Book Reviews

Pul Eliya, A Village in Ceylon: A Study of Land Tenure and Kinship. E. R. Leach. Cambridge University Press, New York, 1961. 360 pp. Illus. \$8.

Pul Eliya is a Sinhalese village with 146 inhabitants in the dry zone of North Central Province, Ceylon. With a wealth of concrete, illustrative material, Leach analyzes and describes the physical structure of the village, its family and kinship organization, its land tenure system (both traditional and nontraditional), and its organization of labor. Besides making an important contribution to the anthropology of Ceylon, he has produced a book notable for other reasons.

Some critics of anthropology object to intensive studies of little communities such as Pul Eliya, for they consider the studies devoid of practical value. Why try to learn all that detail about an obscure village? What we need are broad surveys which enable us to get the "big picture." There is a place, of course, for surveys. They determine the extent to which it is safe to generalize conclusions from studies like this one, and they provide a check on interpretations of functional relationships in the single case. Work in other Sinhalese villages will undoubtedly require some modification of Leach's understanding of what he observed in Pul Eliya. But no survey is worth anything unless intensive studies have been made first. In spite of all their trappings of quantitative rigor, surveys give precise answers only to the questions which investigators know to ask. Without the intensive studies to tell them what to ask, the information obtained from surveys has little to do with reality, no matter how carefully such information is collected. Thus Leach finds that most land legislation in Ceylon has been based on entirely erroneous conceptions of how the tenure systems in the villages actually work, misconceptions which previous surveys in no way dispelled. His explication of how land tenure works in Pul Eliya,

in practice as well as in theory, and his account of the effects of misinformed government legislation effectively demonstrate the practical as well as the scientific value of intensive studies of single communities. *Pul Eliya* should be on the required reading list of all legislators and administrators who are concerned with the welfare of peasant communities.

Challenge to Radcliffe-Brown School

Of special interest to anthropologists is the challenge Leach offers to his fellow social anthropologists of the British or Radcliffe-Brown school. In Pul Eliva Leach found it impossible to work within their theoretical frame regarding corporate groups. He concludes that a social structure, in the prevailing social-anthropological sense of that term, "must necessarily be credited with the attributes of Deity. The anthropologist with his wealth of detailed knowledge of the behavioural facts claims an intuitive understanding of the jural system which holds these behaviours in control. When he writes his structural analysis, it is this private intuition which he describes rather than the empirical facts of the case. The logical procedures involved are precisely those of a theologian who purports to be able to delineate the attributes of God by resorting to the argument from design.

"Of course, it is all very elegant, but it is not a demonstration; the structuralist anthropologist, like the theologian, will only persuade those who already wish to believe" (pages 301-2).

Insofar as the structure of a community is an abstraction from the modalities of event and arrangement which characterize it as a relatively stable system, and insofar as this abstraction is then treated as a system of rules governing the conduct of its members, Leach is entirely right. That one of Britain's leading social anthropologists has come to this position is of great importance for the future of social anthropology.

But Leach's conclusion—"the group itself need have no rules; it may be simply a collection of individuals who derive their livelihood from a piece of territory laid out in a particular way" (page 300)—is one which he has not demonstrated, even for Pul Eliya, unless we assume that "rules" can refer only to the kind of abstraction which Leach rightly argues cannot be treated as if it were a rule of the society. But the recurring patterns of arrangements in a community from which rules are improperly abstracted, in the manner Leach deplores, may legitimately be viewed as the products of human decisions which are themselves made with reference to the mutual understandings that make events, both common and rare, intelligible to their participants. Leach has rightly thrown out the rules of the sociological structuralist, but if, as he says, "society is not a 'thing'" but "a way of ordering experience" (pages 304-5), then implicit in that ordering are principles or rules analogous to the phonological, morphological, and syntactic principles characterizing a language and without which speech could not be an orderly process. Although rules in this sense are also formulations of the anthropologist, their validity for the society for which they are specifically formulated can be tested against actual events in that society. Efforts to develop more sophisticated inductive procedures for formulating such rules are a legitimate and essential scientific endeavor.

Leach has taken a major step in developing his own theoretical orientation. It will have wide repercussions among those who call themselves, by preference, "social" anthropologists.

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World Prehistory. An outline. Grahame Clark. Cambridge University Press, Press, New York, 1961. xv + 284 pp. Illus. Paper, \$2.45; cloth, \$6.

In this volume Grahame Clark, one of the leading specialists in the prehistory of Europe and Disney professor of archaeology at the University of Cambridge, has undertaken a formidable task and has carried it off quite well. His aim is "to present a brief outline of man's prehistoric past, . . . to survey in barest outline the history of mankind from the first dawn of

culture down to the time when successive societies attained literacy."

