Digital Library Use: Social Practice in Design and Evaluation

Edited by Ann Peterson Bishop, Nancy A. Van House, and Barbara P. Buttenfield. Cambridge, MA: MIT Press, 2003. ISBN: 0-262-02544-2 (hardcopy, alkaline paper) \$40.00

Most digital library practitioners have probably encountered an administrator, colleague, or collaborator who thinks that digital library work is a simple matter of scanning some material or administering a web server. Once you have the necessary hardware and software to create and serve digital objects, what should be so difficult about developing a digital library collection? This common misconception overlooks the fact that scanning is often the easiest part of digital library work; it's the abundance of other issues, often unique to each collection, that are truly difficult; issues such as defining collection boundaries, determining appropriate metadata schemes, dealing with unusual or uncommon objects, customizing the presentation of the digital objects, and evaluating service. These difficult tasks are all distinguished by the fact that they are largely social, rather than technological issues, and the ways they are addressed have repercussions in the "social life" of information as much--if not more--than in the technical.

It is this social aspect of digital library practice that the editors of *Digital Library Use* are interested in exploring. In keeping with the orientation of other books in the MIT Press' "Digital Libraries and Electronic Publishing" series, the editors have collected chapters, from leading contributors to the study of digital libraries, that focus more on teasing out underlying concepts and principles than on serving as an instruction manual or a compendium of practical "how-tos". That's a reasonable and welcome approach given the fact that the digital library is still a relatively young enterprise with fundamental characteristics not yet thoroughly understood. The focus also reflects the book's stated audience: digital library researchers, managers, funders, and practitioners (whom the editors hope will "question their assumptions about the relationships among technology, information, practices, and people" (p. 17)), as well as those with interest in broad "trends in digital information."

Given the stated goal to challenge assumptions, Part I of the book appropriately contains three chapters questioning definitions. David Levy begins with an examination of perhaps the most fundamental unit of any library, digital or otherwise: the notion of a "document." After presenting a brief history of the various ways in which information theorists have sought to define documents, he offers his own definition, based on sociologist Bruno Latour's reading of objects as the intersection between the social and the technical. Levy emphasizes the social aspect of documents, and the social values which they are often called upon to support. He concludes that digital documents, rather than bringing about a radical break from the fixity of print material, will necessarily have a continuity with previous documentary form, in part because what we ask of documents as a society requires the objects to have a certain degree of stability. The following two chapters in the section examine the larger concept of the library and its service environment. Catherine C. Marshall looks for the boundaries inherent in digital libraries, boundaries often assumed to be magically transcended when information is created and delivered in electronic form. And Vicki L. O'Day and Bonnie A. Nardi use the metaphor of an ecosystem as a way to examine the notion of digital library service, in order to generate questions for researchers and implementers alike.

Part II turns to the people involved in digital library use. Christine L. Borgman covers the always important (if well-trod) topic of general usability of electronic information sources. Statements such as, "in sum... understanding the behavior, context, practices, expertise, and requirements of the perspective users is essential for improving usability," (p. 99) may have the ring of platitude, and yet this sentiment is probably still not heeded enough in digital library design as practiced. Gary Marchionini, Catherine Plaisant, and Anita Komlodi echo the same need for understanding users, but argue that digital library evaluation must be customized, multi-faceted, and iterative. By presenting three case studies, the chapter authors illustrate that digital library service is a

complex proposition that cannot be adequately evaluated by using any single technique in isolation. Ann Peterson Bishop, et. al. present another case study in which they challenge digital library evaluation to be inclusive of the "concerns of marginalized members of society," as well as "foregrounding social responsibility (p. 164-165)." However, the techniques they describe, such as situated user evaluations in which the user is given some agency as an 'evaluator', could be well-applied to digital libraries serving any audience. In the final chapter of Part II, Clifford Lynch reliably provides some insightful counterpoint, arguing that whatever the benefits of user-centered design might be, the tradition out of which many digital library projects emerge has historically been unlikely to give much weight to such contributions. He writes of the historical, economic, and political tendencies that make libraries inherently conservative, and reminds us that "efforts to integrate user-centered design and socially-grounded engineering of digital libraries must recognize these realities if they are to be relevant within the program of extending and ultimately transforming the academic and research library (p. 212)."

The book's third and final part contains four chapters that are less thematically coherent, but are loosely-tied around concepts of knowledge-creation as supported by digital libraries. Phil Agre contributes a wide-ranging chapter investigating the conceptual implications of considering digital library design in a social context, focusing on the practice of scholarship and the use of electronic information in the practice of democracy. Susan Leigh Star, Geoffrey C. Bowker, and Laura J. Newman present another way of looking at knowledge-creation, using the concept of convergence, the relationship between communities of practice and the information sources that they both create and depend upon for identity. Once again, case studies presented in the chapter demonstrate that social experiences of information are not monolithic, but generate "multiple overlapping information worlds," (p. 252) a challenge to be addressed in digital library design. Nancy A. Van House contributes a chapter discussing her research as a part of the UC Berkeley Digital Library Project. Van House investigated the social practice of digital library users in undertaking "knowledge work," and discusses the ways that digital libraries work both with and against established knowledge work patterns. The final chapter in the book, from Mark A. Spasser, looks at the difficulty of coordinating a large-scale, distributed digital library publishing effort, the Flora of North America Project. Spasser applies social theory to evaluate the strengths and weaknesses of a collaborative publishing system used by the project team.

Viewing the book as a whole, a reader will find several common threads in the chapters of *Digital Library Use*. These include the fact that technology has often overshadowed social practice in digital library design, that digital libraries are complex, heterogeneous social entities that are difficult to comprehend with any singular approach, and that considering the social implications of digital library use generates a great number of questions that have only begun to be answered. That may not hearten practitioners making hard choices about digital library service today, but it should portend a great deal of new and useful knowledge from research to come, for which this book is a useful instigator.

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