

largely artificial operations. In the sub-humid and semiarid grasslands, management is more largely a matter of understanding and taking advantage of ecological factors—seeing that nature gets a chance to do the work. While it is true that each landscape is in some respects unique, we already have, thanks to Weaver and his industrious associates, a lot of information on the western grasslands that we should be using. Meanwhile eastern workers, both state and federal, have done much to improve our knowledge of intensive management under humid conditions.

Our present food surpluses should not blind us to the fact that we are living in a hungry world. Our own rate of population increase suggests that, even if we consider only ourselves, we shall soon be seriously concerned with adequate food production. On both counts the present volume deserves attention.

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**Maya.** The riddle and rediscovery of a lost civilization. Charles Gallenkamp. McKay, New York, 1959. xvi + 240 pp. Illus. + plates. \$5.50.

Whatever the causes may be, it has been evident that for some time now there is an increasing market for books, written in "layman" style, on archeology. A fair proportion of these books have been devoted to American archeology, particularly to the high culture areas of Middle America and the central Andes. Gallenkamp's book concentrates on the pre-Columbian Maya, a group that occupied the scrub and rain forests of the Yucatan Peninsula of Central America. Thanks to modern transportation and the interest of the various governments in the tourist potential and the scientific value of the many Maya sites within this area, an increasing number of people are able to visit the impressive, often awesome ruins that until recently could be reached only by the most determined of travelers and scholars. One might wonder, however, how many visitors leave a site such as Uxmal, or Tikal, or Copan with any substantial awareness of the historical and anthropological implications of what they have seen. Are monuments, temples, and palaces akin to some museum objects—poorly labeled and without sensible context—

at most just attractive "things"? The chances are though that the majority of visitors come away with many valid questions. Does a book such as this one by Gallenkamp properly answer what is answerable and provide a context for a searching appreciation of all the carvings and structures no longer so "lost" in the jungle?

The book is thoroughly readable and reasonably well illustrated with a selection of photographs covering various outstanding Maya remains. The major periods of Maya development are covered, from the still slightly known Formative era through the relatively well investigated Classic or florescent period, to the final period of militarism, secularism and, in many ways esthetic disintegration. A chapter is devoted to John Lloyd Stephens, whose explorations over a century ago marked the beginning of our archeological knowledge of the Maya. A chapter on how the Americas were populated with subsequent cultural diversification, is well done. Other chapters are given to the famed Classic-period tomb found a few years ago at Palenque and to the equally well publicized polychromed frescos of Bonampak. The rich yield from the "Sacred Cenote" (well) of Chichen Itza in Yucatan is similarly treated as a highlight of discovery and an interpretive source.

On the whole, Gallenkamp's book appears to be free of all but minor error (for example, Tikal "Temple V" in one photograph is actually "Temple VI"), and to be generally comprehensive and very much up to date. A good bibliography is appended. In fact, the book often appears to be a synthesis of two prior popular studies—J. E. S. Thompson's *The Rise and Fall of Maya Civilization* (University of Oklahoma Press), and S. G. Morley's *The Ancient Maya* (G. Brainerd, Ed., Stanford University Press). Full credit is given to these sources, and it is evident that Gallenkamp has heavily relied upon them. The question is, if one must choose one of these three books, whether that by Gallenkamp would be the choice. I would certainly favor the revised edition of Morley's study for detail and that by Thompson for an often penetrating view of Maya culture. Another excellent study is George Brainerd's *The Maya Civilization* (Southwest Museum, Los Angeles).

In summary, the Gallenkamp volume should certainly be recommended as an adequate, up-to-date, and reliable pres-

entation of a fascinating subject of interest to anyone concerned with the comparative study of what causes and constitutes "civilization." However, his principal sources, written by men long and actively concerned with the subject, cannot be recommended enough.

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**The Physico-chemical Constants of Binary Systems in Concentrated Solutions.** vol. 1, Two Organic Compounds (without hydroxyl derivatives). 1274 pp. vol. 2, Two Organic Compounds (at least one a hydroxyl derivative). 1283 pp. Jean Timmermans. Interscience, New York, 1959. \$29 each.

These are the first two volumes of a four-volume work aimed at extracting from the literature all of the data on the physical constants of solutions of two components. Elements and compounds are taken as components; alloys and solutions more dilute than 10-weight percent are excluded from consideration.

The first two volumes consist of tables of data on binary systems of the type indicated in the title. Apparently all of the published data on a given system are included without critical evaluation; thus, the user will find reference to the original reports necessary for obtaining an idea of the accuracy of the determinations. Since the bibliography is to appear in the fourth (and last) volume of the series, which is not yet available, the single volumes appear to be of limited usefulness at the present time. Although the arrangement of compounds is quite systematic, the index to compounds is also to appear in the last volume; therefore locating a particular compound in the very large mass of data reported in the first two volumes is a chore.

The work is reproduced from typewritten records by offset printing, and although the print is easy to read, the tables, in many instances, are rather carelessly aligned on the page. Further, a cursory inspection reveals several typographical errors in names of compounds; this would hardly encourage one to regard the numerical data as completely reliable without checking the original source. While the complete set of four volumes will undoubtedly be