why should we do less in the next fifty years?

Six chapters deal with varieties of technology: the physical environment of the library (lighting, ventilation, and the spread of disease); streamlining library processes (appliances, contrivances, and gadgets); photographic processes; new communications devices (telephone, phonograph, and typewriter); the library and radio; and motion pictures and television. Musmann concludes with a chapter on the future of the library and its technology.

This book is indeed "an anecdotal history," much of it derived from library periodicals from the century under consideration (1860-1960). The book is full of quotations and comments, footnoted to a fare-thee-well. The style is sufficiently informal to be readable, and Musmann does a good job of organizing and commenting on the array of sources. While most of the discussions lack in-depth statistics to place specific anecdotes in context, this weakness is almost certainly a realistic reflection of the library world's sketchy historical record. Do we really know how many libraries had in-house radio broadcasts in 1936-and do we have any idea how many libraries currently circulate CD-ROMs?

After reading this book, I have a much better sense of the field's technological concerns through the century before I began to work in libraries. It has been clear for some time that ongoing change and increasing complexity—the continued importance of print, but also an array of new media and access mechanisms—are the only plausible future for libraries. This book reminds us that libraries have never been the stable, unchanging institutions that some people assume, and that there have always been commentators looking for a single, simpler future that was never in the cards.

If you are concerned about the future of the book and the ability of libraries to cope with the onslaught of technology, you should read this book. Yes, it is library history—but it is history that provides a worthwhile perspective on today's fash-

ion for doom-crying and self-doubt among librarians.—Walt Crawford, The Research Libraries Group, Mountain View, California.

Women, Information Technology and Scholarship. Ed. H. Jeanie Taylor, Cheris Kramarae, and Maureen Ebben. Urbana, Ill.: Center for Advanced Study, 1993. 127p., \$10 + \$2 shipping and handling (ISBN 1-882875-00-1).

Academic libraries have succumbed to a romance, indeed an obsession, with technology. Yet how often do we stop to contemplate the profound implications of this information "revolution"? Do we ever pause to ask what should be critical questions: "Revolution by and for whom"? Do we dare to link this brave new library and information world with our professed commitment to "diversity" and equity? As we welcome the potential of powerful new information technologies and the resulting changes in the nature of scholarly research and practice, we must also pay close attention to the power relations embedded in their development, deployment, and use. All the more welcome, then, is this volume which tackles head on the profoundly political nature of information technologies and the implications for university policy.

In September 1991, at the University of Illinois Urbana-Champaign, an interdisciplinary group of thirty-three faculty and academic professionals, including five librarians, gathered around a common goal to "help insure that new communications technologies will be structured and used in ways beneficial and equitable for all." Women, Information Technology, and Scholarship, sponsored by the Center for Advanced Study, draws from the first year (1991–92) of their ongoing colloquium.

Four articles by colloquium participants or collaborators anchor the volume, followed by six colloquium digests and an extensive bibliography. In the first article, Maureen Ebben and Cheris Kramarae offer an overview highlighting issues of particular concern for women in four key areas: difficulties en-

countered by women working in the various electronic forums; training methods; disappointed promises of information technology in education; and electronic publishing. Dale Spender, whose previous work documents the absence of women in dominant culture and recorded knowledge, here compellingly extends her arguments about the politics of knowledge production and distribution to electronic media. Throughout the print era what has been considered legitimate knowledge and scholarship has always been gendered. How will the determinations be made about what knowledge gets encoded and distributed in electronic form and by whom? It is only in the past three decades, the very time that print is giving way as the primary medium of information, that women have assumed positions of power and influence in alternative and mainstream publishing. While listservs of particular interest to women and minorities proliferate, in the ascendent electronic media generally (database producers, software and hardware companies, television, radio), women and members of other subordinated groups exert limited if any control over the means of information/knowledge production and dissemination. Despite the utopian predictions about democratization of information through electronic communication across space, time, and social categories, computer technology in many ways remains one of the last male (read white, educated) bastions.

In the article most obviously tied to libraries, Ann Okerson (Association of Research Libraries), addresses the current "crisis" in academic publishing (high prices, high volume, and slow distribution) and its attendant dilemmas and challenges. Arguing that "the fundamental issue in regard to holding and sharing information resources in the electronic environment, as it turns out, may be one not so much of technology as of ownership," she offers cogent, concrete suggestions for mechanisms to ensure that ownership is retained by scholars. This will preserve, she maintains, the central role of colleges, universities, and libraries in knowledge production and distribution. While Okerson regrettably ignores the gender implications here, reading her piece against the first two articles in the volume elicits thought-provoking questions about how information paradigms, practices, and technologies are shaped by prevailing values and

power relations.

