Program for the Annual Conference of the Museum Computer Network, October 24-27, 2001

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Real Life: Virtual Experiences
NEW CONNECTIONS FOR MUSEUM VISITORS

PROGRAM BOOK

October 24-27, 2001 • Westin Hotel • Cincinnati, Ohio, USA
content, image + media management software for museums.

Visit us at booth 10
MCN/CIMI Annual Conference
October 24 – 27, 2001

GALLERY SYSTEMS
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Welcome!

Welcome to Real Life:Virtual Experiences, New Connections for Museum Visitors. The Museum Computer Network and the CIMI Institute are pleased to welcome you to Cincinnati for this exciting event.

This conference represents a new collaboration between two organizations that have a long history in the museum community of working through challenging technological issues. The Museum Computer Network is one of the oldest organizations dealing with technology issues facing museums. Since the 1960's, MCN's members have grappled with the critical changes in technology that have affected the museum landscape. It has always been MCN's aim to promote the use of technology to benefit individual museums and the community at large.

A little over ten years ago, the CIMI Consortium came into being to pursue cooperative efforts within the museum community that would lead to more widespread access to the rich resources contained within it. CIMI has been at the forefront in researching standards, testing them out in practice, refining them, and disseminating them for everyone's benefit. A few years ago, the CIMI Institute was begun to carry further the work of educating and training the museum community in the use of standards and applications that would enrich our offerings to the public.

Real Life: Virtual Experiences brings together a number of leading experts, from a variety of disciplines, for a discussion about the practical possibilities that the use of technology brings to enhance and extend the experience of the museum visitor. We hope that this event will introduce you to something new and provide you with the opportunity to share your experiences, so that together we can have a better relationship with our visitors.

Sincerely,

Robin Dowden and Angela Spinazze, Conference Co-chairs

Sponsors

Our thanks to all those who have helped make MCN/CIMI 2001 possible!

Canadian Heritage Information Network

The Contemporary Arts Center opened their galleries for our visit Wednesday evening.

The Cincinnati Art Museum hosted our closing reception.

The Beecher Center for Art and Technology sponsored the closing plenary.
Conference Schedule

WORKSHOPS
WEDNESDAY, OCTOBER 24, 2001

8:00am-6:00pm . . . . . . Registration
Coat Room

9:00am-12:30pm . . . . . Introducing Information Technology into Your Building: From Perspiration to Inspiration
Taft 2
Rob Billingsley, Smithsonian American Art Museum, Washington
This course is recommended for both technical and museum program staff involved in developing activities and exhibitions in museum buildings that make use of advanced information technologies. Using a combination of lecture, discussion and case studies, attendees will become familiar with critical factors and basic considerations in information technologies such as:
- High speed fiber optic, copper, and wireless communications;
- Digital audio/visual delivery platforms;
- Voice systems including PBX, Centrex, Video Teleconferencing and Voice over IP;
- And technology project management.
Impacts on building architecture will be discussed as each technical area is addressed.

9:00am-12:30pm . . . . . Wired and Wireless Services: The Present and the Future of Mobile Applications
Hayes
Christian Feichtner, Siemens AG Österreich, Austria
This workshop begins with an architectural overview about the Web and WAP architecture, followed by requirements for successful Web-based applications, like session management and arising problems. Based on the architectures, the similarities and differences of Web and WAP applications are discussed, deriving requirements on how to develop applications for both platforms like context information and implementation strategies. Also included will be a presentation of research projects, which aim at the design and provisioning of ubiquitous applications. At the end an outlook will inform the audience about the future direction of ubiquitous applications.

9:00am-5:00pm . . . . . Physical Computing
McKinley
Slavko Milekic, University of the Arts, Philadelphia, and Marek Walczak, mw2mw.com
Hands-on series of exercises and critiques on various models of physical interaction. Each exercise will be based on both built and theorized interactive museum installations. A portion of this workshop will focus on examples of adaptive interface design for children and introduce the concepts of cognitive artifact and contextual scaffolding.

9:00am-5:00pm . . . . . Streaming Media: Broadcasting for the Internet
Taft 1
Norbert Kanter, zetcom, Berlin, and Holly Witchey, Cleveland Museum of Art
Learn how the traditional broadcasting industry is being transformed via streaming media so that everyone can now broadcast video and audio on the Web. This workshop will introduce you to the present state of multimedia delivery options on the World Wide Web. Motivation and ideas of how to increase the museums outreach through “rich media” software solutions, hardware necessities will be discussed, broadcasting examples and experiences will be presented and possible projects planned by participants.

9:00am-5:00pm . . . . . Building Immersive Environments
Garfield
Josephine Ainsley, University at Buffalo; Dave Pape, Res Ubriac, Buffalo; and Maria Roussou, Foundation of the Hellenic World, Athens
Immersive interactive exhibits, virtual reality systems, large-scale dome theaters, and digital planetarium have started being considered by more and more museums worldwide as spectacular media environments for the delivery of unique artistic, entertainment, and educational experiences. However, the prohibitive costs and the advanced technical knowledge required for the selection, installa-
tion, operation, and maintenance of such environments present practical drawbacks for their use by museums. This workshop explores the aesthetic, economic, technological, and logistics successes and problems involved in the installation of immersive environments in public cultural spaces by looking at real-world examples and taking a wide view of immersive interactive technologies, both high-end (CAVE displays, domes, etc.) and low tech, low cost approaches.

