

Reviews

BARBARA L. CRAIG, editor

Electronic Records in the New Millennium: Managing Documents for Business and Government. A Window to the Future: Papers from a Conference on Managing Electronic Information. 20-24 June 1994. Edited by Elizabeth Shepherd. 66 pp. ISBN: 0-902090-03-8. Video tape (*Part I: "The Management Perspective"* 20 minutes; *Part II: "The Professional Perspective"* 55 minutes). *Teaching Notes and Discussion Guidelines.* By Richard Barry and Anne Thurston. 27 pp. London: School of Library, Archive, and Information Studies, University College, London, 1995.

In 1994, the School of Library, Archive, and Information Studies (SLAIS) of University College, London, observed the seventy-fifth anniversary of its foundation as some institutions do and more should: not by looking back, but by looking forward. The school and those associated with it might perhaps have focused on the traditional body of archival knowledge and practice, but they chose instead to examine the nature of electronic records, the central role these have come to play in modern life, and what records professionals and their administrative superiors must do to ensure the usefulness of these records into the indefinite future. The lasting products of this anniversary celebration are a published edition of some of the papers presented at a week-long conference, together with a videotape and discussion guide exploring the important issues which were raised. Even though the archival community has, in recent years, come to be more or less at home with the automated control of traditional archival records, it is, as yet, far less comfortable with archival records which are themselves in electronic format. The questions considered here will help spread awareness of those issues.

The slender volume of published papers begins with two general discussions of principles involving electronic records, then presents analyses of three case studies from the Netherlands, Canada, and Sweden. Richard Barry explores the terminology that shapes our thinking on this subject: just exactly what is an electronic record? The question seems simple enough, but ask the Justice Department, the U.S. National Archives, and the platoons of lawyers employed by them in the recent struggles over presidential e-mail, and you will quickly realize that it is not a simple question at all. Charles Dollar then continues the admirable and important work, begun in his *Archival Theory and Information Technologies* (1992), of connecting traditional archival theory to the world of electronic records. His explorations of what he calls a "diplomacy of digital documents" and the redefinition of preservation in the electronic age (it's all about ongoing access to information, not the reverential treatment of physical artifacts) will be particularly useful. Archivists who are trying to figure out how their customary understandings and approaches apply to the new formats will find thoughtful connections here. To many, his conclusions will be comforting and optimistic: what we know from paper records about provenance, context, and all the

rest of archival theory means at least as much, and maybe more, in an electronic environment. This will be less satisfactory to absolutists who argue, on the one hand, that computer systems simply have to conform to the law laid down by Jenkinson and Schellenberg (because, after all, it is the law) or, on the other, that familiar archival theory is either irrelevant or counterproductive in the digital world. There is not an answer here, and we should not be looking for one.

The three case studies which follow the articles by Barry and Dollar achieve more mixed success. John McDonald's brief discussion of a joint project involving the National Archives of Canada and a software company to study the requirements of office systems technology is a little disappointing. Its brevity is unfortunate not merely because it concerns the United States' nearest archival neighbor, but also because, in the relentlessly market-driven world of automation, the connections between archives and the private sector producing the hardware and software are critical. We could have learned more from a fuller presentation. Claes Granstrom, by contrast, carefully sets out the legal and legislative environment in Sweden, describing the often conflicting provisions of that nation's archives act, secrecy act, and data act. He relates these statutes to larger societal values and to the changes in that country, as elsewhere in Europe, in response to the reinvigorated European Union. His nation's data act (1973), for example, may not be perfect, as he readily admits, but at least Sweden has such an act. North American archivists, even those who think they do not have to pay attention to such things because they do not work in public sector archives, can learn much from this comparative example.

The videotape and its accompanying guide to discussion are useful, and SLAIS should be commended for making this information available in these formats. The video is divided into two distinct, if overlapping, sections: the first for use with archival and records resource allocators, and the second with groups of archives and records professionals, including students. The results are only moderately successful. The video itself is not, one must admit, great television: lots of talking heads and rudimentary graphics limit its visceral appeal. I would be wary of showing the first part to my superiors, afraid of its confirming their predisposition that records are a disagreeable problem best not thought about, rather than prodding them into action. Still, the intellectual territory which the video covers is unexceptionable. The speakers present reasonably familiar arguments about the importance of records preservation in the electronic environment. "We must begin immediately to value records professionals as highly as we do computer analysts," the narrator says at the end of the management perspectives section. Well, sure, but the tricky part is in how we get from here, where such value has yet to be accorded by the boss, to there.

The second section of the tape, aimed at records professionals and divided into seven units, is particularly suitable for classroom use with archives beginners and students, though instructors would be advised to use it in accordance with their individual pedagogical tastes. I myself would not show it straight through, even though it takes less than an hour, but selected portions of it could be used to generate lively discussion of important issues. In Unit 1, for instance, Charles Dollar considers the critical matter of technological obsolescence, addressing an underlying question that students (and others, too, for that matter) always have: if we want to ensure access to electronic records, must we become hardware and software museums as well as archives? In Unit 3, John McDonald helpfully explores the nexus between records systems and what is actually going on in working offices these days, finding yet more compelling reasons for archivists to move away from their traditional custodial role. Peter Walters of the Netherlands provides a good overview

of the archival issues of appraisal in Unit 4, offering some good comparisons between electronic and hard-copy records. Claes Granstrom's outline of legal implications in Unit 5 is as cogent as his presentation in the volume of published papers. A publication accompanying the videotape offers discussion questions, suggestions for student research papers, a basic bibliography, and even sample questions for use on examinations. These are all very much on the mark and, combined with instructors' own thoughts and emphases, they can help make the most of the video.

This set is a useful introduction to the range of issues surrounding electronic records, and archivists of all types should take advantage of it. For too long the archival world has seemed divided into two camps over what to do about this "new stuff." There are those who are out front with the technology, actively thinking about electronic records and their place in the archives and records continuum. There are also those who fear that they don't understand these issues and never will; many secretly hope that these new kinds of records will simply go away and leave them with their familiar, comfortable paper. *Electronic Records in the New Millennium* will help bring those two groups together.

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Playing for Keeps: The Proceedings of an Electronic Records Management Conference hosted by the Australian Archives, Canberra, Australia, 8-10 November 1994. Edited by Stephen Yorke. Australian Archives, Canberra, 1995. x, 365 pp. Aus\$24.95. ISBN: 0-69222-69-54.

The literature on electronic records continues to expand, and a growing proportion now emanates from Australia. This volume is the most substantial Australian contribution to date. The conference, the proceedings of which this volume represents, was an international gathering of archivists, records managers, and related professionals, with delegates from ten countries, and featured many speakers who are leading authorities on the management of electronic records. While the visiting speakers were all present or former members of the archives and records management community, the Australian contributors included a number from other disciplines, including law, statistics, information technology, and librarianship.

The volume is divided into three parts, as the conference was. In the first part, Margaret Hedstrom gives an account of the evolution of the electronic records program in New York State. Two papers by Kenneth Thibodeau describe relevant activities of NARA and the application of the techniques of description to electronic records. Eddie Higgs discusses questions of access, and also analyzes work done in Europe and more particularly in the United Kingdom, where his experience suggests that achievements in the preservation of databases have not been matched in the area of textual records. Hans Hofman analyzes the background of the electronic records issues, succinctly defining the characteristic relationships between government agencies and archives, and describes the technical and organizational infrastructures identified as requirements in the Netherlands. Finally, two papers by John McDonald consider the Canadian response to the breakdown of established office procedures, and the work of the International Council on Archives' committee on electronic records.

