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MUSEUMS AND THE INTERNET: DEVELOPING A HOME PAGE FOR MUSEUM PROFESSIONALS

By

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TABLE OF CONTENTS

INTRODUCTION

In the most basic sense, the museum facilitates communication among people. This can be direct communication between a docent and a visitor or abstract communication between a visitor and a label. The global computer network, known as the Internet, is a relatively new and rapidly growing form of communication. With many libraries already on the Internet, it is logical that museums should follow suit. Indeed, it is vital that museums adapt to technological changes, so that they remain useful to a society that is becoming increasingly familiar with Internet communication.

The Internet has already influenced the museum field in many ways. A new form of museum has entered the picture in the last two years. This is known as a virtual museum, in which one can explore a room of exhibits via the Internet without going to an actual museum. The Internet can never replace the magic of a museum visit. Museums can however use the medium to enhance already existing museum communication systems. Museum professionals can also make use of online information to improve programming, management and collections. Many new forms of telecommunication also prove

to be very cost effective in times of tight federal funding of museums.

This project hopes to encourage museum Internet participation by discussing the various aspects of the Internet, as well as creating an online index, or home page, which museum professionals can use to access museum resources and online museums. The target audience for the home page are people who are already familiar with the look and control of online data. This allows the project to focus on issues of museum-related materials on the Internet, rather than on the technology itself. To define technical Internet words within the paper, a glossary is provided in the appendix.

BACKGROUND

The History of Communication within the Museum Profession

To reflect on the history of communication within the museum profession, it is also necessary to trace the evolution of the profession. As the profession grew, communication systems expanded and became more specialized in response to the increasing of disciplines and jobs within the museum field.

Through much of history museums were storehouses for the rich run by wealthy collectors or the clergy. By the eighteenth century the French Revolution changed the social climate and museums were "seen as apparatuses for public rather than private consumption." 1 At first museums were used by the French government as tools to expose the decadence and tyranny of the old kingdom, but eventually this subsided as museums grew in popularity all over Europe. In France a "Commission of Monuments" was established as well as positions for guards and caretakers. Exchanges were proposed between museums to develop complete collections, and with this basic rapport communication systems were established.

In the early nineteenth century a workplace phenomenon dubbed "professionalism" by sociologists started to spread. In this movement "a group of workers who were engaged in a common occupation could achieve public recognition so that their work constituted a "profession." 2 This however would be just one of the factors to establish the museum profession. A forum for dialogue concerning museum related issues was needed. To solidify the museum field as a true profession, associations and committees for communication were established.

In 1906, the American Association of Museums (AAM) was formed to provide a forum for professionals to meet and discuss issues of the day. Later AAM began to provide the museum field with publications such as Museum News and Aviso to inform professionals throughout the year of current issues and position openings .

In 1946, the International Council of Museums (ICOM) was established. ICOM consists of national and international committees "established to advance the interest in museology and other disciplines concerned with museum management and operations." 3 ICOM has been influential in writing

international statues concerning professional ethics in the operation of museums.

Many other professional organizations followed over the years, especially regional and specialization groups that felt issues close to home weren't being addressed by organizations on the national level.

Professional publications for communication, associations and organizations brought with them issues of accreditation, ethics, public service, national and regional concerns, and a mutual enthusiasm from people meeting others in the field.

The influence on the history of communication within the museum profession greatly influences how the profession has started to use Internet communications. ICOM has a web site, and much of the Museum Computer Networks' online material includes information on AAM. The existing communication organizations permeate the new online community, but new ones have already developed which are taking the profession to a global level. The Internet allows rapid global communication with museum professionals around the world. This is quite the opposite of the localizing of museum organizations over much of the twentieth century.

History of the Internet

In the 1960s with the Cold War still in full force, the United States (U.S.) government needed a communication system that was decentralized so that the country could continue to communicate during and following a nuclear attack. By September 1969, the U.S. Department of Defense created the Advanced Research Projects Agency Network or ARPAnet, which consisted of numerous computers linked together via phone lines. This system is traditionally considered the backbone of the Internet."The Bolt, Beranek and Newman (BBN) consulting firm of Cambridge, Massachusetts, modified Honeywell 516 computers to serve as "IMPs", or Interface Message Processors, which directed traffic on the ARPAnet." 4

By 1984 "the Internet officially changed from its original language, NCP (Network Control Protocol), to the more flexible TCP/IP (Transmission Control Protocol/Internet Protocol). The change allowed small, local networks to join the Internet with little trouble, and the Internet began to expand as they did." 5

Basically the Internet works by sending and receiving pieces of digital information called packets. Packets can be split up and follow different roots depending on communications traffic.

