A Brief History of the Museum Computer Network

By Marla Misunas and Richard Urban

Written for the Encyclopedia of Library and Information Sciences, August 2007

KEYWORDS
Museum Computer Network, network, computers, museums, professional association

ABSTRACT
The museum information professional's association, the Museum Computer Network, was organized in 1967 during the early years of computerization in museums. Throughout its history MCN has provided conferences, news and networking opportunities to its members. Through a discussion of key points in the group's development and current activity, the forty year history of the association is briefly explored.

INTRODUCTION

The Museum Computer Network, formed in 1967, is a professional association that supports the greater museum community by providing continuing opportunities to explore, implement, and disseminate new technologies and best practices in the field. MCN draws its members from the ranks of museum staff who manage museum websites, network infrastructures, visitor services systems, and museum collection management and registration systems.

MCN provides professional development and educational opportunities through its annual conference. A website and the MCN-L listserv provide members opportunities to communicate throughout the rest of the year.
This article offers a brief history of the organization from its inception in the late 1960s through the present.

ORIGINS

In 1965, the New York University established the Institute for Computer Research in the Humanities (ICRH) under the leadership of computer scientist Dr. Jack Heller. During its first years of operation, the ICRH developed automation tools for NYU's library and completed the first electronic indicies of the Répertoire International de Littérature Musicale (RILM) and the Revista Filología Española. Working with the Dag Hammarskjöld Library, Heller created a suite of programs he called the General Retrieval and Information Processor for Humanities Oriented Studies (GRIPHOS).

Heller and the IRCH came to the attention of staff at the Metropolitan Museum of Art in late 1966. Within the next few months, ICRH developed processes for Carl C. Dauterman to analyze porcelain in the Met's collection and had begun exploring a project to create an electronic index of the Met's Bulletin. During a visit to the museum, Heller met registrar William D. Wilkerson, who introduced him to the challenges of recording information about the Metropolitan's collections and instigated the series of meetings that was to follow.

In the spring of 1967, directors from fifteen New York-area museums met to explore ways Heller's work could be used beyond the Met. With funding from the New York Council of the Arts and the Old Dominion Foundation, the consortium formed the Museum Computer Network

to create a prototype system for a shared museum data-bank. The administrative committee for the project, chaired by Wilkerson, selected Everett Ellin as its first executive director.

The project recruited curators and registrars to develop a data dictionary that would accommodate the diverse methods used to describe museum collections. The resulting tagged record format allowed for the description of individual objects with separate records for artist biographical information and reference citations. Heller's GRIPHOS system provided the information storage, search, and retrieval infrastructures for the records.

MCN and the Metropolitan Museum of Art, with funding from IBM, organized the first U.S. conference on the topic of museum computing in April 1968. This would be the first of many promotional efforts by Ellin, who was concerned about the growing information crisis in America's museums. In an appendix to the American Association of Museum's influential Belmont Report, he described MCN's vision for shared national and international museum data-banks that would not only improve museum management practices, but would provide unprecedented access for researchers. Because of the expected costs, MCN advocated for a single network that would handle data for all the museums across the country.

INCORPORATION AND GROWTH

In June 1969, Jack Heller resigned his position at NYU and accepted a position at the State University of New York at Stony Brook. The original grant funding for the MCN pilot project ended in 1970. Of the original fifteen partners, only the Metropolitan Museum and the Museum of Modern Art continued to catalog their collections using computerized methods and their own operating funds.

In 1972 the Museum Computer Network was formally incorporated in the state of New York with David Vance as its first president. An "administrative committee" was comprised of representatives from institutions who had been involved in MCN's formation. Museums could join to receive consultation and advice about computerization projects or as full members with access to MCN software and hardware resources.

In addition to a change in funding structure, this transition marked a change of what kind of "network" MCN represented. Originally conceived as a physical computer network, MCN was to become part of a growing professional network of related cultural heritage computerization projects. MCN would be one of the co-founders of a related group known as the Museum Data-Bank Coordinating Committee (MDBCC) which sought to find connections and opportunities for sharing work among a variety of museums including archeology, ethnography, history, natural science and art museums.

