

pendent not so much on "sending something to Washington" as on careful compliance with the requirements of the copyright notice, and the three elements of this notice are explained. In an appendix, one finds the regulations of the Copyright Office, a copyright registration form, and a list of some 46 countries which are members of the universal copyright convention.

In an interesting historical sketch of copyright protection, the authors mention that the United States Copyright Act is based on an article in the Constitution which states that Congress shall have power "To promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries." Oddly, in current proposals for copyright revision, the goals of promoting science and education are offered as reasons for diminishing copyright protection.

The issue of fair use, one of the most troublesome in copyright law, is discussed with examples in two chapters. One deals with using the works of others in new publications, the other deals with photoduplicating of copyright material.

Although the scholar's special tax problems are not discussed, there is mention of other legal problems of special interest to him: the right of privacy, patents, defamation, academic freedom, and tenure. Writing of freedom, the point is made that "the basic issues in connection with academic freedom are not legal, but philosophical or social. . . . Academic freedom exists for the good of society and not for the benefit of a particular scholar. . . ." Writing of tenure, the authors conclude ". . . legal enforceability is probably not the most important element in connection with tenure. It is probably more important that there be a set of clear rules relating to tenure and obedience to those rules by responsible faculty and administration."

Although Hogan and Cohen give valuable suggestions on *Publishing Your Book* (Chapter 4), there is little in their book to suggest that an author's chief ground for dismay may lie in his assumption of the integrity of his publisher. There is mention on

page 45 that if the publisher "fails to proceed with the typesetting and production of the book within a reasonable time . . . and if the delay is not due to circumstances beyond his control—then the publisher may have defaulted under the contract and the contract might be cancellable by the author."

Personal experience, admittedly a very small sample, convinces me that an author in his contacts with publishers needs knowledge and protection not mentioned in Hogan and Cohen—despite their publisher's promise that their book contains "complete coverage of what you must know about publication. . . ." Very likely it is not additional laws that are required. Probably laws exist under which an author could sue a publisher for what he considers to be an injury. But isn't an individual author made helpless by pride and the belief that his limited resources will not make much headway in challenging a corporation?

Rather than a legal approach to the problem of author-publisher relations, what is needed, I think, is an approach similar to that suggested by Hogan and Cohen in the case of tenure: formulation of an acceptable code of publishing practice by such an organization as the American Institute of Physics, or the American Association of University Professors. The very existence of such a recognized code would probably minimize need for legal action. The code, I hope, would make authors less naïve and publishers more responsible.

Internal Factors in Evolution. By Lancelot Law Whyte. 128 pp. George Braziller, New York, 1965. \$4.00.

Reviewed by Eugene P. Wigner, Princeton University.

The author is a philosopher of science who has written with wit and insight on problems on the borderline between physics and philosophy. He ventures here into the domain of evolution. He claims that there is, in addition to the Darwinian selection of the "fittest", another type of selection: the internal one. This is because "organisms are so highly coordinated that only a restricted (and ultimately definable) set of variations

from any starting point are permissible" (page 97). Hence, only organisms with a restricted set of properties are possible and one should determine the properties of "any cellular organism capable of developing and surviving in some environment" (page 35). In addition, even if an organism with certain properties is realizable, this may be possible only without the faculty of replication.

It seems to this reviewer that Dr. Whyte's thesis amounts to an exhortation to determine by "a deliberate convergent attack" the possible properties of living and replicating organisms. This is surely a most desirable objective. Many puzzling phenomena (such as the widespread necessity of sleep) may find more detailed explanations as a result of such studies. However, whether one calls "selection" the fact that the sets of viable properties are selected from all possible sets of properties, or considers that "selection" is only the choice of those sets of properties among the viable ones which make for fitness, seems to be largely a matter of semantics. Hence, this reviewer cannot see a real issue between those who call only the Darwinian process "selection" and Dr. Whyte and some others who wish to extend the meaning of this term. The reviewer feels that much of the polemics of the book is somewhat pointless.

However, the reviewer enjoyed the book greatly. It abounds with quotable remarks such as "Expect surprises! [This] should be the watchword of all scientists who try to look beyond the fashions of the day" (page 13) or "naïve enough to think that the communication of ideas prospered in the age of Communication Theory" (page 20). I must not spoil the enjoyment of future readers by giving too many examples.

Excitons. By D. L. Dexter and R. S. Knox. 139 pp. Interscience, New York, 1965. \$6.50.

Reviewed by Joseph L. Katz, North American Aviation Science Center.

Excitons is intended as an introduction to this very rapidly expanding field. Although it is a small book, it will fill the need for such an introduction quite well. The first two chapters