

tually succeed. Thus, he fails to examine the forces that will be acting on the opponent and leading him to move, or not to move, in the direction we wish. The adversary will undoubtedly have political commitments he must meet, allies he must support, or allies whose support he must continue to receive. While Schelling points out that one of the more significant features of modern warfare is the passionate involvement of millions of people in its outcome, he does not consider what effect this will have on the possibility of successfully carrying out coercive warfare. Can the masses be as easily coerced as governments, or can the spirit of patriotism be used instead to resist even extreme coercion? Furthermore, can even governments, with their complex lines of internal responsibility, party pressures, and individual ambitions, be successfully coerced before the level of warfare grows altogether beyond rational limits?

The major failing of this book, though, is its lack of human understanding. (It has been suggested by other commentators that this failing can also be seen in the present foreign policy of the United States, which strongly resembles the policies described by Schelling.) People seldom "give up" once their pride and honor have become involved. Schelling notes that the United States, when itself placed under a compelling threat in the 1958 Quemoy crisis, simply dug in its heels and intensified its determination to resist. Might not our opponents react in the same way? He notes that "skill is required to devise a compelling action that does not have this self-defeating quality," thereby assuming, without proof, that there is a solution to this incomparably difficult psychological problem. Recent history does not offer great hope that nations committed to ideals and goals in which they believe will easily concede defeat, or that the United States is especially adept at understanding the internal psychology of its Communist opponents.

This book presupposes that the position of the United States in influencing world affairs is based upon its military strength. It is concerned with maximizing the effectiveness of that strength, but does not consider other aspects or values in the U.S. political position. In fact, nowhere does it take account of what must be apparent to anyone who examines the world today, that the current use of coercive warfare by the United States has profoundly affected

the attitudes of peoples and governments towards the United States, as well as the spirit of the American people, in ways which many Americans must find deeply disturbing. The use by Schelling of examples of coercive warfare drawn from the campaigns of Julius Caesar, Genghis Khan, and Adolf Hitler does not make one look hopefully toward the future world role of the United States if it indeed chooses to pursue the policies outlined in this book.

Is this the best this country can do with the marvels that modern technology and American ingenuity have made available? Are there not other courses which the United States could pursue that would take advantage of the common desires of the peoples of all countries for peace and economic betterment and would lead toward a more peaceful future than now seems in sight? Schelling, and other associates of the military establishment, have taken the easy way out by simply generalizing from the conflicts of the past. Who is working along new lines, recognizing the revolutionary implications of modern weaponry but also keeping in mind the ideals for which this country has always stood? And who in a position of national power is listening?

## Biochemical Symposium

In view of the abundance, diversity, and biological specialization of insects, it is somewhat surprising that so few biochemists have studied them. In **Aspects of Insect Biochemistry** (Biochemical Society Symposium, London, April 1965. T. W. Goodwin, Ed. Academic Press, New York, 1965. 119 pp., \$6), several examples of correlation between biological and biochemical specialization are brought into focus by the seven contributors. J. E. Treherne presents evidence that insects and some related arthropods transport water against osmotic gradients by mechanisms independent of the movement of other substances, while transport of monovalent cations across cell membranes occurs by at least two different mechanisms. A very nice correlation between locust development and electron microscopy and biochemistry of the muscle is presented by Th. Bucher. F. P. W. Winteringham briefly reviews the highlights of insect metabolism, with special reference to insecticides and the differences be-

tween insects and higher organisms. The intermediary metabolism of insect fat body, an organ somewhat analogous in function to mammalian liver, is well summarized by B. A. Kilby. Aromatic compounds have particularly important functions in insects, and their metabolism is critically appraised by P. C. Brunet in by far the longest contribution (28 pages) to the symposium. By contrast, V. B. Wigglesworth's paper on insect hormones is merely a three-page summary, but includes the most recent references. The complete text has been published recently elsewhere. X-ray crystallography, in the hands of an expert, can contribute greatly to an understanding of insect skeletal structures; K. M. Rudall discusses his own unique contributions to this area in a thoughtful and provocative review.

This little book is singularly free of typographical errors and is produced to high standards. The symposium itself reflects both the strength and weakness inherent in contemporary insect biochemistry. Significant progress has been made when competent investigators have appreciated the special virtues of insect material. Since such scientists are few in number, it is perhaps inevitable that much of the present subject matter has already been reviewed relatively recently, and by the very same authors contributing to the present symposium. But in addition to the convenience of having scattered data encompassed in one volume, this book should serve the important function of drawing the attention of a wider biochemical audience to recent advances and some outstanding problems in insect biochemistry.

L. LEVENBOOK

*Laboratory of Physical Biology,  
National Institute of Arthritis and  
Metabolic Diseases, Bethesda, Maryland*

## Geography

J. R. V. Prescott's small volume, **The Geography of Frontiers and Boundaries** (Aldine, Chicago, 1965. 190 pp. Illus. \$5), is a useful review of the literature (mostly geographical and less than comprehensive, as the author admits) pertaining to frontiers and boundaries. The first chapter, which serves also as an introduction, affords some clarification of terminology and summarizes the concepts of ten writers whose studies have spanned the period 1895 to 1957.

In chapter 2, which deals with frontiers, Prescott distinguishes between settlement frontiers and political frontiers. Following thereafter are chapters entitled, "Evolution of boundaries," "Border landscapes," "Boundary disputes," and "Intra-national boundaries."

