

and Guatemala (the anthropologists' Mesoamerica) but includes treatment of northern Mexico and lower Central America as well. This wider coverage follows from the author's intention (similar to Wolf's) to provide more than a mere summary of facts by ordering the material according to some organizing principle of wider theoretical interest. The framework chosen is the contrast between and interaction of "heartland" and "frontier" regions because the latter, while relatively neglected in previous research, "are an integral part of the region as a whole and necessary components in the consideration of its cultural development." The point is well taken, yet the very breadth of geographical and temporal treatment the framework demands presents a dilemma—given the length of the book and the audience for which it is primarily intended—which Helms does not resolve in a fully satisfactory manner.

Each of the three major sections of the book (dealing with the evolution of the Prehispanic cultures, the colonial period, and the era of the modern nation states, respectively) is written in an agreeable and concise style. References (appearing where they ought in a work of this sort—as footnotes) are numerous, complete, and as current as may reasonably be expected. An annotated reading list, organized by chapter, appears at the end of the book. The maps and charts are adequate, granted the page size, with the only serious omission being the failure to include any dealing with climatic zones. In the same way, the photographs are relevant and well integrated with the text, although they are not always as crisply reproduced as one might wish. Helms has, moreover, an excellent command of the material and of current theory. Thus, for example, in the section dealing with the aboriginal societies (the subject most familiar to the reviewer) she includes recent work on the urban nature of Mesoamerican elite centers (though not always using the newest population estimates), on irrigation, on the nature of the Maya subsistence base, and on the role of trade in the Mesoamerican Late Classic and Early Postclassic; these and related topics are presented in terms of a moderate cultural ecological approach.

There are, nevertheless, some unfortunate omissions. Mesoamerican prehistorians will be somewhat taken aback by a treatment that ignores possible highland priority for various of the traits once lumped as "Olmec," treats La Venta as more significant than San Lorenzo, deals with Cuicuilco in an aside, and despite its critical significance for the emergence of Classic Maya culture completely omits the Izapan culture—or style—of the Guatemalan highlands. In similar fashion, the

treatment of the 19th century omits both the Mexican-American war and the American filibustering expeditions into Central America. Failure to discuss these topics lets slip particularly apt illustrations of the problem of control of the frontier from the heartland, presumably a major integrating theme of the book. Another, more minor, example might be the failure to mention that recent intensification of the hunting of sea turtles for sale to export firms along the Miskito coast may well seriously deplete the local subsistence base; here too one could note the disruptive effect on a local economy of external penetration.

The problem, clearly, is that with so many topics to cover treatment must often be not only concise but actually sparse. The usual way out of this difficulty has been to follow precisely the course Helms has rejected—to cover the Prehispanic and European periods separately. This procedure is commonly reflected in course organization and is perhaps justified by the severe cultural disruption of the Spanish conquest. Although Helms's discussions of both periods are quite good (remarkable, considering their length; either could well stand alone as part of a series of case studies), one wonders just how to fit the book as a whole into the academic scheme without costly supplemental readings. It is unfortunate that such solutions as elaborating the heartland-frontier theme into a major theoretical synthesis or expanding the treatment of folk continuities with pre-conquest conditions were evidently also rejected owing to considerations of length. Ironically, Helms's very attempt to be all-inclusive and her refusal to follow a traditional, "easy" approach may so limit her audience as to cause the neglect of a generally well written and interesting book.

MALCOLM C. WEBB

Department of Anthropology and Geography, University of New Orleans, New Orleans, Louisiana

The H-2 System

Biology of the Mouse Histocompatibility-2 Complex. Principles of Immunogenetics Applied to a Single System. JAN KLEIN. Springer-Verlag, New York, 1975. xii, 620 pp., illus. \$39.80.

The mouse histocompatibility-2 (H-2) complex is a cluster of genetic loci that controls histocompatibility antigens. In addition, it governs a variety of traits of immunological importance, such as susceptibility to tumor viruses, immune responsiveness, mixed lymphocyte reactivity, and concentrations of serum protein, complement, and even cyclic adenosine mono-

phosphate. The striking similarity of the mouse H-2 complex to the human HL-A system suggests that the two have a common evolutionary background. The remarkable polymorphism of the H-2 complex and its unusually high immune responsiveness to histocompatibility antigens have led to interesting hypotheses about its biological significance, such as the immune surveillance theory of Burnet. A few years ago the possibility was raised that histocompatibility antigens are themselves involved in the recognition of foreign antigens and thus in the control of the level of immune responsiveness. It is now known that the response is governed by the distinct *Ir* locus that is located within the H-2 complex. Altogether it appears that the study of the H-2 complex is still in a rather early stage. Entirely new phenomena governed by the complex may await discovery and important similarities between it and other genetic loci may appear.

In spite of the importance of the H-2 system, the literature on it is usually complicated and hard to comprehend because of complex technical details and a somewhat confusing terminology. Many immunologists, mammalian geneticists, and cell and membrane biologists have long felt a need for a clear and systematic account of the subject. This requirement is met excellently by Klein's book. The author illuminates every seemingly esoteric aspect of the subject by defining phenomena in simple, lucid language, and the organization is clear and systematic.

About two-thirds of the volume is devoted to the peripheral region of the complex. The author first introduces the serology and histocompatibility, then presents the relevant genetics, and ends with a description of the current state of biochemical investigation. Each section includes a brief section on methodology as a key to understanding the experimental evidence. The last third of the book deals with the biology of central regions of the H-2 complex, a subject that is developing rapidly. Much current work is described, ample references are provided, and all the chapters have helpful tables and figures. The first part of the volume contains a history of research on the entire H-2 system, each section contains a summary of the historical background, and an appendix presents a chronology of the work in the field. This historical perspective is thought-provoking.

Its grand scale, considerable depth, and clear, systematic outline make this book an excellent summary that should be useful to both beginners and experts in the field, as well as to interested outsiders.

KEIKO OZATO

Department of Embryology, Carnegie Institution of Washington, Baltimore, Maryland