and it is also a substantial addition to the growing body of studies on the subject of social conflict.

Marwick is concerned with a segment, living in the Fort Jameson district, of the populous Ceŵa people. Although altered in various ways by contact with Europeans, the culture of the Ceŵa retains many traditional features. Most of the people continue to live in small communities and gain their livelihood chiefly by simple hoe cultivation of crops. Descent is matrilineal; this is, the Ceŵa trace descent through female lines and take important social affiliations therefrom. As a matrilineal society, the Ceŵa have problems of social relationship which are peculiar to matrilineal groups and different from those of societies that trace descent and form social groups on other principles.

Among the Ce $\hat{w}a$  sorcery is a common explanation of misfortune. Marwick analyzes, in considerable detail, 101 actual cases of alleged sorcery, presenting information on the sex, age, and relationships to others of the persons directly involved. He also presents relevant information on internal and external relations of matrilineages, the nature of chieftainship, and recent social changes. Throughout, discussion of these matters centers on sources of tension and conflict.

The principal ideas presented by

Marwick about the nature and sociological significance of sorcery are not new, as he acknowledges. He sees beliefs and practices of sorcery as socially integrative rather than solely disruptive forces. In his own words, sorcerv provides a means by which tense relationships may be "formulated" and "redressed." As various scholars before him have done, he also sees sorcery as a force upholding the moral order which operates through fear that failure to conform with social rules will lead either to accusations of performing sorcery and attendant punishment or cause the nonconformist to become the victim of sorcery. Marwick does not come to grips with the question of functional alternatives to sorcery, a subject that he discusses only briefly.

What is unusual and most commendable about this book is its presentation of abundant material on actual cases of alleged sorcery and sources of tension in Ce&a society. It is at one time both a quantified study of sorcery and a fairly complete ethnography. This wealth of detail and the manner of its presentation make the book best suited for professional anthropologists and sociologists. The general reader will probably find the book difficult going.

EDWARD NORBECK Department of Anthropology and Sociology, Rice University, Houston

## Animal Behavior, Adaptation, and Interrelations

**Biology**. Karl von Frisch. Translated from the German edition by Jane M. Oppenheimer. Harper and Row, New York, 1965. xviii + 516 pp. Illus. \$9.50 (text ed.).

This book is a simply and clearly written description of certain aspects of biology. The English translation by Jane Oppenheimer is excellent, and the text reads as though it had been written originally in English. The illustrations are of good quality; almost all of them were drawn expressly for this book, and many of them are in color. In some illustrations the color is simply decorative, but in others it has been used to help clarify a point. The book is attractively designed and well printed, although there are quite a few typographical errors.

The text is organized in nine sections, beginning with cells, and proceeding to tissues, organs, adaptations, and interrelations amongst organisms and ending with discussions of reproduction, development, heredity, and evolution. The best sections of the book are those dealing with animal behavior, adaptation, and interrelationships. There is very little discussion of plants and their importance in the biological world, nor is there a description of the major kinds of animals. The text introduces many terms without defining them. The major deficits of the book, however, are in the discussions of the functional aspects of biology such as genetics, developmental biology, cellular physiology, plant physiology, and vertebrate physiology. All of these, indeed the discussion of the chemical basis of biology as a whole, are three decades or more out of date. There is little hint in this book of the current excitement in the field of biology.

The reader who opens this book ex-

pecting to find a fairly complete introduction to the problems and promise of modern biology will be disappointed. This text might serve for some very elementary course in high school biology, but it is unlikely that it will satisfy any instructor in college biology who is looking for a text to supplement his lectures in modern biology. CLAUDE VILLEE

Harvard Medical School, Boston, Massachusetts

## **Classical Mechanical Systems**

Classical Dynamics of Particles and Systems. Jerry B. Marion. Academic Press, New York, 1965. xvi + 576 pp. Illus. \$11.50.

Classical Dynamics of Particles and Systems was written as a text for an advanced, two-semester, undergraduate course in mechanics. More precisely, it was designed as a text for an advanced undergraduate physics course which would prepare the student for studies in quantum physics. This means that emphasis was placed on those areas of mechanics which play an important role in quantum mechanics or provide a demonstration of mathematical techniques useful in quantum theory.

I feel that, on the whole, this is a useful and well-written book. The author has a pleasing literary style, and his exposition of the subject matter is clear and unpedantic. The techniques of mechanics are illustrated by many worked examples, and these techniques are motivated and their limitations are carefully pointed out. A list of references is given at the end of each chapter, and the level of difficulty of each reference is indicated. A sufficient number of problems for the student are also provided at the end of each chapter. The format of the book is pleasing, and the diagrams are numerous and illuminating.

Several chapters are devoted to mathematics. The first two chapters treat vectors and matrices, and I was pleased to see vectors defined in terms of their transformation properties. Another chapter is concerned with the calculus of variations, in preparation for the study of the Lagrangian and Hamiltonian formulation of mechanics. There are also a number of mathematical appendices.

I was particularly pleased with the treatment of the foundations of New-