The second day of the conference focused on the Australian scene. Stephen Ellis and Steve Stuckey give an account of the work undertaken by the Australian Archives, its current concerns, and technical policies. In another paper with a similar theme, Carole

Ellis describes the measures adopted by the State Archives of Western Australia. A paper by Madeline Campbell on the implications of Freedom of Information legislation is set in the Australian context but discusses issues of wider validity, and supports the statement made by David Bearman that freedom of information officers are valuable allies of the electronic records manager. Other papers consider the work done on preserving electronic information in the Australian library field, the use of 'data archives' in England and Australia, and recent initiatives to ensure the maintenance of access to electronic data at the Australian Geological Survey Organisation.

The third part of the proceedings is entitled "Technology," but few of the speakers on the third day were willing to confine their remarks to technological issues. Most took the line of Brian Pink, whose two papers argue that "managing electronic records has very little to do with technology but a lot to do with management issues from a corporate perspective." Thus David Bearman's presentation, which he describes as "the thirty-minute version...of his two-week workshop," touches on a range of issues, few of which are wholly technological. In a submitted paper, Bearman places the electronic records debate in a historical context, discussing the relationship of record-keeping practices at the end of the nineteenth century with those of today, in terms both of technological change and of organizational culture.

Like other recent publications on electronic records, *Playing for Keeps* reflects increased professional awareness of the breadth of issues involved and emphasizes that these are no longer purely, or even primarily, concerned with preservation. The contributors to this volume offer a variety of perspectives, from many parts of the world, on such issues as creation, identification, interpretation, appraisal, maintenance, custody, and public access; their papers also indicate that in some areas there are signs of an emerging international consensus. These authors also touch on many of the wider questions facing the profession which the electronic records debate has brought to the fore: the definition of recordkeeping systems and their relationship to corporate functions; the distinction between records and data and the relationship between records management and information management; and the purposes and priorities of records preservation, in terms on the one hand of accountability and protection of civil rights, and on the other of cultural values and the availability of historical information for research. As might be expected, consensus on these subjects is less apparent.

The problem for the reader is that discussion of all these pertinent issues is scattered throughout the volume; the editor has provided no easy means of access, and those interested in one or more specific topics have little option but to read the volume from cover to cover. The contents list is not helpful, as there are several papers with very similar titles, and in any case titles such as "Information Management Strategic Planning" and "Integrated Information Management" give little idea of the contents of the paper. In some cases, papers with apparently specific titles actually cover a variety of issues. Some papers are prefaced by abstracts, others are not; and the volume has no index. A lot of effort has gone into the design of the publication, which has an attractive appearance, but much less has gone into providing effective means of information retrieval. Of course, these are all common problems regarding volumes of conference proceedings, but as information professionals, we should be able to do better than this.

No one will be surprised to learn that *Playing for Keeps* does not provide definitive answers to the problems associated with electronic records, but this volume does indicate that many conceptual solutions are now beginning to emerge. At the same time, it is clear that we still have a long way to go: the practical issues involved in implementing these

solutions are still largely unresolved, and many of the ideas put forward at the conference were based on the premise that electronic records are to be managed within a large public sector institution. Only one speaker (Higgs) explored in any depth the question of whether the solutions being developed in the public sector are applicable in, say, business or voluntary organizations, where notions of accountability are very different. How should an archivist working alone in a small organization respond to the challenge of electronic records? What are the implications for archives which function by acquiring gifts or deposits from outside the parent institution? At present such questions remain unanswered.

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Managing Change in the Non-profit Sector: Lessons from the Evolution of Five Independent Research Libraries. Jed I. Bergman. San Francisco: Jossey-Bass, 1996. xxxiii, 249 pp. Bibliography. Indexes. Appendices. \$30.95. ISBN 0-7879-0138-5.

The New-York Historical Society: Lessons from One Nonprofit's Long Struggle for Survival. Kevin M. Guthrie. San Francisco: Jossey-Bass, 1996. xxi, 246 pp. Bibliography. Indexes. Appendices. \$30.95. ISBN 0-7879-0187-3. ©

In his concluding chapter of *Cultural History and Material Culture: Everyday Life, Landscapes, Museums*, Thomas J. Schlereth argues that history museums have gone through three eras: the Age of Collecting (1876-1948), the Age of Description (1948-1965), and the Age of Analysis (1965 - present). Archival institutions have also gone through similar stages, although in different time periods. The two books included in this review trace the evolution of long-standing archival institutions that have had to deal with the major revolutions brought about by the changes in American society and archival practice, standards, and expectations throughout these eras. Bergman explores the history, development, and reactions to changes, both internal and external, experienced by five independent research libraries: the Huntington Library, Art Collections and Botanical Gardens in San Marino, California; the Newberry Library in Chicago; the Pierpont Morgan in New York City; the American Antiquarian Society in Worcester, Massachusetts; and the Folger Shakespeare Library in Washington, D.C. Guthrie's book focuses solely on the tumultuous history of the New-York Historical Society.

Because management literature rarely focuses on libraries or archives as case studies even when examining the non-profit sector, these works are unusual. It should also be noted that both Bergman and Guthrie are associated with the Andrew W. Mellon Foundation, which has been a major funding source for cultural and archival institutions. To some extent, the Mellon Foundation's continuing interest in archival institutions helped to make these two works possible. Bergman was a research associate at the Andrew W. Mellon Foundation between 1992 and 1994. Guthrie is executive director of JSTOR, an independent non-profit organization recently established with the financial assistance of the Mellon Foundation to help the scholarly community make better use of information technology.

Change, along with death and taxes, is one of the constants in life. Bergman discusses a number of changes in these five independent research libraries: changes in the vision and mission, the nature and expectations of being a trustee, collecting policies, buildings, and the relationship with researchers as American archival culture moved towards greater openness of collections. Bergman's primary focus, however, is on how financial manage-

ment has changed, often in response to these other needs and trends. While few archives may have the endowments of these institutions, and relatively few may engage in acquisitions or program planning at the same level, there are still lessons here concerning financial management and administrative decision-making for all archives.

Bergman divides his book into two parts. The first part is a brief presentation of the histories of the organizations under consideration, with the focus on financial management. The second section compares and contrasts the financial situations of these institutions and presents various strategies for coping with financial needs (the hiring of a development officer, grant applications, and changes in and professionalization of financial management procedures). This second section can be a bit rough going for the mathematically challenged, but archival managers in large- to medium-sized institutions will learn about financial management (perhaps more about the problems faced by parent institutions) and about the choices faced in sustaining growth. For example, Bergman goes into detail about the importance of maintaining purchasing power as opposed to maintaining book value of an endowment. This section also causes the reader to think about the skill needed to balance legitimate demands for funds within the reality of limited resources (e.g., improve collections through purchases or undertake building/renovations, or computerization). This is a challenge faced on some scale by all archivists.

Bergman's work does seem to reflect a lack of knowledge concerning archival and library procedures and functions. At one point, he implies that there is no way to achieve better returns in these organizations because there are no areas which could function more effectively. Although archives and rare book libraries will never reap the benefits of copy cataloging enjoyed by regular libraries, I do not think that archivists should dismiss the idea of reengineering archival functions and processes. In fact, in the area of organization, more systematization in processing and the development of much more powerful access tools have been implemented in the last decade.

Several other trends are discussed by Bergman. These include the larger societal movement toward more open, equitable access, accompanied by the rise of public programming in archival institutions; the professionalization of libraries and archives (in terms of archival expertise, in the hiring of specific development personnel, and in the separation of administrative and collections staff); the evolution of trustees from an interest group to one of financial supporters; and the role of the National Endowment of the Humanities (as well as other granting agencies) in filling the gap between endowment funds, income from donations and other services, and expenditures and the promotion of new initiatives. Bergman's discussion of the roles of boards and trustees is particularly interesting and thought-provoking for all archives with any type of support group that is thinking about how it relates to the organization.

Guthrie traces the history and evolution of the New-York Historical Society from 1804 to 1994. This extended case study provides a lesson for all archival programs. He stresses the necessity of balancing current and long-term administrative and programmatic goals. This is a ubiquitous challenge for leaders in all types of historical institutions. Guthrie sees his discussion as being applicable to all historical institutions with valuable fixed assets, e.g., institutions that maintain valuable collections of art, artifacts, and library materials, institutions with high fixed operating costs, and institutions that do not generate high levels of earned income. Although Guthrie concentrates on the financial problems, the impact of three other issues is key to his argument: professionalization, American culture, and deaccessioning.

