

able legality). The discussion of copyright follows this negative cast, giving one a sense of walking on a field of legal land mines. Although both topics are rife with ambiguity and gray areas, this overly cautious treatment may leave the reader feeling less capable of dealing with these important issues rather than feeling more informed and thus empowered.

The final chapter of this section provides a brief overview of twenty-three organizations involved in the exploration of topics relating to digital preservation. This is a useful list of sources for additional information on the continuing research and development of standards as well as some current models used to address digital preservation needs. The organizations listed are very heterogeneous, covering a variety of perspectives, practical concerns, and levels of involvement in the investigation of digital preservation issues.

The usefulness of this book is hindered by its lack of a clear audience. Despite the inclusion of library in the title and references to cultural heritage institutions in the text, Kahn often seems to be addressing the concerns of a corporate audience. This focus is most apparent in equations of system down-time with lost revenue, emphasis on massive disaster situations, and the suggestion of high-cost methods of disaster prevention and response (data mirroring, hot recovery site, counseling for staff, and so on). Although many of these suggestions are of clear merit, they are often unrealistic options for most cultural heritage institutions in terms of both financial and personnel resources.

The amount of information stored in digital form is increasing dramatically, paralleled by an equal increase in the potential for data loss through both short-term disaster and long-term negligence. Deliberate strategies to preserve our increasingly digital output are a vital component of any long-range information management

plan. This work can help provide some guidance on what types of information and documentation will make data/system recovery easier and issues to consider in planning for the long-term retention of digital files. Above all, it will convince the reader of the importance of backing up your data—speaking of which, I think I should go back up my computer now.—*Arwen Hutt (ahutt@utk.edu), University of Tennessee, Knoxville.*

Humanizing Information Technology. By Julian Warner. Lanham, Md.: Scarecrow, 2004. 145p. \$35 paper (ISBN 0-8108-4956-9)

Julian Warner, whose often unique approach to issues involving information science is colored from the palette of the field of economics, presents eight insightful essays providing a humanistic, essentially Marxian perspective on today's information technology. Five of the eight essays have been published elsewhere, but additional material has been added to these in an attempt to promote additional thought and they will surely inspire the debate he invites. Although the Marxian approach as reflected in the essays is distinctive, there are somewhat similar works currently in print—for example, John Seely Brown and Paul Duguid's *The Social Life of Information* (Boston: Harvard Business School, 2000) and Ben Shneiderman's *Leonardo's Laptop* (Cambridge, Mass.: MIT Pr., 2002)—that deal in a very interesting way (and somewhat more accessibly) with the human aspects of information technology. Warner is never an easy read, but the time taken for careful review and examination of these essays will be rewarded with some exceptional insights.

"Humanistic" is an interesting, slightly ambiguous, but little-used adjective intended by Warner to mean, in the context of these essays, something different from the attrib-

utes of those medieval scholars who, in bringing back to prominence the literature and philosophy of the classical period, labeled themselves "humanist" to distinguish themselves from the "divines" of their time. What Warner is trying to point up is that, because we comprehend and learn only with the resources of our own human, "natural" intelligence, advances in technology must necessarily take into account human needs, if those advances are to become truly useful and not merely abstractly admirable.

In the opening chapter, Warner states the basic premise for the work,

. . . an information view of history can be developed that would benefit information science and other communities interested in the informatization of life. For information science, the unreflexiveness of its response to information technology developments can be diminished, and, to other communities, a historically specific but also theoretically informed view of information technologies can be offered (3).

In chapter two, the first of the essays, with the intriguing lead-in to its title, "Organs of the Human Brain, Created by the Human Hand," the concept of "computer as machine" versus "computer as human construction" is broached. Anyone who has ever experienced the exasperation of having a clerk tell you that, in order to get done that which needs doing, the computer requires for you to provide it with some piece of information not then easily to hand will immediately grasp Warner's meaning and point. The machine is nothing without the human instructions that have been programmed into it; its reason for being is its human interface, and if the connection is not successfully made,

then the machine is essentially not worthwhile, if not worthless. Warner expands on this premise, deriving his discussion from themes found in the works of Karl Marx, and applies it to information technologies beyond computers to develop a general theory or view of information technology as a construction whose key attribute is its ultimately humanistic (in the sense described above) nature.