MCN was able to attract a number of large institutions as members, allowing it to continue operations and development of the GRIPHOS system. Especially important was the decision by Robert G. Chenhall to select the MCN/GRIPHOS system for the Arkansas Archaeological Survey, which encouraged other state-wide surveys take a similar path.

During this period MCN began to regularly host annual conferences. Initially the conferences focused on issues relevant for GRIPHOS users, however over time the conferences attracted representatives from other museums who had not yet implemented a computerized system.

In 1974 David Vance and the MCN office joined Jack Heller at SUNY-Stony Brook.

FROM INSTITUTIONS TO INDIVIDUALS

Towards the end of the 1970s the operating systems found on IBM's mainframe computers were quickly becoming obsolete, foreshadowing the end for GRIPHOS, which had been tightly tied to those operating systems.

This tight integration had already limited the adoption of GRIPHOS in environments that used non-IBM hardware, a problem for museums who often relied on local university computing centers. Updated packages and user manuals continued to be released, but fewer MCN members were able to support the GRIPHOS software. Vance and Heller worked on migrating GRIPHOS to emerging mini-computers in 1981, but these efforts were soon overshadowed by the micro-computer revolution.

The computer revolution which was changing the business world in the 1980s was reflected in the rapid changes occurring at MCN as well. Cheaper desktop computers along with more accessible software made incorporating computers into their operations more realistic for some museums. This caused the increase in MCN's activity which was evidenced in the composition of Spectra. A different audience was looking to MCN for advice on computerization, and for a affinity group of like-minded museum professionals.

While some longtime MCN members continued to advocate for the centralized approach that the organization had been founded upon, museum computerization efforts were increasingly localized with little demand for the large mainframe systems of the 70s. With dwindling support, the GRIPHOS system was officially retired in 1979.

During MCN's "mainframe" period, only institutions could be members of the organization. Reflecting the change to personal computing, the organization opened up membership to individuals for the first time in 1981. The organization soon attracted a broad spectrum of the museum community using a variety of different approaches to automating their collections.

The MCN Board decided the time had come to make major changes in MCN's structure, some of which were precipitated by funding cut-backs at SUNY Stony Brook. SUNY's withdrawal of support meant MCN could no longer afford to pay its long-time staff member and president, David Vance. Vance stepped down as president in early 1986 and was replaced by Ron Kley. The board created a new model of a short-term volunteer president working alongside a grant-funded executive director.

Throughout the 1980s, MCN moved further away from the original vision of a centralized system, choosing instead to emphasize the development of data standards that would allow the exchange of museum information between systems that met local needs. These efforts retained the spirit of the original network, without forcing museums to adopt a single application or hardware platform.

CONSORTIUM FOR THE COMPUTER INTERCHANGE OF MUSEUM INFORMATION

MCN continued to envision a structured flow of information between museums, and at the end of the 80s received grants from the National Endowment for the Humanities and the Pew Trust to create the Computer Interchange of Museum Information (the CIMI project)[1]. Headed by David Bearman, the project brought together a group of museum professionals and network industry staff.

CIMI became an independent entity and produced the CIMI Standards Framework in 1993. The Framework recommended the standard fields which could later be used for interchange of information between museums, and served as the basis for several test projects. Throughout the 1990s, the CIMI group continued their endeavors; among the members were the Getty Information Institute, the Canadian Heritage Information Network, Eastman Kodak, the Smithsonian, the Museum Documentation Association in the U.K., and of course, MCN.

CONFERENCES AND COLLABORATIONS

Since the first conference in 1968 which involved only the current members, MCN continued to produce its annual conferences, sharing information on the challenges and successes of introducing technology into the museum environment. In 1979 MCN held the first conference to which people outside of the group of MCN institutional members were invited. This approach brought in new attitudes and new life into the organization.

Conferences were held in cities all over North America, usually at museums or facilities where members worked. The 1980 conference hosted the first public presentation of the Report of the North American Planning Conference, held at SUNY Stony Brook that year.