Both Bergman and Guthrie demonstrate that management skills are just as vital as archival, historical, or museum skills in administering a historical institution. In the case of the New-York Historical Society, it is interesting to see how an organization with a long-term collecting view can have such a presentist view in administration and operations. This highlights the lack of basic business training and the inability of administrators, largely trained in history, to use their analytical skills in a management situation. The New York case study reinforces recent attempts to increase the management skills of archivists.

The second issue Guthrie raises is how the larger culture perceives historical institutions and how historical institutions can or should respond to contemporary culture in terms of their mission. In the case of the New-York Historical Society, Guthrie demonstrates how an unfocused collecting mission mortally wounded the institution. Yet, when the Society moved to change the mission to one with a greater focus on education, the financial resources and the public support for change were not there. In the words of former New-York Historical Society board member and director Barbara Debs, "By stressing our role as an educational institution, it requires us to take an active, outreaching stance toward the public rather than merely accumulating material....It redefines the essence of the Society's being and offers us the challenge and the opportunity of demonstrating that an institution founded by a small group of white gentlemen, long viewed as a bastion of privilege,...can remake itself into an open, expansive and inclusive actor of value and vitality in a heterogeneous society" (p. 96). As Guthrie shows, reengineering an institution is difficult, and in the case of New-York Historical Society this remains an unfulfilled goal.

Guthrie discusses at length the ambiguous role of cultural resources as a "public good." Thus, while historical institutions have assets, these are not assets in a traditional or for-profit sense because these do not generate income in the same way. Therefore, in order to survive, it is essential that cultural institutions create or tie into some broader public or cultural interest in maintaining historical resources. But, as archivists know, the public constituency which values historical resources has always been small and the task of convincing others that maintaining these resources as a public good is difficult. This was a particularly difficult sales task for the New-York Historical Society which had a reputation for arrogance. As Debs asks, "Can a private...underfunded institution with enormous value to the public continue to serve that public if entirely privately funded?" (p. 97) This clash of cultures between public and private and the struggle for control is also evident in the failed attempts to merge the New-York Historical Society with other entities, both private and public, in the past few years.

Finally, Guthrie raises an important question concerning deaccessioning—"If it is acceptable to trade one painting for another, why is it unacceptable to trade one capital good, a painting, for another capital good?" (p. 156) Deaccessioning has been a volatile issue in the archival and museum communities for different reasons. For archivists, the deaccessioning issue ties in with the discussion of mission and the history of collecting at the New-York Historical Society.

Interestingly, neither Bergman nor Guthrie cite many primary sources. One wonders how good the archives of these institutions are and if their archives are open to the public. The sources employed by Bergman are largely part of the public record, histories, and annual reports. Guthrie relies on the same types of sources and extensive interviews with individuals involved in the New-York Historical Society. One wonders what more archival research into the boards' or trustees' minutes, for example, would have yielded.

Still, these two works are the best case studies now available on archival institutions. Although one might wish for a better grasp of archival functions, the managerial critique of these programs provides a much more serious look at archival programs than is available elsewhere. It is also good to remember when reading these books that there are archival institutions that have handled change and succeeded in reengineering at least part of their programs, albeit these are institutions that are saddled with less history than the ones treated in these books. Although some of the financial explanations are technical, they are accessible. One or more of these case studies could easily be incorporated into a graduate archives class discussion on management or used in an advanced management seminar.

Archival institutions face constant changes. These books are not only good reads, but will help archival managers of any size institution reflect on their own programs and think about the changes which are necessary for survival.

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Frank Lloyd Wright: Presentation and Conceptual Drawings. Venice, Calif.: Luna Imaging Inc., 1995. 5 CD-ROM discs + accompanying materials. \$1,500.00 ISBN: 0-19-509767-X.

Produced by Luna Imaging, *Frank Lloyd Wright: Presentation and Conceptual Drawings* consists of five CD-ROM discs, the Insight software installation kit, a printed Introduction (106 pp.) and a User's Guide (87 pp.). The product makes available almost five thousand drawings held by the Frank Lloyd Wright Archives, and its value for researchers who use such material is obvious. Built using Insight software, the product is quite easy to use overall, although users with low-end computer equipment may find it frustrating. The equipment used for reviewing the product was an IBM-PC 486DX2 66MHz, with 16 MB of RAM running under Windows 3.11, a 4x CD-ROM drive, and a 14-inch color monitor.

Users create groups of thumbnails of the drawings in a workspace for this purpose (called the Group Display), then consult the images in detail. Groups can be saved for further consultation at another time. In addition, many types of manipulation and re-arranging of groups are available through various commands. Since the Insight software has no provision for deleting a Group Display, the File Manager in Windows must be used for this purpose. Another workspace (called the Data Window) offers "Description" information, "Data Fields," and "File Fields." The "Description" view provides art-historical and other information in paragraph form, the "Data Fields" view provides identifying information, and the "File Fields" view provides technical information about the file. Data fields include Client, Drawing, Title, Medium, Height, and so on. File fields include File name, Path name, File type, etc.

Double-clicking on a thumbnail image in the Group Display takes the user to the Image Workspace, where full images are displayed, accompanied by an Image Toolbar which allows the user to control how the plans are viewed. The toolbar allows users to move, resize, and crop images, remove them from the window, change the brightness and contrast, zoom, and pan. As a navigational and orientation aid, the Toolbar displays a small icon of the image (called a "miniature thumbnail") with a rectangle around it. When the magnifying glass tool is chosen and the image becomes too large for the display window, the rectangle becomes small and surrounds the portion of the image displayed on the screen in the small icon. Although this feature is quite helpful, the user cannot

scroll around the image from within the picture window as might be expected, but only by moving the rectangle within the small icon in the toolbar.

Once the Maximize button has been used to display the image as large as the screen will permit, the magnifying glass tool permits only a single level of magnification. When magnification of a detail is initiated, the computer re-calculates the chosen section of the drawing as best it can, with the accompanying lower resolution. However, this will often still be adequate for obtaining the information the user was hoping to get by magnifying a detail. To zoom back out, the user must point to the magnifying glass in the toolbar again, then hold the shift key down while clicking on the tool's icon. When the cursor returns to the image window, a minus sign replaces the plus sign at the center of the magnifying glass. This routine is a bit cumbersome as the tool is undoubtedly one of the most heavily solicited in the toolbar. A more economical design would have permitted the user to shift-click from inside the picture window.

Similarly, the Maximize button is accompanied by a Remove button which permits the user to eliminate the enlarged image from the screen. In many situations it would be better if users could specify, as an optional parameter, that every time they return to the thumbnail group space, the enlarged image they have just consulted would automatically disappear. As it is, the user must click the Return button to get back to the thumbnail workspace, click on the next thumbnail chosen for viewing, and finally be presented with the image they have just finished with while the system fetches the one they have asked to see next. This is a bit disconcerting, as users will probably keep thinking they have made a mistake until they get into the habit of clicking the button to eliminate the image they have just finished with before returning to the thumbnail space to select the next one. The system designers could rightly argue that viewers may wish to keep the previous enlargement onscreen, but provision other than a specific intervention each time should also be made for those who do not. In fairness, it must be noted that it is possible to select multiple thumbnails for enlarging at once, in which case they are cascaded in the Image Workspace, on condition that enough memory and disk space are available in the hardware configuration.

