The directory organizes over 1,500 unique Internet sources under 19 subjects (chapters) such as Business and Economics, Environment, Health Sciences, and Technology and Engineering. The first chapter lists 18 entries under the category of Principal Finding Aids and Starting Points. While the directory focuses primarily on sites providing U.S. federal government information, it also includes one chapter on state governments (containing 165 entries) and one chapter covering international and foreign government information (containing 221 entries).

Each chapter includes a brief introduction, a few Featured Sites—selected starting points for the topic—and a listing of other Internet sources by subtopics. Each entry includes: entry number; title of the source; primary URL; alternate URLs; sponsor(s) of the Internet source; brief description of the content, coverage, special features, and significant publications available at the source in electronic format; subject headings; and a list of online, full-text publications available from the source, including Superintendent of Documents (SuDoc) classification number.

Two useful Publications Indexes are provided: the first is a complete alphabetical list of the online publications available from the sites included in the directory; the second is the list arranged by SuDoc classification number. The Master Index combines all the subjects, sponsors, titles, and cross-references for the entries into one alphabetical index. The URL Index—which includes an alphabetical listing of the FTP, HTTP, etc. addresses—is interesting but appears less useful. All of the indexes and entries are logically arranged and easy to read.

A variety of Web search engines and Internet directories and guides are available freely online. This, and the ever-changing nature of the Internet and the material on it, may lead many readers to question the need for a printed directory. The author addresses these issues head-on and describes several advantages of this printed directory. First, no single source can be comprehensive, so multiple guides and pointers to government information on the Internet are necessary. In addition, any directory (printed or online), to one degree or another, will always be out-of-date and in need of upkeep. The author offers this printed directory as a "snapshot in time" (p. xii) of the government information resources available on the Internet. The final entries (numbers 1584 and 1585 in the directory) provide a sense of this, for example, in listing the report of the Independent Counsel and the White House responses to the Starr report.

A second advantage of a printed directory is that it can provide a written history—when a particular URL is no longer valid, knowing that the data once were available online can be useful in tracking down the information. Third, the indexes provided in this work (described above) are useful in identifying and locating online government publications. And, fourth, browsing a print directory sometimes can be quicker than waiting for a search engine or Web page to load. To these I would add another advantage: the conceptual and logical organization of information resources in a directory such as this provides users with clear and easy access to important content on the Internet and can facilitate greatly the effectiveness of their online experience. This directory is a useful reference work for academic and public libraries of any size (both depository and non-depository) that have government documents collections or service gov-

ernment information, and for special or smaller academic libraries with a general need to locate a broad range of government information on the Internet.—**Daniel P. O'Mahony, Coordinator, Government Documents and Social Sciences Data Services, John D. Rockefeller, Jr. Library, Brown University, Providence, Rhode Island 02912** <govdocs@brown.edu>.

Indexing and Abstracting in Theory and Practice, 2nd ed., by F.W. Lancaster. Champaign, IL: Graduate School of Library and Information Science, 1998. 412p. $47.50. ISBN 0-87845-102-1. LC 98-218053.

My review of the first edition appeared in *Information Technology and Libraries* (December, 1991) and was reprinted in an anthology[1] with references to other reviews. This review focuses on the extent to which the second edition updates and overcomes the flaws of the first.

The scope remains the same: database indexing. Book indexing is excluded via references to other sources, although there is some attention to automatic book indexing. Thesaurus construction is omitted because Lancaster has published a separate book on this. The early history of indexing is ignored; developments from the 1950s on are treated.

Not all sections of the book have been updated. The abstracts and index terms in Figure 3, referred to repeatedly, summarize a 1985 survey on whether the United States should confer with the PLO, making the book seem outdated. The articles required for the exercises date from the 1970s and 1980s, and students may have to seek the full text on microfilm.

The text is clear except for several pedagogical/logical flaws: terms introduced without definition (*entry vocabulary*, p. 40) and complex indexing methods explained before older, simpler ones (*SLIC* before *KWIC*). Alphabetico-classed indexing remains unexplained in this edition—an unfortunate omission since it is found in Internet directories (glossed over by Lancaster). Bates[2] claims that end-users expect alphabetico-classed structure.

The book is highly readable, but there are awkward transitions from sections that conclude with evaluations of specialized studies (e.g., Chapter 6). Portions of the book have a critical review tone. Several think-pieces are called "unconvincing," and the flaws in methodology of experimental studies are exposed, or their findings labeled unsurprising. It is valuable to give researchers a checklist of errors to avoid in designing indexing studies, but unnecessary to cite the poor ones. Lancaster contradicts himself in mocking the proposals that human indexing be applied to the Internet while concluding the book with his own, similar predictions.

In stating, "I make no apologies for continuing to cite literature of thirty or forty years ago" (Preface), Lancaster was probably alluding to my bibliometric analysis of the first edition. The current references, especially from cognate disciplines, constitute the major enhancement of this text, but the lack of a citation to Wellisch's encyclopedia[3] is inexcusable. Wellisch's bibliography of indexing[4] could have helped Lancaster discover that Artandi and Hines' critique of roles and links[5] preceded his own.