These packets are then re-assembled when they reach the receiving computer. A modem Internet connection turns digital information into audible high frequency sound, so that it can travel through phone lines. The computers must conform to the speed of the slowest modem of the two.

In 1984 the National Science Foundation (NSF) started NSFnet, and many U.S. universities and research facilities were put onto the Internet. The Computer Museum stated that figures from 1994 indicate 25 million people use the Internet, and over 2 million computers are connected to it. 6

In September of 1993, Vice President Al Gore announced the proposal for the National Information Infrastructure or NII. The objective of this proposal is to have a broad-band fiber-optic system to be connected to all of America's schools and libraries by the year 2000. These new fiber optics will be one hundred times faster than modem connections available today, allowing faster transmission of larger data. With access to data everywhere, rural locations will benefit from the cultural wealth of large cities.

One of the latest advents to the Internet is The World Wide Web, a system that allows graphics, sound and movies to be

received on a computer using software connected to the Internet. Besides graphics, hypertext is one of the most important features of the World Wide Web. By pointing and clicking on highlighted text or pictures with the computers mouse, hypertext allows one to move from one "page" or document to another or to another "link" or location on the web. The word hypertext was coined by Ted Nelson, who in 1981 described a text that would consist of "linked nodes." The concept of hypertext however is not new. The concept can be traced back to 1945, to an engineer named Vannevar Bush. Bush conceived the idea of a machine for data dubbed the Memex, which would allow a reader to follow trails of information in a non-linear fashion.7 In one definition hypertext can be seen as an interactive book allowing one to move about to where they wish, but unlike a book, one can go to other books as well.

The first hypertext system to gain popularity was introduced as free system software on Macintosh computers by the Apple company in 1987. It was called HyperCard. HyperCard gave links to other documents as well as to sound and graphic files. HyperCard however only linked local files. The next step was to take this sort of technology and mix it with the existing Internet structure.

Tim Berners-Lee had been working on various forms of Hypertext throughout the 1980s. As an employee of Conseil European pour la Recherche Nucleaire (CERN), the European Particle Physics Institute in Geneva, he worked with Robert Cailliau on a Network Hypertext. Rather than a hierarchical system as seen on a gopher or FTP, the net hypertext is interwoven or webbed. Text is linked "in a way that one can go from one concept to another to find the information one wants."8 A common hypertext protocol was developed so that all computers could understand each other. This is now commonly referred to as HTTP (Hypertext Transport Protocol) and the language it uses is called HTML (Hypertext Mark-up Language). The World Wide Web was released for use at CERN in May 1991. 9

Browser software allows one to view hypertext on the World Wide Web. One of the first browsers was developed at the University of California at Berkeley by Pei Wei. Called Viola, it added the feature of highlighting text that was linked to other text. This browser received little attention and Internet gopher was still the most popular tool. In February of 1993, a student named Marc Andreessen created a browser called Mosaic at the National Center for Supercomputing Applications (NCSA), located at the University of Illinois in Urbana-Champaign. Since

the center was a non-profit organization, the program was made free to the public. Besides the traditional UNIX system , browser software for Windows and Mac were developed as well. In addition to Hypertext Mark-up Language, Mosaic could run other protocols, such as gopher and FTP. Some other browsers were developed, but Mosaic kept the highest profile. In late 1993, the founder of Silicon Graphics, James Clark and Marc Andreessen (inventor of Mosaic) created the commercial company Netscape and wrote the program for what is considered by many the best browser, Netscape. It was formerly called Mozilla, a joke meaning the Godzilla that attacked Mosaic. Recently the World Wide Web has exploded with growth. Hundreds of new listings go online daily. From May 1993 to August 1994, WWW server growth has increased by 3500 percent, with roughly two-thirds of that in 1994. 10

Publishing on the Internet: The New Plurality

With the advent of The World Wide Web and Hypertext Mark-up Language (HTML), many small organizations can obtain a profile equal to larger ones. In other words, "the web is the closest thing to a level playing field in publishing today." 11 This is because access is equal. In the world of books, large

publishers can afford to physically distribute large numbers of books to stores, while a small publisher can't. On the WWW, one just puts text on a computer server and people can view the book all around the world. The Internet Underground Music Archive is a very popular new site in which unsigned bands can make music available to download. This system allows one to skip the middle-man. Many new online only magazines offer an alternative to mainstream press.

