ity of reference service, about personal qualities and behaviors, the people who offer and use reference services, it has less to say than it might. Unlike its predecessors, it is reticent about the affective aspects of service, the interpersonal dynamics, pleasures, and satisfactions of the work; in general, the hard glint of clinical abstraction lingers in its gaze. Thus, no Bopp and Smith librarian would feel the "interest, amounting to fascination, [the] thrills, amounting at times to ecstasy" that Wyer sees as the librarian's occupational reward. If capable of it, the Bopp and Smith information hound would raise an ironic eyebrow at Hutchins's narrative of a young librarian who returns "flushed from the periodical indexes" to the desk, where she is flustered to encounter a student whom she and colleagues are transforming into a library-competent scholar; nor would the student, days later, feel a pang of disappointment in not finding her at her post.

Those who lament the absence of theoretically minded "dead Germans" in librarianship will find no comfort here except perhaps in the rather eccentrically cast chapter 10, which, with chapter 1, might have paid more attention to the economic and political trends that currently threaten egalitarian library service. The editors might have reconciled chapter 6 on instruction, and indeed the entire history of reference librarianship, with the statement in chapter 7 that "[r]eference librarians rarely see themselves as educators." An uneasy tension pervades the text's participation in the transition from print to electronic services. OCLC and RLIN are still quaintly labeled "nontraditional" reference sources; cards introduce bibliographic control and printed pages periodical indexing; the encyclopedia chapter discusses multimedia but gears search strategies to printed versions. Granted the difficulties of using electronic interfaces to demonstrate these points, might the text not be reconceived to do so?

Bopp and Smith situates its workmanlike bulk squarely in the century-old United States tradition of reference service and is eminently usable in all the ways its predecessors have been. Because Katz (new edition scheduled for 1996) covers similar territory in similar ways, personal preference may ultimately determine whether a general reference course requires one or the other. Minor differences of emphasis aside, Bopp and Smith is rather more conscious of itself as a survey of the reference literature, whereas Katz, like Wyer and Hutchins, is more interestingly written. Bopp and Smith smells rather of earnestly cheerless "learning sessions" in airport Ramadas, whereas Katz smells a little more of the reference desk.-Robert Kieft, Haverford College, Haverford, Pennsylvania.

Literary Texts in an Electronic Age: Scholarly Implications and Library Services.
Ed. Brett Sutton. Urbana-Champaign,
Ill.: Graduate School of Library and
Information Science, Univ. of Illinois,
1994. 207p. \$25. (ISBN 0-87845096-3).

This book, which publishes the papers presented at the 1994 Clinic on Library Applications of Data Processing, focuses on fairly recent developments in the area of electronic texts. Its attempt to address the impact of these developments on both scholarly research and library services is not always successful. Although the eleven papers are appropriately wideranging, their quality is very uneven.

Because a significant number of libraries have started to provide access to electronic texts in a serious fashion, a thorough examination of the impact of these texts on library services has recently become possible and necessary. As a result, libraries have begun to grapple with a number of issues, such as the development of selection criteria, licensing and copyright regulations, changes within the MARC format to allow for description of and access to electronic/internet resources, and fundamental decisions on

how electronic texts would be made available to the scholarly community. The thinking that has been done recently in this area and the various projects that have resulted from it have clearly advanced our understanding of these issues. A number of the better papers in this collection reflect this progress.

Susan Hockey offers a succinct historical overview of electronic texts in the humanities since the 1940s, emphasizing the necessity of descriptive markup that recognizes the structural components of texts and demonstrating the ways in which some of the lessons learned have been applied to digital imaging. Hockey quite rightly deplores the lack of progress in the development of analysis tools. Such tools currently constitute a vital missing link for scholars who wish to start using these texts in a rigorous and sophisticated fashion. C. M. Sperberg-McOueen discusses the text encoding initiative (TEI) that has offered a set of guidelines for encoding literary and linguistic texts using standard generalized markup language (SGML). A fascinating paper by John Price-Wilkin describes one approach that has used standards (including use of the TEI guidelines to build SGML-compliant text corpora) and open systems to create a wide-area electronic text service. This approach ensures the reusability of texts, the possibility of applying a variety of analysis tools, and the separation of data and software. Furthermore, the textual analysis systems that implement this approach at Virginia and Michigan allow for speed, phrase searching, truncation, indexing without stop words, structure recognition, and finelevel result displays (KWIC). These are requirements that many text retrieval systems cannot deliver but which are essential for the researcher.

