph Rotblat, to be a prime mover in establishing the Pugwash Conferences in 1955, at which scientists from East and West exchanged views on technical subjects of critical political import. Adopting the formal title of Conferences on Science and World Affairs, scientists and specialists in related fields now meet once or twice a year to discuss radiation effects, biological warfare, technical aspects of disarmament, technical assistance, and many other topics. The results are not always immediately apparent, but there seems little doubt that the Pugwash discussions were an important step to the Test Ban Treaty of 1963.

Rabinowitch is aware that some of his fellow scientists have criticized the *Bulletin* for not being more spritely and the Pugwash talks for not reaching definitive conclusions, but he has steadily adhered to the view that a revolution in man's thinking is not effected by flashy headlines or controversial statements. Rabinowitch has stayed out of the limelight, always giving precedence to the ideas and causes he wanted to promote. Those who have observed at first hand this selfless dedication, and this enormous contribution, to science, education, and peace will welcome the added recognition that comes to him with the award of the Kalinga Prize.

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