

doesn't have time. I think he needs help, and expert help at that. If the boss won't listen to his own reporters, he might listen to a science consultant who is a postgraduate in his own medium.

I would now like to see a survey of scientists made to uncover and examine in detail their misconceptions about "the press"—meaning all mass media and those who work in these media. At the same time, I would like to see a survey made of the media themselves, from top to bottom, to uncover and examine *their* misconceptions about science and scientists. If, as I suspect, a need exists for a bridge between top media men and the scientists, a new profession may arise: consultants on science to the mass media or, alternatively, consultants on mass media to the scientists.

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Elementary Seismology. Charles F. Richter. Freeman, San Francisco, Calif., 1958. viii + 768 pp. Illus. \$12.

This fascinating and beautifully illustrated account of the earth's shivers is composed of three parts, all emphasizing the general relation of faulting to earthquakes. The first part, "Nature and observation of earthquakes" (388 pages), provides a fine historical perspective while presenting basic phases of the science, ranging from elastic waves to earthquake risk. The second part, "Geography and geology of earthquakes" (242 pages), relates earthquakes to major and minor structural features of the earth. New Zealand, California (plus Nevada), Japan, and Formosa are selected for detailed analysis, but other regions are not neglected. The third part of the book, "Appendixes" (97 pages), includes tables, mathematical derivations, and a chronologic list of important earthquakes, with bibliography. A 29-page index completes the volume.

In a lively, conversational style Richter presents a distillation of much information, with penetrating critical interpretation in the areas of his own interests. Humor appears in unexpected places, some barbed in the direction of related sciences but always constructive, some even directed at the author himself. The treatment conveys a nice sense of strategy in attacking the scientific problems, many as yet unsolved. Although intended primarily for students, the book includes much valuable material for instructors and research workers. Richter has unlocked the mysteries of seismology for all who are interested in the earth.

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Science and Education at the Crossroads. A view from the laboratory. Joseph William Still. Public Affairs Press, Washington, D.C., 1958. xi + 140 pp. \$3.25.

Joseph Still, with obvious sincerity and concern, has written, in part I of this book, a series of short essays on various aspects of scientific work and some related educational problems. In part II he discusses the potential contributions of the biological sciences (with stress upon disease control) to international affairs, especially in the tropical countries. As promised on the dust jacket, the book contains a number of interesting and even controversial observations and proposals.

Part I consists of ten short chapters—90 pages—on "The short-range view." The author contends that scientific representation at the top policy-making level in our government is essential. To accomplish this, "the President should appoint one or more Secretaries of Science, without portfolio" (page 13). At least two, representing the biological and the physical sciences, are suggested. Further, he suggests "establishment of Delegate Senators and Representatives" in the Congress. They would "have the power to introduce legislation and enjoy full floor and perhaps limited committee privileges" (page 14) but would not vote on committees or vote on the legislation.

A National Education Council of distinguished citizens is proposed "1) to constantly study and report on our total educational system, 2) to report frequently on future educational needs, and 3) to recommend in broad terms the curriculum and standards our schools must follow to prepare youngsters for the estimated future" (pages 14–15). Presumably this would be a formalization and continuation of the type of temporary study being made by James B. Conant.

Apparently Still desires some new permanent mechanism because he believes that the U.S. Office of Education, the American Council on Education, the National Education Association with its Educational Policies Commission, the separate state departments of education with their numerous nationwide committees, and many other groups are not accomplishing the task. Possibly this conclusion is correct, but strengthening one of the existing groups, which he does not suggest, might be more effective in producing quick results than would be efforts to create another agency.

Several interesting chapters are concerned with the "housekeeping" of American science. These deal with closer cooperation between existing specialized societies (but without mention of the American Association for the Advancement of Science); with current procedures for making short-term research

grants; with the need for better abstracting and translating services; and with the importance of scientific libraries.

In two chapters he considers the search for the gifted student and the encouragement of curiosity. He properly warns against using only IQ scores to identify promising students. However, educators have long recognized the difference between defining the academically gifted and identifying and instructing such students in schools.

Part II, "The long-term view," stresses the world-wide social impact of disease-controlling techniques. The author stresses the effectiveness of DDT in overcoming malaria and indicates some of the social and political implications of this action. Elimination of this debilitating disease opens to many countries their first opportunity to develop a vigorous economy. But the race between production and population is still with us.

The inevitability of reaching some "world population ceiling" and the importance of population control are pointed out. The author avoids becoming entangled in arguments over various means of population control but observes that a rising standard of living has been followed by lower birth rates. This line of argument reinforces his proposal that biologists be included at policy-making levels in government.

Unfortunately the book contains no bibliography, and the sources of Still's references are not explicitly cited. As claimed, this is one man's view of some of the vexing problems we face. His suggestions for action would require marked changes in public opinion; how these could be obtained still eludes many already immersed in the problems.

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Psychological Stress. Psychoanalytic and behavioral studies of surgical patients. Irving L. Janis. Wiley, New York; Chapman and Hall, London, 1958. xiv + 439 pp. \$6.95.

Janis, author of the scholarly *Air War and Emotional Stress*, has in the present book approached the rather poorly defined concept of stress with quite different data—those obtained from persons in hospital undergoing surgery, and from a questionnaire survey of former surgical patients (Yale students all). The book commences with a long detailed account of the author's psychoanalytic treatment of a patient who happened to require surgery during the period of the analysis. Various hypotheses concerning interactions between psychological variables (for example, "anxiety" and "hostility") were derived from the interview notes