Overall, the search engine is efficient and for most searches will prove adequate. This is assured by inverted indexes for most important fields, and by lookup tables which do double duty as authority files. For straightforward searches such as "title equals something selected from the lookup table presented when the title field is chosen," the response is instantaneous and the user can get on with viewing the selection. However, a few weaknesses in the system should be noted. When certain fields or operators are specified, searches can take a long time because not all the fields are indexed. A search for "Description contains 'church' " took 29 minutes and 27 seconds to produce the result in the computer configuration used to review the product. Other than a running indicator of how many records have been searched and a translation into the percentage of the database this represents, no results are given en route. Since no indication is provided of how many hits have occurred so far, users who are tired of waiting do not have the option of deciding that partial results will do, and stopping the search to get on with their work. Searching by dates is particularly frustrating. Even a search statement such as "Project start date equals 1955" commands a sequential search. In addition, if the Equals operator is used and the value data is longer than the 30-character limit, the value will not be found. The onus is placed on the user to specify the Contains operator in cases like this, with the accompanying cost in waiting time.

The search editing window is quite straightforward. Users click on a field name, an operator, and a value from a lookup table (these are called Field List, Verb List, and Data Values Area, respectively), then the Search button. When there is no lookup table, a value must be typed in an adjoining window instead of the one in which the search statement is being constructed. Once the results are available, the user must close the search module in order to view the resulting pictures. It would be helpful if the search window could remain open so that the users could compare the results they are seeing with the statement they have used. A widely used convention in micro-computing is to hit the Return or Enter button to execute a search statement once it is formulated. With this product, doing so starts the search, but releasing the button has the same effect as clicking the Cancel button, so users of the product are required to get in the habit of clicking the Search button as the only means of executing their search (unless they are prepared to hold the Return or Enter button down for half an hour).

An "inscription" field containing textual information, such as the relevant notes by Frank Lloyd Wright, may also be available for searching. A very useful improvement to the product would be to include as searchable data a transcription of the legend information that appears on the drawings. One imagines such information to be an important memory trigger for many users and thus a useful search approach. However, *Frank Lloyd Wright: Presentation and Conceptual Drawings* does not provide this information in searchable form; indeed, users who wish to consult it must magnify and scroll the image in order to retrieve it. Even then, it is often blurred, although it can usually be decoded. To be fair, it should be noted that this information is not necessarily very clear on the original document, but that seems to be another good reason to transcribe it for the benefit of users of the product.

The Introduction and the User's Guide for the product are clear, well-written, straightforward, and informative. Users get the impression that the documentation was included in the original plans for the product, and not just an afterthought. Useful information on the making of the product is provided, including a discussion of conformity to standards for descriptive vocabulary and helpful technical information about the scanning process used, the digital formats, and the derivative images. These well-considered manuals are a refreshing change from the frustrating, hastily-produced software documentation of which most of us have been the victim at one time or another. The Introduction does not have an index (it does not need one), and the one in the User's Guide is quite useful, as is the table of contents. The material is logically organized and clearly presented, so that instructions for performing various operations are easy to understand.

Despite the weaknesses in the interface and the search engine, *Frank Lloyd Wright: Presentation and Conceptual Drawings* will no doubt prove to be very useful to serious researchers and scholars of Wright's work. Those with high-end computer equipment can look forward to having a good representation of the virtually complete Frank Lloyd Wright Archives available on their shelf. This cannot in any way be considered a consumer product, and those with only a passing interest in the work of Frank Lloyd Wright will be more interested in Microsoft's *The Ultimate Frank Lloyd Wright*. For professionals who don't need the complete archives, Luna Imaging has also produced *The Houses of Frank Lloyd Wright*, another CD-ROM product. Luna Imaging and its partners in producing *Frank Lloyd Wright: Presentation and Conceptual Drawings* are to be commended for the important groundwork they have done in creating this product. With improvements in the user interface as well as the ongoing development of high-performance hardware charac-

teristic of the computer industry, researchers can look forward to owning very usable electronic representations of other important archives.

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Working with Folk Materials in New York. Edited by John W. Suter. Ithaca, N.Y.: New York Folklore Society, 1994. Available through the Society of American Archivists, \$31.00 for members, \$36.00 for nonmembers.

As part of an ambitious project to identify and preserve folklore and folklife documentation in New York State, the New York Folklore Society (NYFS), with funding from the New York State Archives and Records Administration's Documentary Heritage Program, has produced this excellent workbook for archivists and folklorists, one that can serve as a model for similar state and regional interdisciplinary efforts.

The Folk Archives Project, begun in 1991 with the services of Frederick J. Stielow, consulting archivist, surveyed thirteen hundred New York repositories. It reported that, although folklore and folklife collections created by professionals working in public, private, and academic institutions had undoubted permanent historical value, many of the ninety reporting repositories had little awareness of this value and negligible knowledge or skill in arranging, describing, or preserving them. A subsequent conference among folklorists and archivists concluded that folklorists themselves could learn how to manage their own materials for deposit in archives, and that archivists could become far more aware of the potential uses of the material. This workbook is a step toward linking those interests.

The workbook is divided into ten sections, beginning with a lucid introduction by John W. Suter, executive director of NYFS, illustrating the record types and purposes of folklore materials—primarily audiovisual materials but also field notes, performance documentation, exhibit catalogs, newsletters and clippings, and student papers—and guiding the reader through the workbook. Ellen McHale, former president of NYFS, gives us an equally well written and useful chapter on folklore collecting in the nineteenth and twentieth centuries, the nature of public and private folklore projects and thus the nature of their documentation, the methodology of folklorists, and the uses of folklore material. About the last, she says: "During the past decade, folklorists working for non-profit and governmental agencies have been surveying and extensively documenting the folklore and folklife of the state....scores of collections exist in universities, libraries, historical societies, museums and other organizations engaged in folk arts programming, and in...private hands as well....Scholars in many disciplines—folklore, history, ethnomusicology, anthropology, sociology, literature and linguistics, to name a few—will find a wealth of material in these collections."

In the third section, Kathleen Roe lays out the fundamentals of archives management as a guide to both folklorists and institutions without professional archivists on staff, suggesting in particular the variations in arrangement and description with which archivists and folklorists must come to terms. Finally, she notes, that "the ultimate purpose of archives is their use." Because of their connections with the everyday lives of ordinary people, the range of cultural backgrounds they represent and, often, their orientation to arts and cultural expression, folklore collections offer new and special opportunities and responsibilities to archival repositories to reach and serve their communities more broadly.

Subsequent chapters, with contributions from folklorists Suter, McHale, and Bruce Buckley; archivists Roe, James Corsaro, and David Carmicheal; and Stielow and Susan O'Brien, archivists with folklore backgrounds, speak to the principles and terms employed by archivists and folklorists, resources available in each field, and the management of folk materials. Basic sample forms are useful to folklorists in organizing their own material for archival deposit. Also included are glossaries of terms used in both archives and folklore and collections of thoroughly readable articles written by folklorists and archivists on their professional habits.

The workbook is impressive and practical. But even more impressive is the concept that produced it. The idea that two professions relatively unfamiliar to each other should, over a span of five years, recognize the value of each to the other and to the public, then create a series of products that includes this workbook, conferences, and consultancies is significant. Although formal interdisciplinary partnerships like this one have been rare among archivists, they are, in fact, one of the most efficient ways to encourage public interest and advance wider archival use and advocacy. The New York Folklore Society, the New York State Archives, and the working professionals in both fields deserve applause for their good planning, diligence, and foresight. The Folk Archives Project is a model not to be missed for other fields.

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The Art and Architecture Thesaurus. 2nd ed. Toni Petersen, Director. New York: Published on behalf of the Getty Art History Information Program by Oxford University Press, 1994. 5 volumes. \$375.00. ISBN: 0-19508-75-69. ∞

Guide to Indexing and Cataloging with the Art and Architecture Thesaurus. Edited by Toni Petersen and Patricia J. Barnett. New York: Published on behalf of the Getty Art History Information Program by Oxford University Press, 1994. xvi, 397 pp. \$35.00. ISBN: 0-19508-88-08.

