phy of history. Seven of the Western anthropologists represented in this volume, not including the two Western Marxists, work without a clearly articulated view of the nature of history, but their research shows that the history of each society is looked upon as contingent and that the basis of explanation cannot be limited, as in the Marxist position it sometimes, at least, can be, to social and economic forces.

The Soviet anthropologists view their own work as truly scientific in that it operates within the illumination of Marxist theory with its correct understanding of the bias that results from membership in social classes. The Western anthropologists do not directly address the Soviet statements regarding bias and the proper conduct of scientific inquiry, but it is clear that they believe objectivity resides in the presentation of reproducible findings rather than in adherence to a theory of history whose truth need only be applied and illustrated rather than established. Apologists for Soviet social science point out that all of us have theories and preconceptions that limit and shape our work, and that is surely true. However, so long as we do not share the same limiting beliefs there is at least a chance that objective truth will emerge from exchanges between us. The commitment of the Soviet anthropologists to the basic premises of the view of history and human destiny formulated by Marx and Engels keeps their disagreements and discoveries within quite narrow limits.

In this view of history humanity goes through stages beginning with the primitive and continuing through slaveholding, feudalism, capitalism, and socialism, with a final emergence when communism is reached. The main task of anthropology in the U.S.S.R., several of the authors tell us, is the reconstruction of the eras of the past through the use of archeological and ethnographic sources. Ethnography is particularly concerned to discover "archaic" features in the lives of contemporary peoples so that these "survivals" can be used in reconstructing a past whose general form is given by the theory.

The difficulties this endeavor encounters come out clearly in what is probably the most interesting part of this broad-ranging and not clearly focused volume. The Soviet theoretician Yuri Semenov addresses himself to the problem that arises from the fact that many human societies do not, in fact, go through the stages of development posited by Marx and Engels. Semenov's erudite and carefully reasoned argument is an attempt to rescue Marxist theory from the embarrassment of undeniable and recalcitrant historical data. His position, one of a number held by Soviet anthropologists who do not accept the details of unilineal evolution, is that history must be viewed as a single development, with all humanity, rather than separate societies, taken as the unit of development. At each stage there is a center of development and also a periphery, and it is in the interaction between the two that the advances occur that are the basis for humanity's inevitable progress.

This argument is sympathetically examined by Ernest Gellner, who makes it forcefully clear that a position such as Semenov's is essential to the preservation of Marxist views of history, since many societies do not, in fact, go through the stipulated stages. More than this he argues that Semenov's reformulation of the basic Marxist view in the light of the nonconforming data is an especially well-conceived one. Nevertheless, he concludes that Semenov's position founders in its attempt to explain the emergence of capitalism, since, unlike all the other transitions in history (primitive to slaveholding, slaveholding to feudal, and so on), the change from feudal society to capitalist society is wholly internal: the mercantile class replaced the aristocracy with no outside societies involved. If, Gellner asks, history is a unity as Semenov argues, how can we understand this unique event? In the feudal-capitalist transition there is no interaction between center and periphery, and Gellner shows that what seemed a position that protects the Marxist view from the problems presented by the facts simply changes the set of facts that assail it.

As Gellner also makes clear, although Semenov is by no means explicit about this, Semenov's scheme, like the rest of Marxist anthropology, proceeds with the assumption that the destiny of humanity is known and that it is therefore the duty of the knowers "to ease the path" of those who may not know the truth.

A Western anthropologist who dared speak, without irony, of the *mission civilisatrice* or the "white man's burden," would be more or less ostracized by his professional community. Semenov has no hesitation in using the notion of levels of development and referring to the obligations of global leadership which this carries with it.

The Gellner-Semenov exchange forms the only obvious basis for wanting this book in one's private library. There are some interesting papers in the book, but the fact that the Soviet authors mainly adhered to the conference's rules and presented broad, programmatic essays on the relationship between anthropology and other fields makes most of their contributions rather limp. The growth of the concept "ethnos" in Soviet anthropology receives a good deal of attention in several of these papers and one by a Westerner, and it may be that those interested in this version of the culture concept—similar to the "custom"-based view held by some British anthropologists but not an explanatory tool—will profit from reading this. Several of the Western anthropologists write rather undistinguished papers, but Fortes's examination of the role of psychology in anthropological explanation is stimulating and Woodburn's discussion of hunting-and-gathering peoples is a shining example of how an interest in ancient ways of life can be advanced by data from contemporary societies when guided by testable hypotheses.

