

because funding agencies demanded something vaguely and unthinkingly termed "relevance." Inevitably, postmodernism or poststructuralism moved in on the field, a virus of literary criticism mutating in search of a new host. Vansina reserves his sharpest criticisms for those who welcome "the triumph of subjectivity as a goal" and "the erasure of the boundary between fact and fiction" (219-20).

Africa should not become a laboratory for those wishing to test out their own constructions and deconstructions. Africa is no one's "invention." Its peoples have played a crucial role in world history, and there is still so much fundamental work to be done on elucidating and analyzing and understanding its history, and in attempting to approximate the truth (yes, I have said it!) about that past.

Vansina ends on a personal note. "Ultimately, the study of African history becomes for me a meditation on the African incarnations of the grandeur and the misery of the human condition itself" (254). Vansina speaks depreciatingly of being in the "autumn" of his life. This reviewer is confident that Jan Vansina will continue to teach and enlighten us throughout his "autumn" and into a "winter" replete with the homage that is his due.

Human Impact on the Environment: Ancient Roots, Current Challenges. Edited by Judith E. Jacobson and John Firor. (Boulder, CO: Westview, 1992. x + 220 pp., figures, references, contributors, index. \$37.50 cloth.)

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The papers of this collected volume were originally presented at Rice University in April 1991, in a series of lectures spread over several days. Under the banner of "Human impact on the environment," the goal of the interdisciplinary group of Rice faculty who suggested the conference was to foster new understanding of the relationship of people with their environment. One point was to illustrate that environmental damage was already possible in prehistoric times and that humankind has been confronted with basically "environmental" problems throughout its history, so that today's issues and their understanding or resolution should be appreciated in a longer time frame. Thus the conference organizers brought in a succession of speakers to present their professional view on (1) preindustrial human impact, (2) the repercussions of the Industrial Revolution, (3) the recent crises of the global environment, and (4) how to deal with the future. The three chapters on the first theme are of specific interest to the readers of *Ethnohistory*.

In terms of preindustrial impacts, Richard G. Klein's heavily docu-

mented paper begins with an outline of the evidence for animal extinctions during prehistoric times. Initially at least, such extinctions were part of the normal process of biological evolution and adaptive replacement. But human behavior changed qualitatively some fifty thousand years ago, as people developed the ability to innovate in response to changing environmental or social conditions. Consequently, hunting pressures may very well have contributed (in some regions more than in others) to the wave of extinctions ten thousand years ago at the end of the Pleistocene. But Klein emphasizes that the zoo-archaeological record remains inadequate to prove the point conclusively, since waves of extinction are common enough.

The implications of agricultural lifeways for new environmental adaptations are illustrated by Charles L. Redman through three provocative examples. In Greece, early land use led to soil erosion that subsequently circumscribed the arable land available for later occupants. In the American Southwest, the Hohokam appear to have ultimately failed to cope with an increasing frequency of destructive floods, perhaps exacerbated by marginal farming in the upland watershed that then led to local erosion and accelerated runoff; salinization of irrigated land may also have been a factor in abandonment. In the case of Chaco Canyon, a relatively unproductive environment appears to have supported a large population on the basis of trade hegemony, which eventually collapsed. Redman's third example is ancient Mesopotamia, where overirrigation during the period of centralized control under the Ur III Dynasty led to salinization and declining productivity from 2400 to 1700 B.C.; from A.D. 226–635 the Sassanid dynasty created the most complex and extensive irrigation system on record, but one that favored salinization and also required much labor, which withered away with the recurrence of bubonic plague after A.D. 541 (and a spate of catastrophic floods shortly before the Arab conquest). Both the Ur III and the Sassanid efforts represent metastable systems predicated on centralization and maximization, and their collapse led to scaling back and diversification that better served long-term productivity.

The epidemiology of civilization is the subject of Mark N. Cohen's paper, explicating the role of permanent settlements, population density, specific human activities, changing diets, animal domestication, and hygiene on the vectors of epidemic and endemic disease. This richly textured essay emphasizes that the emergence of critical population thresholds, particularly under crowded conditions, introduced disease as a potent demographic variable: the cost of "civilization" was very high. In addition, but less fully articulated, the virgin soil epidemics (of zoonotic origin) that ravaged the New World after 1492 also devastated the Old World, even prior to the appearance of urban civilizations. Until the passing of the modern

demographic transition, human disease loads were always heavy, and only a select few individuals lived to their full biological potential.

These authors have indeed attempted to communicate their professional insights in nuanced presentations that successfully bear out the stated premises of the volume, namely that adverse human impact on the environment is not solely an artifact of the Industrial Revolution and that throughout human history short-term strategies for coping with immediate problems have tended to have long-term negative consequences, most of them unforeseen. Unfortunately, the remainder of the volume is somewhat less successful, with a mix of contributions that make generalizations, repackage commonplace position papers, or purvey technical data without context. The editors, who did not organize the conference, have gamely attempted to craft the assemblage into a coherent volume, after the fact. But it was an almost impossible task, compounded by almost total lack of interaction among the speakers, most of whom were whisked off to the airport right after their presentations. Although model symposia such as *The Earth as Transformed by Human Action* (1990) are prohibitively expensive, they suggest that balance, complexity, and strong professional guidance are indispensable. With only modest funding, those criteria can still be met by setting more realistic goals and pursuing them more tenaciously.

Third Sex, Third Gender: Beyond Sexual Dimorphism in Culture and History. Edited by Gilbert Herdt. (New York: Zone, 1994. 614 pp., preface, introduction, illustrations, figures, chart, photographs, notes, index. \$29.95 cloth.)

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Gender studies first emerged with critical questions about the biological grounding of sexual categories. Although the introduction of social, cultural, and historical variables did indeed expand our understanding of gender constructions, most analyses translated sexual dimorphism into gender dichotomies. Gilbert Herdt and the other contributors to this volume challenge conventional theoretical and historical wisdom that dictates the universal existence of two genders, male and female, founded on two biological sexes. Relying upon a wide variety of cross-cultural materials and the methodologies of anthropology and the new social history, the essays in *Third Sex, Third Gender* explore the realities and social practices of multiple-sex and multiple-gendered beings. Central to this book is the deconstruction of demographic, symbolic, and historical conditions that combined in the social creation of third-gender categories.

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