activity (for example, the dilemma of referees who see confidentially an unpublished version of work in their own field); and the obligation of the scientist to communicate to the general public the advances and syntheses of science. (One corollary which Glass and all of us might draw from the last discussion is: "Never publish with a press that does not provide an index.")

The book ends with the following remark: "The problem of the future is the ethical problem of the control of man over his own biological evolution. The powers of evolution are left in his hands." Ominous though the statement is, this book itself should provide many readers with a primer of wise counsel for meeting that future.

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Research Résumé

Solar System Radio Astronomy (Plenum Press, New York, 1965. 428 pp., $17.50) edited by Jules Aarons, contains 18 lectures that were presented at the NATO Advanced Study Institute of the National Observatory of Athens. The lectures were on the following topics: Solar characteristics (by G. Righini; and J. F. Denisse); The quiet sun (by J. Castelli and J. Aarons; M. Pick; O. Hachenberg; and C. Caroubalos); The disturbed sun (by D. J. McLean; J. W. Warwick; A. D. Fokker; O. Elgaroy; M. Anastassiades; and O. Hachenberg); The interplanetary medium (by A. Hewish; and V. R. Eshleman); The moon (by H. Weaver; and G. Pettengill); and The planets (by H. Weaver; G. Pettengill; and an abstract by D. Ilias).

The lectures are essentially an advanced course in solar system radio astronomy, and the book is an excellent reference for students and research workers in this field. The editor of the book, who was also director of the program, has made a remarkable choice of lectures and authors. Outstanding radio astronomers from most of the leading groups working in solar system radio astronomy in Europe and the United States are well represented. Unfortunately research workers from other countries did not participate, but many of their results are presented. Although most of the material in this book has been previously published, it appeared in widely scattered articles. Several of the chapters contain new research results. An attempt was obviously made to emphasize those research areas not covered by recent review articles.

Thirteen of the 18 lectures directly concerned with the radio emission from the sun are well selected and clearly written. The two lectures on the moon and planets, by Weaver, are comprehensive and contain much unpublished material. Pettengill's lectures on radar studies of the moon and planets are an excellent summary by a major contributor to the subject. The two chapters on the interplanetary medium contain recent studies, one using radar and the other natural emission, of the ionized component of the interplanetary medium. Eshleman's lecture is of special interest because he discusses the successful radio technique used in the recent Mariner fly-by observations of the atmosphere of Mars.

The book contains many excellent graphs, diagrams, drawings, tables, and photographs (see cover on this issue of *Science*), and the balance between the quantitative, analytical material and the descriptive, pictorial material is good. All the lectures contain comprehensive references up to mid-1964. It should be a well-used reference in the field of solar system radio astronomy because it supplements many recent review articles.

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The Common Liver Fluke

Basically a literature summary, **The Common Liver Fluke: Fasciola hepatica L.** (Pergamon, New York, 1965. 267 pp., $12), by E. M. Pantelouris is intended to provide "for the research worker, a thorough review of the extensive literature on the subject and a comprehensive bibliography, as well as practical details of techniques for handling material; [and] for the veterinarian, biologist and agriculturalist, an account of our knowledge about this important animal and the disease it causes and of the way in which this knowledge has been accumulated" (from the preface). Sections on the biology of the liver fluke: structure and physiology; pathology, chemotherapy, and immunology; ecology and control; appendices—the whole based on 664 references (extending to 1964)—indicate the broad scope of the work. Coverage is not exhaustive, however; although there is a chapter on human fascioliasis, information on its treatment is incomplete. (In a current volume on clinical parasitology, for example, one may find approximately a dozen references to various aspects of human infestation which are not included in this book.)

The text is quite readable throughout, and although I noted few typographical errors, there are some apparent discrepancies in nomenclature: *Glabra* (*Galba*?) (pp. 20, 21, and 23); *Pseudosuccinella* (*Pseudosuccinea columella*?) (pp. 31 and 258); and Ward 1817 (1917) (p. 16). Although the content of the text cannot be extensively criticized here, another shortcoming is the somewhat imprecise treatment, relative to the evidence cited, of certain of the material that deals with glycolysis and the Krebs cycle (pp. 106 and 107). A feature that will please many workers is the inclusion of much eastern European literature. Most readers will immediately note the consistent use of "cercarium" and "metacercarium." The indices appear workable, and although most of the figures are informative, some lack clarity or are inadequately labeled (notably Figs. 19, 21, 37, 56, and 62) and may perplex certain readers. Figure 64 is poorly reproduced.

Unfortunately, the reader's confidence may be shaken by the relatively numerous, but by no means disabling, irregularities associated with referencing. There are approximately three dozen citations in the text which cannot be immediately identified or are missing from the reference list, and the lack of method and pattern in distinguishing between an author's publications of the same year is frequently evident. There are minor irregularities in the spelling of some names and in the order, but the references themselves appear accurate and useful.

It is significant that enough information on the biology of a single nonschistosome trematode is now available to allow its presentation in book form—a distinction that probably cannot be claimed for any other such species at this time. Nevertheless, despite what is at hand, areas that require