communication, and social aspects of information exchange. Unifying these topics is McGarry's interest in the relationship of information to societal structure. The work is as much a manifesto as an analysis. The author believes that access to information will soon constitute the major basis for wealth. He assumes that information workers have as a major objective the lessening of social and economic inequities. He exhorts his readers to pursue the ideal of equal and open access to information in the interests of social justice. McGarry provides little in the way of justification for his views.

In a scant 188 pages, an author cannot, of course, treat any subject fully. McGarry rightly anticipated that specialists would fault him for omissions and simplifications at "a thousand points." While most of McGarry's lapses will not harm his readers, some omissions might lead to a misunderstanding of current trends. Conspicuously missing are references to the Research Library Information Network, Boolean logic, commercial databases, and selectivity in automated information systems.

More frustrating than McGarry's omission of factual information is his lack of reference to sources. Defending his method of providing only chapter-by-chapter bibliographies, McGarry explains that he "attempted to comply with the requirements of scholarly courtesy by listing sources of quotations and statistical matter and by encouraging readers to use the bibliographies provided." McGarry, who treats scholarly communication in this work, surely knows that the acknowledgment of sources is more than a social gesture. It is a necessity in scholarly writing in order to give credit where due, to build a scholarly literature, and to stimulate critical inquiry. Had McGarry tied his observations more closely to his excellent bibliography, he would have greatly strengthened his credibility.

One article that McGarry included, but seems not to have absorbed, deals with misogyny in library literature. McGarry sticks doggedly with the all-inclusive masculine pronoun until his final chapter when he unexpectedly introduces a single "she." More significant is McGarry's consistent neglect of the role of women as readers, teachers, writers, and librarians.

Not all the flaws in this book are McGarry's fault. The author was not served well by his designer and editor. The typeface is small and the pages crowded. The scarcity of punctuation throughout, combined with the density of type, makes decipherment of the text difficult. Finally, there are too many typographical errors.

Despite inadequacies, the work is still useful as ancillary reading for students entering information work. The author introduces virtually all the acronyms, jargon, and institutions of the profession. He provides a carefully selected and current bibliography in a field in which it is difficult, to use the author's words, to keep "bang up to date." And he identifies topics appropriate to the study of information work. McGarry's most valuable contribution is his raising of ethical issues that he reasonably surmises information workers will face in the coming decades.—*Deirdre C. Stam, Bibliographical Society of America.*

Annual Review of Information Science and Technology, V.17. Ed. by Martha E. Williams, White Plains, N.Y.: Knowledge Industry Publications, 1982. 367p. $45. LC 66-25096. ISBN 0-86729-032-3. ISSN 0066-4200. CODEN:ARISBC.

What can one say about a highly praised review series that has now published its seventeenth annual volume? More good things, mostly.

ARIST's first volume was published in 1966, to immediate and unceasing acclaim, through the intrepid leadership of Carlos A. Cuadra. Cuadra served as editor for ten years, forging and enforcing high standards for scope, content, format, and indexing; his name will not be found in the introductory pages of the current volume, but his imprint remains. His successor as editor, Martha E. Williams, intrepid in her own right, has to a large degree retained, maintained, and in some respects enhanced those standards. *ARIST* is owned by the American Society for Information Science (ASIS); but, starting with

volume 12, business aspects of publishing *ARIST* have been assigned to Knowledge Industry Publications, with ASIS retaining editorial control.

An annual volume of *ARIST* contains a number of separately authored reviews (typically nine in recent years), each on a fairly distinct aspect of the broadly conceived field of information science. Since specific review topics are not necessarily repeated annually, it is common for a review to cover the literature of several years rather than just one year. References of the publications covered are listed at the end of the review. A rich dictionary index provides access to all the subjects and cited authors covered in the entire volume. An additional feature, initiated three years ago, is a cumulative KWOC index of title keywords and authors of the reviews in all *ARIST* volumes to date; this simplifies longitudinal searching and extends reader awareness of the value of older volumes.

Table 1 lists some of the most interesting quantitative attributes of the current volume and of volumes published five, ten, and fifteen years earlier. It gives figures (some are estimates) and also ratios for number of reviews, total pages, review text pages and words, references covered, index terms and entries, publication price, and price in constant dollars. The comparison suggests essential constancy over the years in the average length of a review and the number of references it lists, and perhaps also in the average number of index entries generated for a review.

However, with volume 12, there occurred a drop of from one-fourth to one-third in the amount of review material included in a volume (fewer reviews, less text, less literature covered); the current volume is very similar in these respects to volume 12, except for the inclusion of the new cumulative index. There was thus an abrupt drop in the quantitative value received for the purchase price. Although with the current volume the purchase price as measured in constant dollars has been restored almost to the earlier range, the amount of review material provided is still at the reduced level. For purchasers, the implications go beyond mere economics. If the amount of information science literature discussed annually is reduced or held constant while that literature is growing rapidly worldwide, a reader may well conclude that *ARIST* is condemned to fall ever further behind in the extent to which it actually reviews new developments in its field; at some point, *ARIST*'s reputation for excellence and authority would be called into question.

