

“Securing Digital Image Assets in Museums and Libraries: A Risk Management Approach,” discusses the details of digitizing images but at the same time explores the problems of preserving image integrity and image context. Beamsley also addresses some of the issues surrounding copyright and control of images in the digital world. In “Getting the Picture: Observations from the Library of Congress on Providing Access to Pictorial Images,” Caroline R. Arms describes the processing of images in the vast collections of the Prints and Photographs Division of the Library of Congress. She details all aspects of processing, from specifications for digitizing images to the design of the retrieval interface. Arms’s paper is particularly valuable because she describes methods for processing a large collection of images, including the creation of collection-level and group-level records, and for integrating access to images with access to other materials, as occurs, for example, in the Library of Congress’ online catalog. Christie Stephenson, in “Recent Developments in Cultural Heritage Image Databases: Directions for User-Centered Design,” describes the experience of the Museum Educational Site Licensing Project (MESL) and in the process explores the issues involved in providing access to images from museum collections. In “Evaluation of Image Retrieval Systems: Role of User Feedback,” Samantha K. Hastings describes a study performed using a relatively small and homogeneous set of users and images. Based on this study, Hastings categorizes user queries and suggests the types of tools that are best suited to address these queries, as well as the best ways of evaluating the success of these tools.

The final section, “Experimental Approaches,” consists of three experimental automated approaches to providing access to images. It is an interesting and welcome development

that all three of these approaches make use of textual information as well as automated analysis of the image itself. Yong Rui et al., in “Information Retrieval beyond the Text Document,” describe an experimental technique tested in the context of images of museum objects. They focus on what the computer can do best—provide an analysis of color, texture, and shape—and suggest that this analysis is most successful when used in conjunction with manually supplied, text-based access. Both Neil C. Rowe in “Precise and Efficient Retrieval of Captioned Images” and Rohini K. Srihari and Zhongfei Zhang in “Exploiting Multimodal Context in Image Retrieval” describe experiments in which automated text processing is combined with image processing in order to retrieve images from Web pages. All three papers in this section include detailed descriptions of the methodology used in the automated analysis.

In summary, the papers in this compilation provide a theoretical exploration of issues, a description of the current state of access to images, some practical guidance, and a look at possibilities for the future. This compilation should be useful to both librarians and computer scientists and to anyone involved in providing access to image collections.—*Sara Shatford Layne* (slayne@library.ucla.edu), *Science and Engineering Library, University of California, Los Angeles*

The Social Life of Information. By John Seely Brown and Paul Duguid. Boston: Harvard Business School Pr., 2000. 320p. \$25.95 (ISBN 0-87584-762-5). LC99-49068.

The authors are, respectively, the director of the Xerox Palo Alto Research Center and a historian and social theorist research specialist at the University of California-Berkeley. They come garlanded with encomia from a variety of the digital great and

the good who praise their efforts to prove that “information is inevitably embedded in social relations” (Robert D. Putnam, 3) and that “information technology does not work unless supported by viable communities and institutions” (Bruce Kogut, 3). Even a cursory reading of this text demonstrates that Brown and Duguid are serious fellows appropriately skeptical of the prevalent cyberhype but, at the same time, convinced of the transcendent importance of the changes that technology is wreaking and will wreak in the future. So far, so very good—and the fact that the authors write in acceptable English prose is another unexpected plus.

I am a simple and prosaic soul and always approach books of this type with two simple and prosaic tests. How do the authors define information? What do you find when you look up library or libraries in the index? (The latter on the grounds that how authors treat something that I know well is a fair guide to how they treat what is less well known.) It is a sad fact that many books on information, the Information Age, and so on fail to provide any definition of information, or give *en passant* a cursory and practically useless definition. My spirits lifted when I found a discussion of the differences between knowledge and information (117–19), but not for long, because apart from the smart-sounding “knowledge usually entails a knower” (119), the discussion ends with thrown up hands. I write “smart-sounding” because the implication is that information can exist without human consciousness—an interesting philosophical question but one without practical utility. Surely, even data without a human mind is unbearably evanescent. There is a definition of sorts for information: “something that can be recorded, transcribed, digitized, and shipped in packets” (2). Apart from the leadenness of the words, the fact that they can apply to everything from a Mozart symphony

to *Citizen Kane* to a Harry Potter book to a line of Census data to a street map of Duluth makes the definition of no utility at all. The result of the second test, looking up “Libraries, digitized, 179–181”—the only such entry in an exiguous index—led to even more dispiriting words. The “conventional library, with its massive weight of paper gathering dust and resisting efficient searches, is another paper-based institution that sets fingers itching at the keyboard. The sense that the information is ‘there’ somewhere, but can’t be found can drive anyone to digitize” (179). Seldom can there have been two sentences more choc-a-bloc with clichés, straw men, and plain drivel. It ill behooves two men bent on counteracting digital hype to claim that information can’t be found in conventional libraries. If the Web and the Net had one one-hundredth of the organization and retrieval architecture of a conventional library, the world would be a happier, saner place.

This book is better than its lack of a definition of its subject and stereotyping of libraries would indicate. The authors begin with an admirably clear-eyed assessment of the overheated propaganda on behalf of technology to which we are all subject. Their central metaphor is one of tunnel vision—a concept that envisions the technological drive into the future as being narrow and exclusionary in that it ignores the human and social context of tech-

nological change. What they call the “limits to [sic] information” (vii) center on the notion that technology is a tool to be used or misused in societies and human lives but without the extreme consequences foreseen by the wild-eyed digital pundits. The authors then move on to discuss the idea of agents, in the nauseating nomenclature of the day—knobots, chatterbots, shopbots, etc.—and their limitations, which are many in number and kind. They point to the way in which such agents are given human names (Jeeves, Sherlock, Bob, and the like) as an indication that their advocates wish to narrow the distinction between humans and software, and would seek to replace humans with agents whenever possible. One would have thought this self-evidently negative and potentially evil, but the authors believe that there are areas to be negotiated and demarcated to protect us from antisocial agents. In their words, “[w]e want ATMs that will supply us with money, but not ones that will spend it for us” (62).

In subsequent chapters, Brown and Duguid explore the isolating effects of technology on the individual and the consequences for the way in which enterprises are organized. They cast a cold eye on the discredited and antihumanistic management fads of the 1990s—downsizing, reengineering, etc., and the fatuous TQM, of which far less is heard since the Japanese economy crash-landed—and

the ways in which they were “infofriendly” (117), while ignoring wider human and societal issues. Any librarian of a certain age will enjoy the authors’ analysis of the myths of paperlessness. “Infoenthusiasts have thrust nothing under the hammer with quite so much enthusiasm as the paper document” (174). They go on to show how and why the paperless office, the electronic newspaper, and the digital library have all turned out to be illusory. In the chapter titled “Re-education” they address the future of universities and puncture many of the myths contained in the increasingly voluminous and silly writings on the topic. Of interest to us, the authors, unlike most academics, seem to understand that the future of the university library is far more likely to resemble its past than it will the opium dreams of futurists, information “scientists,” and renegade librarians.

In sum, this book offers a good analysis of the blinkered nature of most prognostications on technology and “information,” and of the way those prognostications ignore the social and human context of communities, organizations, and institutions. The authors do not claim to offer solutions to the intellectual mess we are in, but they do offer a way of looking at that mess that may well lead to solutions.—*Michael Gorman* (michaelg@csufresno.edu), *Henry Madden Library, California State University, Fresno*