MARC J. SWARTZ
Department of Anthropology, University of California at San Diego, La Jolla 92093

Siphonaptera

Fleas. Proceedings of a conference, Ashton Wold, Peterborough, U.K., June 1977. R. TRAUB and H. STARCKE, Eds. Balkema, Rotterdam, 1980 (U.S. distributor, MBS, Salem, N.H.). x, 420 pp., illus. + plates. $48.

At the invitation of the Honourable Miriam Rothschild, 58 delegates representing 15 nationalities assembled to convene the first International Conference on Fleas. The conference was formally opened with an address by Sir Vincent Wigglesworth, and during morning sessions of the following four days 33 papers or their abstracts were delivered. It is these that make up this volume.

Following a brief preface by Traub is an anecdotal, annotated biography of Nathaniel Charles Rothschild (1877–1923) by his daughter Miriam. Rothschild, of the well-known British banking family, was an avid amateur naturalist. Though he accumulated excellent collections of iris, birds' eggs, and various groups of insects, his major interest centered on the Siphonaptera, and he was a pioneer in systematic studies of the order. The account includes a bibliography of publications on Siphonaptera by Rothschild alone and jointly with Karl Jordan. The remainder of the volume consists of presentations given during the conference. These are grouped under

five headings: Taxonomy, Evolution and Zoogeography, Medical and Veterinary, Physiology and Morphology, and Ecology and Faunistics.

The only taxonomic presentation is that of Traub, dealing with the complex family Pygiopsyllidae. In it six new genera and three new subgenera are erected and a key to many of the taxa is provided.

Important papers under Evolution and Zoogeography include accounts of some adaptive modifications in fleas by Traub and of the function of combs in ectoparasitic insects by Marshall; an extensive treatment of zoogeography and evolution in fleas, lice, and mammals, also by Traub; and a study of the host associations and zoogeography in the genus *Pulex* by Hopla. All are thoughtful treatments of their subjects and synthesize much material from diverse sources, although not necessarily all reaching the same conclusion.

Interesting presentations dealing with the medical and veterinary aspects of fleas include an account of the control of flea vectors of disease by Gratz; a review of studies on fleas in the U.S.S.R. by Bibikova and Zhovtyi; an account of the ecology of murine typhus by Traub, Wisseman, and Farhang-Azad; and two papers on the transmission of myxomatosis by the European rabbit flea by Shepherd and by Mead-Briggs and Vaughan.

Two particularly interesting contributions included under Physiology and Morphology deal with how bloodsucking insects perforate the skin of their hosts (Wenk) and the morphological similarities between the skeletal structures of Siphonaptera and Mecoptera (Schlein).

The nine presentations included under Ecology and Faunistics include three abstracts and six papers dealing mainly with distribution and ecological and host preferences. Two of these are in French.

A few of the papers included in this volume constitute major contributions to our knowledge of the order Siphonaptera, and most of the remainder are appropriate for inclusion, albeit somewhat parochial. Both the binding and the type are pleasing to the eye, and for a publication of this type the book is remarkably free of mechanical flaws. However, though this is a book that will appeal to students of the order Siphonaptera, it is not likely to attract a broad audience in the more applied fields of medical and veterinary entomology.

ROBERT E. LEWIS
Department of Entomology,
Iowa State University,
Ames 50011

Genetics

Gene Expression. Second edition. Vol. 2, Eucaryotic Chromosomes. BENJAMIN LEWIN. Wiley-Interscience, New York, 1980. xviii, 1160 pp., illus. Cloth, $45; paper, $25.

The first and third volumes of this work on gene expression are devoted to prokaryotes and to plasmids and phages, whereas the volume under review deals with eukaryotic chromosomes. The author intends to delineate the current state of knowledge of the structure of the chromosome and the dynamics of its reproduction as well as the expression of the genes contained in it. The treatment is brought to the molecular level wherever the necessary information is available. To put these issues in context there are extensive treatments of the cell skeleton, the cell cycle, and chromosome segregation in mitosis and meiosis before the structure of chromatin itself is discussed. The treatment of chromatin structure includes discussion of DNA sequence organization as well as of the physical conformation of the nucleoprotein strands. Gene expression is considered at the levels of the transcription apparatus, messenger RNA structure, messenger RNA processing, and RNA splicing. This is an unusually broad array of subject matter to bring together in the detail with which it is treated here. Nevertheless, Lewin actually does bring the reader abreast of the whole advancing front in a thorough and balanced way.

