

Book Reviews

Digital Library Use: Social Practice in Design and Evaluation. Ed. Anne Peterson Bishop, Nancy A. Van House, and Barbara P. Battenfield. Cambridge, Mass.: MIT Pr., 2003. 341p. acid-free paper \$40 (ISBN 0262025442). LC 2002-45248.

Early digital library research was concerned, quite naturally, with developing the infrastructure required to store and transmit information. As the field matures and consensus starts to emerge about the "foundations" of digital library technology, researchers are trying to better understand these electronic institutions not simply as hardware and software interactions, but also as "sociotechnical systems," networks of users, content, and technology with the emphasis on users. User-centered research that attempts to balance the social with the technical has had some effect on the development of digital libraries and has the potential to provide even greater understanding. This work is an important contribution to the literature in this evolving field.

The twenty-two authors of *Digital Library Use's* twelve collected essays base much of their writing on findings from projects associated with first-generation digital library development made possible by the Digital Libraries Initiative (DLI), funded from 1994 to 1998 by the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), and the Defense Advanced Research and Projects Agency (DARPA). Although all share a commitment to the sociotechnical approach, these essays, like the projects that informed them, explore digital libraries from a wide range of perspectives (so wide, in fact, that the editors judiciously chose *not* to define the term *digital library*, allowing

the multitude of examples included to provide institutional borders). The resulting range of perspectives is one of the book's great strengths. It offers a mix of methodologies, theories, and values from library and information science, computer science, sociology, and even a smidgen from cartography and anthropology.

The authors of the essays in the beginning section analyze basic assumptions about the nature of libraries (digital and otherwise) and the materials they hold before offering an especially apt ecological metaphor to help better envision the interconnectedness of the digital library enterprise. They ask, "What *is* different about digital documents as opposed to their analog siblings? Is the mythic seamless, uber digital library a worthy goal to strive for, or might it be best to keep a few walls in the famous 'library without walls?' With walls or without, is there a better way to understand the interdependent relationships between digital libraries' people, values, technology, and practice?"

The second of the book's three sections is devoted to the investigation of the design and evaluation of digital libraries. The authors of the essays here call the reader to rethink usability and frame information seeking in the digital library environment in terms of problem solving. They also warn that much more needs to be known about the general user and the digital library if these interconnected information systems are to meet their full potential; these writers support user-centered design and evaluation processes that are ongoing and continually inform one another (while being based upon *real*



human information needs). This section also includes a model for investigating a community-based digital library designed to meet the specialized information requirements of a marginalized community and an examination of the tough issues of "control and governance, economics and sustainability, and audience," all concerns of traditional libraries, but issues for the digital realm that are still in the awkward, gangly stage to be expected of the teen-aged, technology or otherwise.

The authors of the essays in the last section attempt to explain the role of digital libraries in knowledge creation and to describe specific user communities. Anchored in social theory, one author argues that the "sociological conceptualization of user communities and institutions is logically prior to the design and evaluation of technical systems." Another investigates how digital libraries designed to serve large groups of users must scale up concepts traditionally seen as individual or psychological, specifically focusing on "transparency," the idea that you do not have to know the intricacies of how a thing works to use it. (A refrigerator is transparent to me; I can't explain its physics, but I can use it to make ice cubes.) This essay explains that as digital libraries seek to meet the needs of larger communities, contentions arise over transparency, but when that larger community accepts the transparency, it becomes "coercive." In other essays, the authors examine issues of trust and credibility in digital libraries by studying data sharing between two closely related fields, and they employ social realist theory as a frame for the evaluation of the digital library resulting from the Flora of North America project, an immense collaborative data-collecting program.

Although the above description might sound like a totally abstract, academic exercise, most of the essays involve or

grow out of real digital libraries with real content designed to serve real people. Investigation into these systems provides the jumping-off place for more conceptual thinking. Of special note are essays by David M. Levy ("Documents and Libraries: A Sociotechnical Perspective"), Gary Marchionini, Catherine Plaisant, and Anita Komlodi ("The People in Digital Libraries: Multifaceted Approaches to Assessing Needs and Impact"), and Clifford Lynch ("Colliding with the Real World: Heresies and Unexplored Questions about Audience, Economics, and Control of Digital Libraries"). The editors' introductory essay is also quite useful. On first read, it appears to be the standard here-is-what-is-between-the-covers production, but because the individual chapters explore digital libraries from a variety of angles, the editors' extremely succinct, but equally useful, mapping of digital library research and their identification of recurring themes and overriding motifs bring a helpful coherence to the book.

Digital libraries are sociotechnical systems, interconnected ecologies of machines, people, and content. This work provides a rewarding, multifaceted investigation into those systems. —Kevin Cherry, East Carolina University.

Buschman, John E. *Dismantling the Public Sphere: Situating and Sustaining Librarianship in the Age of the New Public Philosophy*. Westport, Conn.: Libraries Unlimited, 2003. 218p. alk. paper, \$60 (ISBN 031332199X). LC 2003-53882.

In this stimulating new book, John Buschman argues that for the past few decades librarians have responded at best incompletely and at worst ineptly to a long series of perceived crises. He attributes much of the problem to our not fully understanding how a new public philosophy has changed the framework within which libraries func-