This edition of *The Art and Architecture Thesaurus*, generally referred to as the "AAT," comprises five volumes, plus a user guide. The thesaurus is a tightly organized universe of descriptive terms intended for indexing and cataloging objects, images, and textual materials in museums, archives, libraries, historical societies, visual resources collections, and hybrids of these. While its greatest strengths are in the fine and decorative arts and architecture, it also includes a multitude of terms for use by archives and special collections. The thesaurus project began in 1980, when its directors saw that use of an authorized list of access points—the AAT—could vastly improve the efficiency and comprehensiveness of searching through files and catalogs. Now, in 1996, as files and databases grow and intersect, the most precise on-line searching is still best attained by controlled vocabulary as opposed to natural language and other less structured approaches.

Having seen the need for controlled vocabulary, the AAT established two guiding principles: it should be hierarchically structured, and it should be based on the collaboration of scholars in the field. Together, these principles give the AAT its unique place in the field of indexing thesauri. Beyond these two sound fundamentals, the AAT's extent is its most obvious and compelling feature. The vocabulary comprises terms ranging from very general to very specific, ancient to modern: a total of 24,496 (as of 1994) descriptors, almost double the 1990 count; and 87,499 terms, including guide and lead-in terms, are

found in the AAT's second edition. Furthermore, 1,812 UK descriptors, alternate terms, and lead-in terms have been added, with more to come.

The AAT can serve a variety of institutional needs. Because the terms range so widely, from very general to very specific as well as across subject areas, users at all levels can find applicable terms. AAT vocabulary describes objects, spaces, and people, as well as tools, styles, and colors. While terms like Stagecoaches, Measuring cups, Army bases, Walled gardens, and Stenographers are here, the thesaurus includes more specialized art history and architecture terms, such as Crown Milano glass, Date hallmarks, Citron yellow, Coachbuilders' Framing hammers, Double nailing, Drawings, Cartouche, Renaissance, and Tempera painting. Of the five volumes, two contain introductory material and the hierarchical arrangement of descriptors, and three contain the terms presented alphabetically. In the hierarchical display, the seven "facets" or main categories are shown: Physical Attributes, Styles and Periods, Agents, Activities, Objects, and Associated Concepts. These seven facets are comprised of thirty-three subcategories, called "hierarchies," such as Building Types, Documents, and Architectural Elements. Some facets (for example, Styles and Periods) consist of a single hierarchy (in this case, Styles and Periods). Other facets consist of several: for example, the physical attributes facet consists of four hierarchies, Attributes and Properties, Conditions and Effects, Design Elements, and Color. Terms are graphically displayed within their hierarchy and facet. The more conventional display of descriptors—terms interfiled into a single alphabet regardless of facet or hierarchy—is found in the final three volumes. In this display, many entries contain scope notes, and all provide related, narrower, and broader terms plus the descriptor's hierarchy and facet. Users may first want to locate the term in the alphabetical volume, then move to the hierarchical display for a clearer sense of the context of the term's use.

The introductory volume provides lists of term changes and additions since the 1990 edition. There are over sixty pages of "New terms," "Deleted terms," and "Split terms." Also included is a list of almost three thousand published reference sources. The breadth of this bibliography underscores the AAT's commitment to "literary warrant," or validation of terms in published works. (Records of research for literary warrant for a term are maintained by AAT staff.) Equally fortifying is the inclusion in this same volume of the names of scholars and information scientists in many fields, collaborators whose time and expertise has been tapped by the AAT in validating terms. The accompanying *Guide to Indexing and Cataloging*, a handy and well-written spiral-bound user manual, contains thorough guidelines for application of descriptors and for combining them into "strings," as well as helpful samples of various institutions' catalog records incorporating AAT terms. In addition, the editors of this indispensable volume thoughtfully explain the logic for "bound" terms, and for "decoordinated" terms such as "fieldstone" and "cottages," "three-storey" and "parking garages," that can be combined in cataloging. Though there is a wealth of art and architecture terms in the AAT, a broad array of terms applicable to traditional archives collections comprises the Information Forms hierarchy of the Objects facet. In the *Guide*, a sample MARC catalog record from the Alabama Department of Archives and History, for the papers of Ed Ewing, national campaign coordinator for the George C. Wallace 1968 presidential campaign, contains (as multiple MARC 655 fields) these AAT terms: Audio tapes, Biographies, Clippings, Ephemera, Financial records, Lists, Memorandums, Pamphlets, Press releases, Speeches, and Transcripts. Also, the *Guide's* "Special Format Considerations" provides a chapter entitled "Archives and Special Collections," by Victoria I. Walch and edited by Michael J. Fox. This chapter gives a fine summary of standard description and cataloging practices for archival collections.

A bonus for subscribers to AAT is "User Friendly," an appealing—yes, user-friendly—newsletter. The Spring 1995 issue contained the regular columns "Frequently Asked Questions," and "AAT Users' Forum," plus a sample "Candidate Term Form" and "Comment" form to encourage participation from subscribers in building the thesaurus toward actual needs. This continues the AAT's active involvement of users and specialists in adding useful terminology.

While the primary application of these terms is in cataloging and indexing, institutions may find that the AAT satisfies other needs. For some, it may serve as an excellent reference tool, a resource for well-researched art history and architecture terms, regardless of its intended uses.

There are some infelicitous aspects to the thesaurus. The terminology can seem jargonish: "facets" and "hierarchies," "bound" and "decoordinated" may seem overly abstract for some. However, such naming conventions should not daunt interested users. The hierarchical display may not be as essential as it once was. Many users are now at ease with hierarchical structure in thesauri, and can visualize relationships without the help of a separate display. Cumbersome and inelegant constructions can result from the AAT's breadth. Because the AAT appropriately subscribes to formal thesaurus-construction protocols established by the National Institute for Standards Organization (NISO), it uses parenthetical qualifiers to distinguish one term from another with the same spelling but a different meaning. So it includes both "elevations (building divisions)" and "elevations (drawings)." Precision and standards have their cost. Some institutions may find the AAT's broad sweep can cause confusion, by offering too many options. Or the patterns for combining terms may seem overly complex. As the thesaurus describes a universe of objects, persons, and attributes such as color, structures, and structural components, only the largest and most general collections may apply terms from all facets. For many institutions, other single-format or general thesauri may serve daily cataloging requirements. Libraries may find that *Library of Congress Subject Headings* (LCSH); or thesauri written specially for certain subjects, e.g., music, medicine; or format, e.g., graphic materials, rare books, manuscripts; may be more easily used. Or, a combination of the AAT and one or more of these other thesauri may be appropriate.

The AAT is available in an electronic edition, *Art & Architecture Thesaurus: The Authority Reference Tool* (reviewed by Richard Saunders, *American Archivist* 57 (Summer 1994): 562–64). The most current form of the thesaurus is available as an authority file in the Research Libraries Information Network (RLIN); it is also available on the Canadian Heritage Information Network (CHIN), as of 1993. Its datafile AAT:USMARC, available as an ASCII file, is updated every six months, and can be purchased from AAT.

Even if the AAT's sheer scope and detailed structure can seem overwhelming for some institutions' uses, the AAT is clearly a major resource because of its breadth, its collaborative—hence, balanced—character, and its scholarship. Project director Toni Petersen, from the beginning in 1980 until 1996, has guided the AAT with her vision and fueled it with her energy. And still the AAT is continually being enlarged and improved, developing into a vital and relevant thesaurus much more diverse than the art and architecture of its title. Its staff have generously worked with other thesaurus editors to ensure solid scholarship, collaboration across disciplines, and consistency across thesauri. Through

its education arm and its newsletter, the AAT reaches out to its current and potential audiences in a way that is simply unparalleled.

SARAH ROUSE

*Prints and Photographs Divisions
Library of Congress*

The Bloomsbury Review Booklover's Guide: A Collection of Tips, Techniques, Anecdotes, Controversies & Suggestions for the Home Library. Patricia Jean Wagner. Denver: Bloomsbury Review, 1996. 312 pp. hardback, \$21.95, ISBN 0-9631589-3-7; paperback, \$12.95, ISBN 0-9631589-4-5; limited edition, \$79.95, ISBN 0-9631589-5-3.