The 1985 meeting was hosted by Dr. Jaime Litvak King of the University of Mexico, one of the first professionals to work on the computerization of museum records. Demonstrations featured micro-computers, software and Apple Mac hardware. The meeting featured pre-conference workshops for the first time.

Delegates at MCN's annual meeting in Pittsburgh in 1992 welcomed a surprise visitor—Presidential hopeful Bill Clinton. Clinton spoke with MCN members who were so impressed that the fall 1992 Spectra included a list of delegates who had shaken his hand. Bill Weinstein was the record-holder at four handshakes.

San Diego was the setting in 1995 when MCN and the International Conference on Hypermedia and Interactivity in Museums (ICHIM) held a joint conference which kicked off many of the archiving and online efforts of the next several years. MCN's president at the time, Leslie Johnston, initiated a relationship with the Smithsonian Institution's archives to store MCN's records, where they are still kept.[2] MCN's website went on-line shortly thereafter.

MCN continued to forge informal alliances with professional organizations and to produce conferences in conjunction with these groups. Among the collaborators and conference hosts were the Canadian Heritage Information Network (CHIN), the Association of Moving Image Archivists (AMIA), the Northeast Documentation Conservation Center (NEDCC), the National Initiative for a Networked Cultural Heritage (NINCH) and numerous others. MCN is also an official affiliate organization of the American Association of Museums.

UNITED STATES CONGRESS

The Internet and World Wide Web were expanding rapidly during the early 1990s, and the United States Congress was moving to begin regulating and codifying the use of what it termed the "Information Superhighway." The High Performance Computing and Communication Act of 1991 (the Gore bill) led to the introduction of legislation proposed in Congress to support government information and cultural efforts on the Internet.

Early versions of the legislation did not mention museums specifically. Including museums in information superhighway legislation became a priority for Diane Zorich, President of MCN in 1994. Zorich's efforts and the efforts of many others on behalf of the museum community were

successful in August of 1994 as stated in a Spectra article from the Summer 1994 issue. Spectra reproduced AAM's entire announcement, written by Michael Roark from their Government and Public Affairs office. "The Senate Commerce Committee today voted to guarantee the nation's 8000 museums a place in the National Information Infrastructure under the Communications Act of 1994. Museum images, texts, programming and personnel will soon be accessible to highway travelers." The gist of the bill according to Roark, was to deregulate sectors of telecommunications industries in exchange for industry support for schools, libraries, hospitals, and museums.

PUBLICATIONS

Information about MCN's activities was first published in the ICRH Newsletter along with updates about the progess of the GRIPHOS project which appeared in Computers in the Humanities and Museum News.

After David Vance relocated to Stony Brook in 1974, he wrote the "MCNews" column that appeared in Spectra, the newsletter for the Center for Contemporary Arts and Letters. By 1983 Spectra was entirely dedicated to news about MCN activities. The publication schedule was sometimes sporadic but generally followed the quarter system. 2600 issues were mailed to 41 countries in 1986 while Spectra was still being distributed at no charge. Issues with literature reviews, featured articles and conference reports were often done on an extremely low budget, but always with professional editors publishing the sought-after journal. By 1987 organizational focus shifted towards expanding services and working with the American Association of Museums on cooperative ventures. Consequently the Board decided to expand Spectra contents and begin charging for subscriptions. In 1996 the newsletter underwent a complete redesign and by 1999 with the departure of long-time editor Suzanne Quigley, it moved away from MCN news completely. Guest editors organized Spectra between 1999 and 2002, when it was self-described as "not a scholarly journal, but rather a community-based current awareness publication focusing on issues and projects of interest to museum information professionals." The new millennium was celebrated with a special small format issue guest edited by Steve Dietz and Scott Sayre featuring thoughts and prophecies from 75 colleagues.

By 2002 rising production costs far out-distanced MCN’s subscribers’ and sponsors’ capacity to pay for them; and the Board reluctantly suspended Spectra. The Board’s hope was that the journal would eventually be revived on the MCN website, but competition for limited resources has not permitted its return.

