

Archives and Museum Informatics

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The Use of Alphabet Soup

Many of my museum colleagues are now genuinely confused about the relationship between the AASLH-CADP (Common Agenda Documentation Project of the American Association for State and Local History), the AITF (the Art Information Task Force administered by the College Art Association) and CIMI (the Committee on Computer Interchange of Museum Information administered by the Museum Computer Network). First, I want to affirm that these are complementary efforts.

The CADP and the AITF are working to define what information is used by cultural history and art museums respectively. They will, in the end, adopt common data naming conventions and are likely to agree to some guidelines for the type of data to be recorded in some fields. As such, they are defining the data requirements of two of the major kinds of subject collections.

CIMI will receive the data requirements articulated by these working groups and by representatives of other kinds of museums, such as science museums, together with the data requirements expressed by task forces representing specialized tasks within museums, such as traveling exhibition management, conservation, photo archives management. Its job is to define a communication protocol which can accommodate the information identified by the museum community and to work with vendors and museum information networks to bring about the implementation of this protocol as an "import/export" option, within software used by museums.

If the effort succeeds, importing and exporting data in the format defined by the communications protocol will take place in a way that is invisible to users. Different software packages will continue to have strengths and weaknesses in other areas of functionality, and will continue to compete for the business of museums, but all will be able to read and write in the common format.

So what? Museums will be able to take their data from one system to another when they replace systems or vendors. Museums will be able to communicate information between systems with different functions - collections management, membership and development, and exhibition design for example. Museums will be able to communicate information to each other in such highly interactive processes as loaning exhibits which require communications regarding requests for loans, facilities

reporting, exchange of contracts, arranging for shipping or couriers, making condition reports, providing hanging instructions, etc.. Finally, museums will be able to use the great knowledge which they possess in the aggregate concerning the manufacturers and artists, dealers and auctions, prior exhibits and scholarship, conservation treatments and the like, to enhance their own collections documentation and understanding. What now looks like alphabet soup is a many pronged effort of the community as a whole to bring a new meaning to museum collections.

DAVID BEARMAN, Editor

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JANUARY - JUNE 1991 CALENDAR

- January 24-25** Working Meeting on Research Issues in Electronic Records, Washington DC [invitational; report will be available from: NHPRC, National Archives, Washington DC 20408]
- February 20-23** Visual Resources Association Washington DC, Sheraton Washington Hotel [Lise Hawkos, Art Slide Collection, School of Art, Arizona State University, Tempe AZ 85287-1505]
- February 21-23** College Art Association, DC, Sheraton Washington Hotel [CAA, 275 Seventh Ave., New York, NY 10001; 212-691-1051]
- March 7-14** Art Libraries Association of North America, Kansas City MO, Ritz Carlton [3900 East Timrod St., Tucson, AZ 85711]
- March 7-8** "Research & Education Networking" Oakland CA, Hyatt Regency Hotel [1 Ferry Lane West, Westport, CT 06880]
- April 2-5** "Intelligent Text and Image Handling" Barcelona, SPAIN [RIAO '91, Ms. M.T.Maurice, CASIS Inc., 220 E. 72nd St., #10F, New York NY 10021]
- April 21-22.** CIMI Committee, Open Mtg. Computer Interchange of Museum Inform. (John Perkins, CIMI Project Manager, 5659 Merkel St., Halifax, NS, B3K 2J1, Canada Tel (902)-454-4077. Fax (902) 453-6153 Email Dialcom 141: TCN 420).
- April 26-29** ASIS Mid-Year "Multimedia Information" Santa Clara, CA [8720 Georgia Ave., Suite 501, Silver Spring MD, 20910-3602; 301-495-0900]
- May 7-9** 12th National Online Meeting New York, Sheraton Centre [143 Old Marlton Pike, Medford NJ 08055]
- May 14-17** IASSIST Annual Conference Edmonton, CA [Laine Ruus, Data Library Service, University of Toronto Library, 130 George St., Toronto M5S 1A5, CANADA; 416-978-5589; fax 416-978-7653]
- May 19-23** American Association of Museums, Denver, CO, Radisson Hotel, [AAM, 1225 Eye St., NW, Suite 200, Washington, DC 20005; 202-289-1818]
- May 30-31** National Archaeological Records Conf. Copenhagen, Denmark [Nationalmuseet, Dokumentationsenheden, Ny Vestergade 11, baghuset 2.sal, DK 1471 Kobenhavn K, DENMARK fax 45-33-148411]
- June 5-7** Electronic Democracy: Government Information & Public Policy in an Electronic Age, Crystal City VA, Gateway Marriott [1831 V. St., Sacramento, CA 95818]

CONFERENCE REPORTS

Museum Computer Network Meeting

The Museum Computer Network Conference held in Richmond in October was attended by about 200; somewhat fewer than hoped because it coincided with the Federal budget crisis, but enough to make a lively meeting. The meeting included three sessions on advanced technologies (including imaging, intelligent buildings, and systems design tools), several sessions on documentation projects in the U.S. and Canada, a session comparing different collections management products and numerous scheduled opportunities for group discussion of issues of mutual interest. Two such open discussion sessions in which I was involved were particularly exciting: one addressed the work of the Committee on Computer Interchange of Museum Information (CIMI) and the second was about the impact on museums of commercial interest in acquisition of digital image rights.

The CIMI project itself is discussed in the article by John Perkins in this issue, so I won't repeat its background but rather report on the discussion, in which two particularly important concerns were articulated:

- How could a process be established that involved existing vendors of systems so that the resulting communications format would be achievable?
- How could the different functional requirements of registrars, curators, conservators and scholars within the museum community be served by a single standard without developing a format requiring burdensome overhead?

Both questions derive in part from experience vendors have had in implementing the US MARC formats. The first arises because some museum community vendors have found it difficult to implement MARC because they were not participants in the development of the standard and have adopted data definitions that are hard to translate into MARC output. As demonstrated by those library community vendors who have been active in the MARC definition process, these problems can be overcome by early involvement in the standards definition process. CIMI is encouraging such involvement by inviting all museum networks and vendors of museum systems to participate in the conferencing system through which the committee will seek to define solutions to issues it identifies. The second question reflects an assumption about rules governing the use of the interchange format that is not warranted. If the format that is defined contains the data required to report that shipment xyz arrived at the loading dock at time *t*, as well as the data required to describe the complete context of discovery of an archaeological find, and the data required to fully describe the object discovered, it does not follow that everytime we want to say that xyz shipment has been received we must also include a full description of each object and its provenance. An application that requires only information about the receipt of a shipment can send a message with only three or four

elements of information, while an application that requires full descriptions of objects and their history of discovery need not also carry full descriptions of all their shipping and receiving histories. All these types of data may be communicated within a single standard (if we can define the data such a standard carries), but the messages sent from one system to another will reflect the purposes of the communication, not the full data interchange capabilities of the standard.

The discussion of digital image rights began with short presentations by Nathan Benn and Alan Newman. Benn is a professional photographer with National Geographic whose concerns about the how photographers would be reimbursed for the use of their images in digital distribution systems have led him to concentrate much of his energy over the past year on the creation of an organization to protect the rights of photographers in their images. Alan Newman is the head of Photographic Services at the Art Institute of Chicago where he has been a leader in the use of digital images and is now helping to steer his museum towards agreements that will enable them to license the digital use of their images.

Benn pointed out that professional photographers derive their income from the use of their images and are therefore interested both in creating new markets for those images and in receiving compensation for their use. They see the plethora of digital multi-media that will be offered in the future as both an opportunity and a threat. Specifically they realize that unless mechanisms are created to compensate rights holders for the secondary and tertiary use of images, and for "small rights", they will be abandoning their rights altogether. Since fulfilling an image right request costs Nathan's agent over \$90, any licensing negotiated for less than \$180 (split 50/50 with the photographer) results in a net loss now. Yet the digital environment will doubtless create uses of images in which \$180 fees are unrealistic. Photographers are, therefore, looking closely to the ASCAP model to determine if a mechanism can be established that will charge users of digital rights for use and distribute the income to owners of rights in proportion to the use of their images, just as ASCAP now collects from radio stations and performance halls and distributes the income to musicians and composers.

