lieves that this country needs to give greater attention to the maintenance of its institutions and especially to higher education as a vehicle for educating people of all ages. A citizenry educated to its full potential in an aesthetic and cultural sense, as well as an intellectual one, is, for Professor Bowen, the best foundation of a productive and humane society.

This vision of education and society is one which most librarians are likely to share, but Professor Bowen's book is far more than a hortatory injunction to virtue. It is a trenchant analysis of cost trends in higher education and of the financial environment in which academic libraries exist. This environment has been one of increasing scarcity until recently and still is for many institutions. There is greater and greater pressure for economy in the allocation of resources. Libraries, in particular, have often been singled out as a part of the higher educational enterprise which demands greater scrutiny. The 80-20 rule (20 percent of a library's holdings satisfy 80 percent of a library's use) has been invoked by some as proof that librarians are not responding to either the realities of library usage or educational finance. Authors, such as George Keller in his *Academic Strategy*, believe that academe will see a new era of planning in which rational decision making and the measurement of performance will play a greater role.

Academic librarians are likely to be increasingly caught up in this struggle to define what the role of their parent institution is and how it should respond to changes in its environment. There will be a continuing battle between what Keller calls the incrementalists and the planners. The incrementalists largely eschew planning and rely on politics to gain a larger share of the institutional budget; the planners, without going to the extremes of operations researchers in attempting to quantify the measurement of institutional activity, believe in the desirability of matching inputs to outputs and in demanding some way to measure performance.

Librarians haven't been very good at devising output measures. Most of our measures are input measures of the number of books we have, etc. We know very little of output measures, of how well we satisfy our users, for example. Admittedly, such output measures haven't been very useful up to now. As the economist, Jeffrey Raffel, observed, after a study of libraries, the welfare of libraries seemed to him more dependent on political than economic analysis. This is likely to remain true, but, given the current economic climate, academic librarians are also well advised to begin the development of output measures which they can use to manage libraries more effectively and to win from their administrations the finances which they need to do it well. Professor Bowen's book is not a blueprint for how to do this, but it does provide a lucid examination of the economic environment in which academic libraries exist. An appreciation of this is a necessary first step in understanding the context of library finance and in equipping librarians to participate in the continual debate about the proper allocation of resources that goes on on every campus.—*Richard J. Talbot, University of Massachusetts, Amherst.*

Gilreath, Charles L. *Computerized Literature Searching: Research Strategies and Databases.* Boulder, Colo.: Westview, 1984. 188p. (Westview Special Studies on Information Science and Management) $22. LC 83-23319. ISBN 0-86531-526-4.

Pritchard, Eileen, and Paula R. Scott. *Literature Searching in Science, Technology, and Agriculture.* Westport, Conn.: Greenwood, 1984. 184p. $29.95. LC 83-18471. ISBN 0-313-23710-7.

Wilson, Concepción S. *Online Information Retrieval in Australian Academic Libraries.* Kensington, N.S.W.: School of Librarianship, Univ. of New South Wales, 1983. 362p. $20.

The proliferation of electronically accessible information and its effect on librarianship has been discussed widely. One aspect of this is a debate concerning the ambivalent and uncertain future role for librarians as intermediaries in the process of online data base searching. Predictions waver between those based on hope-filled confidence in information organization

expertise which will ensure librarians a continuing role as searchers, advisers, and trainers, and those based on resignation to a diminishing or disappearing role as access technology becomes increasingly end-user oriented and document delivery systems grow in both number and efficiency. While very different in their purposes and in their approaches to online searching, all three books under consideration express, more or less directly, this professional ambivalence and uncertainty.

Online Information Retrieval in Australian Academic Libraries, Wilson's library school master's thesis become book, is the most openly and directly ambivalent of the three books. It reports the results of a survey intended to monitor "the general characteristics of the growth of online information retrieval services in academic libraries" in Australia. The bulk of the book describes in detail the methodology used in the survey and presents the results obtained by concentrating on four areas: (1) numerical facts, such as number of academic libraries offering searching, number of searchers per library, vendors involved, databases used, etc.; (2) charging policies and promotion of data base searching services; (3) the effect of online availability on printed subscriptions; and (4) characteristics of the search intermediaries (librarians), the end users, and the interactions between the two. The remainder of the book consists of an introduction, a literature review describing the results of other surveys in North America and Europe, appendixes which include a copy of the survey questionnaire, and a discussion of the apparent implications of the survey results.