9:00am-5:00pm . . . . . . . Museums, Metadata Harvesting and the Open Archives Initiative Protocol
Presidential 3
Carlo Logozzo, Cornell University; and Henry Stern, CIMI Institute
The CIMI Institute, in conjunction with the Open Archives Initiative, offers this two-part tutorial to assist museum professionals in understanding the potential of the Open Archives protocol and how it can be used by museums to enhance the availability of scholarship to researchers and specialist audiences via the Web. The morning session is designed for the non-technical audience. This half-day tutorial will discuss the history of the initiative starting with its inception in the e-print community, working through the goals and objectives of the Santa Fe Convention, and ending with a discussion of the current version of the protocol. Case studies will be presented to demonstrate the purpose of the protocol, as well as to underscore its place within the context of providing access to complex museum content. Discussion will focus on practical services that may be provided, and potential collaborations that may develop with existing content aggregators, to collect, distribute and provide access to existing scholarly museum resources.

The afternoon session is designed for technical implementers. At the core of the Open Archives protocol exists a concern on the part of its authors that it be easy to implement—that the technical barriers to implementation remain low so that it can have a chance to succeed and that it can be used by a diverse set of communities working with, and producing, scholarly resources. This half day tutorial focuses on implementing the protocol. Beginning with an in-depth discussion of the components of the protocol, a sample installation will be analyzed and examined as a means to demonstrate how the parts are constructed and what to expect of the final product.

12:30-1:30pm . . . . . . . Lunch on your own

1:30-5:00 pm . . . . . . . Digital Tools and Techniques for Evaluating the Visitor Experience
Taft 2
Geri Gay and Michael Stefanone, Cornell University
A major challenge in assessing design, and impact, using digital technologies in museum settings, relates to the difficulty of gathering, organizing, and presenting useful data. Technologically-rich environments demand equally rich data collection and analysis tools capable of examining human-computer interactions as well as uses of multiple representations of information. Digital technologies not only allow evaluators and museum professionals to gather data from the systems or spaces as they are being used, they allow integration of other data as well, such as observations, interviews, video, audio, text documents and more. This workshop will begin with an introduction of electronic evaluation, including key issues and definitions followed by a look at successful tools and techniques for collecting, analyzing and reporting data within and about technology rich environments. Finally, the presenters will frame the social and ethical considerations involved in conducting evaluations.

6:00-9:00pm . . . . . . . Opening Reception at Contemporary Arts Center
115 E. 5th St, Cincinnati, OH
(513) 721-0390
Join us for a convivial opening reception at the Contemporary Arts Center, one of the first contemporary art museums in the United States. Just two blocks from The Westin!

SESSIONS
THURSDAY, OCTOBER 25, 2001

8:00am-5:30pm . . . . . . . Registration
Coat Room
9:30-10:30am ........ Opening Plenary
Presidential 1 and 2
Genevieve Bell, Intel
Genevieve Bell, a design ethnographer within the Intel Architecture Labs at Intel in Hillsboro, Oregon. Her group, Peoples and Practices Research, is responsible for finding new users and new uses for technology using social science research methods. Genevieve has conducted ethnographic fieldwork in households across Western Europe, China and the United States. She is interested in the intersections of emerging technologies and social practice as they occur within domestic and public spaces. Prior to joining Intel in August of 1998, Genevieve taught anthropology and Native American studies at Stanford University. She has conducted fieldwork with indigenous peoples in the US and Australia. Genevieve holds a PhD in cultural anthropology from Stanford University and a combined AB/MA from Bryn Mawr College in Philadelphia.

10:30-11:00am ......... Break

11:00am-12:00pm ...... To Be Announced
Presidential 1 and 2

12:00-1:30pm ........ Lunch on your own

1:30-3:00pm ............ Rich and Streaming Media: Asset Management and Innovation
Presidential 1 and 2
Moderator: Sarah Kenderdine, Powerhouse Museum, Australia
Zane Vella, Smash TV, San Francisco; Julie Lazar, International Contemporary Arts Network, Glendale, CA; Janet Gardner, Perspective Media Group; and Lynn Underwood, Solomon R Guggenheim Museum, New York
Streaming Internet media can be tremendously compelling, from the real-time broadcast of radical performance art in a downtown precinct, to supporting user interaction in distributed distance education using rich feeds of video and audio. However, most discussions of these audio-visual structures “contribute to the notion of Internet as the next evolution of broadcast media” (Kluitenberg, 2000). The social space of museums and galleries demands more than the passive receiver/active sender of the broadcast model so pervasive in current streaming media dialogues. Cultural organizations can facilitate vibrant and educational cyber environments through fostering active relationships among participants, using a blend of technologies, upstream and downstream. The first part of this session will demonstrate the social, community and innovative aspects of various streaming media based projects—as discussed by speakers Vella and Lazar (see below).

Streaming media is transforming the cultural sector and academia. It is timely and it is political. It can also be confusing and frustrating, with multiple competing and changing standards, and severe quality degradation due to bandwidth constraints. The ongoing storage and availability of material derived from ‘real-time events’, are also pressing issues for all of us. How we manage the rich media created throughout cultural communities is becoming increasingly complex. The second part of this session will examine asset management--discussed in tandem by industry expert Janet Gardner and museum professional Lynn Underwood.

*With a wealth of experience to drawn on, speaker Zane Vella examines visitor opportunities for collaboration and experimentation with media tools and environments using rich media. He will speak specifically about the Zeum Center for the Arts Production Lab exhibit, the Exploratorium’s Webcast Studio, and the CitySpace Project.