Warner continues his Marxian argument (not to say dialectic) in chapter 3, and he develops a historical perspective of copyright and its evolution as dictated by changes in economic circumstances. In the context of United States history specifically, he identifies the end of the great Western expansion and of seemingly ever-increasing internal markets as the critical points where copyright became essential for American authors, thus bringing about the end of the United States as a (paradoxically-tagged) "copyright haven"—a place where the copyrights of nonresident and foreign authors were not recognized. Warner states, "Significant aspects of the history of copyright in the United States, can, then, be read to suggest that economic and political developments slightly precede and, plausibly, influence information developments" (53). This is not a unique view, of course, and one that is certainly open to some dispute, but Warner articulates the point well.

He continues the historical perspective on information retrieval through several of the subsequent essays. In them he essentially rejects the long-held principle in information retrieval research (which principle doubtless helped to give rise to the giantism traditionally characterizing what were usually seen as the "best" libraries), that it is desirable to retrieve, or at least have available, all the documents on a given subject, in favor of an approach that allows an enhanced ability to explore the universe of documents and to put the reader in a position to be able to

make fully informed choices. In today's world of ever-increasing publication volume no longer constrained by the costs, time restraints, and logistical difficulties of the book-publishing process, the ability to discriminate among, and adjudge the quality and reliability of, documents and information resources is clearly becoming much more important than the simple ability to retrieve all, or great numbers of, the documents on a given subject.

In chapter eight, "'W(h)ither Information Services," Warner discusses the past and likely future developments of the information science discipline itself. His conclusions respecting what he describes as a quasi-global crisis in the library and information science field are both provocative and may possibly even be a little disturbing to a profession that is probably more conservative in its outlook than many of its members are likely to believe to be the case, certainly in regard to the roles of librarians and their relationships to their library's patrons. Warner provides a first-rate literature review on the subject and has included an excellent chart visually summarizing what he describes as the various diachronic and synchronic perspectives or points of view on the subject from 1945 through the 1990s.

An extensive bibliography that should prove useful to the researcher—as well as the more casual reader whose interest may be piqued to read further—is provided, but unfortunately the volume suffers from a less-than-adequate index. Apparently computer-derived, it would surely have benefited from a determined application of those principles of the humanistic approach to information technologies advocated in Warner's highly erudite essays. —Vicki L. Gregory (gregory@luna.cas.usf.edu), School of Library and Information Science, University of South Florida, Tampa.

Historical Aspects of Cataloging and Classification. Ed. Martin D. Joachim. Binghamton, N.Y.: Haworth, 2003. 604p. \$99.95 cloth (ISBN 0-7890-1980-9); \$69.95 paper (ISBN 0-7890-1981-7). Published simultaneously as *Cataloging and Classification Quarterly* 35, no. 1/2 and 3/4.

As the editor describes it, this collection "considers the historical aspects of cataloging and classification throughout the world and throughout the centuries" (1). As a result of this extensive charge, a broad variety of topics relating to cataloging and classification are examined at both general and specific levels of focus.

The book itself includes a brief introduction by the editor, twenty-seven articles divided into three major sections (general works on cataloging rules, individual countries or regions, and special formats or topics), and an index. The articles average twenty pages in length, the exception to this being the historical account on the development of law classification schedules, which weighs in at about eighty pages (a significant portion being citations and appendices). About half of the articles contain endnote references, and the other half include bibliographies, both useful for further exploration of the topics covered.

The authorship of this book is very diverse, including contributions from ten countries and all six inhabited continents. The majority of contributors are practicing librarians, primarily from academia but with a fair number from state and national libraries and one contribution from a law librarian. A little fewer than half the authors are library educators, and the rest are either retired, students, or in fields outside librarianship.

The first section is described as dealing with general works on cataloging rules, and is the shortest part of the book, containing only three chapters. The first two articles focus on the