

rians, one asks?), “revolution by general staff.” Rouquié merits our praise for taking stands, but the stands are precariously subjective. A generally cautious set of conclusions on the future of military-civil relations owes as much to the vagaries of evidence presented as to the overall scope of the study.

The dust jacket’s blurb defines this book as “an x-ray of authoritarian regimes.” Rouquié’s x-rays penetrate some parts of both region and topic, but do not allow the emergence of sharp images.

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*El hombre y su ambiente en los Andes centrales.* Senri Ethnological Studies, No. 10. Edited by LUIS MILLONES and HIROYASU TOMOEDA. Osaka: National Museum of Ethnology, 1982. Illustrations. Figures. Tables. Maps. Bibliography. Pp. vi, 307. Paper.

Interest in Peru has been growing among Japanese anthropologists ever since the Japanese archaeological excavations at Kotosh during the 1960s. This book derives from an international symposium held at Osaka in 1980. Although it is directed primarily to Peruvian and Japanese scholars, North Americans with an interest in central Andean ethnohistory will also find it of value.

The principal objective of the symposium was to evaluate the ecological hypotheses of John Murra: that Andean society evolved out of attempts to establish and maintain control over a maximum vertical range of ecozones (*pisos*). Murra emphasized *ethnohistorical* investigation as his main research methodology, but many ethnographers suggest that *contemporary* groups demonstrate the survival of verticality. Of the ten papers presented here, six utilize ethnographic data, three draw on archaeological material, and five make use of ethnohistorical sources; not all of them deal with the issue of environmental relations, however.

Most contributors do find confirmation of the Murra hypotheses. Norio Yamamoto argues that vertical control is a basic Alpine adaptation replicated in the Himalayas and Alps, and that seasonal transhumance among zones led to domestication and, later, to improvement of crops and domesticated animals. Shozo Masuda points out that exchange among different zones involves more than economic goods, and extends to social linkages and even ideas. Both Masuda and Franklin Pease discuss how the colonial Spaniards incorporated the indigenous system of vertical control and ex-

change to their own economic and commercial needs, principally provisioning highland mining centers and transporting metals to the coast.

Although most authors think that patterns of vertical control are ancient, this issue is never satisfactorily dealt with. Most of the papers talk about locally (or, at best, regionally) self-sufficient systems, which stop short of control over a maximum number of altitudinal zones. Yoshio Onuki's analysis of the archaeological record suggests a gradual extension through time in the number of zones controlled by each cultural group. Not until the Classic Period (beginning with the Christian era) did the highland polities achieve control over the lower Andean slopes, and even then they faced competition and conflict in the *yunga marítima* zone with coastal polities that were expanding upward.

One problem in trying to sort out apparent contradictions is that the contributors are comparing apples and oranges. Supporters of the Murra hypotheses are mostly drawing on data from the south Peruvian highlands and coast, whereas those who question them (Izumi Shimada and Yoshio Onuki) are working from north Peruvian materials, mostly from the coast. The latter offer the alternative hypothesis of "horizontal archipelagos"—a core area with outlying colonies (*mitmas*) extending up and down the coast. May it not be that north Peru (with the long continuity of the Moche-Chavín cultural tradition on the coast) is different from south Peru (which seems to have been dominated by the highlands)? Perhaps one needs to treat central Peru separately as well, with the Pachacamac cult centered on the coast being influential at a later time, while the Callejón de Huaylas represents a distinctive highland enclave with widespread cultural influences at an earlier period.

Other important issues that are raised but not dealt with adequately include: (1) whether widespread commercial trade existed in the Peruvian Andes before the Inca implemented their pervasive economic controls, and if so, the nature of such trade activities; and (2) inadequate consideration of the relationship of the eastern Andean slopes, both environmentally and economically, to these models of ecological adaptation.

In spite of the fact that certain common threads run through many of the papers, the editors have made no attempt to draw these out and synthesize the ecological, historical, social, and cultural implications of the work presented. That task has been left to the committed scholar and assiduous reader. Nonetheless this collection makes a useful contribution to our understanding of the cultural and historical processes that led to development of both pre-Hispanic and colonial Peruvian societies.