Another reason why the WWW is becoming very popular is that HTML is considered easy to write compared to some programming. Setting up pages on the web is strongly encouraged by computing organizations such as the National Center for Supercomputing Applications (NCSA). After one writes pages in a plain text file, they can be put on the Internet by a server, that is, a system computer that is on the Internet. These files can then be accessed remotely from anywhere in the world. Many people set up "home pages," which give personal information, resumes, interests, and contacts. In the future home pages could replace business cards or even applications to jobs. Some argue that the new plurality of web publishing can be realized only for the few who can afford computers. Nevertheless, the Internet is challenging some economical and political power structures. The 1989 Tiananmen Square uprising

in China was partly due to students who realized from international press coverage on the Internet that their government had been keeping secrets.

With the increase in the use of the Internet, has come increased concern about what people can view or find on the Internet. Major publications like Time have cover stories on "Cyberporn." The man accused of the April 1995 Oklahoma Federal Building bombing was said to have an Internet account, where he could have easily looked up how to make bombs in a Newsgroup. Large commercial online services such as America Online have a parental control option to block off areas of online use, much like video game guards on televisions. America Online also monitors information within their local customer services, to insure that it is free of profanity and pornographic pictures. On the other hand if one decides to use the Internet gateway, there is no way the online service can regulate information.

With a standard hookup to the Internet one can easily look at newsgroups of bestiality, bondage and other material that may not be suitable for children. Countries with more liberal pornography laws such as Holland can post pictures that may be considered unlawful pornography in a Islamic Fundamentalist

country such as Iraq. Recently, a commercial software product called "Surf Watch" was introduced. It allows one to restrict access to offensive areas of the Internet.

The Electronic Frontier Foundation, a non-profit civil liberties organization, is working for the right to protect privacy and free speech in online information. They argue that "exposure is primarily driven by user choice" 12, and that even novice Internet users have little risk of accidental exposure to offensive or indecent material.

On June 14, 1995, the United States Senate approved by a vote of 84-16 an amendment to the senate's telecommunications-deregulation's bill. This will have to go through the House of Representatives to be fully approved. The amendment sponsored by Democratic Senator Exon of Nebraska was born out of an independent Communications Decency Act (CDA) of 1995. As currently drafted the CDA makes no differentiation between traditional forms of communication, such as the telephone, and the Internet. It will also impose content restrictions that would destroy free speech. By considering computer communication a medium like broadcasting, the bill would allow the Federal Communications Commission to regulate information. Even if the bill does become law in the

United States, there is no way the United States Government can stop the flow of global media. The original Internet was designed with an anarchic model so it would withstand the toppling of a government in a large-scale war. It is too large at this point for any government to fully regulate it.

The History of Museum Communication and the Internet

Although the museums profession's relation to the Internet is new, some organizations have already introduced policies on future relations with the Internet. The objectives of the AAM Telecommunications policy ask "for museums to be eligible for all federal programs on telecommunications" for they "are an integral part of the American education system."13 The proposal asks for preferred rates since museums are non-profit organizations. By assuring governmental support, the Internet will not be entirely overwhelmed by the commercial sector. In viewing daily new sites on the Internet, one can see that at least one third, if not half, are commercial.

As well as policies, organizations have been established as well. The Museum Computer Network (MCN) was founded in the late 1960s by museums wanting to automate and exchange

information. At its start, MCN was a network of people exchanging information at meetings and through publications. They now have several online computer databases. The organization has diversified to include a broad base of international members in professions ranging from computer system managers to librarians, educators, archivists, and directors. The MCN holds an annual meeting to discuss rapid advances in automation. These meetings include workshops and exhibits as well, which help familiarize people with technology that might otherwise confuse them. The 1994 meeting of MCN was held jointly with the International Committee for Documentation (CIDOC), a sub-committee of ICOM.

