urally any collection of papers cannot have the unity attainable by a single author. Thus many gaps can be attributed to format. Bastin's editorial comments are welcome additions in this respect. The book's greatest merit is that it reveals the wide range of suggestions currently under consideration relating to a field long thought by many to be closed.

JOHN CLAUSER
Department of Physics and
Lawrence Berkeley Laboratory,
University of California, Berkeley

Applying a Social Science

Development Anthropology. GLYNN COCHRANE. Oxford University Press, New York, 1971. xii, 126 pp. $5.

This book attempts to explain applied anthropology's lack of academic respectability and of policy successes and to prescribe a cure for both its theoretical and its practical weaknesses. Cochrane argues that academic training in "development anthropology" is poor and that anthropologists are overspecialized, having little sensitivity to the administrative context in which policies for the development of newly independent nations are embedded. Development, he says, is a national matter, and the anthropologist's efforts to achieve it in single communities are therefore not profitable. Rather, development should be defined and approached as a national problem with local dimensions. Anthropology stresses community development just because it is politically neutral. This explanation seems to me to miss the mark, however; it has been politically neutral because anthropologists have stressed community enrichment rather than community empowerment.

The serious practical problem raised is the conflict between anthropologists and administrators, which Cochrane attributes mainly to academic preciousness and utopianism. According to him, the hard reality is that work in development means acceptance of administrative directives about what to study and what to do. Though the only proposal he makes is that anthropologists accept these conditions, he has identified a reason why many anthropologists leave development work and why few are willing to embark on this career.

Applied anthropology also has long-standing ethical problems, for, as Cochrane recognizes, there is no set of scientific values to guide the development process. Also he points out that our ethics are overwhelmingly negative, stressing what we should not do and ignoring what our responsibilities for action are. However, he does not raise the issue of the anthropologist's responsibility to those he studies, nor does he follow through with a definition of development to clarify the ethical issues. He argues that development is painful but not that it may be inherently bad, thus blaming only our approaches to it, never the process itself.

Proceeding from this point of view, Cochrane suggests a reorientation of the field, chartered by his unexamined belief that anthropology's potential in development is yet unrealized, the potential lying in its knowledge of "culture" and "social reality." He rightly argues that development poses interdisciplinary problems requiring the practical collaboration of academics and administrators. Development requires a knowledge of local cultures, of many aspects of the development process everywhere in the world, and of the means to implement plans. So he suggests that we train anthropologists for this by a dual approach: First, we must create an academic development anthropology to deal with theoretical analysis, modeled on development economics or development administration. Then we must train a class of "general practitioner" anthropologists or "non-specialized specialists" with action orientations.

Though Cochrane's definition of the problems of applied anthropology is searching, it is very narrow, raising serious doubts about his remedial program. He accepts on faith that anthropology's potential is unrealized, when its utility in development is in grave doubt among both academics and administrators. Just what this potential is ought to have been explored, for invocations of "culture" are not convincing. His critique of anthropological utopianism is perhaps fair, but it misses the point. Anthropologists are aware that underlying all approaches to development is a vision of the kind of society we are striving to create. This is at variance with anthropology's relativistic philosophy and creates profound difficulties for the anthropologist working in this field. In a world of imperialistic forces, these misgivings cannot be discarded as merely utopian. Here again he fails to provide any definition of development and to face the real problems that definitions of it raise.

Moreover, in laying his charge against ivory-tower academia Cochrane shows no awareness of the existence in our colleges and universities of the fields of rural sociology, agricultural economics and engineering, extension education, communication arts, and nutrition, to name only a few. These also send workers into development. Often having more field experience than anthropologists, they are educationally equipped to deal with both research and administrative problems at local and national levels. Their approaches and their academic organization practice the program that Cochrane thinks he invented. Whatever anthropology has to say about development, it must be said to these workers, and they will not be patient with invocations of anthropology's unnamed potential.

The book does not mention the role of educated citizens of developing nations. Yet major efforts, in all the fields named above and in some anthropology departments, are being made to teach such people what we know, with the idea that they will make their own programs. Apparently Cochrane sees development as our message to an unenlightened world, a view that is intellectually antiquated and politically naive.

Finally, the book is polemical and so leads one to expect solutions more impressive than those offered. Like so many polemics it hides both the strengths and weaknesses of its views by repetitiousness. I do not find Cochrane's invective matched by a knowledge of the present development field, and though he is not beating down an open door his polemical strategy seems to have put him on the front steps of the wrong building.

DAVYDD J. GREENWOOD
Department of Anthropology,
Cornell University,
Ithaca, New York

Peaceful Uses

Man and Atom. Building a New World through Nuclear Technology. GLENN T. SEABORG and WILLIAM R. CORLISS. Dutton, New York, 1971. 412 pp., illus. $10.

The Atomic Energy Commission has been in existence for approximately 25 years. During this time it has had a number of ups and downs, and it is now being attacked by conservationists and others concerned with preserving the environment. This book, therefore,