+ Julie Lazar (Director of the International Contemporary Arts Network) will discuss the works of Kit Galloway and Sherrie Rabinowitz in “Electronic Cafe” that MOCA sponsored in 1984. Lazar will document Caldwell’s involvement in a community-based training program and facility, KAOS Network in South Central LA, and also an intercultural project between artists and musicians in his community in Havana, Cuba. Also discussed will be “In the Name of the Place” that involved artists working with a primetime broadcast network program (“Melrose Place”).

1:30-3:00pm ............ Zero-Interface
Garfield
Slavko Milekic, University of the Arts, Philadelphia; Marek Walczak, mw2mw.com; René Jolicoeur and Kat Gerber, Canadian Heritage Information Network
“Zero-Interface”: an interface where the user does not have to acquire any additional skills in order to successfully interact with an application. This session will investigate examples of applications/installations that can be loosely described as going in the
zero-interface direction, such as Apartment at Whitney Museum of Art, Adrift at the New Museum, Collaborative Mapping Project at Nabi, Korea.

Geber and Jolicoeur will discuss “design simple,” the concept behind the interface design methodology developed for the Virtual Museum of Canada (VMC). Brainstorming sessions and focus groups held with museum representatives and the general public from across Canada provided the overall concept and interface architecture for the VMC. This paper will present CHIN’s interpretation of this concept and the methodology that stems from it.

1:30-3:00pm ............ Out in the Open: The Importance of Standards in the Museum Community
Hayes
Moderator: Rob Lancefield, Davison Art Center, Wesleyan University
Layna White, Grunwald Center for the Graphic Arts, Los Angeles; and Guenter Waibel, Berkeley Art Museum/Pacific Film Archive
Museums harbor data of interest to constituencies that range widely from power users such as researchers to casual audiences such as cultural tourists. This diversity of users and uses demands multiple layers of access to provide different types of experiences. The presentation of any one underlying set of data has to be tailored to these different audiences through multiple paths of navigation or different interfaces.

While standards are commonly touted as a means of ensuring data longevity and interoperability, this session examines their ability to enable a variety of user experiences powered by one data set. This session will demonstrate that standards not only provide a sustainable information architecture, but also that they play a critical role in delivering attractive, tailored, end-user-focused content. The panelists will introduce metadata schemas (REACH, EAD, OA2, TEI Lite) and vocabulary standards (ULAN, AAT) for encoding and presenting descriptive and digital imaging metadata as well as associated textual resources.

1:30-3:00pm ............ Private Eyes/Private Lives: The Impact of New Technologies on Personal Privacy
Presidential 3
Moderator: Diane M. Zarich, Information Management Consultant for Cultural Organizations, Princeton, NJ
Consumer groups predict that privacy is the next big issue on the consumer horizon. Society’s pervasive use and acceptance of new technologies in all areas of life leave “electronic footprints” that can and are being used to monitor aspects of our private lives. The results of such monitoring range from innocuous attempts at collecting usage statistics to serious personal intrusions such as identity theft.

As museums investigate and implement new technologies to enhance visitor experiences, they need to consider how these technologies may intrude on a visitor’s privacy. Webcams in galleries, “cookies” placed on visitors’ computers, and Web site registration are already widely used by museums. How do these impinge upon the privacy of our visitors? And what are the privacy implications for newer technologies on the horizon—e.g., wearable technologies, cellular technologies, etc.? This session will explore the privacy implications of technologies currently in use in museums, as well as the newer technologies being presented at this conference. Panelists will discuss consumer privacy issues, how privacy rights are viewed under U.S. law, and what steps individual museums have taken to review and assess privacy issues that arise in their use of new technologies. This session is sponsored by the Intellectual Property SIG.

3:00-3:30pm ............ Break
Gibson Foyer

3:30-5:00pm ............ Fashionable Technologies
Presidential 1
Moderator: Angela Spinazze
Daniel P. Siewiorek, Human Computer Interaction Institute, Carnegie Mellon University, and Chris Kasbach, BodyMedia
Fashion Toolbelt: Jewelry. This session will introduce participants to the landscape of wearable computers with discussion of the evolution of the technology from the academic research labs to contemporary, viable products. What are the factors that influence a successful wearable device, and how do developers decide if it's fashion, a tool belt, or jewelry?
5:30-9:00pm .......... Grand Opening of Exhibit Hall
Taft I
Join us for the Grand Opening of the Exhibit Hall on Thursday evening where you will have a chance to talk with the developers of innovative products and services that help museums and visitors communicate.

SESSIONS
FRIDAY, OCTOBER 26, 2001

8:00am-5:00pm........ Registration
Coat Room

9:00am-5:30pm........ Exhibit Hall Open
Taft I

9:00-10:30am .......... Experience Planning
McKinley
Andrew Blauvelt and Sarah Schultz, Walker Art Center, Minneapolis
How do the physical and virtual spaces of an art museum come together to reinforce an institution’s mission? This presentation will use the specific example of the Walker Art Center’s recently announced expansion as a way of examining the complex issues involved in experience planning. From early conceptual models to the latest programmatic metaphors for physical spaces, we will examine how the worlds of design, technology, and learning can converge to create more varied and engaging experiences for visitors.

