teria, breathe on the paintings and stir up dust. Artificial lighting and prolonged exposure to the modern French climate are also suspect.

Since the green peril continues to spread, the French Government has closed the caves for an indefinite period of time.

New paintings on rock slabs or in caves are being discovered all the time. Large caves in France and Spain, and smaller caves or rock shelters in Italy and Sicily, shelter well-preserved specimens of Ice Age art.

## **Styles in Rock Paintings**

Rock paintings in styles quite different from the "Franco-Cantabrian" style of Lascaux and Altamira art are scattered on ledges and niches along the western coast of Spain and through North Africa.

Dancing women and a party of honey gatherers are among the exhibits in these "open air" Spanish galleries.

Animals are the main subject of the cave paintings, while many of the cliff or ledge drawings are scenic compositions. They seem to be telling stories of mythical incidents.

Thousands of desert paintings and engravings have come to the scholars' attention, mainly since the end of World War II.

It is harder to date these drawings, however, since not as many clues have been preserved outdoors as in the caves. From artists' tools or other objects found in the debris near the cave paintings, archaeologists can tell the age of the paintings. Without these artifacts, they rely on the paintings themselves.

If an extinct species is represented, then it is assumed that the paintings were done at the time the animal lived. Paintings layered one over another give clues to age, as do the coatings over the paintings left by natural chemical processes.

Often, more recent paintings are side by side with older ones.

Rock art, although concentrated in Europe and Africa, was produced by hunters living in Paleolithic cultures all around the world. Australian aborigines, in modern times, still paint their mythical figures on special stones.

America, settled by migrations across Asia and down through Alaska in comparatively modern times, has rock paintings along the West Coast. The animal figures, mythological creatures and geometric designs are only a few thousand years old.

Modern man can only guess the meanings of the Stone Age paintings. It is like trying to reconstruct Christian doctrine by studying medieval art-although much can be told of the life, the men, and the religion, the real spirit is lost in time.

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## Books of the Week

Listing is for readers' information, not advertising. For convenient purchase of any book listed or any U.S. book in print, remit retail price (we pay postage) plus 25¢ handling charge if price is less than \$2 to Book Department, Science Service, 1719 N St., N.W., Washington, D. C. 20036.

ADVANCES IN CANCER RESEARCH, Vol. 7—Alexander Haddow and Sidney Weinhouse, Eds.—Academic Press, 599 p., illus., \$18. Contributions deal with avian virus growths, resistance to anticancer agents, cytogenetic studies in chronic myeloid leukemia, and ethionine carcinogenesis.

ADVENTURES WITH INSECTS—Richard Headstrom—Lippincott, 220 p., illus. by author, \$4.25. Observations and discoveries for the young would-be entomologist, with detailed description of 40 simple

CB RADIO CONSTRUCTION PROJECTS—Len Buckwalter—Sams, 111 p., illus., paper, \$2.50. Projects included in this book comprise a series of accessories, operating aids, and test instruments that may be assembled by an operator with no prior knowledge of electronics.

COMPARATIVE ENDOCRINOLOGY, Vol. 1, Glandular Hormones—U. S. von Euler and H. Heller, Eds.—Academic Press, 543 p., illus, \$20. Aims to present an up-to-date picture of the subject, to the medical scientist, zoologist and research worker.

COORDINATION OF FEDERAL OCEANOGRA-PHY—Robert Walden Coggeshall—School of Govt. and Public Admin., Am. Univ., 86 p., spiral-bound, paper, \$2.50. Documents the current history of the search for appropriate and effective means to coordi-nate Federal oceanography.

CYTODIFFERENTIATION AND MACROMO-LECULAR SYNTHESIS—Michael Locke, Ed.—Aca-demic Press, 274 p., illus., \$10. Presents the ap-proaches of geneticists, biochemists, cytologists and molecular biologists to problems involving the synthesis of macromolecules and differentiation within cells,

DYNAMITE UNDER THE ALPS: The Challenge of the Mont Blanc Tunnel—Arthur R. Pastore—Coward-McCann, 97 p., illus, \$2.95. Gives an account of the struggle and experiences during the tunneling of "la Montagne Maudite," the mountain accursed, Europe's highest peak.

EEG AND BEHAVIOR—Gilbert H. Glaser, Ed.—Basic Bks., 406 p., illus., \$12.50. This work represents an interdisciplinary endeavor involving neurologists, psychiatrists, psychologists, physiologists, and pharmacologists who have been using EEG as an indicator of brain function and reactivity.

ELEMENTARY MICROBIOLOGY—Orville Wyss, O. B. Williams and Earl W. Gardner, Jr.—Wiley, 318 p., illus., \$5.95. Presented as a text for an elementary course to be used in conjunction with the traditional lecture, laboratory and library reading.

EVOLUTION—Jay M. Savage—Holt, 126 p., illus., paper, \$1.75. Deals with what is known about

the process of evolution and surveys several of the theories proposed to explain the process.

ESSENTIALS OF VECTOR AND PHASE ANALYSIS—Alan Andrews—Sams, 128 p., diagrams, paper, \$2.95. A basic textbook on the principles necessary for a thorough knowledge of AC circuit

INVARIANT IMBEDDING AND RADIATIVE TRANSFER IN SLABS OF FINITE THICKNESS—Richard E. Bellman, Robert E. Kalaba, and Marcia C. Prestrud—Am. Elsevier Pub. Co. 346 p., \$6.50. Of interest to research workers in the areas of pure and applied mathematics, physics, astrophysics and engineering, presupposing a standard course in intermediate calculus together with elementary physics.

LABORATORY MANUAL FOR ELEMENTARY MICROBIOLOGY—Orville Wyss and Curtis Eklund—Wiley, 101 p., \$2.95. Demonstrates the use of basic laboratory tools, includes classic experiments in this science and offers the possibility for research

THE LIVING PLANT—Peter Martin Ray—Univ. of Mich. Press, 127 p., illus., paper, \$1.75. Introduces reader to plants as organisms, with emphasis on biological activities important to plants, such as photosynthesis, water transport, and light response; mineral nutrition, and regulation of growth.

REPORT ON THE NATIONAL DEFENSE EDU-CATION ACT, Fiscal Years 1961 and 1962—Fran-cis Keppel—HEW (GPO), 126 p., illus., paper, \$1. Summarizes and evaluates operations under the Na-tional Defense Education Act of 1958 during its third and fourth years.

THE STRUCTURE OF CHIN SOCIETY: A Tribal People of Burma Adapted to a Non-Western Civilization—F. K. Lehman—Univ. of Ill. Press, 244 p., illus., maps, paper, \$3. A monograph based upon field research carried out in the Chin hills.

TV TROUBLESHOOTER'S REFERENCE HAND-BOOK—Stuart Hoberman—Sams, 128 p., illus., paper, \$2.95. Prepared as an aid to the television technician in analyzing and repairing television troubles. Deals not only with the common, but some of the unusual troubles involved.

YOUTH: CHANGE AND CHALLENGE—Erik II. Erikson, Ed.—Basic Bks., 284 p., \$6.50. Focusing on the social awareness and individual needs of youth today; the historical forces behind their discontents; the problems of work and career in an automated age, and motivations of those who joined the Peace Corps.

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