Spectra’s suspension occurred at a dark time for volunteer organizations and membership associations in particular. The “dot com” boom was over, and the tragedies of September 11, 2001 had just occurred. The U.S. economy was experiencing a downturn wherein nonprofit organizations, including museums everywhere, suffered. Nonprofits’ budget cuts translated into fewer members for MCN and fewer travel dollars for members.

INTERACTIVE AND ONLINE

The computer ubiquity envisioned for businesses in the 1970s gradually became reality in the 1990s, with the wider availability of personal computers, access to email, and the internet. Various programs were founded around the country, such as the Electronic Frontier Foundation, the Museum Informatics Project at the University of California, Berkeley; and the National Initiative for a Networked Cultural Heritage. The Getty Art History Information Project launched their website and the Networked Access initiative. MCN members quickly embraced new

technologies which were becoming more and more affordable for smaller institutions not supported by universities or other large entities. The 1990s were a time of growth and expansion for MCN.

ICHIM, the International Conference on Hypermedia and Interactivity in Museums, began to hold conferences which focused on the presentation and web tools in the international museum community. Also in 1996, MCN created their first Internet home page and a discussion list; many museums' webpages were launched, and thousands of webpages from all over the world began to come online. In the late 1990s MCN continued developing its own website, [3] which was completely overhauled in 2005.

ANSWERS CHANGE, QUESTIONS REMAIN THE SAME

Over the last forty years, cycles and recurring themes have occupied the MCN Board. Most of the plans centered around continuing to produce the high quality conferences and publications for which MCN was well known; and to foster greater member involvement in planning and programs. Board of Directors' strategic planning retreats dealt with these key issues every few years. Each time the focus of the organization shifted slightly, but the premises of supporting the use of technology in museums and supporting museum information professionals did not.

As evidenced in Spectra over its 28 year history, desperate straits were always balanced by periods of optimism and growth. Expenses for MCN's ventures increased dramatically over the years and funding was nearly always an issue. Several different management models were tried during MCN's lifetime, including a full-time Executive Director, a part-time Program Director, and various management companies performing administrative duties. Currently MCN's administrative functions are managed by McPherson Clarke, a Canadian association management company.

MCN TODAY

GOVERNANCE

Since its incorporation in 1972 MCN has had a volunteer Board of Directors, usually composed of 12 people. Each director is elected for a term of three years, and may serve two terms in succession. Directors are expected to contribute to MCN's programs throughout their terms and to participate in several committees, such as Communications, Leadership Development, Membership, Finance, and Marketing. Directors meet monthly by phone and twice a year in person. The Executive Committee handles many of the organization's immediate concerns and is composed of the board officers. The President, Vice President/President-Elect, Treasurer and Secretary form the Executive Committee. The Treasurer and Secretary are appointed from the Board of Directors, serving a renewable one-year term. The Vice President serves in that capacity for one year and as President for one year. The Past President also serves one year in an advisory capacity.

Over the years the by-laws have continued to develop and change. MCN by-laws are available in the About Us section of the website [4]. The latest strategic plan is also available in the About Us section of the website [5].

SIGS AND CHAPTERS

In 1997 MCN created the mechanism to form Special Interest Groups (SIGs) with the establishment of the SIG Charter [6]. Each SIG provides a forum for MCN members to pursue

specific subjects while MCN as a whole focuses on its members' more general concerns. SIGs may also represent geographic regions, such as the active California SIG.

Contributing to fields within the museum information profession, SIGs provide opportunities for learning new skills, leadership, and growth. Where communication with the MCN Board is indicated, this usually occurs through the Board's SIG Liaison; in some cases, it includes communication with other officers as noted.

Over the years MCN has formed relationships with various international groups, but never formalized these relationships. In 2006, MCN created the mechanism to form separate regional chapters outside North America. In March 2007,"...A ceremony marking the establishment of MCN in Taiwan was held at the National Science Council, attended by MCN President Marla Misunas, Academia Sinica Vice President Liu Tsui-jung, and Academia Sinica academician Ovid J.L. Tzeng. Liu also chairs the state-operated National Digital Archives Program (NDAP) which cooperates with the MCN in the organization of the MCN's branch office in Taiwan."[7]. Dr. Der-Tsai Lee, Director of the Institute of Information Science, Distinguished Research Fellow, and Director of Research and Development for the Digital Archive Technologies Program in Taipei, Taiwan; is the chapter's first President.