9:00-10:30am .......... The Straw that Broke the Museum's Back? Digital Art On-Line and On-Site
Presidential 2
Richard Rinehart, Berkeley Art Museum/Pacific Film Archive; Jon Ippolito, Guggenheim Museum, New York; and Roel Ferrera-Balanquet, The Museum of Contemporary Art Ateneo of Yucatan
In this session, digital artists, museum professionals, and curators will discuss the recent impact of native-born digital art forms, from net-art to tele-robotics, on museum practice and the viewer’s experience. The everywhere-at-once network location of net-art changes the role of the museum as presenter. The interactive and dynamic aspects of digital art gallery installations changes the viewer’s relation to art in a museum setting, and poses special logistical and organizational problems for museums. As museums begin to accession digital art into permanent collections, new preservation challenges and strategies will arise. These new art forms challenge and reconfigure core museum practices through the nature of the media, and as conscious artistic strategy. Are museums up to this challenge? Or will they be irrelevant to this new art movement?

9:00-10:30am .......... Affinity Group: Sustainable Systems for Ongoing Creation of Digital Content
Garfield
Kenneth Kobus and Bryan Wunar, The Adler Planetarium and Astronomy Museum, Chicago
The Adler Planetarium is building an entirely computer-based museum facility in which content is the focus and the technology fades into the background. This space will be filled with dazzling electronic displays, compelling educational computer-based interactive exhibits, data driven virtual reality experiences of the universe and computer/video classrooms that are fed information and deliver experiences through an extremely broad bandwidth network connection (OC-3) to the rest of the world. An almost infinitely malleable electronic and physical space, it will be driven by its broad bandwidth connectivity. Adler hosts the world, the world experiences the rich science content of Adler, in real time at high quality: this is the concept behind CyberSpace, the gallery.
While not cutting edge, the ability to continually update and reprogram content and deliver programs from outside make this space unique. We’ll have the ability to meld electronic content with live events as they happen (NASA launches, etc) which will make for a new type of gallery content. Communications technology will also allow us to host Adler’s science resources in programs that will be sent (via Internet, H.320 and H.323 videoconferencing) worldwide, including directly into classrooms to augment teachers, piloting a new proactive role for museum in formal education, and the potential of a significant new revenue stream. The gallery will serve as an electronic nexus allowing the entire museum (via our network) to serve as a location for live video programming.
If we can build and sustain a mechanism for the ongoing creation of electronic content then we can expand the concept throughout the Adler, augmenting all of our exhibits with electronically updateable components that would eventually make for an entire museum whose content can be rapidly changed. This not only has implication for repeat visitors but will allow us to exhibit a depth and breadth of content far beyond that which standard static exhibit would allow over an exhibit's life.

9:00-10:30am . . . . . . . Bricks and Torture: Preparing Your Building for the New Media Age

Presidential 3

Moderator: Leonard Steinbock, Cleveland Museum of Art
Brian W. Cato, ICI Networks, OH; William Barrett, The Field Museum, Chicago; and Sandro Freytag, Armstrong World Industries, Inc., PA
Voice, data, audio, high res images, video, and Internet resources are all starting to fight for space on the Museum network. Not quite ready for it? Fortunately, new technologies and techniques are helping us cope with both hostile old buildings and challenging new architecture. This session explores the hows, whys, whens, and "gotchas" of cable-based and wireless networks, through case review, the testimony of experts, and an emphasis on dialogue with the audience.

10:30-11:00am . . . . . . Break in Exhibit Hall

Taft 1

11:00am-12:30pm . . . . . . Affinity Group: Plugged In—Attracting a Virtual Audience for Online Events

McKinley
Norbert Kantor, zetcom AG, Berlin; and Andrea Poll, Columbia College, Chicago
In 2000, Poll produced pause, a large scale public art project as an Artist-in-Residence at the Chicago Cultural Center as part of the Millennium Community Arts program sponsored by the Mid-Atlantic Arts Council. As part of the project (which can be seen at http://pause.colum.edu), six community organizations were connected to the Chicago Cultural Center for a live Web streaming performance. Using the pause example and others, Kantor and Poll will discuss how to market and advertise for a Web cast event or pre-recorded video content with special emphasis on the importance of cooperation and advance advertising. Participants will discuss their experiences producing weekly, monthly and one-time special events such as performances, lectures, interviews and concerts.

11:00am-12:30pm . . . . . . Portable Devices in Museums: What Have We Learned So Far?

Presidential 2

Moderator: John Perkins, C/IMI
Barbara Roberts, Acoustiguide Corporation, New York; Peter Long, The Field Museum, Chicago; Robert Fitzsimmons, Vulcan Northwest, Seattle; and Mandy Smith, John F. Kennedy University, Orinda, CA
From the audio guides that we are familiar with to the handheld devices that we imagine visitors using in our galleries, this session explores portable computers in museums. Panelists will discuss the present and the future of audio tour systems, a handheld applications assessment by the Field Museum, and a discussion of MEG, Experience Music Project's Museum Exhibits Guide. Smith will be presenting the findings from her master's project, "Handling Interpretation: Hand-held Computers as Interpretative Tools in U.S. Art Museums."