The last article, by Cheris Kramarae and H. Jeanie Taylor, takes up the hotly debated question of women's and men's participation on electronic networks, focusing on the problems often encountered by women: marginalization and monopolization by men, sexual harassment, pornography or technotitillation. The "chilly climate" for women and minorities at most universities has been documented. Now blowing through cyberspace, this silencing chill has serious consequences not only for interaction on nets but also for scholarship and the academy in general. If electronic technologies often "replicate or intensify previous problems," universities, the authors argue, are uniquely positioned to "institute change at 'home' and thus to influence change in the larger world." Much of the article outlines specific suggestions for policy and behavior changes to ensure that networks provide a forum for open debate for everyone, including women and other marginalized groups, and that university rhetoric about diversity and equality extend to equity in practiceeven in cyberspace.

The six "digests" provide snapshots of additional key issues raised in the colloquium, ranging from concepts of agency, privacy, and ownership in the information age, to feminist computer networks, to a vision of the ideal information technology. The volume concludes with an impressive annotated bibliography on women and information technology, covering the all-toofew feminist works but also a range of current discussions and arguments in the field. Indeed, this forty-page bibliography would provide an excellent point of departure for a full course or seminar on this topic—one way academic librarians

might take the lead in mapping these new frontiers.

If this volume represents a forceful social critique of the current state of information technologies in academia, it is no Luddite call for return to an idealized pretechnological past. In fact, it is their clear recognition of the powerful potential of new information technologies that motivates colloquium participants to demand that these be fully realized for women and other marginalized social groups. In the contested terrain of information technology, it is only by addressing the embedded social relations that this technolandscape of enticing promises will prove more than an exclusive preserve.-Joan Ariel, University of California, Irvine.

White, Howard D., Marcia J. Bates, and Patrick Wilson. For Information Specialists: Interpretations of Reference and Bibliographic Work. Norwood, N.J.: Ablex, 1992. 310 p. \$24.50 (ISBN 0-89391-983-7).

This collection of articles by three library school faculty focuses on three aspects of information work. Each is the topic of one of the book's three main sections: reference work, bibliographic writing, and literature searching. In the short fourth and final section, Howard White sets out to provide an integrated view of what information specialists do.

In his introduction White says that the authors "offer . . . insights into human aspects of the profession [i.e., information work] that are seldom treated elsewhere." With a few exceptions his promise, however, goes largely unfulfilled. While some interesting notions emerge, it is difficult on the whole to say to whom his book would appeal. It lacks a solid focus, and the reader moves through a somewhat bewildering array of topics with quite different approaches.

Five of the book's eleven chapters are rewrites of articles that appeared over the years in journals. There is a short article on the nature of a reference book, replete with charts and empirical data, a speculative treatise on the uniqueness of librarians and information specialists,

and several articles about techniques for conducting online searches. At one point in the book we have a discussion of Karl Popper's "world 3" theory as it relates to information science, while at another we get a discussion of online versus manual database searching infused with neologisms such as BIBBLE: "To BIBBLE is to look for a bibliography already prepared, before launching into the effort of preparing one."

What theme or themes unite these disparate pieces is far from clear despite White's claim that "there is a great deal of theme-passing from author to author." The articles on literature searching seem to have a specialized pedagogical purpose that little serves the general interpretive ambitions of the book. Many of the book's observations seem to be commonsense notions recast in an academic parlance sufficiently ponderous so as to make them sound insightful. "Libraries, as guarantors of 'permanent publication,' ratify the choices of publishers generally, but of some much more than others."

In the final chapter, however, White makes some observations that raise important questions about librarianship. He writes that most librarians, once finished with school, do not read library and information science research literature because "they do not need to; or, as they would claim, because it does not tell them what they need to know." A remarkable admission! If it so, why, we might ask, should librarians read this book? What does White's observation suggest about the relevance of professional research to professional practice? If a librarian, upon completing formal training in the library and information science, has little need for the research of library and information science, then what is its purpose? What is it about the whole professional educational endeavor that makes library and information science relevant to formal education but irrelevant afterward? Nevertheless, White's observation is, in my view, the most important of the book and raises far-reaching questions.

White then immediately adds something that makes the above an even more interesting and pressing issue. "The