The Museum Computer Network, as well as creating a dialogue with professionals and organizations, has made steps to set standards in regard to automation. The Consortium for the Computer Interchange of Museum Information was started in 1988. Its standards framework will be tested with various museums over the coming years. Their projects include exchanging as well as searching databases (online information) to develop uniform models of telecommunications. Other groups sponsoring the Consortium are "the Getty Art History Information Program, the Canadian Heritage Information

Network, the Research Libraries Group, and museums such as the National Museum of American Art and The National Gallery." 14

The Museum Computer Network publishes a quarterly journal called Spectra, which discusses issues in museum computer automation. Unfortunately, this is not available on the Internet. A newly created Electronic Services Committee of the MCN has already started to promote online services. Some MCN event information and documents can now be downloaded via the Internet. Publications on helping museums with computer technology are also available by writing to the headquarters at the Massachusetts Institute of Technology.

Another museum computer organization is the Museum Informatics Project (MIP). MIP is an undertaking of the Information Systems and Technology department at the University of California at Berkeley. MIP works with faculty, curators, and collections managers to organize information technology in museums and other non-book collections at the university. Basically the project encourages the use of technology, such as online university collections. Many of the informative museum sites on the Internet, such as the

University Paleontology Museum, have resulted from this ongoing project.

Existing Museum Communications Systems on the Internet

Museum professionals use a wide variety of Internet systems. These systems range from simple forms, such as listings or bulletin boards, to complex WWW sites. Although Internet systems are not essential for communication within the museum profession, they are rapidly becoming more popular.

One of the most popular, informative, and easiest forms of telecommunication available on the Internet is a list server or an automated mailing list. If one has an e-mail account, one can send and receive messages on an international "bulletin board." Like a magazine, one sends a request to subscribe to the list, but in this case, one uses e-mail. Computer software makes note of ones e-mail address and then begins to send the postings of the list. There are currently three lists available to museum professionals. Museum -L, CIDOC-L, and ICOM-announce.

Museum-L is maintained by John Chadwick, through the University of New Mexico. It is a general message board where

people can post or answer messages concerning any aspect of the museum field. Since these are posted internationally, one can expect twenty to thirty listings a day.

CIDOC-L is the International Documentation Committee (part of ICOM), which addresses questions regarding museum documentation. ICOM-announce is an infrequently used service, which announces any new developments or meetings regarding ICOM. It is not intended for "discussion." These list servers can be used to contact colleagues in other parts of the world, saving on long distance charges. Most importantly, they create an instant arena for museum dialogue. One can ask a specific question relating to the care of paintings and get five responses by experts the next day through the museum list.

Gopher, telnet, and FTP are basically all systems of data transfer on the Internet (see Glossary). The first museums online used these systems in the late 1980s and early 1990s. Lawrie Conole of the Scienceworks Museum of Victoria, Australia has created an international directory of e-mail addresses for museum professionals. This is one example of information received via gopher. Most software available on the Internet is retrieved via FTP, because this format is ideal for

storing large files. If a museum had software programs available for downloading, FTP would be the format of choice.

Telnet is a system that allows one to log onto a computer from a remote area, thus one may follow the command procedures of that system. Telnet is very useful for searching libraries and could be used in searching museum collections information.

On the entertainment side, telnet, is often used for role-playing or scenario games called MUDs (Multi-Users Domains) in which one is directed though a world described only in words. One can meet and talk to people in these worlds and participate in games. Although no museum MUDs exist now, the possibility is there. For example, telnet could be used to develop a MUD for a children's museum site.

The fastest growing part of the Internet is the World Wide Web. Created only two years ago, it is a graphic interface (the Screen display has pictures as well as text), which uses a point and click system. Jonathan Bowen who maintains Oxford's Virtual Library Museum list states that U.S. museums make up half of all the museums currently online. The number of museums setting up spots on the World Wide Web as of April

1995 are one a day, according to Bowen. 15 The World Wide Web allows people to visit museums through the downloading of pictures, sounds, and movies. In terms of museum publicity these sites are interesting, but by themselves do not add much to communication in the museum profession. One new WWW site which does facilitate discussion is Conservation OnLine, or CoOL, which is devoted to information concerning conservation issues in museums and library archives. Since the WWW is new, its full potential to the museum field is not yet realized.