11:00am-12:30pm, . . . . Zooming In: Dynamic Imaging Servers & File Formats

Presidential 3

Moderator: Guenter Waibel, Berkeley Art Museum/Pacific Film Archive
Jeff Anderson Lee, University of California Berkeley; Rob Lancefield, Davison Art Center, Wesleyan University; Scott Soye, Minneapolis Institute of Arts; John Weise, University of Michigan; and Larry Wenzel, Pennsylvania State University Libraries
Spurred on by the maxim "one file, many purposes," museums capture high-resolution image files of their collection objects. Web derivatives typically contain a fraction of the master file data; megabytes are downscaled to kilobytes, and the amazing details of a brushstroke or a signature are sacrificed to considerations of bandwidth and copyright concerns. Zoomable file formats support a more satisfying end-user experience, and a better return on the initial investment in quality digital imaging. Images on your institution's website no longer merely offer a hint at an artifact, but become a powerful tool of examination and discovery. By serving out image details in small discrete chunks of data the new file delivery formats solve bandwidth issues and alleviate copyright concerns. Panelists will discuss various file formats (such as MrSID and FlashPix) and expand on the technical aspects of implementing digital imaging servers as well as the overall implications for digital imaging workflow and practices.
11:00am-12:30pm . . . . . . . The Discreet Machine
Garfield
Moderator: Chuck Patch, The Historic New Orleans Collection
Computers in museum galleries are no longer novelties. And perhaps this is a good thing. While web-based exhibits and Internet museum applications have, with some famous exceptions, stolen the limelight from interactive exhibit technology, exhibit designers have been rethinking the integration of computing technology into public spaces. The panelists in this session represent a diverse range of players in museum exhibit design.

* With over 20 years experience as an exhibition developer, Hugh Spencer is well grounded in the history of museum exhibition design and the evolution of the concept of ‘interactivity’ in design. He will address emerging technologies and their potential to enhance the visitor experience.

+ Malcolm Ferris has substantial experience of developing new media for use in public spaces and has produced and directed a number of significant projects, from large 3D real-time immersive installations to screen-based user-interface and on-line works. He has also been involved in European funded research programs and is currently developing a project, “Wireless Information Systems for use in Information-rich Cultural Environments.” Ferris’ multi-faceted experience is especially evident in the 500-sq. metres digital media gallery he curated for the UK’s newly relaunched National Museum of Photography Film & Television.

* The Adler recently completed the “Programmable Gallery” a major interactive exhibition. Bryan Wunar will discuss the planning and rethinking of traditional approaches that were necessary for the innovative design of the installation.

12:30-2:00pm . . . . . . . Conference Lunch and MCN Business Meeting
Fountain
If you wish to join us for the conference lunch and have not purchased a ticket, a limited number of additional tickets will be available at $25 apiece. If you wish to attend the MCN Business Meeting only, please join us at 1:30 pm.

2:00-3:30 pm . . . . . . . Images in Action: Generating the Questions that Shape New Views of the Museum Experience
Hayes
Moderator: Sam Hastings, University of North Texas
Rebecca Barham-Johnson, Robin Davis, Jo Glenny, Terri Karches, Mary O’Connor, Susan Richardson, University of North Texas; and Kathy Walsh-Piper, Dallas Museum of Art
Can users tell the difference in dots per inch (dpi) in an image on a 72 dpi computer monitor? Do children really like lots of color and automated gifs? Do wireless webcams work to enhance the museum experience? What do children see when they visit a museum? What types of policies and training are needed to support a public scanning station? What are the challenges of building a local history archive on the fly? These are just a sample of the questions that provide a framework for the research presented.

Images in action or image retrieval in the age of digital collections presents several major challenges to systems designers, educators and researchers. Virtual and diverse user groups, effective use of new technologies, the need for new descriptive methods and issues of resolution and representation in the digital environment are just the beginning. A coordinated effort is needed to formulate the questions that guide effective research efforts. The panelists are faculty, librarians, museum educators and Institute of Museum and Library Services (IMLS) Fellows who are teaching and conducting research in the areas of image databases, visual information retrieval, multimedia resource collections and the impact of new media in cultural heritage organizations.

Barham-Johnson and M. O’Connor present the results of a study in user perception of resolution for images on the web. Davis and Richardson discuss children as design partners for a study with results that change the way we will design web activities for children. Glenny and Walsh-Piper present project results from a pilot study using wireless webcams at the Dallas Museum of Art for educational programming. Hastings and Karches present how children use the IMLS Public Scanning Station at Denton Public Libraries to develop a local history archive and the policies and procedures developed to support the project.

2:00-3:30pm . . . . . . . Affinity Group: Using High Definition Technology for Audience Development
McKinley
Laura Willumsen and Rocío Nogales, Pittsburgh Center for the Arts; Ted Geier, CineMuse, Inc., New York
CineMuse Network is a national network of museums and cultural organizations using high definition (“hi-def”) digital content to carry out their missions and attract new resources for education programs, admission-based cultural events, and exhibition sup-
port. Innovation, collaboration & leadership, new audiences, savings & revenue, production, and exciting future projects are all being generated by the Network's innovative uses of hi-def technology. There will be time for a demonstration to show how both affordability and flexibility make hi-def cinema accessible to museums of all types and budget sizes.

2:00-3:30pm ........ Beta Meta: The Challenges of Delivering Complex Content To Mobile Devices
Presidential 2
Moderator: Tony Gill, Research Library Group
Carl Goodman, American Museum of the Moving Image, New York; Chris Tellis, Antenna Audio/Arts Communications Technologies; John Weber, San Francisco Museum of Modern Art
In this session, panelists will discuss the challenges of delivering complex content to a variety of mobile devices within the museum. The discussion will focus on matching content with the appropriate device based on lessons learned and insights gained through projects aimed at improving communication between museum and visitor.

