relatively insoluble, they have turned toward the surgeon for surgical reassignment of sex. The technique and early operative results of the first few cases are presented. The anatomical results leave a good deal to be desired—particularly in the conversion of female to male (6 cases)—but surprisingly enough their psychologic adjustment, in spite of functional anatomical difficulties, appears to be better than male to female (29 cases). The understatement of the year is contained on page 373, "Two men committed suicide and their postoperative condition was therefore definitely worse."

As it has only been in the past few years that such operations have been performed in this country, any follow-up evaluation is of necessity incomplete. It is likely that many, if not all, transsexuals imagine that the conversion procedure would result in a relatively normal-appearing functional male or female genitalia. This is far from the case, but a recent visit to Yale by Dr. Milton Edgerton, Chief of Plastic Surgery at Johns Hopkins, indicates that operative techniques are being steadily improved.

Of the reported 3,000 patients who have written to Hopkins applying for sex reversal procedures, the serious question can be raised as to how many would actually benefit from the procedure. Patients seeking sex reassignment operations are almost by definition to some degree unstable and maladjusted. One of Dr. Harry Benjamin's patients who approached this reviewer was a male prostitute living with a woman, who wanted to have a conversion to female so he could live with her as a lesbian. Another patient presented a more practical problem. A male who wears female clothes in the State of Connecticut can be (and was in this case) arrested for impersonation. On arrest the presence of breasts (from estrogen) and a penis gave the police pause as to whether confinement would be in the men's or women's wing of the prison. (He/she got solitary.)

While the subject is a fascinating one, and this authoritative book will undoubtedly contribute to an overall knowledge of sexuality, it would seem well if sex conversion efforts were limited to one or two centers. There is grave question as to how many patients will ever be restored to a normal way of life. Certainly with present surgical techniques there is no way to affect a complete transformation of such patients. The amount of medical, psychiatric, and surgical manpower required to run a Gender Identity Clinic is such that it might be better spent elsewhere. This should be considered for the present a research rather than a service endeavor.

John McLean Morris

Genesis of the Hymenoptera and the Phases of Their Evolution.
By S. I. Malyshev. London, Methuen; distributed by Barnes and Noble, New York, 1969. viii, 319 pp. $10.00.

This book is a compendium of observations from all over the world organized into an interesting story of the evolution and biological relationships of the multiform insects in the order Hymenoptera (the "membrane-winged" insects). The work is a translation of Professor Malyshev's book, which was originally published in Russian in 1966. Professor Malyshev
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cites diverse references and presents organized arguments for the evolutionary behavioral changes that have occurred in the order Hymenoptera since its origin in the late Carboniferous or early Permian to the present day. The arguments, though sometimes teleological for the sake of clarity, are largely based on field investigations and laboratory studies of insect behavior as well as morphological evidence. The author pays careful attention to details of the concomitant evolution of the plants and animals that have served as hosts for Hymenoptera in the course of their evolution. Professor Malyshev has combined fossil evidence and original laboratory studies, in which insects were challenged with new hosts or habitat materials for oviposition and nesting, to provide coherent biological evidence for his generalizations of probable evolutionary relationships.

The book is divided into six major sections that discuss the origins of the following groups: 1) the first Hymenoptera, 2) the primitive plant-eating wasp-like forms (Phytophaga) from saprophytic forms, 3) the first carnivorous Hymenoptera and secondary phytophagous forms (Terebrantia), 4) the true wasps (Vespiformia), 5) the ants (Formicoidea), and 6) the bees (Apoidea). The insect groups within each of these sections are organized in chronological sequence consistent with current views on insect evolution and phylogeny. Professor Malyshev has taken great care to discuss critically diverse pieces of evidence in formulating his evolutionary theories. He has provided an extensive bibliography and complete indexes of species and authors' names.

The use of laboratory models in conjunction with ecological and morphological evidence for evolutionary divergence demonstrates a logical approach for any evolutionary study and makes this book a valuable addition to the library of any student or professional investigator in the fields of entomology or general evolutionary biology.

William L. Krinsky

Advances in Optical and Electron Microscopy, Vol. 3. Edited by R. Barer and V. E. Cosslett. New York, Academic Press, 1969. 286 pp. $14.50.

This book is the third volume of a series of articles on optical and electron microscopy. The first contribution by Benford and Rosenberger concerns the design and operation of continuously variable magnification or "zoom" systems in light microscopy. Humphries discusses measurement of particle size and other mensuration methods in optical microscopy. In the first of three articles on electron microscopy, Thomas describes microincineration techniques for the localization of minerals in tissues. Ferrier discusses the techniques of high resolution electron diffraction. Finally, the evaluation of electron microscopic autoradiographs is described by Williams. The individual articles, of course, are not related and are written primarily for the specialist. However, if one is working in one of the areas covered or plans to utilize one of these techniques, the book can be recommended.

Thomas L. Lentz

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