Turning from consideration of the quantity of *ARIST*'s coverage to consideration

TABLE 1

CHARACTERISTICS OF *ARIST* VOLUMES, 5-YEAR INTERVALS

	Vol. 17 1982	Vol. 12 1977	Vol. 7 1972	Vol. 2 1967
Number of reviews in volume	9	9	13	14
Pages in volume	380	374	616	492
Pages devoted to review text	178	188	388	357
Words of review text	89,000	88,000	155,000	150,000
References in reviews*	1290	1308	1892	1594
Terms in volume index	3000	4000	6000	2400
Entries in volume index	4900	5000	8700	3000
Cumulative KWOC index included?	Yes	No	No	No
Text words per review	9900	9800	11,900	10,700
References per review	143	145	146	114
Text words per reference*	69	67	82	94
Index entries per review	540	555	670	220
Price when published	$45.00	$35.00	$17.50	$15.00
Price in constant 1967 dollars	$15.48	$19.29	$13.98	$15.00
Text words per 1967 dollars	5700	4600	11,100	10,000
References per 1967 dollar*	83	68	135	106
Index entries per 1967 dollar	320	260	620	200

*Figures are not adjusted for any instances of a reference being listed in more than one review in the same volume or in different volumes.

of its quality and scope, the current volume causes no misgivings whatever. Rosenberg's "National Information Policies" reviews material on the status and issues of policy development, particularly in the U.S.; this is supplemented by McDonald's briefer "Public Sector/Private Sector Interaction in Information Service." Brimmer's "U.S. Telecommunications Common Carrier Policy" is a continuation of last year's review of national planning for data communication; it conveys a complex picture of rapid transition and unresolved problems. Kantor's "Evaluation of and Feedback in Information Storage and Retrieval Systems" uses perhaps too much space describing an analytical approach that seems largely superfluous, but does indeed review the literature on this topic.

Travis and Fidel in "Subject Analysis" describe a mature field of study that is sadly unknown to nonparticipants who could make good use of it. Lundeen and Davis review "Library Automation," a topic that is often brought up to date in *ARIST* because of activity and interest. Wooster's "Biomedical Communications" provides a broad historical review of this new *ARIST* topic. Levitan examines work in "Information Resource(s) Management" (as contrasted with information systems and services management) and finds it to be a field with considerable, but not yet overwhelming, acceptance. Griffiths reviews recent work on estimating "The Value of Information and Related Systems, Products and Services" and finds some grounds for optimism.

ARIST continues to deserve high praise. Anyone involved with libraries or information who is not yet familiar with this series would be well advised to take this volume and read just the paragraph or two of "Conclusions" at the end of each review. This brief exposure will be enough to inform, inspire, and stimulate a desire to read and think more deeply on all those review topics we didn't know we cared about but really do.—*Ben-Ami Lipetz, State University of New York at Albany.*

Doughery, Richard M. and Heinritz, Fred J. *Scientific Management of Library Opera-*
tions, 2d ed. Metuchen, N.J.; Scarecrow 1982. 286p. $15. LC 81-18200. ISBN 0-8108-1485-4.

The time has long passed when it could be suggested (as it was in these pages by a reviewer of the 1966 edition of Dougherty and Heinritz' *Scientific Management of Library Operations*) that management is but one part of the library administrator's work and that flowcharting, time studies, cost analysis, and performance standards are nonlibrary subjects. Few would now dispute that the profession requires management specialists equal to any in the world of business and industry and that the analytical tools which have proven valuable in the profit sector are as essential to libraries as "books and bibliography." Yet it must be admitted that many of the methods and approaches set forth by the authors some sixteen years ago have seen little widespread application in libraries. To be sure, decision flowcharting has become commonplace as libraries have moved into the "revolution in library systems work" that Dougherty and Heinritz remind us has occurred since the publication of their first edition. But, can it be said that performance standards in libraries really are the norm, or that time study has been undertaken in anything but a superficial way? Motion study, forms analysis, even flow techniques other than decision charting have found little broad-based acceptance. In this thorough revision of their important work, the authors argue convincingly that careful analysis of library activities through use of the tools and techniques of the management scientist is as important today as at any time in the past.

New chapters have been added on "System Implementation and the Process of Change," "Human Factors Engineering," and "Project Planning Techniques." The latter is largely a treatment of Gantt charts and critical path methodology. Dropped from the work are a long analysis of a circulation system that was a major part of the earlier edition as well as a dated chapter on aids to computation. In their place several useful topics have been added: a treatment of decision trees and tables; a more complete consideration of