2:00-3:30pm ........ Cultivating the Online Community: Technology’s New Role In Museums
Presidential 3
Moderator: Christine Henry, Institute of Museum and Library Services (IMLS), Washington
Barbara G. Smith, IMLS; Beth Sandore and Nuala Bennett, University of Illinois Library at Urbana-Champaign
As museums strive to better serve their communities, new and innovative uses of technology will help to reach their goal. This session will highlight up-to-date funding opportunities through IMLS that help to bring innovative technology options to museums of all sizes and disciplines. Information will be presented on IMLS 2000 technology in museums survey. Panelists, including recipients of IMLS National Leadership Grants, will present their current projects and help lead a discussion about current technology needs in museums and how IMLS may foster these needs.

3:30-4:00pm ........ Break in Exhibit Hall
Taft 1

4:00-5:30pm ........ Affinity Group: Mobile Devices in Museums: How Effective Are They?
McKinley
Geri Gay and Michael Stefanow, Cornell University
Museum professionals involved with user interface design and content for mobile communication will be interested in this affinity group. Professor Gay will present a case study around which discussion about evaluation and effective design of museum applications designed for visitors on the move will take place.

4:00-5:30pm ........ Interpretation And Representation: Strategies for Providing Access to Subjects
Presidential 2
Lanya White, Graumwald Center for the Graphic Arts, Los Angeles; Brian C. O’Connor, University of North Texas; and Erin Coburn, J. Paul Getty Museum, Los Angeles
Subject descriptions determined by curators and cataloguers represent works of art and artifacts in information systems, with the formal, authoritative descriptions marking what a particular agent knows about a work at a particular time. Is this practice useful to information seekers and explorers, in their research, learning, and other real life activities? In this session, panelists will examine motivations and methods for providing meaningful access to subject matter, specifically in public access systems where text and images cohabit.

Audiences likely influence our access strategies. Our subject descriptions, for example, should reflect how the assumed audience wishes or expects to find subjects represented and how they put works or their visual surrogates to use. How might broad online access to digital images, as well as old and new commentary about works, complement or change discovery and selection of subject matter? Image rich public access systems, for instance, provide opportunities for information seekers to self-determine the usefulness of images and subjects for evolving needs. If museum descriptions of subjects offer direct guidance from domain knowledgeable describers, might we also encourage more needs-driven descriptions by or for different audiences?
4:00-5:30pm . . . . . . . . Responsive Physical Environments

Presidential 1

Moderator: Maria Roussou, Foundation of the Hellenic World, Athens
Clark Dadosworth, Osage Associates, San Francisco; Carter Emmert, American Museum of Natural History, New York; and Jeff Mayer, Gensler, Southern California

The concept of providing an interactive, responsive experience to museum visitors is not new. The leisure and entertainment industry has been refining this concept with great success, far before technological advancements made the development of responsive exhibits simpler. The research labs that have been conceiving and creating state-of-the-art technology and systems are now able to open up their innovations to broader application. And, more recently, museums have been exploring and are installing "responsive" physical environments in galleries, as part of the displays, in separate interactive areas, or even as stand-alone installations and exhibition spaces.

Responsive environments are exciting and attractive. They can place the visitors/users/participants in control, lending them possibilities to become actively involved in the construction of the experience or even make observable changes to the environment. Visitors interacting with responsive environments enjoy the sensation that their actions matter, while museums strive to make the response a meaningful one that can serve their purpose. Advanced interactive systems and virtual reality installations have almost inherent responsive and interactive qualities, but how do museums decide on how to put them in practice and what degree of interactivity to provide? How can they customize the experience for each visitor but still maintain the necessary group throughput? To what level should their environments provide immediate response in order to ensure prolonged engagement and how do they seamlessly combine innovation and experimentation with a complete production for the broad public? How do they prepare visitors for the experience and at the same time preserve the sense of magic and the suspension of disbelief?

The panelists—inventors, technologists, museum and themed attraction professionals—have faced these challenges when applying interactive responsive technologies in public spaces. For this session, the speakers will report on what is out there, what is available, and how museums are using these systems to reach their audiences.

4:00-5:30pm . . . . . . . . The Entertainment Complex...Or, Strategies in the Field of Engagement

Presidential 3

Cynthia Goodman, Millennium Monument Center, Newport, KY; Gideon D'Arcangelo, Edwin Schlossberg Incorporated, New York; Benjamin Britton, University of Cincinnati and University of Arizona, Japan

Like it or not, museums in the 21st century recognize "entertainment" as a strategic imperative for the engagement of new audiences. Most critically, entertainment might be identified as the core of an endlessly stimulating spectacle, the weaving of goods and images that ensnare a consumer society. More prosaically, entertainment is understood in terms of pleasure, as amusement, a diversionary means to occupy one's attention. Symptomatic of the "entertainment complex," museums staunchly eschew the former while dancing coyly with the latter. Yet, however problematic, the seductions of entertainment are not new; and the perception of entertainment as a necessary evil is deeply entrenched, so much so that one might come to understand the efforts of museums to entertain as something of a devilish complex.

How do Museums gain new audiences and retain committed ones if not by entertaining them? Conversely, is entertainment in the museum such a horrendous prospect? What precisely are the Museum's contemporary goals? And how are these goals articulated, particularly in relation to new technologies and their display? Do Museums wish to intersect with the popular culture, to infuse and be infused by it, or to remain distinct from it? How do Museums and the purveyors of entertainment strategize to both ends?

The session questions the presumably blurred line between museum exhibitions and programming and entertainment as arenas of cultural production, and considers the history and future of the "great divide" between the two. Do museums want to entertain or not?

