

basic substance. Burger provides a far richer view of Early Horizon society than is found anywhere else in the literature, and Chavín religion undoubtedly contributed to the form of society in the late Early Horizon in many places. As Burger notes, however, it remains to be seen to what extent its proponents triggered change or helped fill a leadership vacuum left by local collapse or conflict. In sum, we will be debating the importance of ideology and the rise of pristine cultural complexity for some time to come, and this book is an enormously welcome addition to the literature.

TERENCE N. D'ALTROY, Columbia University

Disease and Demography in the Americas. Edited by JOHN W. VERANO and DOUGLAS H. UBELAKER. Washington, D.C.: Smithsonian Institution Press, 1992. Plates. Illustrations. Maps. Graphs. Tables. Notes. Bibliography. Index. x, 294 pp. Cloth. \$62.00.

Seeds of Change, the phrase developed by the national museum to commemorate the Columbian Quincentenary, took on meaning through symposia, exhibitions, and edited volumes devoted to exploring aspects of the Columbian experience. Conceived to refer to plants, animals, and diseases brought to the New World, these seeds, once introduced, sent “ripples around the globe affecting the people as well as the flora and fauna of both the New World and the Old” (p. ix). This volume, part of the larger project, evolved from a two-day symposium held at the Smithsonian in the fall of 1989. Itself a commemorative Quincentenary seed planted by the Smithsonian, it represents one of those Columbian seeds of change that had far-reaching consequences.

The general goal of the volume is to provide a scholarly review of extant knowledge about prehistoric and historic health, disease, and demography of native populations. The structure of the volume reflects its title; accordingly, it comprises two major sections. The first focuses largely on evaluating morbidity and mortality through skeletal biology and paleopathology. Although documents are employed, they play a minor role. The second section concentrates on population size. Given the importance of documents in estimating population size, the temporal focus of this section is the historic period.

In addition to two summaries by Aufenheide and Crosby, there are 12 papers in the first section (Ortner, Verano, Larsen et al., Powell, Stodder and Martin, Owsley, Buikstra, Milner, Saunders et al., Walker and Johnson, Carlson et al., Bogdan and Weaver) and 11 in the second (Ubelaker, Snow, Thornton et al., Meggers, Cook, Dobyns, Upham, Kiple and Higgins, Boyd, Trimble, Reff). The spatial focus ranges from the Great Lakes to the Andes. The editors have made a concerted effort to be exhaustive in their coverage, incorporating as much contemporary thought as possible.

The question tackled by the skeletal biologists is whether or not the Ameri-

cas were a “disease-free paradise” before European discovery. Not surprisingly, the presenters decimate that assumption. The evidence, on the continental scale, is overwhelming. Before the diffusion of acute, epidemic diseases, Native Americans suffered from a range of infections. Although the severity of these infections varied, health was clearly compromised; this status may partially explain the great numbers of deaths that occurred in the wake of introduced infections.

In the second section the issues are native population sizes at the contact boundary and the magnitude of decline that followed. The timing and role of infectious disease introduction looms large in these discussions. Disease, population size, and decline are contentious topics, and the editors make no bones about it. Rather than reaching consensus or presenting a single view, the goal is to “clarify issues and logic . . . and point . . . toward greater understanding” (p. 2). Future scholarship on contact populations and disease will tell whether or not understanding has resulted.

Despite varying quality and detail, the volume is successful. The editors wanted to cover the field, and they have largely done that. Indeed, a major strength here is the diversity of topics and areas and the inclusion of most major researchers on native demographics and disease. The volume is a useful introduction to the field and a reference for specialists.

ANN F. RAMENOFSKY, University of New Mexico

Vanguard of Empire: Ships of Exploration in the Age of Columbus. By ROGER C. SMITH. New York: Oxford University Press, 1993. Illustrations. Maps. Figures. Appendixes. Notes. Glossaries. Bibliographic essay. Indexes. xii, 316 pp. Cloth. \$35.00.

Every component of the “world encounter” that began in the fifteenth century crossed the oceans in wooden ships. People and their possessions, mineral and agricultural products, religions, ideas, and diseases all passed overseas aboard vessels bound for American, European, and Asian ports. Ships were as basic to the continuing encounter as they had been to its first, exploratory phase. In *Vanguard of Empire*, Roger Smith assiduously examines the ships and shipping of both stages over the period 1430–1530.

This book is uniquely complete. Samuel Eliot Morison (*Admiral of the Ocean Sea*, 1942) and José María Martínez Hidalgo (*Las Navas de Colón*, 1966) have written in the context of the Columbus voyages, describing the ships utilized in them. In *Six Galleons for the King of Spain* (1986), Carla Rahn Phillips displays a firm knowledge of the *Carrera de Indias* and the ships built for it. Björn Landström’s book *The Ship: An Illustrated History* (1961) describes and beautifully depicts vessels of all epochs. But Smith addresses the task of full exposition of the Iberian maritime world: the terms of trade and exploration beginning in the early fifteenth century, the sailing craft employed, their construction, arms, rig-