final chapter (by Aronin and Schwartz) describing the regulation of c-*fos* expression in the SCN. This review is clear and informative, but, ironically, probably the most dated of all the chapters, as research on molecular events associated with phase-shifting has proceeded at an incredible pace during the past few years.

One serious omission is a thorough discussion of multi-oscillator models of the mammalian circadian system. Though Kittrell provides a valuable review of the controversy over SCN control of temperature rhythms, research results do not yet allow firm conclusions. On the other hand, work by Stephan and others has demonstrated the existence of a circadian oscillator, entrainable by restricted food access, which is definitely not located in the SCN. Adding a review of this important work would have strengthened the book.

In many cases, a reader of this book can almost hear various authors addressing each other, approaching the same question using different techniques or interpreting the same data in slightly different ways. The uniform quality of the literature reviews ensures that the book will not be quickly dated. Though this book is currently referred to within the field as "the SCN book," it certainly has the potential for being "*The* SCN Book."

Mary Harrington
Department of Psychology,
Smith College,
Northampton, MA 01063

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High-Energy Preoccupation

The Structure of the Proton. Deep Inelastic Scattering. R. B. ROBERTS. Cambridge University Press, New York, 1991. x, 182 pp., illus. $49.50. Cambridge Monographs on Mathematical Physics.

The structure of the proton has been one of the main preoccupations of high-energy physicists—experimenters and theoreticians alike—for the last three decades. A major breakthrough in the late 1960s, which occurred during scattering experiments at the Stanford Linear Accelerator Center, showed large probabilities for scattering electrons on hydrogen targets. These unexpected results indicated that the electric charge in the proton was carried by smaller entities variously called quarks or partons. The initial experiments spawned a great deal of subsequent experimental and theoretical activity, which is still ongoing. The original experimenters had to visit Stockholm two years ago.

Deep inelastic scattering is, however, only one of the windows we have for looking inside the proton. There is also a great deal of spectroscopic evidence, and the integration of the information from each of these fields of research is still rather clumsy at present and open to controversy. In *The Structure of the Proton*, Roberts deals only with data and interpretations from deep inelastic scattering experiments. The book gives a concise, complete, and up-to-date summary of the field, from precise definitions of lepton-nucleon cross-sections in terms of structure functions, to their interpretation in terms of the quark-parton model, to perturbative quantum chromodynamics and nuclear effects. All this is done in about 180 pages. The emphasis is on concise presentation, and one can find all the main equations and references to the literature very easily. For example, the topic of polarized structure functions, a subject of intense debate during the last four years, is disposed of in about four pages.

The book will therefore be of greater use to people who have an interest in the subject already (and wish to find a particular equation or reference) than to greenhorns. Roberts refers the reader to Frank Close's *An Introduction to Quarks and Partons* (Academic Press, 1979) and Richard Feynman's *Photon-Hadron Interactions* (Addison-Wesley, 1989) for a more historical introduction and broader discussion of the subject. I expect to see the present book on the shelves of friends who are involved in data analysis and the design of new experiments, but not among the broader ranges of graduate students.

Gabriel Karl
Department of Physics,
University of Guelph,
Guelph, Ontario, Canada N1G 2W1

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