However, industrial archeology, as it was developed in Great Britain and the United States, has been much less concerned with well-written monographs than with trying to preserve some of the fast-vanishing factory buildings, railroad stations, canal locks, and other physical evidence of our industrial "roots." Where preservation is impossible, industrial archeologists have tried to insure that a record will be made before the wrecker's ball hits.

Hudson describes with approval the work of the Historic American Engineering Record (HAER), a division of the Department of the Interior's Office of Archeology and Historic Preservation. The remarkable quantity of careful fieldwork done by that young and enthusiastic organization is indeed impressive. That recording of physical remains leads to advocacy is a point insufficiently recognized in Hudson's book. HAER has, for example, studied the economies of rehabilitating rather than destroying structures and has encouraged private investors to renew rather than simply replace old buildings. Also in America, the Society for Industrial Archeology (SIA) has supported the production by John Karol of a first-rate film entitled "Working Places," which argues eloquently for "adaptive reuse"—that is, rehabilitation—of industrial buildings and other endangered structures. The nicely illustrated *Newsletter* of the SIA, issued by Robert Vogel, a Smithsonian curator, is a model of succinct reporting. Losses of structures are deplored; the decision to preserve an iron furnace in Alabama is reported as a triumph; very little in the way of relevant books and articles is missed in that lively and informative publication.

The industrial archeology movement had its origins in museums and among collectors of machinery of various kinds. A number of university professors have joined the ranks, particularly in England and Germany. The strength of the movement is not in providing a shelf of books but in making it possible for the rest of us to go see and experience at first hand the impressive and interesting structures that the builders of our technological civilization have left behind as a legacy. To prevent the kind of massive public vandalism that destroyed Pennsylvania Station in Manhattan is the mission of industrial archeologists. Each succeeding generation must discover for itself the reality of such great industrial structures. The aura that clings to a Lowell mill or an original Watt steam engine cannot be conveyed in books, nor can matters of scale and texture be understood through either words or pictures. I hope that academic historians will take seriously Hudson's suggestions and admonitions, but I should hate to see industrial archeologists dissipate their enthusiasm and dedication to preservation by shifting their emphasis to simply recording the "whole picture" in books.

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Deep-Seated Rocks

Proceedings of the Second International Kimberlite Conference. Santa Fe, N.M., Oct. 1977. F. R. BOYD and HENRY O. A. MEYER, Eds. American Geophysical Union, Washington, D.C., 1979. In two volumes, illus. Vol. 1, Kimberlites, Diatremes, and Diamonds: Their Geology, Petrology, and Geochemistry. viii, 400 pp. $19. Vol. 2, The Mantle Sample: Inclusions in Kimberlites and Other Volcanics. viii, 424 pp. $19.

An international conference on kimberlites was held in Capetown, South Africa, in 1973 and dramatically marked the rebirth of interest in these deep-seated rock types. The conference and its associated field trips were such a success that it was agreed that a second conference should be convened in four years. These two volumes contain the papers presented at the second conference. Thousands of samples were collected at the first conference, and research on some of them is well represented in the two volumes.

Volume 1 deals mainly with the field relations, mineralogy, petrology, geochemistry, and eruptive mechanism of kimberlites and related rocks and with experimental studies concerning the genesis of kimberlite. It also includes specific studies of diamonds and their inclusions from a wide range of localities. Volume 2 discusses eclogite and peridotite xenoliths from kimberlites in Africa and from the Colorado Plateau as well as xenoliths from basalts and other volcanic rocks in various parts of the world. The diversity of work reported in the two volumes is a clear indication of the health and vigor of research in these areas. The 69 papers represent a major step forward, although there are of course many unresolved questions.

Gurney, Harris, and Rickard have studied inclusions from a large number of diamonds from the Finsch pipe, whereas Tsai *et al.* have studied diamond inclusions from four African localities. These studies add to our knowledge of peridotitic and eclogitic suites found in diamonds from specific localities, but there is still a need to relate such studies more closely to kimberlitic and xenolithic populations in the same localities.

Skinner and Clement propose a new classification of kimberlite, which is badly needed, and apply it to 12 southern African localities with wide mineralogical diversity. Mineralogical and petrological studies extend well beyond Africa and include new studies in India by Akella *et al.*, in Greenland by Scott, in Canada by Mitchell, and in the western United States by C. B. Smith *et al.* In addition, much more emphasis is being given to specific mineralogical studies that are sorely needed for a better understanding of kimberlites and their genesis. Elthon and Ridley attempt to distinguish xenocryst, phenocryst, and groundmass minerals such as olivine and phlogopite in kimberlite from the Premier Mine. Raber and Haggerty have studied the complex zircon oxide reactions in diamond-bearing kimberlites, some of which appear to be due to the availability of carbonatitic fluids. McMahon and Haggerty have studied magnetite and pyrochlore in the Oka carbonatite complex. J. V. Smith *et al.* have studied potassium, rubidium, and barium in micas from a wide variety of kimberlites and xenoliths and discuss the implications for the origin of basaltic and related volcanic rocks.

