

works and chaos, and polarization, respectively. Space exploration provides the impetus for several of the contributions—Owen K. Garriott on research from manned space platforms, Gerald R. North on satellite measurements of moisture variables as related to global change, and P. Bauer on the ionosphere as viewed from space. Finally, there are two papers that have a biological cast: W. Ross Adey on “electromagnetic fields and the essence of living systems” and Humio Inaba on “bio-information” from ultraweak photon emissions.

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**Advances in Bioclimatology**, 1. G. STANHILL, G. L. HAHN, J. D. KALMA, R. S. LOOMIS, and F. I. WOODWARD, Eds. Springer-Verlag, New York, 1992. x, 157 pp., illus. \$89.

In his preface to this new series Stanhill notes that advances in bioclimatology—defined as “the study of the relations between the physical environment and the form and function of living organisms”—have been “unevenly spread through the vast field of interest encompassed” by the term. The purpose of the series is to overcome this separation by providing a “common forum.” The inaugural volume consists of four papers. In the first, R. L. Desjardins briefly reviews techniques for measuring CO<sub>2</sub> flux densities both locally, with ground-based instrumentation, and regionally, from aircraft, noting also the potential of such large-scale projects as the First International Satellite Land Surface Climatology Field Experiment. R. M. Gifford then discusses the relation of CO<sub>2</sub> to vegetation productivity, considering photosynthetic irradiance, water regime, temperature, and nutrients. Modeling of radiative transfer in nonhomogeneous plant canopies is the subject of a contribution by T. Nilson, who concludes that, given the difficulty of determining the input data required, more models of canopy and individual plant structure are needed. The last and longest paper in the volume is a consideration by E. A. N. Greenwood of deforestation, revegetation, and water balance that is subtitled “An optimistic path through the plausible, impracticable and the controversial.” Each paper has an extensive reference list, and there is a subject index for the volume as a whole. Volume 2 of the series, also scheduled to appear this year, will be devoted to the bioclimatology of frost, announced contributors being J. D. Kalma, G. P. Laughlin, J. M. Caprio, and P. J. C. Hamer.

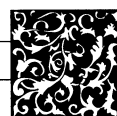
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**Paleoanthropology Annuals**. Vol. 1, 1990. ERIC DELSON, IAN TATTERSALL, and JOHN VAN COUVERING, Eds. Garland, New York, 1992. xvi, 287 pp., illus. \$55.

This volume inaugurates a series of reprint collections, based on the resources available at the American Museum of Natural History, that is “designed to make available to a wide audience a selection of those works . . . which the Editors consider to have been the most significant” in the field of paleoanthropology. Chronologically, the criterion for inclusion is, the editors state, actual appearance in the calendar year the volume represents, rather than date of record. The editors open the volume with an essay on “the year in paleoanthropology.” Highlights they discuss include various proposals regarding the contested status of plesiadapiforms as early primates, several significant finds of Miocene hominoid fossils, new approaches to deciphering primate paleoenvironments and the timing of devel-

opmental sequences, and discoveries of various Middle Pleistocene artifact assemblages in Europe. Ongoing interpretation of and controversies over already known material are also summarized. The year 1990 saw, in addition to the many additions to the journal literature, the appearance of eight books the editors deem noteworthy, and these, along with over 40 papers not included in the volume, are listed in a bibliography that follows the introductory essay. For reprinting, a total of 32 articles have been chosen from some dozen journals ranging from *Science News* (a write-up of a controversy over a specimen of *Ouranopithecus*) to *Palaeontographica*, *Abteilung A* (an announcement of a possible new species of omomyid primate from Morocco), with representation from such general journals as *Nature* (five papers) and *Science* (three) as well as from anthropological and paleontological journals. The articles have been put into a uniform format, and those originally published in languages other than English have been translated by the editors.

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## Vignettes: Popular Images

Most people I have met, even in the outback of Australia, seem to have heard of the giant radio telescope at Jodrell Bank—it is, so to speak, the Eiffel Tower of England.

—R. Hanbury Brown, in *Boffin: A Personal Story of the Early Days of Radar, Radio Astronomy and Quantum Optics* (Hilger/Institute of Physics)

Steinmetz has certainly not kept pace with Edison, Ford, Babe Ruth, and the other folk heroes of the “lowbrow” newspaper story . . . [One] reason for Steinmetz’s decline in popularity has to do with the shift in hero worship in the twentieth century from idols of production (in industry, politics, and the military) to idols of consumption (movie stars and sports figures, for example) . . . Edison, Ford, Steinmetz, and Harding were idols of production; Ruth and Dempsey were idols of consumption. One reason Edison and Ford were so popular is that they easily became idols of consumption as well. Edison’s picture and name appeared on such everyday items as phonograph cylinder cases and light bulb advertisements. Ford’s name was stamped on every Model T . . . But what was there to consume in the case of Steinmetz? The square root of minus one? Lightning in the laboratory?

—Ronald R. Kline, in *Steinmetz: Engineer and Socialist* (Johns Hopkins University Press)

I had a science fiction magazine called *Strange Adventures*. It was a monthly magazine and was selling slightly above average. One issue had a fantastic rise in sales—a leap of ten points. What happened? We looked at the cover which showed a gorilla in a cage in a zoo. The people outside the cage were looking at this gorilla, and the gorilla had a slate in his hand and he had written in chalk, “Please help me, I am the victim of a horrible scientific experiment.”

—Julius Schwartz, as quoted by Mike Benton in *The Illustrated History of Science Fiction Comics* (Taylor)