Newman noted that publishers and brokers are now interested in acquiring the rights to images of museum objects and asked, rhetorically, what the audience would do if they were approached for such rights. He then suggested some of the numerous issues that are involved including the varying requirements for adequately recording a digital representation of different kinds of objects and images, the need for standards to facilitate interchange of such images, the potential of copy protection schemes to mark digital copies, and the limitations of existing display and print output devices. He urged museum administrators to begin to look very hard at the issues involved and noted that such a session was planned for the Museum Education Consortium meeting in January. In particular, Newman cautioned against assuming that reproduction density or quality was the only issue.

Bearman then led an active discussion, in which the whole concept of controlling secondary and tertiary uses was questioned, along with whether a market existed or could be made to exist, and whether any kind of "clearance center" for rights could work. The consensus of the participants seemed to be that the promise of the technology and the problems inherent in it were two sides of the same coin, and that the museum community needed to identify the perceived concerns, address them in concert with potential buyers of such rights, and publicize the solutions reached by early agreements so that the community could move rapidly, but not precipitously, into this new era.

AUTOMATION IN ARCHIVES

The Mid-Atlantic Regional Archival Conference (MARAC) devoted its fall 1990 conference exclusively to archival automation and attracted a record attendance of over 200. I was unable to attend more than a few sessions since papers were presented in six parallel sessions over one and a half days, but those which I heard testified to the growing maturity of the field. Discussions were focussed on the automation of particular functions within archives and on issues related to software, standards, and records creation practices.

When they are published, the papers by Avra Michelson and Tom Ruller on automation in support of appraisal decisions, by Paul Conway on his user studies at NARA, and by Tom Hickerson and Kathleen Roe on local systems requirements and the software available to satisfy them, will be important reading. The last two will appear in the Spring issue of Archives and Museum Informatics and the Michelson and Conway studies were sponsored by NARA and will be available as technical reports in the growing series of research papers from the Archival Research and Evaluation Staff in NARA.

One serious lacuna was evident at the MARAC Conference: archivists are paying far too little attention to the important changes in the character of communications and the nature of record keeping in the contemporary office environment. Papers on these changes were presented by non-archivists, but they were, frankly, disappointing in that they failed to ask the kinds of questions about electronic records and electronic communications systems that archivists need to address if they are to manage the records of the 1980's and 1990's.

ASIS MEETS IN CANADA

"From Research to Applications", the 53rd annual conference of the American Society for Information Science, was held in Toronto, November 4-8. As usual, the theme was sufficiently broad to accommodate over 300 presenters including a plenary session featuring Robert Kahn, Mitch Kapor and Robert Lucky on a panel together! I focussed on sessions devoted to thesaurus software tools, hypermedia, and the Defense Department CALS initiative and SGML.

A very active special interest group on Classification Research chaired by Susanne Humphries (NLM) put together several sessions on thesaurus construction, indexing software, and thesauri as knowledge bases in information retrieval. Jessica Milstead presented two papers identifying functional requirements for thesaurus construction packages and evaluating the products in the U.S. marketplace. Jim Anderson (Rutgers) discussed the collection of user presentation language by an interface and its linkage to a faceted classification system to enhance thesauri as retrieval environments. Lois Lyman noted that the ANSI standard does not help to identify software requirements, such as the need to be able to suppress display of thesaural equivalents created to accommodate spelling variations and typographical errors, or the need to integrate specialist thesauri with general lexicons. Marcia Bates discussed a system that enables users to select terms from among those presented as possible search terms by a search of the system vocabulary prior to the submission of a search. Dierdre Stam (Catholic University) discussed the relationship between art scholarship and thesaurus construction, noting that in the discipline of art history the construction of thesauri, as a discipline defining activity, has preceded their application to databases.

In the multi-media sessions, Kenneth Morell (St. Olaf College), presented results from studies of the use of Project Perseus CD's and videodiscs on Greek civilization and language in classrooms at Harvard, Bowden, the University of Maryland and St. Olaf's. He concluded that students needed to develop new learning strategies to make use of these multimedia extensions of their classrooms and that a single course was adequate to teach these new approaches. Dennis Egan (Bellcore) presented "Superbook", the collective work of the Cognitive Science Research group at Bellcore. Superbook is an environment for non-sequential reading and writing based on rich indexing, search feedback, navigation overviews and dynamic page display construction that takes any ASCII text. Experiments in its use showed students relied more heavily on the indexes and tables of contents of Superbook than of traditional books and that navigational overviews in the form of major headings also helped improve recall. Janet Walker (DEC) discussed a one year background study of the use of The Document Examiner, a similar product developed by Symbolics as an alternative documentation repository for Symbolics workstation developers (the print volumes occupied 8,000 pages and were being regularly updated). Her findings regarding the importance of the table of contents and "bookmarking" as navigational strategies were similar. An interesting aspect of the study was the effort to distinguish real data from noise created by users employing multiple sign-ons and the same sign-on being used by numerous individuals, by hiring/firing of employees and extended periods of business travel by users, and by the use of the system for experimentation, testing, demonstration and other purposes for which it would be inappropriate to include data in a study such as this. Howard Besser (Univ. of Pittsburgh) discussed interfaces for digital multimedia networks, involving multiple simultaneous users and transmission of large digital files. Besser presented data

on communication rates and seek times for different sizes of systems and files and called for better compression ratios, determination of the best display resolutions for a variety of different applications, and standards for color display. He also discussed such strategies as progressive transmission of images and distribution of image banks to local devices in order to facilitate image browsing as a search technique.

To me some of the most interesting sessions of this meeting were the least expected: those related to the Computer-Aided Acquisitions and Logistical Support (CALs) initiative at DOD. I have previously discussed the CALs effort itself: DOD wants to receive the documentation for its systems, and to order its parts, in machine-readable form. What makes CALs exciting, and what was so interesting about these sessions, is its potential as a superset of a broad range of communications standards and a powerful incentive to businesses of all kinds to adopt such frameworks as SGML, EDI and the Computer Graphics Metafile. It was clear from these sessions that the CALs effort is impacting on small suppliers as well as primary contractors, and that the initiative is now influencing European governments and suppliers as well as U.S. DOD contractors.

I learned a great deal about the ability of SGML to convey other formats (literally to carry them across into other machines that can interpret them) and was therefore particularly pleased to have been invited to take part in an exploratory meeting at SoftQuad, a Toronto based SGML software house, on the potential use of SGML tagging of MARC records as a vehicle for inputting and outputting MARC data without MARC translation facilities. The meeting, attended by representatives of major bibliographic networks, resulted in SoftQuad staff member Michel Vulpe taking on the challenge of creating an SGML DTD (Document Tag Definition). Late in 1990, I received a draft of this DTD, which I understand will be tested by the National Agricultural Library. I look forward to following this development, as it may provide a means by which MARC data and information not easily carries in MARC records, such as images and sounds, can be conveyed in a single protocol.

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Archives and Museum Informatics carries news, opinion and reports on information technologies, techniques and theories relevant to archives and museums. Submissions of notes, letters to the editor and articles are welcomed. Deadlines for submissions are the 15th of March, June, September and December.

FIRST CIMI COMMITTEE MEETING

by John Perkins, CIMI Project Manager

The Committee on CIMI (Computer Interchange of Museum Information) held its first meeting October 8-9, 1990 in Richmond, VA. Thirteen representatives of American museum associations and other interested organizations met to establish goals and objectives, to adopt a process through which to carry out the agenda, and to identify key issues for discussion.

Background

CIMI was proposed in 1988 by the Board of Directors of the USA based Museum Computer Network (MCN) as a first step in its effort to support the development of standards for automated recording and retrieval of information about museum collections thereby encouraging the exchange of museum information for scholarly research and making information about cultural heritage in museum collections more widely available. CIMI responds to a need for the coordinated development of a common standard for the communication of museum information now, while museums are in relatively early stages of automation processes and before disparate, irreconcilable approaches are taken by vendors and institutions alike.

The representatives were responding to an invitation issued by the Museum Computer Network (MCN) to US museum associations to form a working committee for the Computer Interchange of Museum Information (CIMI). The invitation was subsequently accepted by the American Association of Museums (AAM), the Association for State and Local History (AASLH), the Association of Living Historical Farms and Agricultural Museums (ALHFAM), the Association of Systematics Collections (ASC), and the Museum Computer Network (MCN). Funding was secured from the National Endowment for Humanities and Pew Charitable Trusts with in-kind support from the MCN for a period of two years to establish the working CIMI Committee. This core Committee meets with representatives of museum networks which may be groups of museums associated with a common vendor, a particular system, or simply be any organization with data to exchange. Currently, the Conservation Information Network (CIN), Research Libraries Group Inc. (RLG), Canadian Heritage Information Network (CHIN), and the Museum Documentation Association (MDA) participate at their own expense as network representatives.