In the coming years, private libraries will proliferate at an unprecedented rate. A combination of the desire for self-development, new technology, economics, and market forces will drive this trend. More adults will turn to collecting in the search for investment options as they pursue research interests toward and into their retirement. Archivists should support the development of guides to the care of private collections, if for no other reason than because their institutions someday may purchase or inherit these collections.

The Bloomsbury Review Booklover's Guide addresses the concerns of private book collectors. Its purpose is to help non-professionals develop and care for their collections. It is also a concise reference source for book and manuscript professionals who are expert in their specific fields, but whose knowledge in other areas is limited. The scope of the study is comprehensive: book history; book arts and printing; advice for acquisition and weeding; techniques for cleaning, repair, display and storage; classification and cataloging; the use of the public library as a resource for booklovers; on-line services; and children and books. Home archives are covered in one chapter.

It is in the chapter on archives that the book is at its weakest in presentation, organization, and content. For the most part, the archival categories used by the author (non-books, recordkeeping, and genealogical records) are consistent with suggested archival standards, where material is generally grouped by types of records. The lengthy discussion of each of the categories and the types of records within them, however, lends itself to much overlapping and repetition, and is cumbersome to the reader. To avoid confusion, the focus should have been on the definitions, characteristics, and special requirements that are unique to the categories and items in question. The discussion of home archives emphasizes preservation and storage, but does not include information and advice on collection development, acquisition, appraisal, weeding, arrangement, and description. There is no discussion regarding records retention. Reference could have been made to Donald S. Skupsky's *Records Retention Procedures: Your Guide to Determine How Long to Keep Your Records and How to Safely Destroy Them*, (Denver: Information Requirements Clearinghouse, 1991). A list of publications of the Society of American Archivists and reference to representative web sites and on-line services aimed at the archival, records management, and historical communities (e.g., the SAA and ARMA websites and the more popular genealogical listservs, like Roots-L and PIE) should have been included. A list of the names of representative regional archival groups whose members sponsor workshops and special events for non-professionals would also have been helpful. In addition, the needs of the collector who acquires archives and manuscripts as a financial or intellectual investment should have been addressed.

The style of this book is sometimes awkward. The author's casual presentation, as typified in her repetitious use of the word "stuff" to describe the contents of home ar-

chives, sometimes trivializes her argument. On occasion the author's tone seems condescending to both collectors and professionals; rather the author should ceaselessly encourage mutual understanding and cooperation. *The Bloomsbury Review Booklover's Guide* offers much in the way of useful and expert advice about the care of books, and it addresses the lack of a concise single source about collecting books and archives which is useful to both the home librarian and the professional. There are shortcomings, particularly regarding the work and concerns of the archivist, but with a careful and selective revision, this work could become a standard reference tool for both private libraries and public institutions.

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The Conservation Assessment Guide for Archives. Jane Dalley. Ottawa: Canadian Council of Archives, 1995. 85 pp. with 3-hole punches for placement in ring binder. Available through the Society of American Archivists, \$21.00 for members, \$25.00 for nonmembers. ISBN: 0-929115-11-2. ☉

Conservation Environment Guidelines for Libraries and Archives. William P. Lull with the assistance of Paul N. Banks. Ottawa: Canadian Council of Archives, 1995. 102 pp. Soft ring binding. Available through the Society of American Archivists, \$16.00 for members, \$21.00 for nonmembers. ISBN: 0-929115-09-00. ☉

Archival Enclosures: A Guide. Edward Kulka. Ottawa: Canadian Council of Archives, 1995. 68 pp. with fold-out charts. Soft ring binding. \$18.00. ISBN: 0-929115-07-4. ☉

The Conservation Assessment Guide is a tool for surveying archival collections from a preservation perspective. This tool is based on the model *The Conservation Assessment: A Tool for Planning, Implementing and Fundraising* published by the National Institute for Conservation of Cultural Property and the Getty Conservation Institute in 1991 and used by participants in the SAA Preservation Management Program. The significant difference between the tools is their audience orientation. The Dalley book is specifically aimed at archives, whereas the focus of the NIC/Getty volume is museum collections. *The Conservation Assessment Guide* is an overall preservation planning tool. It takes a broad look at preservation issues and needs of a repository and outlines solutions to address those needs. While the volume has conservation as its focus—preservation as it is known in the U.S.—it also provides standardized guidelines for assessing the effect of archival policies, procedures, facilities, storage, environment, disaster management, and staff on an archives' holdings. The operating premise of this volume is that assessment is the first step in the development of a preservation management program and the "cornerstone of preventive conservation." The workbook includes assessment procedures, a contact questionnaire, an assessment questionnaire, and an appendix with report guidelines for the assessors.

The Conservation Assessment Guide is designed as a cooperative effort between an archival repository and a conservator. Repository size is not an issue in use of this tool—it has broad application. The data gathering about the institution and its policies is undertaken by the repository staff, and the site visit and assessment report are conducted by a con-

servator. While designed to be a working tool for conservators assessing archives, it also may be usable by an archivist experienced in preservation management principles.

The assessment process is composed of 1) an initial contact between the repository and the surveyor, 2) advance gathering of data, compiled by the institution, 3) the site visit, 4) an assessment report, and 5) a conservation strategy. The final report is composed of an evaluation of the archives' preservation status: its policies, procedures, programs, facilities, holdings, storage, exhibition/loan activities, disaster management, and staffing issues. The report includes a list of prioritized recommendations and a conservation strategy with a calendar of activities. An outcome of the conservation assessment is not only a usable program building tool, but also a work to be implemented and built upon. Additionally, it is an educational document about the varying elements of preservation management. In this publication, the process of conducting an assessment is outlined clearly and in a straightforward manner. For archives, *The Conservation Assessment Guide* is an important preservation planning tool.

Conservation Environment Guidelines for Libraries and Archives is an updated version of the original work of the same title originally published in 1990 by the New York State Program for the Conservation and Preservation of Library Research Materials. This valuable publication is intended for "the overwhelmed preservation administrator, the hesitating archivist in a multi-departmental bureaucracy, and the director of a historical society who is scrambling to interpret design drawings and plans." It is an exceptional and comprehensive document that introduces archivists and librarians to issues, language, pitfalls, and opportunities in dealing with the environment and its impact on preservation of collections. The book is clear and aimed appropriately for its audience. The concepts of environment and environmental control are de-mystified for archival and library preservation professionals concerned with and responsible for long-term collection preservation.

This practical guide covers general collection environment criteria, assessment of environment, monitoring, and goals for an improved conservation environment. It also discusses general building systems and environments that can support conservation, including various possible compromises. In fact, the latter section gives the archivist hope for an incremental program designed to maximize available resources.

Publication contents include: elements of the conservation environment (relative humidity, temperature, light, particulate contamination, gaseous contamination and air pollution), environment goals, achieving conservation environments (HVAC, lighting, fire protection), interim and low-cost environmental improvements, as well as the design and construction process. The appendix contains information on selecting manufacturers, includes a lexicon of design and construction terms, and points to other readings.

The Lull book is an important addition to two other excellent publications on environmental control: Barbara Appelbaum's *Guide to Environmental Protection of Collections* (Madison, Conn.: Sound View Press, 1991) and Garry Thomson's *Museum Environment*, 2nd ed. (London: Butterworths, 1986 [now out of print]). Both the Appelbaum and Thomson books focus on museum environmental control, whereas the Lull book focuses on practical environmental control for archives and libraries. This unprecedented volume is a welcome guide that fills a lacuna in the archival preservation literature with regard to implementation of a conservation environment.