CONFERENCES LOOK TO THE FUTURE – AND THE PAST

Despite the economic downturn of the 2000s, MCN continued to produce strong conferences. Innovative presentations on current topics drew MCN members both experienced and new to its conferences. 2004's conference theme, "Great Technology for Collections, Confluence and Community," focused on the intersection of museums, libraries and archives, which drew delegates from all three disciplines. This intersection too is a recurring theme, as seen when looking back at Spectra, Winter 1989, when a member wrote in for help integrating cataloging information for the three different areas within a museum. The topic of integration remains fluid, as museums couple and de-couple their electronic resources.

"Digits Fugit," MCN's 2005 conference, focused on digital preservation and partnered with the Northeast Documentation Association, providing an entire week's worth of educational programs in Boston.

The 34th annual conference in 2006, "Access to Assets: Return on Investment," took an entirely practical approach. The conference showed delegates how the sometimes intangible educational programming for which they are responsible can be shown to be integral to their museum's operation. And whether they bring in funds directly or not, the public expects to have these programs, or will go to other institutions that do.

In 2007, the annual conference celebrated MCN's 40th anniversary, "Building Content, Building Community: 40 Years of Museum Information and Technology." Conference pricing was reduced and conference programming expanded. A full day of plenary sessions focusing on leadership preceded the usual educational sessions and demonstrations which took place over the remaining three days.

COMMUNICATIONS

While publication of Spectra ended in 2002, MCN continues to place an emphasis on providing a place for museum technology professionals to communicate. Since 1996 MCN has maintained

the MCN-L listserv, which serves as the primary forum for museum professionals to discuss topics from day-to-day operation of a museums technology infrastructure to the impact of emerging technologies on current practice.

FUTURE DIRECTIONS

MCN's strategic plan for the years 2007-2010 is comprised of five major sections: Communication, Finance, Leadership Development, Membership, and Programs and Education. Each section of the plan integrates with the other four to establish and maintain initiatives and goals outlined in the plan. Among the goals are those with which MCN boards of directors have long been concerned: increasing membership, improving the association's financial health, continuing to produce quality programs, and keeping members actively involved in program planning. The methods by which the board and committees of the organization work are changing--for example the board now actively uses its own wiki--but the core aims of the organization remain helping museum staff use technology effectively and helping museum information professionals advance their careers.

BIBLIOGRAPHY

American Association of Museums. America's Museums: The Belmont Report. Washington, D.C.: American Association of Museums, 1968.

Chenhall, Robert G. Museum Cataloging in the Computer Age. Nashville: American Association for State and Local History, 1974.

Institute for Computer Research in the Humanities. ICRH Newsletter. New York University. 1965-1969.

Jones-Garmil, Katherine. "Laying the Foundation: Three Decades of Computer Technology in the Museum." in Wired Museum. Edited by Katherine Jones-Garmil. Washington, D.C.: American Association of Museums, 1997.

Metropolitan Museum of Art. Computers and their Potential Application in Museums. New York: Arno Press, 1968.

Museum Computer Network, Spectra, 1974-2002, volumes 1-29.

REFERENCES

1. http://www.cni.org/pub/CIMI/part1.html#or (accessed August 2007).

2. http://siarchives.si.edu/findingaids/FARU7432.htm (accessed August 2007).

3. http://www.mcn.edu (accessed August 2007).

4. http://www.mcn.edu/about/index.asp?subkey=4 (accessed August 2007)

5. http://www.mcn.edu/about/index.asp?subkey=1723 (accessed August 2007).

6. http://www.mcn.edu/groups/index.asp?subkey=88 (accessed August 2007)

7. http://www.taiwanheadlines.gov.tw/ct.asp?xItem=67390&CtNode=39 (accessed August 2007).

ABOUT THE AUTHORS

Marla Misunas is the Collections Information Manager at the San Francisco Museum of Modern Art and Richard Urban is a Doctoral Student in the Graduate School of Library and Information Science, University of Illinois.