The two other papers that report on experiences with electronic texts within libraries are severely limited by a nutsand-bolts, "how-we-did-it" approach that is not particularly enlightening. In her paper on the information arcade at the University of Iowa Libraries, Anita Lowry does not achieve the distance from the project that would be necessary to draw valuable insights. Mark Day's tooextensive reportage on the electronic text resource service at Indiana University is a peculiar combination of a somewhat naive plunge into postmodern theoretical waters combined with personal and institutional history writing that ultimately does not advance our thinking on the topic.

Three papers introduce issues that go beyond the delivery and analysis of electronic texts. Rebecca Guenther gives a very thorough overview of some of the problems that arise when providing bibliographic control of and access to electronic texts. She offers a history of some of the important modifications to the MARC record, including the electronic location and access field (856). Guenther also touches upon the work done by the Internet Engineering Task Force (IETF) on uniform resource identification, and by the Library of Congress on the electronic cataloging in publication project. The compatibility of SGML and MARC are also explored, suggesting the possibility of some promising interactions between the two standards. The copyright issues that all Internet users are confronted with are visited by Mary Brandt Jensen in a readable and realistic fashion. She provides for the uninitiated a fine introduction to a complicated legal combat zone. Finally, a paper by Lorrie Lejeune from the University of Michigan Press argues for inclusion of publishers in their traditional role as guarantors of quality and credibility within the new electronic environment. Although this role is definitely desirable, the shift from printbased to electronic publishing is not one that centers only around secure online cost recovery. Lejeune glosses over some of the basic economic shifts that are already taking place: e.g., the replacement of a purchase transaction by a license or

royalty transaction. Such shifts have profound implications for libraries, changing the cost factors of prolonged or repeated consultations, as well as the locus of ownership of the artifact. Nor are issues of cooperative collection development or interlibrary use addressed. One would also hope, at least from a library perspective, that the cost of perpetuating the role of the publisher as guarantor of quality is not decided by asking, "How much will the consumer pay?" but rather by asking, "How much does it cost to perform the functions of high-quality peer review and editing?"

Conversely, the scholarly implications, of incorporating electronic texts in humanities research are far from clear. First of all, relatively few scholars have used electronic texts and textual analysis systems extensively in their research; and second, even for these electronically sophisticated researchers, the querying of electronic texts has only informed one particular aspect of the research. Thus, although some researchers might enter the proclaimed electronic age at certain moments, they are not full-time inhabitants. Given this state of affairs, it is perhaps too early to have valid pronouncements on this topic. At any rate, it appears that the scholars who were invited to this conference were not prepared to do so.

Jay David Bolter's keynote paper recounts the history of writing as a movement from the printed word-a stable representation governed by authorial or corporate control guaranteeing the accuracy and fixity of the text-to the electronic text, displaying qualities of fluidity, multiplicity, and dispersed control. Bolter asserts the somewhat dubious point that authorship and writing in a print environment have been creative activities, whereas in a hypertextual environment they've become merely connective. Bolter expands on this assertion by claiming that "copyright is incompatible with ... electronic writing" because copyright theory is embedded within the notion of author as creative agent.