One of the more interesting facets of this study is the heavy reliance on examples of boundary and frontier problems and situations drawn from the African continent, of which the author has intimate knowledge based on field observations. Indeed, the author's contribution to our knowledge of African boundaries is already established in the geographical journals published in the United States.

Despite Prescott's deep interest in his topic, however, the present volume does not add much to that which is already known or understood. The presentation, moreover, is somewhat stock and fails to excite. Perhaps the author might have been more judicious in his selection of topics. There are statements that contribute little and whose relevance is highly questionable. Holdich, in 1916, may have regarded the Indian boundary with Asian neighbors to the north as the best "natural frontier" in the world. But that could only have been true—if it was true—because of the weakness of China and the presence of the British in India. In recent years the high mountains have not afforded India much peace of mind.

One is inclined, too, to question the distinction the author makes between the American frontier and the Russian frontier. The Russian frontier advancing eastward across Asia was not solely a political frontier "marking the *de facto* limits of the Russian state, established by conquest," any more than the American frontier (presumably Prescott means the U.S. frontier) was solely a settlement frontier "advancing through territory secured by treaty." If anything, there is a little of both conquest and treaty rights in the frontier of each country. The United States acquired the Southwest for "American" settlement through war, while Tsarist Russia obtained in the Treaty of Peking with China (1860) legal right to occupy the Ussuri basin in the Far East and the Semirechiye in Turkestan. Surely a simpler example of a settlement frontier is the Canadian western frontier.

*The Geography of Frontiers and Boundaries*, reflecting the traditional interest of political geographers in the

United States, concerns itself primarily with international situations. Only in the last chapter is any attention given to intrastate boundaries. The problems of metropolitan areas, with their multiple, and sometimes overlapping, jurisdictions, are mentioned only indirectly. Even so, at the provincial or state level, questions pertaining to the development of natural resources shared by more than one unit, examples of which may be found in the North American West, are largely ignored.

Ratzel maintained, according to Prescott, that it was unrealistic to attempt to dissect the boundary from the state—and yet one has the feeling that this is precisely what geographers have tended to do. Boundaries have been classified up and down, "natural frontiers," "artificial boundaries," "physical boundaries," "mathematical boundaries," "*frontières plastiques*," "*frontières mouvantes*," "antecedent boundaries," "pioneer boundaries," "subsequent boundaries," and so forth. Where does this lead us? What is there about any boundary that is of interest to the geographer? Is it the boundary itself, the frontier, or the zone which is the focus of our interest? Or, rather, is it not the region that is bounded that demands our attention? A political unit or a state presumably represents a slice of territory organized for political purposes. One wishes that geographers would direct their attention to the relationships between community and territory, how effectively the territory is organized, the extent to which the population feels itself a part of the central community, or the extent to which regional or sectional feeling is a problem of total community integration. Under such an orientation, the boundary is a matter of secondary importance, as one would expect in regional geography—political or otherwise.

At the international level, lack of contiguity between community and territory may give rise to border problems, international tension, and even conflict. At the internal or metropolitan level, the problem may involve little more than that of providing rapid transit for an urban community straddling several jurisdictions, or of disposing of garbage, or of assuring that no one community pours sewage into the common lake. At either level, there is much to concern the political geographer.

W. A. DOUGLAS JACKSON  
*Department of Geography,*  
*University of Washington, Seattle*

## Nature of Peasant Societies

Eric R. Wolf's book *Peasants* (Prentice-Hall, Englewood Cliffs, New Jersey, 1966. 128 pp. Illus. Paper, \$1.75; cloth, \$4.50) is a landmark in the study of peasantry. Wolf has succeeded in ordering information on cultivators from all over the world and from Neolithic times to the present in such a way as to provide the anthropologist and sociologist with new insights and new problems for research, and other social scientists or administrators with an indispensable source of means for comprehending the many settings in which the economic and social development of peasantry is now taking place.

The ordering principle in Wolf's work is evolutionary theory. A peasantry, Wolf writes, emerges once executive power has been crystallized and a state has been formed. It is the lien which those of a higher social stratum have on the products of the cultivator that defines him as a peasant. Wolf, then, does not subscribe to the common definition of peasantry as a group dependent on cities; he more appropriately regards the peasant as related to power-holders, wherever they may be in residence.

In Wolf's view, the central dilemma of the peasant is how to provide simultaneously for meeting his own household's utilitarian and ceremonial needs and meeting the obligations imposed on him by outsiders. The peasant household, then, and not the peasant community, is the focus of Wolf's analysis. This focus, coupled with his assumption that variations among peasantry are types of adaptations to the diverse ecological and social conditions under which the household's dilemma is acted out (Wolf mentions some cases in which successive adaptation ends up in the extinction of peasantry as an entity), has important consequences for the typological categories Wolf uses, many of them original with him.

Wolf analyzes agricultural organization on the basis of paleotechnic and neotechnic ecotypes, treating subvarieties by considering which paleotechnic types have supported most peasantries and why, and which were more conducive to the development of scientific agriculture and under what conditions. External liens on peasant resources are discussed as types of domain—patrimonial, prebendal, mercantile, and administrative—with a caution that these types are not mutually exclusive in any society and that each