Participation in CIMI and in its meetings is open to any museum association, regional group or any other interested party committed to the objectives of CIMI or occasional observers. Any group interested in having a representative attend CIMI meetings should contact the CIMI Project Manager, John Perkins who was hired in October, 1990. The Project Manager prepares briefing materials and conducts research for the committee as well as operating the online, electronic conference where much of the discussion occurs.

The CIMI committee will meet twice a year over the next three years to develop the technical framework for the communication of museum information. The intellectual content, the data and functional information to be exchanged, will be defined by discipline specialists. CIMI will encourage, support and coordinate existing working groups to provide solutions to the technical problems of interchanging data in a system-independent way. CIMI will not dictate content of interchanges nor attempt to control the purposes of interchanges, but will assure that any information proposed by subject-matter or media experts can be interchanged in a fashion consistent with the principles of the protocol.

Decisions from the First Meeting

The committee ratified its major goal to create a communication protocol for the interchange of all types of museum information. A number of issues relating to this objective were explored and a strategy for how to continue the discussion of them was presented.

Protocol Issues

The protocol that is ultimately developed will provide a means for the transfer of data from and to any sources required for museum purposes yet will ensure it is application, implementation, system and vendor independent. It will be designed so any data from any museum or function of museums can be interchanged in a fashion consistent with the protocol. This will be done by working with representative community organizations to assure the adoption of extant international and national standards as frameworks for museum data exchange.

Because of the diversity of the information museums store, the protocol must represent for interchange purposes all types of data including text, numeric, image, multimedia, graphic, and sound. This places enormous demands on the traditional data-processing concepts of a museum record both from a structural as well as content perspective. A record may include textual data about an object followed by an image file, then sound bytes, then pointers to other data files acting as authorities.

To cope with these complex requirements the protocol will have to accommodate dynamic and flexible methods of transmitting data along with multiple existing transmission protocols. Images, for example, will be best carried in an existing format such as TIFF, rather than CIMI trying to redefine a new image standard to allow them to be combined with text. At the same time it will be necessary for the protocol to be compatible with the millions of records already in existence.

Additionally, the protocol must also carry content, use, relationship, attribution and other meaningful information within the context of the interchange for a variety of application uses. For example, relational information content such as authority files, separate data records, and their corresponding pointers must be transmitted intact.

One of the critical issues explored in a preliminary way was how to represent the functional or service requirements of data content in the protocol. Service requirements are the messages and instructions that need to be conveyed in an interchange so data can be delivered in a way that applications can do something with it. Since the role of the protocol in an exchange of information is to support any method that user systems or software applications need, the relationship between data carried and user view of the data should produce a lively discussion in the coming months.

The protocol must reflect consumer requirements, not just those of software vendors and developers, yet at the same time CIMI recognises the important contribution vendors can make. Vendors, their user groups, and developers will be encouraged to embrace the CIMI objectives, support the process, and contribute but in a manner that does not unduly influence the protocol with commercial self-interest.

While it is premature to expect solutions, the discussion of these issues has been initiated and will continue over the coming months. After discussing the protocol, the meeting attendees examined the longer-term activities of CIMI, their focus and objectives, and the operational structure that was going to be required to fulfill the needs.

Content Issues and Protocol Validation

While CIMI is primarily concerned with building the technical framework of a communications protocol, it must be tested with real data. The second phase of CIMI operation is to trial the developing protocol with data contributed by subject and discipline experts working as Task Forces. The validation process involves taking the requirements for data, relationships and functionality expressed by a Task Force and examining the ability of the protocol to accommodate the stated requirements. Through an iterative process the requirements for exchange are accommodated. In some instances the protocol will need to be modified, in others CIMI may suggest alternate approaches to the Task Force that may re-state the requirements.

Continued Evolution of the Protocol

An important part of CIMI's work will be to encourage the ongoing elaboration of the data interchange requirements museums have. This will become part of the process that sees the protocol being continually revised and updated. The exact mechanism will be developed during the second and third year as a result of the work with the Task Forces described earlier. Throughout this time CIMI will concentrate on developing a mechanism to channel requests from committed professional groups to map their interchange requirements into the protocol. Although a large number of data and functional requirements will be examined, CIMI is not intending to map the universe of museum data. These activities are unlikely to be completed in the first three years, rather a methodology is to be

established that will allow requirements to be continually addressed.

Continuing Discussions

Getting the results CIMI wants requires extensive discussions with a widely dispersed group in a very short period of time. In order to foster a dialogue within the broadest possible community and to make best use of the time between face-to-face meetings, an electronic conferencing system that will allow discussion of issues to continue between meetings is being established through the Telecommunications Cooperative Network (TCN). Issues will be explored in various forums of the online conference. Since a cumulative electronic record of the discussions is available online it will be possible for a large number of people to follow and contribute to the development of the protocol. Interested participants will be able to join the discussions at any time and be able to browse all the discussions that have already taken place. Those interested are encouraged to contact the CIMI Project Manager for instructions on how to get access to the online discussions.

Upcoming

With the cooperation of the Museum Computer Network (MCN), the CIMI (Computer Interchange of Museum Information) committee has established an electronic mail and conferencing system as part of the Telecommunications Cooperative Network's (TCN) Electronic Village. TCN provides a large number of non-profit organizations with electronic mail, conferencing and bulletin-board services and is the host of the AAM Communications Network.

MCN and CIMI agreed to establish and operate the communications system to facilitate the discussions of the committee during its development of a communications protocol for the exchange of museum information and to allow greater participation by the museum community in the work of CIMI. MCN will first use the system to enhance communications capabilities for the Board of Directors, hoping later to add features of interest to the general membership.

The conferences established will include the technical issues under investigation, discussions on the functional requirements of a data exchange protocol, and a forum where cumulative minutes of the meetings can be reviewed at leisure, allowing new participants access to prior discussions. Easy access to the CIMI Conferencing and Communications system is available throughout North America and elsewhere internationally.

The CIMI committee will hold its next face to face meeting next in Washington DC, April 21-22, 1991. Meetings are open to the museum community. [For information please contact John Perkins, CIMI Project Manager, 5659 Merkel St., Halifax, NS, B3K 2J1, Canada. Tel (902)-454-4077. Fax (902) 453-6153. Email Dialcom 141: TCN 4200].

IN-BOX

REPORTS

Academie Suisse des Sciences Humaines & Association des Musees Suisses, **Projet de detail pour une Banque de Donnees Culturelles Suisse: Rapport Final** (Berne, Oct. 31, 1989)

David Meili's report on the Database for Swiss Cultural Heritage outlines the future plans for the establishment of a multilingual, interdisciplinary database of Swiss cultural heritage not unlike the Canadian Heritage Information Network. Prototype definition is now underway.

U.S.Congress, House of Representatives, **Taking a Byte out of History: The Archival Preservation of Federal Computer Records** (Washington DC, GPO, 1990) Report 101-978, 25th report by the Committee on Government Operations, November 6, 1990; 30pp.

This report, prepared by Robert Gellman, Chief Counsel to the Government Information, Justice and Agriculture Subcommittee of the House Committee on Government Operations, finds that: "NARA's current policies are inadequate to assure the long-term preservation of electronic records. Both evolutionary and revolutionary changes in NARA's policies, methods, and procedures may be needed to respond to the challenges of preserving electronic records. NARA is not currently prepared to accession some computer records created by Federal agencies that will be candidates for preservation in the next few years. Too little attention is being devoted by Federal agencies to planning for the archival needs of information in electronic recordkeeping systems that are in use and being planned." It recommends that NARA undertake a thorough review of the situation, that NARA and OMB take a lead in requiring agencies to plan for archival requirements of electronic records, that NARA and NIST continue to work on standards, and that NARA should ask Congress for amendments to its enabling laws that are needed to effectively manage electronic records. It requires that NARA respond to the report by July 1, 1991. Hopefully NARA will not overlook this last, open invitation, to redefine the legal framework that structures the management of electronic records so that it can serve the necessary regulatory, rather than custodial, role and to assign to NARA, rather than the agencies, the clear authority for determining what is an electronic record.

Reporters Committee for Freedom of the Press, **Access to Electronic Records: A Guide to Reporting on State and Local Government in the Computer Age** (Washington DC, Reporters Committee, 1990) \$5. 30pp.