6:30-9:00pm . . . . . . . . Closing Plenary and Reception

Sponsored by the Beecher Center for Art and Technology

Cincinnati Art Museum
953 Eden Park Drive, Cincinnati, OH
(513) 639 2924

Please join us for a wonderful closing reception hosted by the Cincinnati Art Museum and a closing plenary session at the CAM Auditorium. The CAM is approximately 15 minutes by cab from the Westin. Arrangements will be made for sufficient cabs. The museum can be reached on public transportation using Queen City Metro Coach #49.
7:00pm .......... Closing Plenary
Cincinnati Art Museum, auditorium

Lisa Anne Couture, Asymptote Architecture, New York
Founded by partners Hani Rashid and Lisa Anne Couture, Asymptote Architecture is a New York based firm whose work has gained professional recognition both in the United States and abroad. Couture and Rashid have brought innovation to their field by challenging the boundaries of their discipline and exploring the potential of new technologies. The work of Asymptote includes architectural design at all scales: furniture, interior, building and urban design but also extends beyond these into the realms of digital environments and installations. Current and recent building projects by Asymptote include the prize winning pavilion for the Floriade in Amsterdam, the award winning Unvers Theater, a 30,000 sq. ft. multimedia theater structure constructed in Denmark, the New York Stock Exchange Trading Floor Command Center and the Guggenheim Center for Art and Technology in New York. Asymptote is also working at the forefront of the design of interactive architectural environments intended for the space of the computer. Both the Virtual Trading Floor for the New York Stock Exchange and the Guggenheim Virtual Museum are fully navigable interactive multi-dimensional architectural environments. In addition Asymptote has recently completed a new line of furniture for Knoll, Inc. Asymptote has received acclaim for several of their art scaled projects, which range from large public works to smaller gallery installations. Asymptote's projects have been widely exhibited and are included in the collections of the several museums.

SATURDAY, OCTOBER 27, 2001

8:00am-12:00pm ...... Registration Open
Cafeteria

9:00am-12:00pm ...... Exhibit Hall Open by appointment only
Taft I

9:00am-12:00pm ...... Special Interest Groups (SIGS)
  - 9:00am-10am: California - Fountain Standards - Garfield
  - 10:15am: Intellectual Property - McKinley
  - 11am-12pm: Controlled Vocabulary - Presidential 2

1:00-4:00pm ........ NINCH Copyright Town Meeting: “New Strategies, New Contexts”
Presidential I

MCN is hosting one of the six NINCH Copyright Town Meetings being held around the country in the third year of this successful series. The Town Meetings balance expert opinion and audience participation in discussions of the basics of copyright law, the implications of copyright online, recent changes in copyright law and practice, and practical issues related to the networking of cultural heritage materials.

The MCN event will focus on the recent changes to traditional values in copyright and on what new strategies we might develop to proactively protect the interests of this community and of the public good.

The three-hour meeting will comprise three sections:

1. MAPPING THE LANDSCAPE
   David Green, NINCH; Diane Zorich, Information Management Consultant; Amalyah Keshet, The Israel Museum, Jerusalem; Suzanne Quigley, The Whitney Museum, New York
   A Practical Cartography of Copyright
   As most museums do not have or cannot afford in-house legal counsel, rights management and registration staff have had to assume the responsibility for developing eminently practical ways to assist their museums in this increasingly important area. We have had to move way beyond simply thinking about image rights clearance, or putting our Images on the Web. Now we have to make new
assessments of the ownership of intellectual property, develop new agreements, and watch for the possibilities of copyright infringement. This all calls for new and creative thinking. This joint presentation will explore some ideas for solutions to the new problems.

Questions & Comments

II. CHANGES IN COPYRIGHT LAW AND MUSEUMS’ RESPONSE
Siva Vaidyanathan, University of Wisconsin at Madison
10 Things You Can Do to Save the Information Ecosystem

Recent changes to law, technology, and cultural habits have threatened to stifle the flow of culture and information in America. This presentation presents some ways users, consumers, scholars, teachers, and journalists can resist the trend toward total control of content.

Rina Pantalony, Intellectual Property Counsel, New York, (formerly with the Canadian Heritage Information Network, Ottawa)
The Carrot v. The Stick: Can Copyright Be Used to Enhance Access to On-Line Cultural Heritage Content

Copyright, if used effectively, managed well and respected in business arrangements encourages and enhances access to content on the Internet. But with the advent of new technologies and the emergence of a knowledge-based society, new ways of thinking may be required in order to ensure that the Internet fosters the free-flow of information. This presentation will focus on two examples arguing that a greater respect for copyright protection would increase access to digital content.

Questions & Comments

Ice Cream Break

III. NEW STRATEGIES
James Shulman, Executive Director, ArtSTOR
Intellectual Property: The ArtSTOR Approach

This April, the Andrew W. Mellon Foundation announced the creation of ArtSTOR, a new independent not-for-profit organization that will develop, “store,” and distribute electronically digital images and related scholarly materials for the study of art, architecture, and other fields in the humanities. ArtSTOR’s executive director will discuss the organization’s approach to the intellectual property issues involved in archiving and distributing digital images.