Much progress in experimental work has been made by Ellis and Wyllie and by Eggler and Wendlandt. Experiments have been extended to higher pressures, with varying amounts of carbon dioxide and water. These studies are of critical importance in understanding the phase relations of garnet peridotite xenoliths and megacrysts. Analogous experimental studies of eclogites and spinel peridotites are needed.

Important studies of eclogite and peridotite xenoliths in numerous localities cannot all be noted here. Evidence for pervasive metasomatic processes is presented in several papers, especially the paper by Boettcher *et al.* There has been much progress in the use of deformation textures in interpreting the history of peridotite xenoliths. Severe deformation accompanying eruption is found to be more important than slow creep at depth. Inclusions from the Kao pipe, the Premier Mine, and Orapa, Botswana, have received special study, but lower crustal granulites and eclogites from Lesotho have also been interpreted. Numerous studies of megacryst assemblages from widely separated localities as well as studies of specific minerals such as ilmenite, enstatite, and pyrox-

ene-ilmenite intergrowths are presented. Especially interesting is the study of potassic sulfides by Clarke. Although much has been learned about megacrysts, there is still debate about their relation to the kimberlite host.

Studies of xenoliths from the Colorado Plateau greatly advance our understanding of this important region. Xenolith studies in alkali basaltic and related volcanic rocks from Australia, New England, Europe, and San Quintin, Baja California, are also included. Especially interesting are the xenoliths and nodules in alnoite from the Solomon Islands (Nixon and Boyd). Jordan explores the geophysical implications of garnet lherzolites in the upper mantle, and Thompson presents a model of its metamorphism.

There is such a wealth of material packed into these two volumes that it is difficult to do justice to all concerned. It is clear that studies of kimberlites and associated deep-seated rocks are in a most exciting period, and these volumes are an important milestone.

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Primates

The Study of Prosimian Behavior. G. A. DOYLE and R. D. MARTIN, Eds. Academic Press, New York, 1979. xviii, 696 pp., illus. $49.50.

The Study of Prosimian Behavior is the third collection of papers on the prosimian primates to have appeared within the past five years, and although its editors are careful to warn us against the dangers they see in the development of "prosimianology" as a study distinct from the "mainstream of primatology," this volume will in itself do much to establish the study of the so-called "lower primates" on a level with that of the remainder of the order. The focus of the book is limited to behavior, but to behavior very broadly defined; and though the editors have not attempted to provide an overall synthesis, the volume, largely because of its topical rather than systematic organization, comes closer to this, within its limits, than did either of its predecessors. As is almost inevitable in a volume of invited contributions, however, some of the 14 chapters bear the marks of haste.

In the introductory, and the only expressly nonbehavioral, contribution, Petter and Petter-Rousseaux review prosimian classification. This discussion would have been more useful had the authors not chosen to adopt karyology as their touchstone; they tell us, for instance, that "in the absence of a karyotype for [*Allocebus*] it is difficult to reach conclusions about its evolutionary relationships" (p. 24). On the other hand, the distribution maps provided by the Petters are especially welcome, although they do differ in certain unexplained respects from those published recently by Petter *et al.* (*Faune de Madagascar*, vol. 44, 1977). There follows a brief but characteristically thoughtful essay by Martin in which he makes the point that behavioral evolution may usefully be discussed only within the framework of an explicit phylogeny. If there is one thread that runs throughout the book, however, it is the hoary but undemonstrated assumption that the prosimians (or at least the strepsirhines) form an exceptionally close-knit group. In most cases this assumption is implicit, but it is clearly articulated by Klopfer and Boskoff: "The old and limited geographical range of extant prosimians . . . suggests a close relationship among species" (p. 124). This undercurrent is regrettable, since it constitutes a real barrier to understanding the wealth of adaptive and phylogenetic diversity among these animals. Certainly, however, it is not specific to this book.

Many of the contributions, such as those on reproduction, behavioral development, and intelligence, serve chiefly to remind us how little we still know about these matters. It is the chapters, such as those by Pollock (ranging behavior), Hladik (diet and ecology), and Charles-Dominique (lorisid behavior), based on field studies, that most clearly reveal how our knowledge has advanced over the past decade. Valuable also are two chapters combining field and laborafory investigation: one by the late Georges Pariente (to whose memory the volume is dedicated) on vision, the other by Schilling on olfactory communication. The one contribution devoted to a single genus is Niemitz's useful review of the natural history of *Tarsius*.

Especially in its organization by topic, this volume builds effectively upon the foundation laid by its predecessors, and is an indispensable addition to the literature on an important and fascinating group of primates. I suppose there is little use in complaining about its price, but for the money one might expect better than the penny-pinching telegraphic style of the bibliographies.

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