This traditional textbook would serve well as an objective presentation of descriptive general biology. I can recommend its use only as a comprehensive resource book for the beginning student. It is not a book that would inspire the student to view the biologic sciences as dynamic or as having immediate social consequence.

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BIOLOGY TODAY. [Author or editor not named.] 1972. Communications Research Machines, Inc., Del Mar, Calif. 1,051 p. $14.95.

If Ringling Brothers and Barnum & Bailey had ever decided to put together a biology book, it might have looked something like this. A fantastic phantasmagoria of psychedelic posters illuminates each of the 45—count 'em, 45—chapters. In all the rings something is going on at the same time. Darwin's finches vie with fuzzy photographs of phenobarbital tablets. Fraternal fetuses float like astronauts outside an orbiting spaceship—but with real umbilical cords. A full page of penises tumefy and detumefy in pinkness that puts Rubens to shame. Aging prostitutes on the streets of New York; the daughters of Bilitis engaging in homosexual horseplay; a drawing of Noah's Ark in which animals two by two are doing what animals two by two normally do. Something for everyone. Illustrated instructions on how to insert a diaphragm; a *five*-page foldout on DNA; and the world's largest printed mitochondrion.

The lavish use of artwork in color and the medley of typographic effects make this the first biology textbook that you could place on your coffee table as a conversation piece. Its big (8½-by-11-inch) format gives plenty of room for the white space that book designers seem to love; it is used so profusely that many two-page spreads contain only one column of type. A "now" book; a "right on" book; a "relevant" book! It's a superior production job; but, in trying to present too much, it is likely to leave the student with the pleased, confused, disorganized euphoria of a youngster who has tried to watch all five rings at the circus while drinking too much soda pop and eating too much popcorn.

The writing is frequently turgid or telegraphic. The following sentences, from the chapter "Building Blocks of Nervous Systems," are illustrative:

> In the cells of the spinal column, the effect of an IPSP lasts only about 8 ms, slightly less than the 10 ms duration of an EPSP. In the brain, however, the effects of an IPSP last for 100-200 ms or more; in the neurons of the brain, a single activation of an inhibitory synapse may counteract many successive activations of excitatory synapses.

As a multivisual experience this volume is without peer, although much of it may be considered artsy-craftsy or, at the very least, of more value to an artist than a biologist. On page 169, for example, there is an artistic interpretation of a pandemic which does very little to explain pandemics, although the varicolored concentric circles make a pleasing pattern. The artistic interpretation of the web of dependency, on page 699, is more confusing than helpful and is never referred to in the text. Annoyingly, the captions often are displaced from the art: most frequently one finds captions in the upper and outer corners of the pages and the related photographs or drawings somewhere else. Page 777, for example, has 10 pictures and six captions that are not easy to relate; and the illustration of the clam is not accounted for in *any* of the captions.

Although artwork is heavily emphasized, some of it is unclear, some confusing, and some just poor. On page 628 one is referred to a grid supposedly overlying a prairie dog town; but only fragments of the grid are visible, and these overlie only the darker portions of the diagram. Chapter 2 contains an extensive color parade of living organisms—with no indication of size; the ant is about as big as the alligator, and

the hyrax rivals the hippopotamus. A green earth, on pages 800 and 801, exists solely for the placement of 52 small and unclear numbers showing fossil sites.

One gets the distinct impression that different parts of the book were written by different people, who did not compare notes. On page 23, for example, are listed 23 animal phyla; but on page 771 one is introduced to a phylum Tentaculata, which is not among the 23 earlier introduced. But then, some of the 23 phyla are not dealt with in the chapter on animals; so it all balances out. The animal chapter emphasizes the frequent textual unevenness and bias. It finds space for over five inches of type on sponges but disposes of birds in less than an inch and a half.

Although the book appears to be "mod," authors need to catch up in certain matters of content. On page 228, radioactive phosphorus is still labeled P^{32}, a designation now superseded. Race gets relatively short shrift in this volume: it would seem that a "with it" book would attempt to introduce more pictures of minority groups, even if only for cosmetic purposes.

An interesting feature of the volume is its apparent lack of authorship. There is an impressive list of "contributing consultants" in the front of the book, and an even more impressive detailing of them in eight pages in the back. However, since none of them is credited with writing a specific part of the volume, one can only assume that they were employed, as are most consultants, to read a few pages critically and to allow the use of their names. The real authorship of the volume remains a deep mystery.

The book is accompanied by a box of materials entitled "Involvement in Biology Today." Because the size and weight of the book alone are enough to cause posture distortions in those carrying it around, I had hoped the box would contain a truss in case of hernia. Instead, however, it contains a metabolism game, wherein one stops on pyruvic acid and is instructed to "shoot the dice for advice"; a packet of brine shrimp eggs; several geometric figures to cut out and assemble; and a 131-page "involvement" volume that has some of the characteristics of a laboratory manual. There is an instructor's resource package delineating performance objectives, references, and films for the various chapters. It includes a sequence of test items that indicate—contrary to the Barnum & Bailey approach used with the students—that the instructor is expected to examine on such prosaic items as the name of the longest extension from the cell body of the neuron; to ask for a description of the structure and function of meristematic cells and tissues; and to ascertain if the student recognizes the most common mutations as point mutations. The publisher thus appeals to both the interest in progressivism and relevance on the part of the student and the desire to maintain the status quo on the part of the instructor.

This is a great big marshmallow of a book: a visual breakthrough; a book dominated by artists. Like a circus poster, it promises more than the show can deliver. The format makes the volume appear new, daring, and different, but the bulk of the text consists of truncated, traditional materials. It is a recitation of facts common to most texts. The scientific process and the inquiry approach fail to pervade the chapters. However, the sections on populations, behavior, and the human organism are contributions: the mystery author is to be commended for breakthroughs in these subjects and for his visual innovations but is to be faulted for letting too much hang out.

Failure to apply Occam's Razor and to exercise selection has created another encyclopedic text. The fate of this volume in the marketplace will be worth watching. If it is accepted, it could set a standard, of sorts, for the next several decades. Even its existence in trial form cannot but influence the design of biology books in the immediate future.

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For Young Readers

OUR DIRTY AIR, by Sarah M. Elliott. 1971. Julian Messner Publisher, New York. 64 p. $3.95 (hardback).

This book is written for junior high school students and would also be suitable for some fifth- and sixth-graders. It describes all kinds of air pollution, together with the experiences of persons who have suffered from each kind. Good black-and-white photographs illustrate problems and solutions. A brief description of air pollution and weather explains a temperature inversion. Elliott then tells how living organisms are affected adversely by air pollution. Experiments using various pollutants on plants and animals are briefly described. The last three chapters discuss solutions to the air-pollution problem; here the reader is given hope for the future rather than a totally bleak outlook. This book would be a good addition to the junior-high-school library.

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AISE-CE-BON, A RACOON, by Lillian Brady. 1971. Harvey House, Inc., Irvington-on-Hudson, N.Y. 128 p. $4.50.

This is the story of a mother racoon and her litter of four. The family's activities are traced throughout a year's