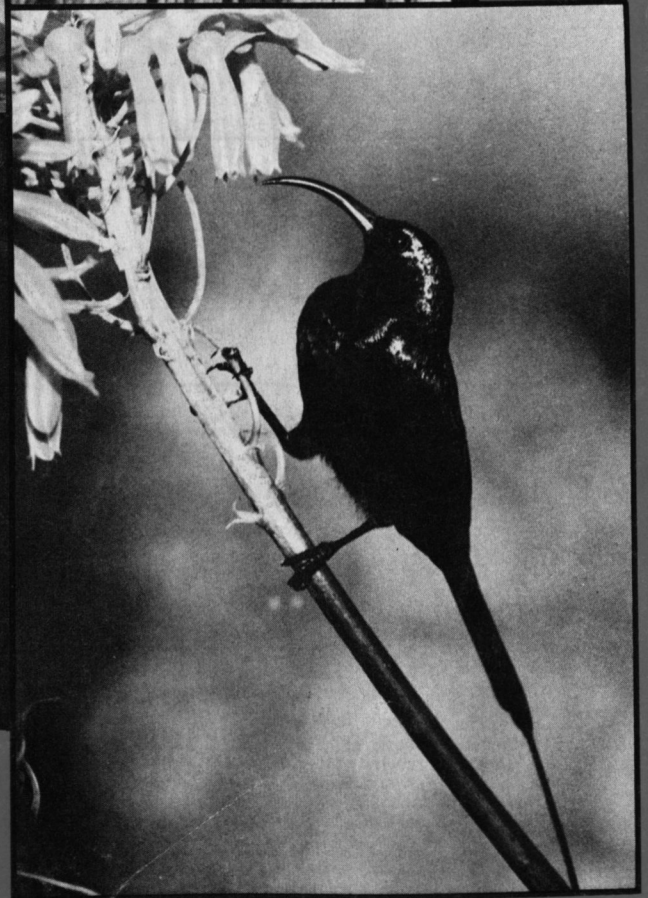


Science Books & Films

Critical reviews of books, films, and filmstrips in mathematics and the social, physical, and life sciences



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Science Books & Films

Reviews arranged by Dewey Decimal Classification

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Explanation of Symbols

Appraisal

- ★★ Highly recommended
- ★ Recommended
- AC Acceptable (No serious errors or deficiencies)
- NR Not Recommended (serious errors of fact or serious deficiencies in development)

Level of Difficulty

- K Kindergarten or preschool
- EP Elementary grades 1 & 2
- EI Elementary grades 3 & 4
- EA Elementary grades 5 & 6
- JH Junior high grades 7-9
- SH Senior high grades 10-12
- GA General Audiences
- C First two years of college
- P Professional

Other Abbreviations:

C.I.P. Library of Congress Cataloging in Publication Data

Galley: reviewed in galley form

Annotations are listed in order of Dewey Decimal Classification, Edition 19.

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Cover Pictures

The dunes of Death Valley, California. Photo by Donald Young, from *The Great American Desert* by Donald Young, (NY: Messner, 1980). Scanning Electron Microphotographs of the radula of the California Dorid nudibranch. Photo by Hans Bertsch, from *Pacific Coast Nudibranchs* by David W. Behrens, (Los Osos, CA: Sea Challengers, 1980). Sunbirds are a distinct family of small birds given to very rapid and erratic flight. The photographer stripped his garden of every aloe blossom save one to capture the sunbird pictured here. Photo by John Karmali, from *Birds of Africa* by John Karmali, (NY: Viking, 1980). Thistles are found in unlikely places. Where did they come from? From traveling seeds! Photo by Jerome Wexler, from *Seeds* by Patricia Lauber and Jerome Wexler, (NY: Crown, 1981).

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a review of Egyptian watercraft and its uses are also included in this book. The author makes a plea for more adequate care of this unique relic. After surviving some 4500 years in the boat-pit, the ship may ultimately be lost because of inadequate care. There are many excellent black-and-white and color illustrations to support the text.—*Malcolm F. Farmer*

MATTHIAE, PAOLO. *Ebla: An Empire Rediscovered.* (Illus.; trans. by Christopher Holme.) Garden City, NY: Doubleday, 1980. 237pp. \$14.95. 77-80898. ISBN 0-385-12904-1. Index.

C-P ★★ Neither light reading for one with only a passing interest in the archeology of the Middle East nor a fully technical exposition, this summary report of the excavation at Tell Mardikh will give the nonspecialist substantial information on the evolution of Bronze Age urban society. Written by one of the principals involved in the excavation, it constitutes the most reliable interpretation of the evidence that has been widely reported by others in a second-hand form. Among other important points, Matthiae repeatedly denies that any of the text materials from the State Archives found in the Mardikh IIB1 level contain any significant information concerning biblical characters, places or events. The principal value of this work is in its exposition of cultural evolution over a span of about 2000 years during the Early and Middle Bronze Ages in northwestern Syria. Although the text is heavily laden with the technical jargon of Middle Eastern archeology, it may still be a useful reference work for the nonprofessional. In addition to the excellent summary of the excavation results, Matthiae has provided a fine review of the development of archeology in the region.

—*Calvin Jennings*

WEITZMAN, DAVID. *Traces of the Past: A Field Guide to Industrial Archaeology.* (Illus.) NY: Scribner's, 1980. 229pp. \$17.95. 79-65975. ISBN 0-684-16107-9. Index; C.I.P.

JH-SH-GA-C ★★ With the growing interest in America's 19th-century heritage, it is small wonder that someone has rediscovered the technology of the Industrial Revolution. This book conveys the excitement of one antiquarian who

has sought to understand landscape features that we all see but seldom think about: old railroad beds and associated signs and structures, cast- and wrought-iron bridges and roof trusses, early blast furnaces, and primitive oil-well drilling rigs. Numerous photographs and excellent diagrams, rendered in a tasteful antique style, explain both the mechanics of the different structures or devices and their temporal changes or styles. Weitzman has provided a kind of field guide to old iron-works that can be understood by a generation that has neither seen old steam engines in service nor has a sense of the excitement that industrial achievements must have had for their great-grandparents. But there is more here that will be appreciated by anyone interested in recognizing and understanding traces of the 19th-century. *Traces of the Past* complements existing guides to domestic architecture by explaining the role of the Industrial Revolution in providing the communications network that made the 19th-century colonization of North America possible. The features it identifies can still be seen in countless small towns scattered across the continent. I believe that other readers will derive the same appreciation that the reviewer did and, with it, a new sensitivity to a living historical landscape.—*Staff*

WERTIME, THEODORE A., and JAMES D. MUHLY (Eds.). *The Coming of the Age of Iron.* (Illus.) New Haven, CT: Yale University Press, 1980. xix+555pp. \$27.50. 79-26420. ISBN 0-300-02425-8. Index; C.I.P.

GA-C-P ★★ This history of the development of metallurgical technology, especially in the preparation of tools, is a fascinating departure from the traditional history of wars. Fourteen papers by 16 experts delineate the development of metallurgy for gold, silver, copper, and copper alloys, culminating in the start and expansion of smelting, forging and treatment of iron and steel throughout the world. Iron artifacts from as long ago as the 9th century B.C. put into perspective the modern iron and steel civilization. The book would make good collateral reading for students of metallurgy and will be a valuable reference for courses in anthropology and archeology. Some of the listings of grave and mound finds may not be of interest to general readers but these can easily be skipped.—*Elizabeth P. Hartner*