produced wrong results is irrelevant to the Nobel Prize. To disprove the pet notions of a generation of theorists is every experimentalist's dream; to mislead other experimentalists is unforgivable. In this regard, the pushers of the "split A_2," for example, are far more deserving of criticism than Carlo Rubbia.

This is an exceedingly funny book. The characters are all painfully real, and are most vividly portrayed. Although, if Rubbia were anything like the monster Taubes sometimes makes him out to be, why do so many intelligent and talented physicists continue to work with him? Because, in science there is no substitute for brains, and Rubbia has brains, whatever his faults. Taubes does succeed in presenting clearly the extraordinary dedication, commitment, and back-breaking work of the average high-energy physicist. He also provides clear and concise explanations of the physics issues involved, which should satisfy both the expert and the layman simultaneously, although at different levels.

Still, some fraction of the laughter in this book is malicious. A Talmudic scholar once branded novelists as largely immoral because they mocked people and made fun of their weaknesses. That charge also applies to Taubes, but the weaknesses are our own, and Taubes has chronicled many of them in this amusing book.

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Seeing the Light: Optics in Nature, Photography, Color, Vision, and Holography

David S. Falk, Dieter R. Brill and David G. Stork
446 pp. Harper and Row, New York, 1986. ISBN 0-06-041991-1. $37.50

To develop a text "that continually reminds the student of the connections between the abstract ideas of physics and everyday life, or phenomena they are familiar with," was the stated goal of the authors of *Seeing the Light*. They have met their stated objective very well. *Seeing the Light* provides a logical presentation of the fundamental properties of light and geometric optics and then uses them as building blocks to develop an understanding of various areas that are not customarily touched on in conventional physics courses. This text is appropriate for courses in light and color for nonscience majors. The elementary mathematical skills necessary to understand the book should not be a barrier to these students. (Mathematical appendixes are provided for some topics.)

After students have studied the first few chapters, a variety of paths of study are possible depending on an instructor's goals for the class. This text can accommodate units or courses of varying length—from a few weeks to an entire year.

The authors present each topic in such a manner that nearly everyone using this text will both be able to master the fundamentals, and also be challenged by the extensions of these ideas to common or unusual applications. For example, in the unit on mirrors and lenses the traditional principles of reflection and refraction are developed to explain the formation of images from various types of mirrors and lenses. In addition they entice the reader with the application of these principles in the area of anamorphic art and photography—topics relegated to a footnote at best in most textbooks. [Anamorphic is a term for distorted pictures that can be seen through, for example, a cylindrical mirror.]

Probably the most outstanding feature of this text is the excellent collection of photographs, line graphs, color plates and cartoons. They are well chosen to assist the reader in understanding the development of the subject matter. For example, a black and white "Herman grid" and a beautiful color plate of Victor Vasarely's "Arcturus II" illustrate the concept of lateral inhibitions in vision.

Included in nearly all areas of study are a series of "Try Its." These consist of simple demonstrations or experiments, which a student can do on his own, usually with materials that are easy to find. The vast majority of these work as described in the text. Many instructors will find them useful as classroom demonstrations.

At the end of each chapter there is a nice selection of questions and problems that can be used to enhance the students' understanding of the topics being studied. Most of these exercises do not require a simple regurgitation of the textbook facts, but demand reflection on the ideas introduced in that chapter. More difficult or mathematical problems are in a separate section.

Throughout the text the authors use references to literature and art, and connect them to the topics being studied. The authors define specialized terms and give their etymologies to assist student recall. These links to the humanities should be particularly appreciated by liberal arts students.

In conclusion, this is a multifaceted, highly instructive and visually interesting book that students and their instructors should find appealing.

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