State by state summary of the legal environment for access to electronic records, with analysis of statutory

basis, court rulings and attorney's general opinions, and fee structures. This review is essential for those actually seeking to use electronic records and instructive for those planning to manage them. [1735 Eye St.NW Suite 504, Washington DC 20009]

REFERENCE:

Automated Records and Techniques in Archives: A Resource Directory, Marion Matters editor (Chicago, SAA, 1990) 75pp.

This volume is the culmination of several years of work by members of the SAA Committee on Automated Records and Techniques, ably assisted in the end by Marion Matters. It consists of an annotated bibliography of 236 items largely published since the 1983 bibliography edited by Richard Kesner (published by the SAA) and annotated directories of organizations, information clearinghouses, educational and training programs, periodicals, and bibliographic databases relating to automated records and techniques in archives. Twenty pages of the publication is devoted to an index. On the whole it appears to be a useful reference book, although by its very nature somewhat superficial and subject to rapid obsolescence.

BOOKS:

Dewey, Patrick R., **Public Access Micro-computers: A handbook for librarians**; 2nd ed. (Boston, G.K.Hall, 1990)

Archives and museums are just discovering what 50% of libraries in the U.S. know - that their users are ready and eager to use computers to access information. If you are planning to implement a public access facility, this manual is a useful starting point

Sandra K. Helsel and Judith Paris Roth, eds., **Virtual Reality: theory, practice and promise** (Westport CT, Meckler, 1991) 143pp.

The eleven articles that comprise this slim volume appeared in nearly the same form in the summer 1990 issue of *Multimedia Review*. They are accompanied by a list of individuals and companies in the Virtual Reality business and a bibliography of some writings on virtual realities. As a whole they are a useful introduction to the field, especially articles by Michael Spring and Myron Krueger setting out the basic concept of an extended user interface. Two articles deal with the applications of virtual reality to museums. Unfortunately, Myron Krueger only mentions his implementation of Videoplacé at the Connecticut Museum of Natural History, without discussing in depth the design issues involved. Joan Sustik Huntley discusses these in more detail in her presentation of the Fluxbase application developed on a NeXt computer for virtual exhibits by the University of Iowa, Weeg Computing Center, Computer-Assisted Instruction Laboratory.

Fredric M. Miller, **Arranging and Describing Archives and Manuscripts** (Chicago, SAA, 1990)131pp.

This volume is the first publication in the SAA's new "Archival Fundamentals Series", the successor to its Basic Manual Series" and is intended to replace the manual by David Gracy in that series. Miller's approach, while updating Gracy in particulars, especially with regard to description standards and information interchange formats not developed when the Gracy manual was written, is firmly grounded in traditional archival practices. It does not attend to the emerging universe of electronic or non-textual records or changing patterns of organizational communications in the "Information Age" and it ignores the relationship between description practices and use, whether internal (e.g., functional requirements for archival management) or external (use studies and the needs of potential clients). Unfortunately, that reflects the state of archival description practices in the United States in 1990. □

Toni Petersen and Pat Molholt eds., **Beyond the Book: Extending MARC for Subject Access** (G.K.Hall, Boston, 1990) 275pp., \$39.95 (\$27.50 paper)

This collection of fourteen articles written (with one exception) specifically for this volume, address the application of library formats and cataloging practices to visual depictions and museum objects. In the aggregate these chapters present the most advanced thinking in the field, whether on the application of thesauri, providing for subject and provenance access, or employing advanced technologies. Anyone considering the applicability of MARC and library intellectual control practices to non-book materials should read this volume. I found some particularly valuable insights in articles by Jackie Dolley and Helena Zinkham on the "Object as Subject", by Alden Monroe and Kathleen Roe on "Functional Access to Archival Records", and by Linda Evans on "Cataloging an Artifact". □

Richard Smiraglia, ed. **Describing Archival Material: The Use of the MARC AMC Format**, *Cataloging & Classification Quarterly*, Vol.11 #3/4 (Haworth Press, NY, 1990) 228pp.

The ten articles in this double issue of *Cataloging & Classification Quarterly* herald the coming of age of the MARC AMC format as a legitimate means of cataloging for librarians and archivists. Some of the papers reflect the contents of a course in library standards for archival description taught by authors Smiraglia, Edward Swanson, Michael Fox and Marion Matters. Others are presentations of the format and its place in archives automation by Lisa Weber and Kathleen Roe. Still others, by Barbara Orbach, David Thomas and James Corsaro look at issues of integration between AMC and images, sounds and map cataloging traditions. The volume as a whole is well edited and its parts are solid contributions. The pieces by Fox, Roc and Orbach are particularly valuable because they frame old issues in new ways. □

□ ARTICLES:

Caroline Backlund, The Cutting Edge: New Auction Sources and Computer Projects, *Art Documentation*, vol.9#4, Winter 1990 p.175-178

This is a useful review of sources for auction data. It includes all but the most recent new electronic forms of this information (excluding, for example, the recently released videodiscs from Astor House, cited in the Software section of this issue of *Archives and Museum Informatics*), and relates them to published sources. □

Sabastian Heath, The Perseus Project: Classical Civilization through Optical Media, *CD-ROM Professional* vol3#6 November 1990 p.66-70

The Perseus Project is an interdisciplinary effort funded by Annenberg /CPB and Apple Computer to bring the resources required for studies of Classical Greece together in a resource database on videodisc and CD-ROM. The combination of 50 MB of texts, 1000 images from museums, considerable quantities of original photography, and site plans for ancient buildings along with dictionaries, morphological databases and other linguistic tools, should enrich the study of this period both by scholars and the interested lay browser. For those who want to get a feel for what the "textdisc" might do to education, this is a project to watch. Its implications for archives and museums to interpret their holdings to a variety of publics should be self-evident. □

Paul Kahn, Publishing Webs of Information at Brown University, *CD-ROM Professional*, Sept 1990 p.80-86

The author explores the differences between developing materials for a single course and publishing a complex, multi-function, hypermedium. In the process, Kahn addresses current technical and economic barriers to interactive multimedia publication and distribution. □

□ NEWSLETTERS & JOURNALS:

ALIC Notes, Issue 11 October-December 1990 (Archives Library Information Center, National Archives, Washington DC 20408) requests that those who wish to continue to receive ALIC Notes and its bibliographic distributions, return a completed membership form. It also describes several new electronic records, archival description and NARA staff travel reports. The latest acquisitions list reveals that NARA's recent funding for ALIC has paid off; this is now becoming a valuable resource for archivists. □

CIMI News, vol.1#1 is dated January 1991. It promises to appear twice annually to report on the Computer Interchange of Museum Information Committee and its work. For free copies write to John Perkins, CIMI Project Manager, 5659 Merkel St., Halifax B3K 2J1, CANADA.

Computers and the History of Art: An International Journal (ISSN 1048-6798), 2 issue p.a., [\$40. individuals, \$66 libraries, \$108 corporate], has been announced by Harwood Academic Publishers (P.O.Box 90, Reading, RG1 8JL UK, or P.O.Box 786 Cooper Station, NY, NY 10276).

Disc Magazine (ISSN 1052-4053 from Helgerson Associates Inc., 510 N. Washington St., Suite 401, Falls Church, VA 22046-3537, \$44.95 p.a.).

Disc Magazine is subtitled "A Technical Publication for Producers and Suppliers of CD-ROM Products and Services", but publisher Linda Helgerson has done herself a disservice if only producers and suppliers read Disc Magazine. The premier issue of contains the best overviews of the state of CD-ROM standards and the processes for actually making CD-ROMs that have appeared in the generally accessible (e.g., lay) literature. If future issues address equally complex areas with as much lucidity, they will be valued by consumers as much as by those whose businesses depend on CD-ROM. I know this still sounds very abstract to many archivists and museum professionals, but the fact is that in less than five years CD-ROM has become the publication medium of choice for a vast array of in-house publication and for documentation in a wide range of industries. We can expect to see this trend accelerate as standards make for greater interoperability and users realize the benefits of fulltext and hypermedia access.



Mind over Media, a new journal from Multimedia Computing Corporation, 3501 Ryder St., Santa Clara, CA 95051; 408-737-7575 began publishing in October 1990 (12 issues; \$150 p.a.).

The premier issue contains useful how-to articles on various aspects of multimedia production and the usual product announcements, people reports, and calendar items.