This is an ambitious design that quite naturally, in a work of 284 pages, calls for a great deal of compression. Although Clark bases his discussion almost entirely on concrete but fragmentary evidence, he found it impracticable to incorporate or even summarize the nature of the evidence itself. What he has done is to present a reasonably coherent picture of human cultural history from the earliest appearance of man as a tool-making animal to the emergence of adequately written history in different parts of the world at different times.

In a disarming paragraph Clark signals his awareness that "the varying intensity of archaeological research in different parts of the world, the author's unequal reading, and the insistent progress of knowledge, which modifies conclusions almost before they can be set down, all help to distort the picture."

Paradoxically, although the author specifically eschews an attempt at artificial evenness of treatment, the actual structure of the book, by virtue of its relatively even chapter lengths, superficially approximates just that, and results in a certain lack of balance.

The first chapter, entitled "Man's place in nature," is fairly evenly divided between physical environment and biological evolution. The next two chapters, which span 50 pages, discuss Lower Paleolithic cultures and their survivals, on the one hand, and advanced Paleolithic and Mesolithic cultures on the other. Here Clark is dealing with his own specialities and is at his best. "The invention of farming and the rise of Mesopotamian civilization" occupies 23 pages, and "Ancient Egypt and the later prehistory of Africa" only 20 pages. By contrast, "Neolithic peasants and arctic hunter fishers" in Europe runs to 28 pages, and "From Mycenae to the age of expansion" runs to 33 pages. Since both of these chapters are subdivisions of a broader topic, the foundations of European civilization, this disproportionate bias is understandable, particularly since our archeological evidence for much of Continental Europe and the Mediterranean is fairly complete and therefore quite confusing.

On the other hand, to treat India and the Far East, including China, Southeast Asia, Indonesia, and the Philippines, as well as Japan and Northeast Asia, in 32 pages, the New

World, encompassing North America, Mesoamerica, and South America, in 28 pages, and Australia and the Pacific in 11 pages is likely to cause the professionals who specialize in those areas to gasp.

It is obvious that Clark could do no more than present his own interpretations and that only occasionally could he outline some area of disagreement, and it is also obvious that he had to omit much relevant material. This, then, is the kind of book about which the expert can and does say, "This is excellent, stimulating and informative, but for my area. . . ."

It is not a book to read at one sitting, for the compression of material has resulted in a density of style. Each chapter must serve as a point of departure for further reading or lectures to fill in the gaps, repair omissions, and assess conflicting interpretations. But as an introductory text that leads the reader into unfamiliar territory this book deserves a place on the reference shelf of the professional archeologist, the serious student, and the interested layman.

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Science Since Babylon. Derek J. de Solla Price. Yale University Press, New Haven, Conn., 1961. 149 pp. \$4.50.

The author delivered five of the six chapters of this book as public lectures in a prolegomenon to a program in the history of science and medicine at Yale. He wisely concentrated attention on certain "crises," in the study of which he has himself made valuable and important discoveries or suggestions. His enthusiasm is infectious and will convey in print, as it must surely have done by the spoken word, the variety of opportunities that await the scholar in this, the newest field of historiography.

Price tells of the complements of Greek geometrical model and Babylonian computation in Ptolemy's Almagest. The comparisons of clockwork between China and the West is a welltold detective story, containing clues for a fuller tale of cultural relations. A chapter on the technological background of American science takes a more generous view than has been fashionable of our national heritage in

this field. An essay on discovery in radiation grapples with the problem of what to do with recent history in science. There is a most suggestive study of the quantitative growth of science. The book closes with an appeal for institutionalization of what the author calls "humanities of science," of which the reader is to take the five substantive chapters as samples. I find this summons a little apocalyptic and would prefer to refuse the choice of all or nothing. And perhaps one need not make it in order to enjoy and profit from the excellent observations and curious facts that abound in a brief, delightful, and intriguing book.

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Anatomy of Monocotyledons. vol. 1, Gramineae. Charles Russell Metcalfe. Oxford University Press, New York, 1960. lxi + 731 pp. Illus. \$13.45.

A more appropriate title for this excellent reference work would have been "Leaf Anatomy of the Gramineae." Leaf anatomy is emphasized because "in the vegetative organs of the Gramineae the most important characters are to be found in the leaf." The volume is the culmination of over 10 years of research by Metcalfe, and it records the data for 206 genera and 413 species examined. In addition, the literature has been summarized and blended with the author's results, so that 345 genera have been treated.

There are chapters on the general morphology of the grass plant, on the diagnostic microscopical characters, and on the leaf structure and taxonomy of grasses, but the major part of the book records the details of leaf anatomy. The genera are arranged alphabetically under each of two divisions: the genera not in the Bambuseae and genera in the Bambuseae. The diagnostic characters of each genus are followed by the detailed anatomy of selected species. This usually includes only the abaxial epidermis of the leaf and a transverse section of the lamina, but sometimes the anatomy of the culm and other parts are given. The source of the material examined is indicated for each species. Sometimes it is from plants cultivated at Kew and sometimes from a specific herbarium specimen. Additional information from the literature is considered separately.