Jennifer Trant, Executive Director, AMICO
AMICO - IP issues in delivering a multimedia library to educational institutions

The Art Museum Image Consortium (AMICO) is an innovative collaboration, not seen before in museums, that shares, shapes and standardizes museum multimedia and makes it available for educational use. Since 1997, AMICO Members have been creating The AMICO Library (TM), an integrated resource compiling the digital documentation of their collections. In doing so, they have developed practical, workable agreements around the use of a wide range of intellectual property that balance the needs of museums, educational users, artists and artists estates, and respect the many layers of copyright inherent in a digital art resource.
Exhibitor Information

2b Technology/Vista .................................................. Booth 7
Charlene Pine
11551 Nuckols Road, Suite J
Glen Allen, VA 23059
(804) 221-8426
(804) 644-3203 fax
2b Technology supplies software, e-commerce and call center solutions for attractions of all sizes. VISTA Software administers all aspects of back office and front desk activities including Quick Desk Ticketing and wireless Access Control. Our e-commerce engine supplies web sales capabilities for admissions, membership, classes, excursions and more. VISTA Call Center delivers customize service including group sales, vanity numbers, membership up-sells and member ticket fulfillment. Each service integrates fully, pulling from a combined database to generate detailed reports and create a complete visitor management system for your organization.

ADLIB Information Systems ........................................ Booth 9
Bert Degenhart Drenth
Reactorweg 291
P.O. Box 1436
Utrecht, 3542 AD, The Netherlands
bert@nl.adlibsoft.com
www.adlibsoft.com
ADLIB Information Systems (AIS) has specialized in software for information and collection management in libraries, museums and archives for more than 20 years. With 600 customers in 20 countries, AIS has offices in the Netherlands, England and Australia, and distributors in several other countries.
ADLIB Museum is the professional, user-friendly application for museums. The catalogue module has built-in thesaurus facilities and image integration. Additional integrated modules include loans and image management. An Internet/intranet server module is also available, featuring extensive searching capabilities, such as thesaurus and index-based searches.

Advanced Solutions International, Inc. ............................ Booth 14
Cindy Burns
901 N. Pitt Street, # 200
Alexandria, VA 22314
(703) 739-3100, x. 305
(703) 739-3218 fax
ASI is an international provider of e-business software solutions for not-for-profit and commercial organizations. IMIS, the company’s flagship software, is the industry leader with more than 20,000 users worldwide. IMIS e-commerce capabilities allow an organization to seamlessly integrate back-office systems with a front-end Web presence. ASI distributes its solutions primarily through a network of Authorized Resellers that provide local training and support.

Art Museum Image Consortium (AMICO) .......................... Booth 4
Kelly Richmond
2008 Murray Ave., Ste. D
Pittsburgh, PA 15217
(412) 422-8533
(412) 422-8594 fax
The Art Museum Image Consortium (AMICO) is a not-for-profit collaboration of museums dedicated to enabling educational use of museum multimedia. Join your museum peers worldwide to fulfill your educational mission, set standards collectively, streamline rights issues and enhance staff comfort with multimedia and imaging through AMICO membership and the creation of The Amico Library™.
Exhibitor Information

**Better Light, Inc.** ................................................................. Booth 11
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1200 Industrial Road, # 17
San Carlos, CA  94070
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(650) 631-2915 fax
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**Cuadra Associates, Inc.** ................................................................. Booth 13
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**Gallery Systems** ................................................................. Booth 10
Pam Sanders
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New York, NY  10001
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(646) 733-2392 fax
pam@gallerysystems.com
Gallery Systems provides software and support for museums, galleries and other collections worldwide. Its products include: The Museum System (TMS), the leading content management software for museums; TMS Light, a streamlined version of TMS that offers all the functions of the main program's main three modules; eMuseum, a Web interface that publishes data held in either database on the Internet. Clients include: Smithsonian Institution, The Metropolitan Museum of Art and The J. Paul Getty Museum.
KE Software, Inc. ................................................................. Booth 15
Andrzej Kowalski
303-601 West Broadway
Vancouver, BC V5Z 4C2 Canada
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Luna Imaging ................................................................. Booth 8
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3542 Hayden Ave., Bldg. One
Culver City, CA 90232
(310) 452-8370
(310) 452-8389 fax
Luna applies digital image technology to visual collections of cultural materials. Luna sets the bar for image quality and technology in building visual collections of lasting value. Services include: consulting, planning, master archive and derivative image production, data editing and integration of image and text. Luna's Insight software offers access to image collections over the Internet. Find and use images through Insight's visual environment for viewing, comparing and organizing images. Works with any database or CMS!

Plumb Design ................................................................. Booth 12
Magali Berville
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(212) 285-8600
(212) 285-8999 fax
Plumb Design, Inc., creates online experiences that facilitate the exchange of knowledge and the interplay of ideas. Plumb Design Services provides strategic consulting, Web design, custom software development and systems integration services for Global 5000 companies and major nonprofits, including a number of internationally-recognized museums. A wholly owned subsidiary, Thinkmap Inc., develops software tools such as Thinkmap Studio for navigating, displaying and animating complex and interrelated information. Thinkmap technology is fundamental to the design and operation of acclaimed cultural and historical exhibitions, mounted online and in kiosks by the Smithsonian Institution, Seattle's Experience Music Project, Motorola and Sony Music Entertainment.

Questor Systems, Inc. ......................................................... Booth 5
Teresa Ridgeway
2627 Mission St.
San Marino, CA 91108
(626) 403-0808
(626) 403-1739 fax
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Exhibitor Information

Soo-Kim
School of Visual Arts, New York, NY
empirewindow@hotmail.com

The HEART is a new navigator for large museums, the Heart helps users personally and benefits museums. For users, its monitorless simplicity allows them to concentrate on the art while navigating their way by touch. For museums, their website gains more exposure and usage as visitors create their own itinerary and journal through the linked HEART web pages. HEART’s new form of interactivity with the visitor and the museum will become part of the 21st century museum experience.

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Vernon Systems Ltd. ........................................... Booth 2
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