Nonprofit Management Strategies, a newsletter published by The Taft Group (a Division of Gale Research Inc.) first appeared in September.

The 24 page news orientation alternates every other month with an in-depth "management clinic" briefing on a single topic. [The Taft Group, 12300 Twinbrook Parkway, Suite 450, Rockville MD 20852; 800-877-TAFT].



Intelligent Systems, is to be launched as a quarterly newsletter of the Foundation for Intelligent Systems in the Social Sciences, Arts and Humanities [2637 Asilomar Drive, Antioch, CA 94509; 415-778-0841]. No price or initial issue date has yet been announced.



NEWS

ELECTRONIC RECORDS MANAGEMENT BY FEDERAL AGENCIES

The Administrative Conference of the United States (2120 L St. NW, Suite 500, Washington DC 20037; 202-254-7020) has drafted a study of electronic records management practices of Federal agencies, focussing on access, which takes a strong position with respect to the applicability of FOIA to electronic information. Keep an eye on the progress of the October 3rd draft report.

NATIONAL GEO MULTIMEDIA CD

The National Geographic Society has released "Mammals: A Multimedia Encyclopedia" complete with 700 full screen color photos in MCGA format, 250 mammals, 150 maps, the equivalent of 600 pages of text, sounds from animal vocalizations, a glossary and much else. The encyclopedia runs on any CD-ROM drive attached to an IBM PS/2 (or compatible?) with 640K and a mouse. To hear the vocalizations and the narrated tutorial requires a speaker. (Jeanie Proctor, National Geographic Society, Educational Media Division, 17th & M St. NW, Washington, DC 20036).

ELECTRONIC FRONTIER FOUNDATION

A new foundation to increase public understanding of the societal impacts of computer related technology and to address the legal issues that arise as computers are used for communications has been established in Cambridge, Massachusetts. The Electronic Frontier Foundation received its initial capital from gifts made by Mitchell Kapor, Steve Wozniak and an anonymous third donor. [EFF, One Cambridge Center, Suite 300, Cambridge, MA 02142; 617-577-1385].

AUTOMATIC DECLASSIFICATION & MORE

On October 19, the Senate passed S.3225, landmark legislation to assure the reliability of the Foreign Relations of the United States publication series and guarantee the automatic declassification of State Department records over thirty years old with extremely few exceptions. The legislation was precipitated by the resignation in February of Warren Cohen, Chairman of the U.S. Department of State, Advisory Committee on Historical Diplomatic Documentation, who felt that the Committee was not being given access to information it needed to assure the integrity of the series. S.3225 was passed with strong bipartisan support. A parallel bill H.R.5954 was introduced in the House on October 26. Both stand a good chance of passage in the next Congress.

THE COALITION FOR NETWORKED INFORMATION

The Association of Research Libraries, CAUSE (the Association for the Management of Information and Technology in Higher Education) and EDUCOM have joined in forming the Coalition for Networked Information which is designed to promote access to intellectual resources through NREN. Nearly 70 institutions have committed themselves to joining the Coalitions' various task forces and funds have been received from, Apple, DEC, IBM and XEROX. [contact Paul Peter Evans, Director, 1527 New Hampshire Ave., NW Washington, DC 20036]

MCN HIRES NEW DIRECTOR & MOVES

The Museum Computer Network hired Lynn Cox, previously Managing Editor of *Archives and Museum Informatics*, as its Executive Director in November. Cox replaces Deirdre Stam who left MCN to teach library science at Catholic University of America after two years in which she more than tripled MCN membership. With the change, MCN will relocate its offices from Syracuse, New York to Pittsburgh, Pennsylvania.

Continued growth and diversification of MCN is the goal for the next few years. Ms. Cox looks forward to increased activity by MCN special interest groups, especially those devoted to administrative computing (including development), imaging, and collections management both in the 1991 MCN conference program (Santa Monica, Nov. 6-9) which is now under development and in the journal *Spectra*. Send program ideas, *Spectra* papers, and your dues to MCN at 5001 Baum Blvd., Pittsburgh, PA 15213-1809; 412-681-1818.

INVISIBLE BAR CODE INK

Battelle Memorial Institute in Columbus Ohio has developed a line of bar code inks that are invisible under normal light but can be read by bar code scanners which use infrared radiation. The new inks are likely to change the way barcodes are used in everyday products because numerous barcodes with information for all aspects of the manufacturing, shipping and sales of items can be affixed to products without taking up space desired for advertising or making the packaging unsightly. Archives and museums, which have long hesitated about using barcodes on membership cards, mail and other materials that are received by patrons, should find this new technology interesting. Battelle has licensed all uses of the inks in fixed bar-code systems to Accu-Sort Systems Inc. (511 Schoolhouse Rd., Telford, PA 18969-1196; 215-723-0981) which is a leading manufacturer of industrial bar-code scanning equipment. For further information about the technology itself, contact John J. Garvey, Battelle, 505 King Ave., Columbus, OH 43201-2693; 614-424-7507.



SOFTWARE:

MARS - The MANUSCRIPT and ARCHIVES REFERENCE SYSTEM

MARS, the online catalog of the North Carolina State Archives, is not commercially available, but it is, as far as I am aware, the first online public access catalog to the holdings of a public archival repository in the United States, and therefore deserves our attention. Other states have reported their holdings to the Research Libraries Information Network databases which are available to librarians and scholars throughout the country, but these databases are not really accessed by the general public when they visit the archives.

MARS was formally installed in the search room of the North Carolina State Archives in April 1990. In November 1990 there were 107,000 descriptions in MARS, but even though these represented only a small portion of the total holdings of the Archives, the system is reported to have been extremely well received by patrons. MARS is implemented on a Prime 4150 superminicomputer belonging to the Department of Cultural Resources, the parent agency of the State Archives, and is available to patrons of the archives in the search rooms and remotely without usage fee, but with a \$.10 charge per page for printouts from overnight searches. I searched MARS by modem at 2400 baud, and except for the first drawing of the initial logo screen (which took about 10 seconds), response time was entirely acceptable and the search system was extremely impressive. I should note that in this review I am addressing only the online catalog search functions of the MARS system; the staff of the North Carolina State Archives is equally enthusiastic about the data entry system and functions reserved for staff, including the automation of their Records Center and the direct entry of preliminary accessions records into MARS when state agencies transfer their records.

When the patron first encounters MARS, the main screen is painted with the MARS logo and a menu of five numbered options - browse, search, display, list and HELP. As described in the excellent pamphlet and written help materials provided to patrons of the archives, the four basic reference functions available in MARS are:

- 1) BROWSE index terms in subject, personal name, corporate name, geographic locations, source or donor, creator, agent and form of material index.
- 2) SEARCH finding aids entered by the researcher in a search template permitting search by subject, name, geographic, and corporate index terms, by year or span of years, by call number, form of material, record title and by record class, group, or series.
- 3) DISPLAY 26 fields of information from a specific finding aid at the group, series, box, folder or item level.
- 4) LIST the content of any given class, group, series, box or folder.

To get acquainted with MARS, I began by selecting the 5th option, HELP, by typing the number and the ENTER key. I was pleased to find a rich HELP system with several subtopics for further exploration; these subtopics are "Main Menu Options", "MARS I.D." and "Fields of Information in a MARS Finding Aid". These subtopics can be explored in further detail by selecting choices displayed in the explanations. Two to five additional levels of help are provided, with 1-3 screens per topic. The help is well written and well laid out, and is sufficient to understand all the options that currently exist. Three help subtopics (Completeness of MARS, Relationship of MARS to Paper or Microfilm Finding Aids, and Requesting Material) are not yet available. I subsequently found that help topics related to specific options available on screens throughout the system can also be retrieved at those locations by using the context sensitive "?" command on most other screens.

When the user elects the BROWSE option, the system presents a choice of nine indexes and index combinations:

- 1 = Personal Name Index
- 2 = Corporate Name Index
- 3 = Geographic Index
- 4 = Subject or Topical Index
- 5 = Combined Name-Geographic-Subject Index
- 6 = Form of Record Index
- 7 = Creator Index
- 8 = Combined Source, Donor, Agent Index
- 9 = Combined Creator, Source, Donor, Agent Index

I chose to search the corporate index by entering "2". The system responded that I could elect to begin my browse at any point in the alphabet by entering the letters at which I wished to commence, or to browse from the beginning with the ENTER key. By electing to begin at "ST" the system returned eighteen corporate names numbered 271-288 from Springfield Cotton Mill to St. Botolph Club. Instructions on the option line provide for selecting a term by entering the line number or going forward or backwards in the list by one page or by 5 pages at a time (these options each worked well and I skipped ahead a screen to select the St. Paul Fire and Marine Insurance Co.). The system responds to a choice of a term by reporting the number of records retrieved and then lists the record groups in which the term appears. In this case the terms appeared in only one group: "69 Supreme Court", in which 69 is the record group number and Supreme Court is the record group name.

