Cultural Minorities

The Prospects for Plural Societies. STUART PLATTNER and DAVID MAYBURY-LEWIS, Eds. American Ethnological Society, Washington, D.C., 1984. viii, 231 pp. Paper, $16. From a meeting, Lexington, Ky., April 1983.

Anthropology as an academic discipline has always addressed problems of the practical world. This is particularly the case when the survival of minorities is involved. It is not surprising, therefore, that when the president of the American Ethnological Society, David Maybury-Lewis, wished to have the prospects for plural societies discussed at the 1982 annual meeting of this prestigious society the leading scholars in the field rose to the challenge. Maybury-Lewis's own involvement with Cultural Survival, an organization working on behalf of so-called tribal groups and underprivileged ethnic groups throughout the world, provided the symposium with something of a built-in bias toward viewing the nation-state as "the villain of the conference" (p. 5). Yet the responses of the 13 anthropologists and sociologists whose papers are presented here were by no means uniform. Even the liberal idea of the freedom of a people to embrace and perpetuate the traditions of its choice was called into question.

The organizer invited specialists on different geographical regions; from different continents; and of different theoretical persuasions. Their charge was to discuss "the situation of tribal peoples in nation-states; the criteria for evaluating the success of ethnic groups in minority positions; and the possibilities, constraints and impediments to various forms of pluralism entailed in the structure of modern societies" (p. 77). Underlying this was concern with the physical extinction of Amerindian groups in countries such as Brazil and Ecuador and the recent publication of Leo Kuper's study of the United Nations' incapacity to deal with genocide.

From the different geographical regions represented come studies of Brazil, Ecuador, Oman, China, Malaysia, and Pakistan as culturally plural nation-states, as well as studies of ethnic movements that cut across national boundaries in the Andean region of South America, in Indonesia, and in South Asia. The papers themselves suggest that history and the spread of ideas, particularly religious ideas of tolerance and exclusion, are more important than geography for understanding the conditions of minorities in plural societies.

The selection of contributors from different continents brought forth an even more challenging response. This takes the form of questioning the hegemony of Western social science and the usefulness of a "modern, secular, liberal outlook" (p. 141) in the practical affairs of Third World nations. Such questions are raised by two elder statesmen, the octogenarian Lin Yueh-Hwa from the People's Republic of China and T. N. Madan of India, and disquiet with existing anthropological models of cultural pluralism is expressed in milder form by Akbar S. Ahmed of Pakistan and the Norwegian scholar Fredrik Barth.

The theoretical persuasions represented in the volume are neither very extreme nor very different. Leo Despres reiterates his perception that competition for scarce resources accounts for a great deal of the when and where of ethnic confrontations. M. G. Smith continues to argue for the umbrella concept of pluralism rather than its component parts: race, class, ethnicity, internal colonialism, and social stratification. His well-documented paper demonstrates how the adoption of these particular concepts at different times reflects the social contexts of their users. It might perhaps be noted that at the conference itself younger scholars volunteered papers more critical of current anthropology than those represented here. The dominant theoretical stance of this volume emerged in the early years of the development decade (the 1960's). At that time the center-periphery model of the state associated with the name of Edward Shils and the primordial model of ethnicity associated with his Chicago colleague Clifford Geertz were innovative in the study of newly independent nations. Drawing upon these, but moving beyond them, the anthropology represented here addresses primordial sentiments and civil politics in the global context of the 1980's. The practical problems of legitimacy, ethnoregionalism, and citizenship in nation-building are here placed within the uneasy realities of global politics and threatened sovereignties.

Ironically, given the immediate concerns of the symposium with the condition of minorities within the nation-state, the most challenging paper argues for an anthropological theory of transnational dimensions. This is Fredrik Barth's "joker in the pack." It is generally accepted that there are two contending approaches to the anthropology of the plural society, and these are outlined by Despres in this volume. One approach focuses on the objective "culture-population-group" within a structural framework. The other takes a "more subjective, instrumentally oriented approach" (p. 8). For many, Barth pioneered the second path. In his previous work on boundary maintenance and ethnicity as an organizational vessel, he explored identity and manipulation. Now he launches his vessel upon the "currents" or "streams" of traditions. Sohar, a dominantly Islamic but cosmopolitan Omani town at the edge of the Indian Ocean, provides him with a microcosm. Rich in the complexities of race, ethnicity, religion, and gender, Sohar is viewed by Barth as a plural isolate that has emerged within the "moving context" of historical change. The analysis is openly derivative from the Boasians, and it is no less than the emergence, reproduction, and change of cultural traditions within what they would call a contradiction-ridden manifold that Barth seeks to place again on the agenda of anthropology.

It would be wrong, however, to conclude that this collection of papers is of significance only, or even primarily, for anthropologists. Anthropology's particular expertise in the analysis of the traditions and symbolic expression of various forms of religious and cultural pluralism has an immediacy in both national and international affairs. Two examples may be given. The scholars attempting here to suggest "alternatives to extinction" for the Indians of the Amazon and the Andes delineate how state power in South America maintains stability and the status quo (that is, the privileged position of the current power-holders) through increasingly authoritarian military regimes. Indians, who form a minority in all Central and South American countries, unite as Indians across state borders in order better to stake their claim in the developing world economy. The Indian movement brings together as a political force not only Indians but many others whom the state insists on categorizing only as peasants or citizens. The symbols of Indian ethnicity provide both the organizational vessel and the banner of political opposition.

