introduced this idea: "First and foremost it is essential that we recognize that information is no longer a free good, just as clean air and pure water are no longer free goods. Each instead, has its costs; and, in general, the principle applies that the higher the quality, the higher the cost." However Euster's brief article permitted no further discussion, even in broad terms, of what resources and models are available to begin this analysis.

The major and complex problem and motivation needs more attention. How reference managers create a climate that enhances staff motivation and development is only generally discussed throughout the volume. Bronwyn W. Parhad's article, "Managing Telephone Reference Services: Problems and Solutions", has some sound practical advice for coping with lack of motivation. There is, however, a vast literature in the behavioral sciences on motivation. Some of it deals with research on motivating professionals in service or nonprofit organizations. This literature should be examined for its possible application to reference service.

The next stage in the literature of managing reference services is systematic analysis and research. Ruth Fraley's introduction outlines many problems that lend themselves to both. The editors of this issue should have encouraged contributors to move beyond the anecdotal and descriptive to the systematic and analytical. I hope future work on the management of reference services does so.

The readers most likely to benefit from this volume are new reference managers, those who wish to become reference managers and reference librarians who want a basic understanding of the work of those who manage them.

It is doubtful that each issue of *The Reference Librarian*, which, according to its front matter, is "a regular, refereed monographic series published quarterly", should be reviewed. Other journals whose issues contain articles united by a common theme are not always reviewed. However, since this is a new series, it is worth reviewing the early numbers and worth noting that other issues will be devoted to such topics as "Ethics and Reference Service," "Reference Services for Children and Young Adults" and "Reference Publishing and Reviewing."

Although the present issue has some shortcomings, *The Reference Librarian* is worth watching to see if it can make a substantive and unique contribution to the literature of reference service.

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Electronic Communication: Technology and Impacts. MADELINE M. HENDERSON and MARCIA J. MACNAUGHTON, (Eds), Praeger, Westview Press, Boulder Colorado: 1980, xvii + 178 pp. $18.50. ISBN: 0-89158-845-0.

This is a collection of lectures presented in January 1979 at an AAAS (Section T) symposium sponsored by the American Society for Information Science among others. It was published by the American Association for the Advancement of Science (AAAS) for rapid dissemination by reproducing the camera-ready copies submitted by the authors; although the editing was well done, with but few errors (e.g. principal is misspelled on p. 125), color slides presented at the symposium were, unfortunately, excluded.

The book as a whole should be read by every student of information science, particularly the chapters by Cotton, Cawkell, Freeman-Freeman, Siegel and Laudon. In the introduction, Madeline Henderson tries to impose some kind of structure and unity upon the papers and presents some controversial views of her own. For example, she states that, "The complexity of our society has increased demand for timely and relevant information for management ... and these demands are being met, in large part, by innovative technological developments in computers and electronic communication." This suggests that the "computer-communications" revolution is demand-driven. It can be argued that these technological advances were driven by the inventiveness of scientists and engineers, and the know-how of competing entrepreneurs, and sold to users who did not always use them to meet real needs for information. Indeed, these technologies contributed to the complexity of our society, which then added to the demand for these very technologies. Her projection of less face-to-face communication is not borne out by facts: attendance at sports events, theaters, and concerts has not declined as a result of being able to view these events better on TV.

The different chapters vary greatly, and should really be reviewed separately. In a field that changes monthly, some of the presentations were dated when this collection was published in 1980,

and certainly by 1982. The last chapter, "Policy Options for the Future," by W. R. Hinchman is an example, in that it discusses various ways of restructuring the Bell System. The seven chapters comprise Part 2, "Operational Trials of Electronic Information Exchange System" (EIES), gives interim, semi-scientific results of a field trial in the use of EIES by several groups of researchers. Nearly all these chapters stress the amount of use by participants in computer conferences and reveal their disappointment that it was not heavier. The recommendation that one should choose for computer conferencing groups that have a task to accomplish which is defined by its members as a high priority professional activity, and whose successful completion is important to their on-the-job advancement, is obvious and should have been followed before assembling the groups or starting the use of EIES; moreover, it should be augmented by the requirement that such tasks could be done without computer conferencing (probably in combination with other procedures) only with great difficulty, at great cost or inconvenience, if at all. We have yet to discover many such tasks.

Chapter 1, "Perspective on Trends in Electronic Communication," by I. W. Cotton, is a good if dated introduction to this topic for library and information science students and practitioners. It informs the reader, for example, of a controversial new definition of data processing to be used for purposes of regulation by the FCC, as: "The use of a computer for processing information wherein (A) the semantic content or meaning of input data is in any way transformed, or (B) where the output data constitute a programmed response to input data." The work on a "network access machine" at the National Bureau of Standards and implementation of a common command language may also be newsworthy to many readers.

Chapter 14, "Social Change through Electronic Communication," by A. F. Westin, seemed out of place in a book aiming to provide a snapshot if not a *future* orientation. Based on *past* trends, the author concludes that: (1) automated information systems are not likely to have an impact (toward more efficient government) on the art of managing other functions other than by providing faster typing, accounting, billing; (2) that "computer systems have not yet transformed the fundamental relations of the individual and organizations in the privacy and due-process sense"; (3) that computers and communication technologies are very expensive affairs "(!) and a power-enhancing or power-consolidating part of our political system"; and (4) that it "has had very little effect on the quality and nature of citizen participation in our society."

Chapter 13, "Problems of Accountability in Large Federal Databank," by K. C. Laudon is, by contrast, an eye-opener. It tells us that only 27% of the records in a large state criminal history system are complete and accurate; that by 1985 nearly half of all criminal justice decisions made in the US, from arrest to parole, will be assisted by the proposed criminal history system that relies on such records. "The suspension of critical judgment, not recognizing underlying data quality problems, not recognizing the incomprehensibility of much of their own software, leads inexorably to acceptance of the system reality as the only reality." As we approach 1984, it is well to keep this in mind, with a view toward averting the consequences. If the book had no other message, this one alone should reach any reader who is concerned about this topic.

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