After the retrieval set has been constructed, the user is presented with three options of how to proceed: Go to Lower Level ("G#"), List Contents ("L#"), Display Full Description of Group Level ("D#"). The effect of choosing any of the three options is not intuitively obvious, but once the user has taken each option once, the implications are clear and consistent. When the user selects the DISPLAY option, the system lists all information in 26 fields of data regarding the record group within which the term selected has been assigned (this requires several screens). If the user selects the LIST option, the system displays the

headings of the next level of the description, in this case the titles of the record series within the Supreme Court group. If the user elects the GO option, the system returns only the heading of the series within which the term was assigned. The GO option can then be repeated until the system returns the level to which the term was assigned. In this case the final screen in the series reported that the search of MARS for the index "St. Paul Fire and Marine Insurance Company" returned:

"Supreme Court/Original Cases, 1909-/Fall 1935, Case Nos.317-322

1 60.2.1358.5 35F-322. Bettie Joyner (adm. of William Lee Joyner) v. St. Paul Fire & Marine Insurance Co. et al 1934-1935"

Other methods of retrieving a search set are similar. The user can browse other indexes, and select terms from alphabetical lists presented in the same way as the corporate name index. The user can SEARCH the database from a search template into which he or she enters known terms from indexes, dates, forms of material, etc. And the user can ask to DISPLAY a known record id.

When using the SEARCH template, I was able to browse indexes for terms I wasn't sure would be there, and to combine more than one search term between categories and within categories. Complex searches executed with little delay. In using the DISPLAY approach I invented a record group and series number - 67.2 - and found that it retrieved "Class = State Agency Records, Group = Governor's Office, Series = Non-public Schools Reports". As in other searches, the results could be listed or displayed.

Because I was attached remotely, I did not use the facilities available to local patrons in house to print reports or create call slips, but instead printed out my reports using a combination of PrintScreen and a download function, so I can say nothing about this aspect of the system. However, since I used the same search facilities available to patrons locally, I can testify that the online public access catalog of the North Carolina State Archives is a useful and effective tool for information retrieval with a generally easy to use interface. The only complaint I had was that backing up menu's one level at a time is often frustrating, but this is a complaint about the database system, not the MARS application.

The North Carolina State Archives staff is to be commended for following national standards with respect to field definitions and for using standard vocabulary control in fields such as form of materials, as well as for their stated intention to make possible the interchange of MARS records in MARC format. I believe that the results they have achieved will be of considerable interest to other archivists and that both the system itself, and the experience North Carolina has with patrons using the system, are very much worth studying.

David Bearman



Membership and Development Update

During the final stages of researching the latest Archives and Museum Informatics Technical Report, **Functional Requirements for Membership, Development and Participation Systems**, (available for \$25 pre-paid; \$30 billed from Archives & Museum Informatics, 5501 Walnut St. Suite 203, Pittsburgh, PA 15232-2311), I requested product literature and demonstration diskettes from a large number of firms that we have not previously reported on in this newsletter. Most of these firms have few installations in archives and museums and have not appeared at Museum Computer Network conferences so they are probably unknown to most readers, but an examination of their literature suggests that some of these are offering products that deserve a more extensive review. For the moment I will only list them, but in future issues we will review some of these products in detail.

- Advocate Development Corporation 186 South Street, 5th floor Boston MA 02111 617-542-8489 Ed Murphy **ADVOCATE**
- Campagne Associated Ltd. 491 Amherst St. Nashua NH 03063 603-595-8774 **CommTact**
- CSCI 4351 Garden City Drive, Suite 200 Landover MD 20776 800-426-2724 **CSCI Membership Processing**
- Dataplus, Inc. 4545 42nd. St., NW; Suite 209 Washington DC 20016 202-244-0842 Marion Ballard **Advancement Plus**
- Datatel 4375 Fair Lakes Court Fairfax VA 22033 703-968-9000 Paul Kaldize **BENEFACTOR**
- ECHO Consulting Services Inc. P.O.Box 540 Center Conway NH 03813 800-635-8209 Loren C. Davis **ECHO Development Systems** demo disks available
- Impact Systems Inc. 83 Cambridge St. Burlington MA 01803 800-828-3863 Mark Connors **FundRaiser**
- Institutional Data Systems 2 Hamilton Ave. New Rochelle, NY 10801 914-632-2332 **IDS System One Fund Raising Management** (integrated module of the fund accounting system) demo disk available
- John Snow Inc. 210 Linden St. Boston MA 02111 800-521-0132 Barbara Cohen **DONOR\$** demo disks available
- MacTrac 124 University Ave., Suite 310 Palo Alto CA 94301 415-853-1100 Nancy Szczepanaski **MacTrac**
- Master Systems 1249 Pinole Valley Rd. Pinole CA 94564 800-827-7214 **Donor Master II**
- MicroEdge 124 West 24th St., Suite 6D New York NY 1001 212-463-8290 Kurt Olsen **PC Gift Essential Gift**
- Not-For-Profit Software & Systems Software Services 122 Senatorial Drive Wilmington DE 19807 302-652-3370 J. Harry Feldman **NFP Membership & Statistics, Contrib Plus NFP Accounts Payable, NFP General Ledger NFP Payroll** demo disks available
- P.G. Calc Inc. 129 Mount Auburn St. Cambridge MA 02138 617-497-4970 Henrietta Yelle **Planned Giving Manager (PGM), Mini-Manager Alternative Minimum Tax Calculator** demo disks available
- PhilanthroTec 6135 Park South Drive, Suite 109 Charlotte NC 28210 800-332-7832 Shelly Danyluk **Charitable Scenario**
- Samuelson Computer Services 350 South Schmale Rd. Carol Stream IL 60188 708-668-1598 Roger Hughes **RISS (Resource Information Support System)**
- SofTrek 3729 Union Rd. Buffalo NY 14225 800-442-9211 Tom Kraft **PledgeMaker**
- Systems Support Services 8731 Red Oak Blvd. Charlotte NC 28217 800-548-6708 Georgeanne Bingham **Donor II** demo disk available
- Travis & Software 229 Ridgewood Dr. Ferris TX 75125 214-544-3937 Bob Heinonen **Almost Custom Software**



SOFTWARE FOR GIFT GIVERS

The Grants Management Group Inc. [800 West End Avenue, New York, NY 10025; 212-678-7077] offers several IBM PC based packages for foundations and corporations that give grants, match gifts and support employee volunteering. Its client list includes more than 400 well known private and public foundations and large corporations. Grants Manager helps prepare funding recommendations to boards, issue personalized response letters, and produce reports on proposals and grant status including payment schedules and cash projections. Matching Gifts verifies, processes and reports on employee gifts. Dollars for Doers tracks corporate matches of employee volunteer hours.



ARTifacts

At the MCN meeting, Rockledge Computer Systems Inc. [P.O.Box 718, Andover MA 01810; 508-470-3699] showed ARTifacts, its PC-based collections management software. While this was clearly still a product under development (especially the image management portions which were not demonstrated at MCN), it has some useful procedural features that Rockledge customizes for each installation.



CARLYLE SYSTEMS

Attendees at the Museum Computer Network conference were pleased to discover Carlyle Systems, a library systems vendor, taking an interest in museums. Carlyle recently acquired rights to ImageQuery, the U.C. Berkeley image management software associated with Howard Besser and used by the Lowie Museum of Anthropology and has integrated it with their cataloging product. Hopefully, Carlyle Systems Inc. [5750 Hollis St., Emeryville CA 94608; 800-274-4274] will become another player in the museum collections management systems market.

DOCENT, A MAC VIDEODISC INTERFACE

Belser Knowledge Services has released DOCENT, a HyperCard stack that provides an interface for exploring a videodisc imagebase and an authoring tool that permits the construction of "Notebooks" with user defined playback sequencing, timing and presentation. A second program, StackYACC is a stack for creating Docents. Belser has Docents for its own videodiscs (German Painters of the Renaissance, Dutch Baroque Painting, 19th Century Painting - A Selection and Codex Vat.Lat.) as well as for the National Gallery of Art videodisc. [54 West 21st. St., Suite 309, New York, NY 10010; 212-727-3888].