Although his analysis is theoretically sophisticated, it really does not move the reader beyond generalities that have by now become daily journalistic fare. James Marchand's paper, which abruptly returns us to techno nitty-gritty, is an impressionistic and eclectic account of a scholar's trek through technology. Although Marchand correctly identifies certain problems, such as the lack of standardization and of consideration of user needs, these observations are clouded by generalized statements that are contradictory or overly simplistic. Robert Alun Iones advocates effective collaboration between scholars and "tool developers," which he illustrates using three instances of such cooperation at his home institu-

It would have been extremely useful to have included in this collection a number of papers by scholars who have actively used the electronic text services described by Price-Wilkin, either at Virginia or Michigan. Scholars with solid experience in this area could have explored the possibilities and limitations of these systems; the ways in which electronic texts can further current research: new areas of humanities research that now can be effectively tapped by using electronic texts; the searching capabilities and effectiveness comparing the SGMLencoded text corpora to the ARTFL database (Chicago) of French texts that does not use SGML; the usefulness and/or limitations of "minimal" structural markup and the possible need for more sophisticated but expensive higher-level markup; innovative ways of incorporating electronic texts in day-to-day teaching, their requirements of and needs for analytical tools; and the impact of these systems on humanities research methodology.

An in-depth and thorough examination of all these issues is needed. Some of the papers in *Literary Texts in an Electronic Age*

are valuable starting points, but the book as a whole fails to accomplish this goal.—
Kurt De Belder, New York University.

Collard, Claude, Isabelle Giannattasio and Michel Melot. Les Images dans les bibliothèques. Paris: Editions du Cercle de la Librairie, 1995. 390p. (ISBN 2-7654-0577-8, ISSN 0184-0886.)

All the world, by some accounts, is fast becoming images. Text has long been digitized. Sound has long been digitized. Visual images themselves, which have been available as bits as long as have the others, now at last are becoming available to the general online world thanks to the World Wide Web. The end result of all this effort has been the creation of images: images of text, images of other images, multimedia applications using sound and text and graphics, and much more. If nothing else, the hours that we all spend now in front of video screens are making us very aware of images.

There is an accompanying suspicion, however, that a world preoccupied with image is a world become superficial. An image, some feel, somehow bears less validity or significance than "reality." Much criticism of the entertainment value of images stems from this suspicion. The hold of television and video games on the consumer imagination is criticized for contributing to such superficiality: entertaining images that should—but many feel do not—have something more real underneath.

The controversy that accompanies the collection of images, particularly their collection by an icon of established culture such as a library, is more understandable if it is considered in conjunction with this suspicion of images. Libraries perennially have assembled vast image collections: illustrations accompanying text inside printed books and illuminated manuscripts, images standing alone assembled into books or preserved in various other media. By the modern, digital definition, library contents—text and

all—might even be seen to be nothing more, or less, than giant collections of images.

Michel Melot presents a masterful analysis of the many issues involved in this complex and convoluted picture in Les Images dans les bibliothèques. Melot is the former curator of the prints collection of the Bibliothèque Nationale, was the first head of the Pompidou Center's Bibliothèque Publique d'Information, and currently is President of the Conseil Supérieur des Bibliothèques. He is an accomplished author and a recognized expert on prints and images. This book, which contains the contributions of three authors, is at once a handbook of library procedures for the treatment of images, an essay on the particular French approach which views library problems as processes rather than objects (French librarians think of documentation and collection more than they do of books and serials), and, thanks to Melot's essays, a trenchant piece of sociological and semiological investigation into the precise meaning of the term image.

Melot's introduction sketches the distinctions that others have drawn around the concepts of image, sign, language, and writing, and the differences and relationships he sees among them. His erudition on the subject is impressive: fans of semiology, structuralism, linguistics, and cognitive studies will not be disappointed, yet readers unfamiliar with or usually uninterested in these arcane areas also will have their understanding of "images" much deepened by Melot's analysis.

The first part of the book, "Documents and Their Users," covers image reproduction, uses and users, and "the great collections." The second part of the book, "Managing the Fixed Image," addresses the practical topics: collections, conservation and restoration, reproductions, documentation, communication and services. The book's third part concerns the particular problems of motion pictures: