

have taken a course in collection development, though this is an unjustified assumption since collection development is seldom a required course. (In fact, librarians without a collection development course may be the best market for this book.) Similarly, the long section on written collection development policies neglects to prepare the reader for the fact that many libraries of all types do not have useable, current policies. In both these areas, I would have expected Johnson to provide some basic statistics as she does so well for many other collection development topics.

Overall, I recommend this book highly for present and future academic librarians, particularly those in large libraries, who wish to learn the fundamentals of collection development. Experienced collection development librarians could profit from the summary of recent developments and research and also from the extensive bibliographies. Public, school, and special librarians, on the other hand, may find large portions to be irrelevant to their collection development activities and would need supplemental readings on important topics such as intellectual freedom, community analysis, and outreach.—*Robert P. Holley (aa3805@wayne.edu), Wayne State University Library and Information Science Program, Detroit, Mich.*

Protecting Your Library's Digital Resources: The Essential Guide to Planning and Preservation. By Miriam B. Kahn. Chicago: ALA, 2004. 104p. \$40; ALA members, \$35 (ISBN 0-8389-0873-X)

Most library professionals have been dealing with computers and digital technologies long enough to have run into personal cases of a data disaster: a disk that's mysteriously unreadable; a corrupted file; a file lost because of a system crash or an obsolete file format. As a profession and a society we are increasingly dependent

upon computers for both individual daily work and management of institutional data. We entrust our valuable intellectual resources to digital storage systems, and therefore we must address how this investment can be safeguarded. Understandably, the issue of digital preservation is currently an important area of research within cultural heritage institutions as well as the larger information technology community. Although there is consensus on some aspects of what is needed for digital preservation, it is an area in the early stages of development with many unanswered questions and undecided standards. An authoritative, cohesive digital preservation program is probably still several years in the future. In the meantime, information creators must use what guidance is available to insure the safety of their data, both in day-to-day operations and long-term access.

Protecting Your Library's Digital Resources is an attempt to provide librarians and other cultural heritage institutions with "a practical 'how-to' guide to plan for the future of their data" (vii). To do this Kahn brings together two sides of the data protection issue—disaster recovery and digital preservation—and divides the book into two related sections. Section 1 addresses the issues relating to ensuring short-term safety of resources, and Section 2 looks at factors affecting long-term preservation. The final chapter of the book consists of checklists that can be used to address the issues raised in the two main sections.

Kahn begins chapter 1 by discussing some of the most common causes of data and operations loss, including viruses, systems crashes, and power or telecommunications outages. She uses these situations to emphasize the importance of data back-ups, both of personal and of network files. Despite emphasizing the importance of individual backup of personal files, Kahn does not provide any practical suggestions for encouraging this type

of behavior within an organization. She goes on to make the recommendation that whichever backup method is being used, it should be tested to verify that it works as expected.

Chapters 2 through 5 primarily deal with the creation of a disaster response plan. Kahn discusses the personnel roles needed during recovery and the necessity of setting priorities in the recovery effort. The importance of clear and thorough documentation is addressed, as is the desirability of testing the disaster recovery plan. Although Kahn recognizes that the "total loss of equipment or building" (24) is the least common disaster, many of her suggestions seem to focus on precisely this type of situation. Despite this focus on an unlikely eventuality, these chapters raise some important questions to consider when developing a disaster response plan.

In the smaller second section covering the importance of planning for long-term preservation of digital files, Kahn outlines issues that need to be considered before beginning a digitization project and notes that digitization projects are much more than simply scanning. She points out that it is important to consider the source of funding for maintenance after seed or grant money runs out. Many of the issues raised are important, but this brief treatment provides a bare overview of the factors that contribute to good digital project planning. In pursuing such a project, there are many works that will provide a more systematic and thorough guide for project planning and development.

Kahn goes on to provide an overview of techniques for retaining digital files (copying, reformatting, migration, and emulation). Her treatment of the subject provides a basic introduction to the options and issues involved but leaves one with the sense that there is no correct method to choose (data loss of some sort being inherent in every choice except emulation, which is deemed of question-

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,