Virtual museums are museums that exist solely as sites on the World Wide Web. For example, IAMfree is a virtual museum space for Artists for Revolution through Technology on the Internet (ARTnet). ARTnet is described as "a not-for-profit public benefit corporation that hopes to create a series of international, contemporary music, art and literature museums, available free and worldwide on the Internet." 16 IAMfree displays an image of a lobby that one can point and click on with a mouse to enter "virtual rooms."

A much more basic virtual museum can be seen in the Web Museum in Paris, created by Nicolas Pionch. Originally called Web Louvre, this site contains thousands of photographs of paintings and sculpture, which one can download. This site has

grown considerably over the last few months and now has ten identical or "mirror" sites around the world to support the heavily growing demand to access these files.

Another example of a virtual museum is Web Acropol, which is a picture tour of the Acropolis in Athens, Greece. Each part of the monument can be viewed through pictures taken at various angles.

There are many virtual exhibits of picture, sound and movie files on the Internet, but only a few call themselves museums. A completely three-dimensional online virtual museum is in the works. Silicon Graphics and Template software have actually created a web site that is three dimensional, though it requires special viewers and state of the art computer hardware, as well as a modem connection one hundred times faster than a standard 14.4. modem can provide. The San Jose Mercury News reported that "of the 30 million estimated Internet users, there are probably only a million using the web because of the more advanced graphics and modem requirements". 17 Currently the World Wide Web museum links provide interesting information and publicity.

Tools to Use on the Internet

With a basic hook up, one can use many freeware (free software) and shareware (try, then buy-if-one-likes software) applications to perform a number of uses. An Internet provider usually has what is called a "Usenet newsfeed." Usenet is a group of "bulletin boards" each one maintained by a different computer system somewhere in the world. Usenet, commonly called "newsgroups," number in the thousands. The discussion topics are incredibly diverse, ranging from groups solely devoted to discussing the uses of the object known as the spork (spoon and fork combination) to discussions on the social climate in the Baltic countries. Federal regulation of Usenet is being considered because some countries allow more liberal information access than others, but since this is international, no censorship laws exist. It is currently a "wild west" atmosphere.

A more immediate tool than Usenet is IRC or Internet Relay Chat. This relay chat is sponsored by only about one hundred public relay servers, which one can log onto via the main access server. Once granted permission to send and receive on the server, one picks a channel or "room." These are on a international scale and people are constantly making and quitting channels. Some rooms are known to stay constant, such

as large groups where the number of people "in" them is large (#England, or #Macintosh). The servers are incredibly busy with the number of people requesting access, so frequently one can be cut off. Unlike commercial services in which rooms are limited to a main system, IRC is international. In the museum field this would be ideal for having a real-time discussion with a colleague in Australia, without the expense of long distance charges, because it is via a local Internet server. IRC proved to be an important tool for reporters in sending up to date news in the recent downfall of the Soviet Union.

An even more advanced communications program adds audio and video. This requires faster modem hook ups, as well as very fast computer processors. CU See Me is a program developed by Cornell University and currently can be downloaded for free. By hooking up a small direct digital camera, one can send and receive real time, choppy but visible video. A simple Quickcam Camera can now be bought for about one hundred dollars. With the new fiber optic cables in place by the year 2000, the video will improve. In the museum field, conferences could be held in this manner. In education, this technology would allow students to ask questions of a museum curator from the other side of the world.

There are numerous "search engines," designed to comb through information on the Internet. One types and sends a query, then receives all the "hits" to that word. "Hits" are when the engine matches a person's search word with one somewhere on the Internet. The Nexor search engines in the UK do exhaustive searches. There is also Lycos at Carnagie-Mellon, as well as Web Spiders (self-moving programs that wander from site to site and collect data). WAIS, or Wide Area Information Server, is another form of searching the Internet. Netfind is a "white pages" for the Internet and can be used to find someones e-mail address, but this is usually limited to systems which keep track of e-mail listings, such as government institutions and universities.

There are numerous tools to use on the Internet that will allow museum professionals to have global communication with others in the field. The possibilities of sharing information are only limited to the professions' commitment to use the tools of the Internet.

PURPOSE

The purpose of this project was to encourage museum participation on the Internet by developing an index (or home page) of online resources for museum professionals who have access to the World Wide Web.

OBJECTIVES

The objectives of this project were:

1) To determine the Internet locations of all the museums on the World Wide Web.