The book is remarkably up to date, especially considering the rapidity with which this subject has grown recently and the ambitious scope of the book. This feat is the more impressive in light of the author's reliance on primary research reports rather than derivative material. Nearly all the references are from the 1970's, including many from 1979. So much has been learned in the seven years since the publication of the first edition (for example, about nucleosome structure and interrupted genes) that the present book ought to be thought of as new.

The book is easy to read because of its straightforward style. When comprehensive coverage of rapidly developing subjects is attempted, exposition often becomes disjointed as a result of the inclusion of information whose significance is still obscure. Lewin has avoided this pitfall and produced smoothly integrated stories. Somehow, he has maintained the momentum of his developing thoughts without obscuring discrepancies and controversies. He explains the different positions in a controversy and states his position and the reasons for it without appearing to force the argument. I believe the reader will come away with balanced views whether he or she always agrees with Lewin or not. Despite the commendable reliance on primary research data, which helps the reader to distinguish fact from interpretation, the volume has the flavor of a textbook. I suspect this is inevitable in light of the primary objectives of the book. Lewin is a master at integration and reconciliation, and I doubt that he intended to be a bold blazer of new trails. In any case, the emphasis is on balance and broad perspective more than on insight and incision.

For anyone with elementary biochemical and biological preparation, the book would be a first-class instrument for learning current (1979) knowledge, and doing so with perspective. Similarly, it would be a useful means for researchers to broaden and consolidate the context in which they work out their specialties, although it would be of less value to the specialist in those sections that deal more narrowly with his or her specialty.

R. DAVID COLE
Department of Biochemistry,
University of California,
Berkeley 94720

Books Received

Advances in the Study of Behavior. Vol. 11. Jay S. Rosenblatt, Robert A. Hinde, Colin Beer, and Marie-Claire Busnel, Eds. Academic Press, New York, 1980. xii, 378 pp., illus. $35.

Agenda for Progress. Examining Federal Spending. Eugene J. McAllister, Ed. Heritage Foundation, Washington, D.C., 1981. viii, 376 pp. Paper, $6.95.

Alcohol and Drug Problems in Women. Oriana Josseau Kalant, Ed. Plenum, New York, 1980. xxii, 762 pp., illus. $55. Research Advances in Alcohol and Drug Problems, vol. 5.

American Genesis. The American Indian and the Origins of Modern Man. Jeffrey Goodman. Summit, New York, 1981. 288 pp., illus. $11.95.

The Amphibian Embryo in Transplantation Immunity. E. Peter Volpe. Karger, Basel, 1980. x, 148 pp., illus. $74.25. Monographs in Developmental Biolgy, vol. 14.

Baalbek. Friedrich Ragette. Noyes, Park Ridge, N.J., 1980. 128 pp., illus. $21.

Ballistic Materials and Penetration Mechanics. Roy C. Laible, Ed. Elsevier, New York, 1980. x, 298 pp., illus. $73.25. Methods and Phenomena, vol. 5.

Basic Anatomy for the Allied Health Professions. Royce L. Montgomery. Urban & Schwarzenberg, Baltimore, 1981. viii, 456 pp., illus. $19.50.

Basic Chemistry. William S. Seese and Guido H. Daub. Prentice-Hall, Englewood Cliffs, N.J., ed. 3, 1981. xiv, 596 pp., illus. + index. $19.95.

Basic Corrosion and Oxidation. John M. West. Horwood, Chichester, England, and Halsted (Wiley), New York, 1980. 248 pp., illus. $69.95.

Basic Medical Microbiology. Robert F. Boyd and Bryan G. Hoerl. Little, Brown, Boston, ed. 2, 1980. x, 766 pp., illus. $19.95. Laboratory Manual. x, 182 pp., illus. Paper, $7.95.

Cluster Analysis. Brian Everitt. Published for Social Science Research Council by Heinemann, London, and Halsted (Wiley), New York, ed. 2, 1980. viii, 136 pp., illus. Paper, $16.95.

Cluster Analysis Algorithms for Data Reduction and Classification of Objects. Helmuth Späth. Translated from the German edition (1977) by Ursula Bull. Owen Hanson and Biran Meek, Transl. Eds. Horwood, Chichester, England, and Halsted (Wiley),

(Continued on page 962)