ZASIO AND SKUPSKY BET ON "Retention!" PLUS "Versatile"

Donald S. Skupsky, President of Information Requirements Clearinghouse Inc. (Denver) and Kevin S. Zasio, President of Zasio Enterprises Inc. (San Jose) have joined forces to market Skupsky's databases of retention requirements in electronic form and to integrate it with Zasio's records management software system, Versatile. Jeanne Raudenbush of Information Management Specialists Inc. [222 Milwaukee St., Suite 304, Denver CO 80206; 800-447-7100] has taken over a Zasio's Director of Marketing and Sales and is supporting both products.

INTERACTIVE AUCTIONS CATALOGS & VIDEO

Astor House Ltd. [439 Lafayette St., New York, NY 10003; 212-982-1500] has released The International Auctions Laser Reference which records worldwide auction sales of Impressionist, Modern and Contemporary Art. The 1989 disc combines a printed index to 10,556 works of art offered in 1989 with visual reproductions on laser disc and a reference database that details title, dimensions, medium, date of execution, auction date and location, auction estimates and actual sale prices, and provenance. The tool can be purchased as a subscription, updated bi-annually (\$5,000) or without the bi-annual update (\$3,500) or as a database alone.

AUTHOR/EDITOR - SGML PROCESSOR

I recently obtained a copy of Author/Editor, a package by SoftQuad Inc. (720 Spadina Ave., Toronto M5S 2T9 Canada; Apple Mac version for C\$495.00), which is a wordprocessing package that outputs SGML conformant texts that are automatically marked up by use of "stylesheet" type conventions. SoftQuad products run on the Apple Macintosh II and on a variety of UNIX computers including Altos, AT&T, Convex, CT, DEC, Masscomp, Motorola, Pyramid, Sequent, SUN and SCO Xenix systems. A separately packaged and priced module called RulesBuilder enables users to employ the AAP SGML Document Type Definition (DTD) or to define their own new SGML DTD's. My own interest in it was that Michel Vulpe, a member of the SoftQuad staff, has taken up the challenge of defining a DTD that will output MARC records. The potential of such a DTD is that someone could write a MARC record in a word processing environment, output the record to any number of print formats, and search the record as if it were both a database and a textfile, but my real interest in it is that while MARC cannot accommodate raster images, graphics, sound or other multimedia, SGML happily references data conforming to other standards within itself. As such it may provide a way around some perceived limitations of the ISO-2709/ANSI-Z39.2 standards.

STANDARDS:

CD-ROM STANDARDS UPDATE

An excellent update on the state of CD-ROM standards (and the lack thereof) is found in three articles on interoperability of CD's in the premier issue of DISC (Fall 1990) p.30-43. The discussion not only identifies what is required beyond ISO 9660 compatibility to make CD's interoperable, but also explores the technical and economic barriers to achieving increased interoperability. Those following CD-ROM standards closely will want to obtain a copy of the CD-RDx standard proposed by the Intelligence Handling Committee of the Intelligence Community Staff (CIA, DIA, NSA etc.). CD-RDx is intended to make read-only data exchange possible for CD-ROM data across proprietary access and retrieval programs and user interfaces. To receive a copy of the proposed standard, write to: IHC, Intelligence Community Staff, PO Box 90828, Washington, DC 20090-0828. The NISO Standards Development Committee reviewed CD-RDx at its meeting on September 12 and is expected to charge a committee with its development as a NISO standard by spring 1991.

The Special Interest Group on CD-ROM Applications Technology (SIG | CAT) has formed the CD-ROM Consistent Interface Committee (CD-CINC), to provide guidelines for CD-ROM interfaces. [contact co-chairs Susan David (202-707-7169) or Fred Durr (301-243-0797)]

INTERNATIONAL ARCHIVAL DESCRIPTION STANDARDS?

A meeting of an Ad Hoc Commission on Description Standards of the International Council on Archives was held in Germany on October 28-30, 1990. Representatives from Canada, Malaysia, Portugal, Spain, Sweden, the UK and U.S.A. were present along with staff of ICA and UNESCO PGI. A French representative was unable to attend at the last moment due to a family crisis. The Commission selected Christopher Kitching (UK) as Chairman and Hugo Stibbe (Canada) as Project Director and then moved with unexpected speed to draft and adopt a "Statement of Principles" for archival description. The statement, which will be circulated for comment when finalized early in 1991, consists of definitions of about ten basic terms (access points, arrangement, authority data, corporate body, description, fonds, levels of description, provenance, respect des fonds), followed by five major sections:

- I. Scope and Purpose,
- II. Units of Description,
- III. Organization and Structure of Description,
- IV. Categories of Descriptive Information,
- V. Retrieval of Descriptive Information.

In addition, the statement contains an appendix entitled "Model of the Levels of Arrangement of a Fond", which is similar to that employed in the Canadian Rules for Archival Description (RAD). The consensus on a statement of principles encouraged the Commission to plan to formulate rules for archival description as its next task. It formed two sub-groups, one on rules and one on access points, and adopted a workplan designed to achieve agreement on these in time for the 1992 ICA meeting in Montreal. When the text of the statement of principles is finalized, we will publish it here for debate. In the meantime, the discussion here, as in the Ad Hoc Commission meetings, will focus on the reconciliation of differences (if any) between the rules defined by UK MAD, Canadian RAD and US APPM standards. In the Spring 1991 issue of Archives and Museum Informatics, Steven Hensen, author of APPM, will review RAD and MAD.

HANDBOOK ON DESCRIPTION STANDARDS

In case you feel confident for a moment that archival description standards issues are being resolved and a uniform set of rules will be forthcoming, look forward to the Handbook on Description Standards to be published by the Working Group on Archival Description Standards in the Summer of 1991. The Working Group (whose work is reported in the two latest issues of the American Archivist vol.52#4; vol.53 #1) is publishing a compendium to describe the content and application of more than 120 technical standards related to archival description. (Contact Vicki Walsh, 65 N. Westminster St., Iowa City, IA 52245; 319-338-6650)

CALS BULLETIN BOARD

The Department of Defense Computer-aided Acquisitions and Logistics Support initiative has begun to have a major impact on defense contractors who are now placing pressure on their subcontractors to provide documentation to them in CALS format and to support ordering of materials using EDI. The result is an upsurge in attention to the use of CALS by small businesses and the need to disseminate CALS information more broadly. One reflection is the establishment of a free bulletin board at 301-948-8966 for 300,1200, or 2400 baud communications to an electronic messaging system for the CALS community, downloading files including MIL-STD-1840A (the basic CALS standard), and bulletins on CALS related activities. Another is the creation of a CALS Small Business Task Group staffed by ELS Inc., 5201 Leesburg Pike, Suite 510, Falls Church VA 22041. Contact them for further information.

NPS REGULATIONS ON CURATION OF ARCHAEOLOGICAL COLLECTIONS

The National Park Service has issued final regulations (effective October 12, 1990 (CFR79.36) on the curation of Federally-owned and administered archaeological collections. The regulations identify the responsibilities of Federal agencies to manage and preserve collections which will not be relevant to others, and other regulations including terms and conditions to include in contracts for curatorial services, standards for evaluating repositories, guidelines for using collections and procedures for inventorying and inspecting holdings that should be applicable to anyone charged with curatorial responsibility for collections of archaeological finds.

COMMON AGENDA PHILADELPHIA PROJECT

The AASLH Common Agenda Philadelphia Project, which is to test the concepts developed by the Database Task Force in ten Philadelphia area museums to determine whether they are understandable, sufficiently comprehensive, capable of improving internal management and adequate to facilitate data sharing, has selected its ten test sites and a project manager. Margaretta Sander, formerly Administrator of Pennypacker Mills, was selected to administer the project. The participating institutions include the Afro-American Historical and Cultural Museum, Balch Institute for Ethnic Studies, Clivendon (a site of the National Trust for Historic Preservation), Delaware County Planning Department, Ebenezer Maxwell Mansion, Germantown Historical Society, Historical Society of Pennsylvania, Mercer Museum of the Bucks County Historical Society, Pennsbury Manor, and the Please Touch Museum. [Contact Margaretta Sanders, Common Agenda Documentation Project, Balch Institute, 18 S. Seventh St., Philadelphia, PA 19106; 215-295-8090]

NOTIS UNDERTAKES Z39.50 LINK

NOTIS Systems announced the signing of contracts with Indiana University and SUNY for joint development of host-to-host software links based on Z39.50 to provide users with a seamless connection from one NOTIS site to another to perform searches and initiate or track inter-library loans.