2) To identify other resources to include on the index, such as exhibition companies, education organizations, and government organizations (NEH, NEA).

3) To design and write the Museum Professional Home Page using Hypertext Mark-up Language (HTML).

4) To put the home page and additional resources (text and picture files) on a server system so it can be accessed on the Internet.

5) To briefly evaluate the home page and identify any problems.

RESEARCH QUESTIONS

The following questions were used to guide the research for this project:

1)What would enable or encourage a museum to use the Internet?

2) How many museums and museum related sites are on the Internet?

3) What other information would museum professionals like to see on the index page?

4) How do/can/will museums use information from the Internet?

JUSTIFICATION

The Internet is a rapidly growing new form of communication. A broad-band fiber-optic data network called the National Information Infrastructure (NII) will be fully completed at the turn of the century, at a cost of 200 billion dollars (largely privately funded). The government hopes to build a new model of private and public cooperation. The NEA (National Education Association) found that schools suffer a technology gap over business. To ensure education is not left out, "The Technology For Education Act" will be introduced, forming a new department in the U.S. Office Of Education. Through classroom linking via video, students in poor or remote districts will receive equal education. The new tools of the system will include distance learning, video fieldtrips, video teleconferences, collaborative projects, interactive TV shows, teacher training, video on demand, online shopping, e-mail, online research and home/school communication.

As facilitators for education, museums are an important part of the online revolution. Currently, just basic use of the Internet can be a tool in everyday museum work. Museums need accurate and up to date information. Through the Internet, information can be received faster than through the mail. e-mail

is a far more cost effective way of sending information. Museums must also keep abreast of the changing technology and the opportunities in this new and rapidly growing medium. The Internet allows debate in the field to flourish. Unlike museum conventions, a more immediate "global dialogue" can be created through Internet discussion groups (as seen already in Museum-L). Smaller museums can gain international recognition by having information available on the Internet.

A museum professional index or home page on the Internet will allow an extremely large number of people, both museum professionals, and students "directions" to other sites on the Internet. Unlike less-specific search systems, this one will save time. When research was started there were five to ten museum specific lists or pages, but not any specific to the museum field itself. Other similar services might be developed in the coming month, but the page can always be modified.

METHODOLOGY

Research was done on the various forms of Internet connection options, such as which type of software, connection, and local service provider to use. The system chosen for the project was Point-to-Point Protocol for Macintosh because it was the most economical. The software was then configured to work with the computer. The Internet connection was accessed though a modem using a Netscape browser interface via Sirius Connections of San Francisco. With this connection, the World Wide Web, as well standard Internet features such as Usenet, telnet, and gopher, could all be viewed.

The first step to determine the extent of Internet use among museums was to examine the "bulletin board" or list known as museum-L. Here locations of World Wide Web museum site addresses were collected. Sites were examined in order to determine what was already on the Internet. Museums, related organizations and businesses were found through extensive computer-aided Internet searches. A home page specifically related to the museum profession, however was not found.

A home page is the name used for a title page for a site on the World Wide Web. Home pages can be simple and connect to a

few other pages or give access to many pages all over the Web. Home pages often include graphics and other resources such as sounds and movies, which can be used with the proper applications. Highlighted text or graphics in the pages indicate that they can be clicked on with the computer's mouse. When this is done the browser software will connect to the site indicated in the highlighted area.

Information on writing home pages was found on the Internet. Home pages are written using a series of commands within a plain text. This is known as Hypertext Mark-up Language or HTML. The National Center For Supercomputing Applications or NCSA, as well as "Pages From The Underground," were used to learn how to begin writing HTML.

After learning to write tags or commands in plain text, an Aracnid (beta 1.4) HTML page-maker was used for quicker construction. The software put the tags in automatically. Halfway through the construction of the home page, the software was changed to Web Weaver (2.51) because of its compatibility with the Netscape Browser.

Graphics for the home page were drawn using Expert Color Paint software. Paint files were imported to a graphics converter

application to be made into GIFs (Graphic Interchange Format), one of the universal graphic file types for HTML on the Internet. Graphics from other sites were copied using the Macintosh "control-shift-3" option in which a picture is taken off the screen. These were later cropped and scaled using the Paint software. Each site listed on the page was given a logo and a brief description, so that the reader would have a sense of what the site was all about before deciding to "visit" it.