The book is nicely formatted; the reduction ratio of many textual illustrations (e.g., Figure 106) is excessive, however.

Proofreading was excellent, but there were a few editing slip-ups: identical textual footnotes on pages 250 and 281, and minor flaws in the author-date references: the two 1990 references by Haynes et al. are not differentiated through codes, and Lancaster and Warner's 1993 text is dated 1983 in the reference. The major problem is that the bibliography is arranged by *author and title* rather than *author and date*.

The 15-page index looks good but is not exhaustive. Terms discussed repeatedly are missing: *Boolean operators, phrases, and proximity*. For many index headings the set of locators is incomplete; most features of Internet search engines (e.g., *Truncation*) were not indexed, rendering it difficult to compare them with automatic indexing algorithms. Cross referencing is inadequate (*Similarity/Query by example*), and there are inconsistent double postings (*Output overload*; *Overload of output*). The 12 pages devoted to a farce about abstracting should have been added to the index.

Flaws notwithstanding, this current synthesis of database indexing and abstracting principles is highly recommended, both for students and practitioners concerned with content analysis, information retrieval, and automated language processing.—**Bella Hass Weinberg, Professor, Division of Library and Information Science, St. John's University, 8000 Utopia Parkway, Jamaica, New York 11439 <Fax (718) 990-2071>.**

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Leadership and Academic Librarians, edited by Terrence F. Mech and Gerard B. McCabe. Westport, CT: Greenwood Press, 1998. 276 p. $65.00. ISBN 0-313-30271-5.

The literature of academic library leadership is not particularly extensive. One usually goes to the managerial literature to obtain articles and information on leadership in academic libraries. In *Leadership and Academic Libraries,* the contributors discuss the issues and various forms of leadership. Editors Terrence F. Mech and Gerard B. McCabe are experienced administers and information professionals.

The introduction states that the purpose of the book is to illustrate "how individual librarians and their personal leadership are contributing to the changes in our profession and the expanding career opportunities available to academic librarians." The initial section focuses on the evolution of the academic library, beginning in Colonial America. Beverly Lynch profiles emerging leaders such as William Warner Bishop of the University of Michigan and Harvard's Justin Winsor. Library directors were "scholarly administrators" who were actively involved on campuses. The status of

other librarians and staff was somewhat mixed. Raven Fonfa provides a historical review of the evolution of materials selection, progressing from faculty control to selection by librarians. This evolution was gradual and complex, contributing to perceptions of librarians as effective decision makers and, eventually, as leaders. Fonfa asserts this evolution "signified and impelled the professionalization of librarianship."

Contemporary leadership is discussed in the second section. Delmus Williams examines roles and responsibilities of directors. In a realistic presentation, the author states that effective directors are leaders on campuses, participating fully in the life of the academic community. They are advocates and educators who become strategically networked, possessing political skills that facilitate success. Williams also notes that, in general, academic librarians tend to be conservative and are inclined to seek "safe" decisions and minimize risk, affecting their ability to lead effectively. Don Riggs underscores the relevance of visionary leadership, suggesting that leaders need to create a "mental image" of the future, followed up by planning and implementation. Riggs also emphasizes the importance of trust as "the glue that holds the entire library together." Rosie Albritton discusses the behaviors and practices that are applicable to effective transformational leadership.

The importance of leadership in nonmanagerial positions or settings is explored. Barbara Dewey emphasizes public services leadership in a review of desired skills in job advertisements. Academic libraries are seeking people who are collegial, effective communicators, oriented toward service, innovative, flexible, able to prioritize and perform multiple tasks in a continually changing environment, and able to build positive relationships with students, scholars, and administrators. Janet Hurlbert states that instructional services in liberal arts colleges need effective leadership. Moreover, effective leaders are able to focus on the success of others. George Newman reviews leadership opportunities in collection management, instructional services, and information technology. Newman is also concerned with political realities, asserting that librarians and libraries need to be effectively integrated into critical teaching and learning processes on campuses. Kenneth Oberembt examines commonalities and differences in national cultures, with an emphasis on the individual versus the group, authority, working with uncertainty, and masculine/feminine roles. Expatriate librarians who are aware of these cultural differences are more likely to succeed in positions of leadership. Brian Champion discusses justice and fairness as elements of leadership in a reengineered setting. He asserts that leadership needs to be "measured by how fairly and humanely we take the group of people we have responsibility for to the next level."

The relationship between leadership behavior and career development is examined. David Dowell discusses specific stages of professional careers (apprentice, independent contributor, mentor, and mover and shaker), stating that one's contributions to the profession are related to one's ability to progress from one stage to another. In a discussion of the "protean" career, Dowell emphasizes the importance of skills such as mentoring, active listening, and the ability to learn continuously. Leaders also need to be more aware of the "whole person," balancing the professional with the personal. George Newman looks at options for directors inter-