The results obtained in the first three categories, numerical facts, changing policies, and effects on printed subscriptions, are comfortably predictable. Eighty-three percent of the eighty-six Australian academic libraries provide online searching and only one quarter of these offer free searches. Dialog is the most commonly used vendor and ERIC the most frequently accessed database, with PsychInfo and Medline close behind. Online searching has led to no consistent alteration in printed subscriptions. It is in what the survey reveals about search intermediaries and their relationships to end users that Wilson finds cause for ambivalence and uncertainty concerning the future. Most end users are, unsurprisingly, faculty. The majority of search intermediaries believe these end users are neither inclined nor able to conduct their own searches. These low expectations of end users can only be wondered at in light of Wilson's additional discoveries that, at most of the academic institutions surveyed, librarians performed too few searches to remain proficient (even at the shockingly low proficiency requirement of one search per week) and that, in terms of the actual search process itself, interaction between end users and search intermediaries is generally quite low. Other findings of interest include the facts that only one third of the 246 search intermediaries claim any subject expertise, and only four out of the total number perform online searching as even half of their jobs.

Wilson's survey results for Australia do not differ significantly from the results of American and European surveys. Because of her results and their consistency with other findings, Wilson's discussion of future trends reflects a high degree of pessimism. She asks some unsettlingly relevant questions: If librarians as search intermediaries are essential, what is the unique skill they have? Could software intermediaries be as or more effective? If librarian intermediaries are to remain the online experts, how can they maintain proficiency? Given the high cost of electronic access, is it reasonable to expect often inadequately trained search intermediaries to exploit effectively information technologies? As a consequence of her survey results, Wilson, while coming to no fixed conclusions, predicts an uncertain future for librarians in the online retrieval process.

Charles Gilreath's *Computerized Literature Searching: Research Strategies and Databases* is a well-written, well-organized book. After discussing the basic ideas behind computer searchable files, Gilreath examines the databases available and the peculiarities of searching in the various

subject areas, including biological and physical sciences, social sciences and education, humanities, business, and law. A glossary of terms and various figures expand on textual explanations. Gilreath's book, however, has a major problem. Because it embodies the ambivalence and uncertainty of the library profession toward its future role in online searching, it lacks a clear audience.

Gilreath intends the book for end users, both those using mediated search services and those "who plan to profile and conduct their own searches. . . ." While some subject specialists might benefit from reading the explanation of computer literature search systems, those end users seeking an intermediary would undoubtedly expect this searcher to know from experience what Gilreath's book contains and more. Librarians having to search in an unfamiliar subject area, another potential user according to Gilreath, will be better off with the *Directory of Online Databases* and vendor documentation. The information in *Computerized Literature Searching* falls so short of what the end user wishing to conduct his/her own searches would need, that one suspects Gilreath of following up on a suggestion Wilson makes in the discussion of her survey results: that search intermediaries "adopt a 'closed shop' or 'guild mentality' and try to prevent end users from receiving searching skills." That Charles Gilreath, a veteran searcher and author of CAIN and Agricola user guides, produced a clear, well-written book for no one in particular is a concrete indication that the profession is sitting squarely on the fence.

Online data base searching is the focus of only one chapter in Pritchard and Scott's *Literature Searching in Science, Technology and Agriculture*. This guide to scientific literature, as the authors explain in the preface, "is arranged to correspond to the order of procedures in which a person would undertake a literature search." Carefully explained definitions and examples of primary and secondary sources, detailed discussions of formulating a search strategy and limiting a topic, and instructions on how to cite various sources in a bibliography make this a useful guide

for the authors' intended audience, college undergraduates and beginning level science graduate students. Lists of abstracts and indexes in various scientific fields are included in an appendix, leaving the body of the text free for in-depth illustrations on the use of complex reference tools (e.g., *Biological Abstracts* or *Index to Scientific and Technical Proceedings*). The organization and clarity of *Literature Searching* make it a worthwhile textbook choice for a research methods class.