EDI TECHNICAL REPORT

Electronic Data Interchange: Purchase Orders, a technical report by Elaine Woods which compares the Book Industry Systems Advisory Committee format (BISAC), the Serials Industry Systems Advisory Committee format (SISAC) and the protocols being considered by the MicroLIF Committee to the EDI standards adopted by ANSI X12, the International Standards Organization, and the UN/EDIFACT standard. This extensive (160p) report is both extremely readable and a useful introduction to the problem of marrying MARC and other standards which arise from outside the narrow library/cultural repository community. [NISO, P.O. Box 1056, Bethesda, MD 20817; \$40.00]



SHARING ARCHIVAL APPRAISAL DECISIONS

An exchange in the GRP Standard over the past several issues regarding the proper appraisal of political action committee reports led James Cypher, Public Records Analyst in Massachusetts, to make the useful observation that the information that serves as the basis for an appraisal decision should be recorded in that decision. The proper conclusion here is that a functional requirement imposed by appraisal is that there needs to be an active link between an appraisal decision and the statutory and regulatory authority for the decision. A database of such statutes and regulation needs to be maintained so that changes to them will then automatically result in the flagging of appraisal decisions based on the previous version which might require review and revision.

"ELECTRONIC LIBRARY COMMUNICATIONS FORMAT"

The recently formed Memex Research Institute has announced that its first major initiative will be to try to develop a communications format for abstracting and indexing information and full-text of documents in Group III and IV raster formats. For a full description of their project, see the article in Library Hi Tech cited in the In-Box section of this issue. Memex has acquired an impressive advisory board chaired by Henriette Avram of the library of Congress and including Richard diGennaro (Harvard), Miriam Drake (Georgia Institute of Technology), Roy Mersky (University of Texas), Clifford Lynch (University of California), Bela Havvany (Silver Platter),

Richard Rowe (Faxon) and James Terragano (Maxwell Online). Memex staff include Edwin Brownrigg, previously of Bond University and Brett Butler of InFour.

I'm not entirely clear about what Memex plans to do to develop alternative protocols, but I will keep readers informed.



ART INFORMATION TASK FORCE

The recently formed Art Information Task Force of the College Art Association, funded by the Getty Trust Art History Information Program, has hired Patricia Barnett of the Metropolitan Museum of Art as its Administrator. Formation of the Art Information Task Force was an outcome of the summer 1989 workshop on developing a format for cataloging art objects sponsored by the Getty Trust which conceived of the idea of having a task force consisting of representatives from art history, museum, visual resources, archives and library settings work together on standards for describing art objects and sharing that data. The AITF, chaired by Eleanor Fink of the Getty Art History Information Program, is seeking funds to continue to meet over the next three years to identify fields of information required to describe art objects, evaluate existing standards, and investigate options for information interchange in cooperation with the MCN sponsored Committee on Computer Interchange of Museum Information. Other organizations participating in the AITF include the Visual Resources Association (VRA), the Art Libraries Society of North America (ARLIS/NA), and the Museum Computer Network (MCN).

The three-year project was launched with an inaugural meeting of the Art Information Task Force (AITF), held October 30-31, 1990 in Santa Monica CA. The 12 member Task Force, comprised of art historians, museum curators, registrars, and art and visual resources librarians, held broad-ranging discussions on the nature of art documentation and its current and potential users, in order to identify and prioritize the types of information to be shared by constituents of the communities represented. Throughout the meeting, participants stressed the need for collaboration and integration of the Task Force's work with initiatives being undertaken in the United States and Europe. Eleanor Fink, Program Manager for Information Standards and Services of the Getty Art History Information Program and chair of the AITF, noted in her introductory remarks that the mission of the AITF complements the work of numerous projects, some concerned with electronic transmission of images, some with identification of standards for museums, and others focussed on specific subject areas such as architecture. The AITF has already established reciprocal agreements to review and reconcile its work with that of the Committee on Computerized Interchange of Museum Information (CIMI), the Documentation Committee (CIDOC) of the International Council of Museums (ICOM), and the Council of Europe's Steering Committee for Integrated Conservation of the Historic Heritage.

Task Force members discussed and adopted a three-year workplan, agreeing to begin their investigation into descriptive standards by analyzing the essential categories required to uniquely identify an art object. Patricia J. Barnett, Administrator of the AITF and Director of the Clearinghouse on Art Documentation and Computerization at The Metropolitan Museum of Art, will analyze and compare data dictionaries from a select international group of automated cataloging projects for art objects and visual resources. This effort to "map" data elements and examine their frequency of use will yield a list of data categories to be critiqued by the Task Force at its next meeting in April, 1991.

In addition to the analysis of data dictionaries, the Task Force will develop an advocacy plan to disseminate information about the Task Force and coordinate its publications. This initiative will begin by establishing a network for communication among groups identified as constituents to be informed of AITF activities, and by seeking endorsement of the AITF mission by appropriate institutions and agencies in the art history, museum and information communities.

Among the recommendations adopted by the AITF at its first meeting were that:

"the primary concern would be to focus on sharing those data elements that are critical in supporting scholarly catalogues and labels;

categories of contextual information related to objects, persons, etc. will be considered;

descriptive requirements will be viewed in stages: Level I to contain primary or core information; Level II to contain fields for attribution, provenance, and contextual description or references;

a flexible process not to exclude any genre of object from consideration over time will be attempted;

the content and critical process of defining art information requirements is the primary focus; structuring information is secondary;

work will begin with Western art; non-western subject experts will then be consulted to see how other cultures can be accommodated;

the works of other focus committees, e.g., architectural standards, can be reconciled with the work of the AITF;

an initial attempt will be made to maintain one data dictionary to encompass all media and forms;

continued involvement with other information standards endeavors is encouraged."

[For complete minutes, contact: Pat Barnett, Thomas J. Watson Library, Metropolitan Museum of Art, 1000 Fifth Ave., New York, NY 10028-0198; 212-570-3935]



PRESERVATION DATA RECORDING

OCLC has developed guidelines for recording preservation data in its cataloging or union list subsystems. For more information contact Phil Schieber at OCLC, 6565 Frantz Rd., Dublin OH 43017-0707; 614-764-6144.



Text Encoding Initiative

The ACH/ACL/ALLC Text Encoding Initiative, First Draft Guidelines have been released. The 300 page report contains a description of the TEI project, an introduction to SGML, recommendations concerning the representation of diverse character sets for interchange purposes, detailed proposals for a standard file header or "electronic titlepage" to provide bibliographic information within machine readable texts, tagsets for features common to most text types, for some specific text types such as language corpora, drama, verse and dictionaries, and for representing detailed linguistic analyses, and recommendations for extending these guidelines. The publication of this draft represents the conclusion of the first phase of the TEI activity. Phase 2, which is scheduled to continue until June 1992, will be devoted to public discussion of the drafts, revision in several stages, and issuance of final Guidelines in 1992. TEI hopes that potential users from all communities will request these drafts and comment on them.

The authors of the draft assessed their success in meeting the design requirements developed at their planning conference in 1987 in the Winter 1990 issue of ACH Newsletter. These requirements were that it should:

- 1) specify a common interchange format
- 2) provide a set of recommendations for encoding new textual materials
- 3) document existing major schemes and investigate the feasibility of developing a metalanguage in which to describe them
- 4) be a set of guidelines, not a set of rigid requirements
- 5) be extensible
- 6) be device and software independent
- 7) be language independent
- 8) be application independent

Their self-evaluation states that the current draft satisfies 1 and 2, "though perhaps not as explicitly as one might have expected". It does not document existing encoding schemes, though work is continuing in this and it does not recommend a metalanguage because the working committee established to consider this issue decided against it. It is a set of guidelines rather than recommendations and is device and software independent. But it is not fully implementable in software. It is extensible, but the mechanisms currently provided for extension require "heavy-duty" knowledge of SGML. It is not biased towards any language but has not solved many problems of language representation. Finally, they believe the draft is reasonably simple and clear, and encourage readers to try it, and to help them refine it.

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