Similarly, religious movements (dis-

cussed here particularly in Islamic countries) serve to define and redefine the positions of individuals and groups within both national and transnational political arenas. The dynamic process of being "born again" adds a further dimension and is shown here to operate within both organized religion (Islam and Hinduism) and the nation state (Malaysia, Pakistan) to gain increasing privilege and exclusivity. Readers may conclude with this reviewer that it is to be regretted, perhaps, that case studies of cultural pluralism in the United States are not under consideration. Barth is surely wrong when he argues that U.S. ethnicity is "a very special kind of case" (p. 85). The seminal paper of the symposium, Leo Kuper's "International protection against genocide in plural societies," poses at the outset the field of study: destructive conflicts between ethnic and other groups *in the successor states to the colonial empires* (p. 207; emphasis added). Ethnohistorians would not consider this challenge met in this otherwise informative and thought-provoking volume. Perhaps not until cultural pluralism and genocide are studied in empires—political and economic—will they be understood in nation states.

JOAN VINCENT
Department of Anthropology, Barnard College, Columbia University, New York 10027

Relativity and Other Issues

Understanding Relativity. Origin and Impact of a Scientific Revolution. STANLEY GOLDBERG. Birkhäuser, Boston, 1984. xviii, 494 pp., illus. $24.95.

Goldberg's book has several clear and worthy objectives: to provide a self-contained exposition of special relativity "primarily for a lay audience" (p. xi) that will serve "to *demystify* the substantive content" (p. xiii) of the theory (part 1 and six appendixes, totaling over 300 pages); to provide a comparative account of the reception of special relativity during the period 1905 to 1911 in Germany, France, Great Britain, and the United States (part 2, totaling some 85 pages); and to describe how special relativity was assimilated in the United States from 1912 up to (almost) the present (part 3, totaling some 60 pages). In addition, Goldberg has a fourth—for me, much more problematic—objective having to do with analysis of how science is related to other aspects of culture and society. Among Goldberg's statements along these lines are the following: "The glib claim that it is necessary to do science in order to fuel the fires of technological progress will be scrutinized and found wanting" (p. xii); "There is no special kind of thinking that is 'scientific' " (p. 2); "The fate of ideas like the theory of relativity is as much a function of culture as is the fate of any other product of the human intellect" (p. 325). Since I found Goldberg's remarks on these and similar topics vague, largely programmatic, and hence difficult to evaluate, I shall say no more about them.

Let me begin, then, with Goldberg's own interpretation of special relativity—an interpretation that colors much of the discussion in all three parts of his book. Special relativity, Goldberg holds, is "a theory of measurement" that "says nothing about the nature of the world" (p. 103); and, he goes on, the two postulates of the theory (the principle of special relativity and the constancy of the velocity of light in vacuo) "could never be justified *a posteriori*" (p. 108). As for the relation of special relativity to Newtonian mechanics, Goldberg holds that Einstein's theory "did not replace Newtonian mechanics. It replaced the Newtonian theory of measurement" (p. 103). In other words, what is usually thought of as special relativity mechanics is for Goldberg simply Newtonian mechanics with a new theory of measurement (primarily, for time), for "the basic premises of Newtonian mechanics are unaffected" (p. 103).

Now, I find calling special relativity merely a theory of measurement more mystifying than illuminating, but, quite apart from terminological matters, to maintain that special relativity says nothing about the world seems to me just false. The easiest way to see this is to look at the actual structure of Einstein's 1905 paper. The first two sections of the paper deal, as Einstein explains, with the kinematics of a rigid body. The position of a material point is taken to be directly determinable by means of rigid measuring rods and Euclidean geometry. The motion of a material point is more problematic because it involves the unclear idea of time. To clarify this idea Einstein proposes his famous definition of clock synchronism (or simultaneity), which stipulates that oppositely directed light rays along the same path move at identical speeds. But, and this is crucial, Einstein adds that one must assume that the proposed definition is consistent, applicable to any number of points, symmetrical, and transitive. These four assumptions say some things that are presumptively true about the physical properties of light rays. In other words, though Einstein's definition of clock synchronism may be a sheer stipulation, it is a usable definition only because of the contingent behavior of light rays. This—the empirical—side of Einstein's definition Goldberg simply ignores (see his discussion of the definition on pp. 110–113), as he also ignores Reichenbach's more explicit presentation of the empirical aspects of special relativity in his axiomatization of the theory (1924). (It is difficult to make out Goldberg's attitude toward Reichenbach's work; he first quotes, without challenging, Reichenbach's claim that his logical analysis of special relativity coincides very closely with Einstein's own interpretation of that theory and then dismisses the work of Reichenbach as having "confused logic with history" [p. 307].)

In his legitimate concern to dispel the air of paradox often associated with the relativity of time and space Goldberg places insufficient emphasis on the larger goal of Einstein's thought experiments with clocks and rigid rods, which was to formulate a new relativistic kinematics to replace Newtonian kinematics. These two kinematical theories, it must be stressed, represent objectively different and incompatible space-time structures, so that no more than one can characterize the world. In this sense, at least, special relativity certainly does say something quite definite about the world.

With respect to Einstein's own understanding of the epistemological basis of special relativity, Goldberg says that Einstein's popular writings on relativity often do not "reflect his views on the nature of good theories" (p. 109); and yet he claims his own exposition of special relativity will "follow Einstein's account in his fine, albeit parsimonious, popularizations" (p. 110). In any case, I should like to cite what I consider to be one of Einstein's most important writings on the nature of physical theories in general; it was first published in the London *Times* in 1919, and in it Einstein draws a distinction between physical theories of two kinds: constructive theories (like the kinetic theory of gases) and principle theories (like thermodynamics). Special relativity is said to be of the latter kind, namely a theory whose "elements" are "not hypothetically constructed but empirically discovered . . . general characterisitics of natural processes" and whose "postulates" are "powerfully supported by experience."

Goldberg's exposition of special rela-