Archival Enclosures: A Guide addresses an important area of preservation management—how to select enclosures that will meet preservation concerns for chemical stability and durability. Standards cited are American (ANSI, ASTM), British (BSI) and international (ISO). This informative book contains chapters on: enclosures for paper records,

books and pamphlets, machine-readable data carriers, photographic records, production and supply, catalog listing, suppliers, distributors, and contacts, as well as a glossary and bibliography. Pull-out charts comparing catalog specifications for archival boxes, and test results for archival box samples are included. Some information presented in this volume is time-sensitive and therefore may be outdated. For example, prices may rise and specific products may be taken off the market as well as others added. Regular updating has been agreed to by the CCA and will be welcome.

This package of three publications is an important outreach effort to archivists on the part of the Canadian Council of Archives and the individuals involved in the specific projects, and has moved archival preservation forward in a meaningful way.

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Copyright Theft. John Gurnsey. Aldershot, Hampshire and Brookfield, Vermont: Aslib Gower, 1995. xi, 196 pp. Bibliography. Index. Appendices. £28.50. ISBN 0-566-07631-4.

John Gurnsey, an English information science consultant, has published extensively about the changing roles of information services and electronic publishing. Widely respected as an information specialist and technical analyst, he is a fellow of the Library Association and the Institute of Information Scientists. Given the growing problem of copyright exploitation in electronic publishing, it is, therefore, understandable why Gurnsey's research interests have now shifted to copyright theft.

Gurnsey's book provides a concise overview of copyright abuse in conventional printing and in electronic media. Divided into three parts, the first section covers the history of copyright theft in conventional printing and the associated legal issues, international conventions, and effects in the publishing industry. A chapter on electronic printing concludes this initial part and thus functions as a bridge to the second section which deals exclusively with copyright abuse in the electronic media. In part two, Gurnsey concentrates on copyright exploitation of electronic databases; audio, broadcast, and video materials; software; games; and multimedia products. Gurnsey devotes the third and final section to implications for copyright abuse in the future. He discusses the changing nature of information retrieval, use, and dissemination and the need for reform of copyright legislation.

Rather than abandon today's inadequate copyright laws, Gurnsey advocates that they be adapted to conform with contemporary issues. He argues for a balance in copyright legislation that will protect holders of copyright and at the same time not impede competition. However, he seems to place entirely too much faith in what legislation may accomplish. Because complex socio-economic factors underlie the activities of copyright theft, application of legal measures will have limited effect. For instance, it is doubtful that even world-wide legislative reform and subsequent strict enforcement of copyright laws would be able to stem the exponential growth of piracy.

Gurnsey acknowledges that piracy or for-profit copyright theft (when illegitimately produced items are sold for monetary gain) is now a multi-million dollar industry with operations around the globe. However, he does not sufficiently explore the roots and tentacles of this illegal enterprise. Found mainly in areas of concentrated poverty and low-income, these illegitimate industries have evolved through similar social and economic circumstances. As a result, copyright theft must be treated as a multifaceted problem—legal, social, and economic. The courts and police cannot be expected to shoulder the

entire burden for reform. Although legislative reforms are direly needed in countries where pirating flourishes, economic incentives most likely will have to be offered in conjunction with legal efforts if viable and effective campaigns against piracy are to be launched. For example, legitimate publishers and software manufacturers may eventually have to resort to counter-marketing strategies to diminish the competition of pirate companies and find ways to attract the pirate companies' population of consumers. It is clear that as long as these illegitimate industries are able to attract and hold a large population of consumers, copyright piracy will not be abated.

Another disappointment with the text is that Gurnsey concentrates primarily on for-profit abuse of copyright in the commercial sector and largely overlooks the changing function of copyright in the non-profit area. Unfortunately, he does not examine concepts of fair use and how recent advances in electronic technology and communication are challenging the role of copyright in the non-profit sector. Thus he leaves the reader with a very narrow perspective on the ethics of information usage. Given the escalation of scholarly communication on the Internet, academic and other non-profit institutions are now confronted with highly restrictive interpretations of fair use. Publishers and other holders of copyright argue for limitations of fair use when considering the placement of copyrighted materials on the Internet. In response, academic institutions are lobbying to create an unimpeded flow of information on the Internet. Their objective is to expand provisions of fair use for the Internet so that it may be used as a vehicle for enhancing learning and advancing knowledge.

Back matter includes a glossary of acronyms and abbreviations, bibliography, and index. The glossary focuses mainly on the names of organizations specializing in information delivery and terms pertaining to computers and electronic media. Whereas over 200 individual titles are cited as references in the text at the end of each chapter, the bibliography includes 165 additional titles consulted by Gurnsey in research for the book. The references together with the bibliography form an extensive compilation of publications dealing with for-profit abuse of copyright. The index (pages 191–196) provides a thorough overview of and quick access to topics that are covered in the text.

A flaw in the compilation of publications is that most of the works cited are published by presses in the United Kingdom, the United States, and Australia—all highly developed countries. Since most for-profit abuses of copyright and technical licensing occur in poor and under-developed countries in Asia, central Europe, and Africa, it would be important for balance and scope to include more references to literature from these countries. Although Gurnsey does include a few citations to articles in publications such as the *Malay Mail* and Karachi's *Daily Dawn*, wider coverage of pirate industries in regional presses is needed, especially since Gurnsey has concentrated so heavily on the large-scale for-profit abuse that occurs in under-developed countries.

My conclusion is that *Copyright Theft* has limited use as a reference. Whereas it catalogs common perpetrations of copyright abuse around the globe, it fails to provide a comprehensive world view on the topic and depth of coverage on associated ethical and legal issues.

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Document Management for the Enterprise: Principles, Techniques and Applications. Michael J.D. Sutton. New York: John Wiley & Sons, Inc., 1996. 369 pp. \$44.95. ISBN: 0-471-14719-2. ©

This book is must reading for any archivist, records manager or information manager involved in or contemplating the development or implementation of an enterprise document management system (EDMS). It is an eleven course meal on EDMS topics normally regarded as the fare of chief information officers or heads of IT. These are matters of increasingly great importance, however, to archivists and records managers as well. What separates this book from many others in its genre is that the author has integrated considerable archives and records management (ARM) coverage throughout. ARM specialists now being invited to the table are struggling to understand the information management and technology (IM&T) perspective and technical jargon, and to frame ARM needs and concerns in language that their IM&T counterparts will both understand and support. This book offers an excellent guidepost for both groups, and for all professionals to enhance their qualifications and help them catch up with the growing trend in the modern workplace toward the use of enterprise-wide knowledge- and information-based technologies that bring with them profound changes in the manner in which records are created and managed.

Sutton provides an excellent map to EDMS. Major topics include: The Transition to Enterprise Document Management; Overcoming Obstacles to Effective Document Management; Planning for Enterprise Document Engineering; Creating Policies and Roles for Document Management; Defining the Document Management Architecture; Developing the Logical Model; Developing the Physical Model; Organizing the Document Engineering Project; Building the Business Case; and Managing the Document Engineering Project.

There is an excellent appendix covering thirty electronic document management products, their vendors, and a matrix of the network platforms that these products support. It would have been even better with an additional matrix showing what recordkeeping functionality and open systems standards the vendors profess to support, and the e-mail and World Wide Web URLs for the vendors in addition to addresses and phone/fax numbers that are provided. Unfortunately also, although the TRIM for Windows system is one of the listed products that has important recordkeeping functionality, information was apparently omitted on it in the product/client matrix in the appendix.

The book also contains a bibliography and a glossary. The latter is better for learning the meanings of arcane acronyms than for discovering definitions. The index is not as good as should be for such a large book that will often be used for reference purposes rather than sequential reading. For example, if one were interested in the crucial subject of how EDMS relates to legacy paper systems, one would think the subject was not covered. There is only one index entry under "paper." It was an annoying task for this reviewer, interested in strategies for linking paper and electronic records (beyond conversion of paper to digital forms), to have to annotate my index with at least ten other references to paper. The deficiencies in the index are in part compensated for by an excellently organized table of contents.