Computer literature searching is integrated into the guide through inclusion of a chapter devoted to "computer retrieval" and an appendix listing science data bases, their vendors, and their dates of coverage. Consistent with the rest of this clear but detailed book, the searching chapter lucidly describes the advantages and disadvantages of going online for information and the steps involved in the process. Since beginning researchers in a field need intermediaries at virtually all stages of a search for information, for Pritchard and Scott to list "making arrangements with a librarian or a company" as the first step in setting up a data base search seems sensible. In no other chapter, however, including those which explain complex abstracts or indexes, is a librarian their initial recommendation. With the intention, it appears, of producing educated consumers of information technology, Pritchard and Scott provide diagrams illustrating Boolean logic and examples of actual searches on Dialog, SDC, BRS, and Medline. While, as search intermediaries well know, an educated consumer can be a great addition to an online search process, in the face of the detail the computer retrieval chapter provides, it is fair to ask why end user oriented systems like "Knowledge Index" or "BRS After Dark," are not even mentioned. Given the authors' stated intention to arrange the book according to the logical order of an information search, it is also surprising that online full-text data bases and reference files, like *Kirk-Othmer Encyclopedia of Chemical Technology* and "Super Index," have been omitted from the chapter on secondary sources. Since online searchability of such databases is significantly al-

tering the whole research process, especially in the sciences, beginning researchers ought to be familiar with these options.

These curious omissions in an otherwise detailed literature guide hint at a certain territoriality and suggest an amount of uncertainty. In an age when personal computers are becoming commonplace in dormitory rooms, instructional literature research guides may need to take on a considerably different form. Use of *Literature Searching* in a research methods class would require the instructor to expand the definitions provided for the use, scope, and access to computerized files.

Despite their diversity, these three books uniformly offer evidence of uncertainty and ambivalence among librarians concerning their future role in the online searching process. Wilson, confronted with disturbing survey results, has little choice but to question the necessity of poorly trained librarian intermediaries. Gilreath's attempts to give end users and librarians alike a piece of the pie relegate his book to a no-person's-land. Unsure about where information technology belongs in library instruction, Pritchard and Scott narrowly define its possibilities and confine it safely to the discretion of the librarian expert. Electronic information is not only here to stay, it is, in increasingly numerous cases, all there is. In the face of this reality, librarians seem justifiably insecure about whether either of these phrases apply to themselves.—*Constance Miller, University of Illinois at Chicago.*

Financial Planning for Libraries. Ed. by Murray S. Martin. New York: Haworth, 1983. 140p. $20. ISBN 0-86656-118-8.

Readers of the *Journal of Library Administration* will recognize this work as volume 3, numbers 3/4, Fall/Winter 1982. This special issue of the journal, guest edited by Murray Martin, has now been published as a hardcover monograph. Contextually, however, it remains a collection of nine articles, not chapters, preceded by Martin's introduction outlining issues in academic library financial planning. The work is divided into two parts: I. General Financial Principles and II. Issues in Spe-

cific Budget Categories. Although linked by the underlying theme, the articles have no further relationship. Each retains its own style, level of scholarship, specificity, and level of treatment.

Since all but one of the authors works in the academic arena, it is no surprise that their articles are directed to academic librarians and draw examples from academic libraries. Harold Jenkins directs his article, "Returning to the Unified Theory of Budgeting: An Umbrella Concept for Public Libraries," to public library administrators. Unfortunately, it offers nothing of real substance for these readers. Jenkins argues that it is time to give up jingoistic budgeting approaches and return to planning and budgeting techniques characterized by the administrator's clear understanding of the library's mission and operation. Although there's little to dispute regarding these principles, there's not much substance either. Besides, it's remarkable that anyone could write about public library planning and budgeting today without even a casual reference to Vernon Palmour's *Planning Process for Public Libraries* (1980) which has had an inestimable impact on thinking is this area.

For those interested in academic library budgeting or planning/budgeting generally, the remaining articles may prove useful. Although weakly researched, Duane Webster's paper, "Issues in the Financial Management of Research Libraries," is a cogent appraisal of the current financial environment of large academic libraries. His advice for internal and external strategies for meeting the challenges of this environment are too general to be of direct use but provide a well-targeted outline for more detailed study.

Edward R. Johnson's "Financial Planning Needs of Publicly Supported Academic Libraries in the 1980s: Politics as Usual" reports a survey of library administrators in fifty-five medium-sized academic libraries. His observations and conclusions are based upon the opinions of the thirty-eight administrators that completed and returned the survey. As such, some readers may find this distillation of opinion useful, but most of it will not provide insights for anyone who is familiar