ians, with examples drawn from actual library situations. Well illustrated, with easily understood tables and diagrams, the article provides an informative summary of various aspects of energy conservation. The authors make their point in a matter-of-fact, rational, and very convincing manner. The presentation is by itself a good example of how to save the reader's energy, by using gibberish-free language. The study is strongly recommended to all library patrons, library administrators, and especially to the librarians' budget-controlling supervisors.—*Joseph Z. Nitecki, University of Wisconsin–Oshkosh.*

Lancaster, F. W. ***Toward Paperless Information Systems.*** Library and Information Science Series. New York: Academic Press, 1978. 179p. $13.50. LC 78-51237. ISBN 0-12-436050-5.

This book gives the author's view of our transition to a paperless society, i.e., the replacement of print-on-paper by electronic media for many forms of human communication, particularly in science, technology, government, and business fields. The author views this as an inevitable and normal process that is also desirable because of the cost/benefit and efficiency possible.

This well-designed, easily read book begins by summarizing the gains made in the application of computers to the storage, retrieval, and dissemination of information. The concept of a paperless system is introduced through next discussing a prototype system at the U.S. Central Intelligence Agency called SAFE (Support for the Analyst File Environment). Here the goal is to reduce the need for extensive personal document files through the substitution of a system that permits individuals to practice their own organization of documents and have access to better central information.

Next, through an excellent summary of the work that has been done on communication in the scientific and technological disciplines, the author introduces a scenario for an electronic information system set in the year 2000. Feasibility and benefits of such a system are discussed in the next chapter in a logical and well-reasoned manner. Assessment of the technological, intellectual, social, and psychological problems to be encountered are realistically dealt with, and of interest to librarians will be the final chapter before the conclusion, which deals with the role of libraries in a paperless society.

Lest we all think we can hide our heads in the sand and play ostrich, information specialists and librarians should note that we see ample evidence around us daily of what Lancaster addresses in this neat volume. The pieces are here now: computer conferencing, large on-line data bases, full text storage and retrieval, personal microcomputers that will soon rival the power and storage of our present mainframes, and new forms of storage, to name a few examples.

In fact, today many people perform work at home or out of their offices that only several years ago had to be done in the office. Whether we really accept it or not, paperless information systems will slowly permeate our work and even affect our lifestyles and our leisure, perhaps more than we would care to admit.

But perhaps of most interest to those who may read this review is the impact of these developments on the information sphere that libraries serve. Lancaster approaches this area with a positive posture but not without warning the library community that librarians and libraries will have to change their service views and their activities. He further points out the fact that librarians have largely neglected serious study of how paperless systems will affect their role and that of their libraries.

Perhaps the best way to taste of this book is to read a recent article by Lancaster entitled "Whither Libraries? or Wither Libraries" in the September 1978 issue of *C&RL* (p.345–57) in which he addresses this problem further.

This reviewer recommends purchase of this volume for library and information science collections, both personal and institutional. It should be read by librarians, information specialists, computer professionals, and those interested in technology trends, future studies, and economics of information. Collections concentrating on computer developments, future studies, and intelligence community activities should also acquire this volume at its modest price for the information it contains.—*Audrey N.*

Grosch, University of Minnesota, Minneapolis.

Townley, Helen M. ***Systems Analysis for Information Retrieval.*** Institute of Information Scientists Monograph Series. A Grafton Book. Boulder, Colo.: Westview Press; London: André Deutsch, 1978. 121p. $13.50. ISBN 0-233-96920-9.

Exactly how does one go about designing and implementing an information retrieval system for a particular organization? What are the various options that the designers and programmers must choose among? How does it all work? One can get a pretty good feeling for the answers to these questions from this very readable little book of about ninety pages (plus a few appendixes).

The author has almost twenty years of experience designing and implementing information retrieval systems. In her book she has interspersed little gems of wisdom only that experience can give. These range from the seemingly trivial "never make a note of anything without dating it" to the key observation that the system is likely to veer off course, or flounder entirely. Hence the statement of project goals "is to be the most important single document . . . for obtaining (and keeping!) backing for the project and for keeping control of the evolving system as it comes into being."

It is refreshing to read someone who realizes that systems analysis is very subjective, "partly technique and partly flair." Townley realizes that there are numerous designs that can result from analysis and that we will create and destroy dozens of such seemingly clear-cut things as record specifications before we settle on one to actually implement.

In this book we are once again reminded that the job of the analyst is only possible if he or she can get people to talk—and it is important to talk to all levels of workers and to more than one at each level.

Townley takes great pains to demonstrate to us exactly how dumb the computer is (without going through the boring details of binary number systems!). By providing clear and concise descriptions of the concepts of files, records, and fields, as well as several major file and field addressing techniques, we can begin to get a picture of how sophisticated systems are built out of simple elements. The illustrations of computer searching techniques (such as Boolean logic) bring out the work that computers do in information retrieval systems in order to perform their amazing feats.

The author's final word of warning is something that we are only now beginning to appreciate: "It must not be forgotten that the computer based service will not save labour: it will only permit more work to result from the same effort. Management must never underestimate the manpower and time that will be required to keep the new system working."

In short, this is a very down-to-earth and practical book on systems analysis for information retrieval, filled with good advice to those who are about to embark on projects in this field.—*Stephen M. Silberstein, University of California, Berkeley.*

Smith, Lynn S. ***A Practical Approach to Serials Cataloging.*** Foundations in Library and Information Science, volume 2. Greenwich, Conn.: JAI Press, 1978.