The records management sections include coverage of such topics as distinguishing between document and records management, file classification, controlled vocabulary/the-sauri, and legal issues—all topics that will be hotly debated by any interdisciplinary EDMS development team. Apart from the clearly identified recordkeeping chapter and section headings, Sutton offers considerable commentary on other subjects very relevant to rec-

ordkeeping in an electronic environment such as metadata/document profiles/data dictionaries, conversion of legacy documents, OCR/ICR, multi-media, and version control.

Beyond these more obvious topics, the book covers other topics of growing concern to modern ARM professionals, such as e-mail, business systems analysis/process management, workflow systems and management, cost/benefit analysis and interdisciplinary team building. Similarly, there is good coverage of *de facto*, *de jure*, and what Sutton refers to as *de jour* information standards. This coverage is more explanatory and descriptive than prescriptive. Archivists will regret the absence of discussion of such topics as strategies for preservation of electronic records facing technological obsolescence. On the IT side, there is no coverage of intranets, extranets and World Wide Web technologies, and related ARM opportunities and risks. This shortcoming is due chiefly to when the book was written. As new as the book is, the technology continues to develop rapidly.

The book is spiced with excellent asides from the author's consulting experiences. For example, he refers to one client that used an approach called "*navigational documents...created by the electronic records administrators and classifiers to describe the navigational location, business rules, old file numbers...of a primary or secondary group.*" Similarly, the author provides wisdom that can be gained only through painful experiences in different user organizations: "Training should be delayed until one week before a business unit is set to convert. As a general rule, you can expect 50 to 75% of training to be forgotten within two or three weeks, especially if it is not applied. The last thing an organization wants is to train the whole staff when it will be five months before some trainees ever see the product." This kind of practical knowledge transfer both provides a good balance between theoretical and practical coverage and gives the reader a sense of the author's well deserved credibility.

Even the title of the book is a step in the right direction. Though in a very specialized professional community it stands for "engineering document management systems," normally the abbreviation "EDMS" is used to mean "electronic document management system." Managing electronic documents is daunting enough. However, modern organizations—particularly those with a broader knowledge-management mandate—must manage all kinds of documents, or *documentation* to embrace the broadest set of documentary objects, not just electronic documents. And they must do it on a global organizational or enterprise level. Sutton sets the stage for this kind of document management by giving to EDMS in his title the meaning "*enterprise document management system.*"

Although one of the book's greatest strengths is its well-crafted integration of records management considerations into the broader EDMS fabric, ARM professionals should not expect to find coverage of all topics of common concern to them or to agree with everything the book has to say about recordkeeping. The author is fast on the draw when it comes to pointing out that ARM professionals have seen their role too much as passive custodian and do not keep up well with changes that EDMS may impose on an organization. These should be, by now, criticisms very familiar to ARM professionals. This criticism is fair enough, but Sutton is not so fast in pointing out that senior executives, chief information officers (CIOs) and IM&T professionals typically make major technological decisions and investments without due regard for the recordkeeping and litigation risks that come with EDMS; or that EDMS specialists, including vendors producing these products, continue to take their functional requirements cues from CIOs and remain largely unaware of the application of the field of diplomatics (the study of documents and their relationships to their creators and underlying acts) to modern document management sys-

tems. Nor does he challenge all of these groups for sharing in the risks that such ignorance may bring to organizations.

ARM professionals will not find commentary here on how EDMS may or may not accommodate results of research carried out at the Universities of British Columbia and Pittsburgh; or the Pittsburgh Business Acceptable Communications metadata; the Government (or Global) Information Locator System core requirements, or some of the better known functional requirements of international organizations such as those of the World Bank and United Nations or the European Electronic Records Management Functional Requirements. Nonetheless, the book does treat many important recordkeeping functional requirements, such as: ease of use by records managers to track and manage documents; maintain schedules automatically/manually; migrate records from on-line to near- or off-line storage; move documents from one records series to another; transfer files from one business unit to another; maintain parent/sibling relationships; maintain records-series/business-unit accountability matrix; force- and default-fill profile fields; view/report document history; synchronize centralized and geographically dispersed document repositories; capture/store native format structure/profiles; and generate bar-codes, labels, and box lists.

Some readers may be confused by Sutton's treatment of the "life cycle." He uses that term on several levels, including document, process, EDMS engineering, and EDMS project. The more familiar "document life cycle" is defined as "planning, collection, creation or generation, organization, storage, retrieval, dissemination, and final disposition." One can see that this could be fairly easily mapped into the familiar life cycle outlined in the United Nations' Advisory Committee for the Co-ordination of Information Services' report (*Managing Electronic Records: Issues and Guidelines*): "creation and identification, appraisal, use and disposition" or to some other life-cycle approach, such as the World Bank's "create, capture, manage and use."

At the engineering level, the Sutton Enterprise Document Engineering Life-Cycle stipulates that

All documents...must be managed according to a document life-cycle—an object management technique for tracking and controlling documents...stages are define, analyze, originate, safeguard, promulgate, and retire....Value added at each phase is a prerequisite for triggering the next phase. The phases are sequential and temporal, so they have limited life spans.

Archivists would, of course, feel more comfortable with the terms *appraisal* instead of *analyze* and *manage disposition* rather than *retire*, and all that those terms bring with them.

Other readers may be put off altogether with the life-cycle approach, e.g., those who prefer the Australian, and now more internationally embraced, *records continuum* approach that would remove what are regarded as artificial boundaries of the life-cycle approach. The latter, rather than taking the sequential perspective, would rely on relationships in terms (as presented in Frank Upward's writings) of identity, transactionality, evidentiality and recordkeeping entities. But this may reflect less of a theoretical disagreement and more simply the author's use of information engineering tools (state-transition analysis) to manage the EDMS, and how he decided to organize the book's information. Indeed, Sutton fosters the view that document profiles should include important attributes and relationships such as the business process within which the document was created.

Similarly, some ARM professionals will view this book as being too *docu-centered* for recordkeeping, especially at time when they are increasingly turning to macro-appraisal and scheduling—at the system application or business process levels. Ironically, it is the advent of modern EDMS that is likely to make macro-appraisal feasible. Again, this may be more a matter of interpretation. Sutton espouses both a docu-centered and a macro-view when he says: “Documents are the heart and soul of an organization. They are the lifeblood of business processes. A document is a process in motion, while a process is a document not yet at rest.” Document management is described as “the process of overseeing an enterprise’s official business transactions, decision-making records, and transitory documents of importance.”

ARM professionals should concern themselves with the centrality question. This is not simply a turf issue. It can be a serious architectural issue over which ARM professionals may find themselves at odds with EDMS designers, IM&T, and library professionals—potentially formidable as a coalition—over legitimately different perspectives. The latter groups are typically accustomed to seeing documents and books as largely independent objects (or *composite objects* in today’s multimedia world of compound and complex documents), and to deal with relationships within documents—parts (in the SGML sense), embedded objects, versions, etc. By contrast, ARM professionals also see them as existing in the context of other documents and bodies of documents. Where ARM professionals place emphasis on archival description, the latter groups may be satisfied with minimal metadata contained in document profiles. Where ARM professionals are heavily vested in document classification by file schemes, records series and groups, and index terms, the latter groups rely more on a combination of fuzzy/full-text search, thesauri and good document profiles as a less constraining, more robust and flexible approach that is better geared to modern organizational structures and realities.

ARM professionals should be open to these new possibilities as they attempt not simply to react to new technology, but rather to put it to work for the organization’s legitimate recordkeeping needs. EDMS designers should recognize the serious risks in not accommodating those needs. Indeed, a major challenge to those engaged in EDMS projects is to rationalize and bring balance to recordkeeping functional requirements and the composite-object/object approach needed to manage modern multimedia documents, which is familiar to EDMS designers. This book will serve both ARM professionals and EDMS designers well in that essential task.

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