After the home page was completed it was put on a server, a computer that is directly connected to the Internet and can be accessed by other computers. A web site account was established with the Sirius Connections server. Files were transfered using the Fetch software program. The location of the home page and its parts had to be modified slightly so that it fit onto the computer system. On June 8th the incomplete page was put online and checked to see if all the links to other sites worked, and that the files were in order. A counter feature was added with the help of the Sirius computer system, so that the number of "visitors" to the page was recorded.

To publicize the Museum Professional Home Page, other indexes or URL's (Uniform Resource Locaters) on the Internet were notified that the page was online. On June 30th the

competed page address (http://www.sirius.com/~robinson/musprof) was introduced to the Museum-L discussion list. Netscape and NCSA were contacted by e-mail and asked to add the address to their listings.

The final phase of the project was to evaluate the development of the Museum Professional Home Page by including a section on it for e-mailing comments. These recommendations were then be used to change any mistakes, conflicts or inaccuracies.

LIMITATIONS

The amount of time available limited the extent of research to find sites on the Internet. This also limited time to collect reactions to a Museum Professional Home Page and make any extensive changes to it.

For the most part, the limitations of the project were largely technical in nature. The audience that could use the Museum Professional Home Page was limited to people who had access to the World Wide Web.

Technology also effected the outcome of the page. The computer and Internet connection used in this project were slow and running at a minimum of proficiency. The primitive resources affect the look and complexity of the final home page. Because the server used was an off-site commercial system, it was harder to change or modify information. Sometimes the system would be down for maintenance, and could not be accessed.

The rate at which new sites are developing on the World Wide Web quickly changes information and within a few months, without modification, a home page can become useless.

Site addresses change periodically and hundreds of new sites are added daily.

As with many technology-based projects, the Museum Professional Home Page is a transitory tool, but hopefully it will prove useful as a introductory navigation system for museum information.

FINDINGS

The initial search for museum resources revealed no sites specifically designed for the museum field; although there were many resources online, they were not all listed on one index or home page. As a result, the Museum Professional Home Page was designed. In just the last few months, the sites on the Internet have increased dramatically. One site, Museum Online Resource Review, a commercial organization, set up a site similar to the Museum Professional Home Page (MPHP). This was eventually added as a site on the MPHP. It would not be surprising to see similar museum resource pages put on the Internet in the near future.

On June 30th the Museum Professional Home Page Internet address was posted in Museum-L, the online discussion list. Nine-hundred-and-thirty-four people directly subscribe to the list, and fifteen people responded with e-mail comments.

Some of the e-mail comments concerned technical content. One person suggested using a different tag system in the HTML text, which would allow text-only browsers to read the graphic pages, rather than having an entire set of alternative text pages. One person caught a few spelling errors.

Jim Angus the web site manager at the Los Angeles County Museum of Natural History, responded that he was glad to see his list was on the home page, but he raised the question on the use of copyrighted materials in using logos on the pages. He wrote that since it was a non-profit project, it was probably allowed.

Suzanne Quigley, Head Registrar of the Guggenheim Museum and Editor of the MCN's Spectra, wrote that the home page was clear, not cluttered, and not overwhelming, in that it didn't try to list everything. She also suggested adding the AAMDO (Association of Art Museum Directors Online) to the home page as soon as it appears on the Internet.

With help of the Sirius Connections Computer System, a counter was included on the Museum Professional Home Page. Between the home page's announced release of June 30th and July 3, 1995, the site was visited one-hundred-and-thirty-two times. Due to problems with the Sirius counter, a counter program in Forsmark, Sweden was added on July 21. Since changing the counter, the page has been visited four-hundred-and-twenty times as of September 4th, 1995.

DESCRIPTION OF THE PRODUCT

The Museum Professional Home Page is designed for the World Wide Web. It is intended for museum staff as well as people interested in museums. It is a basic starting point or index to resources available online. The first page gives an introduction stating that the site is "a navigation tool for museum professionals." A "text-only" option is given here for people not wishing to view the graphics. It also has a link to a John F. Kennedy University, Department of Museum Studies information page, giving the address. A comments link to e-mail is also provided for evaluation purposes. The remainder of the page is comprised of four sections: Museums on the World Wide Web, Virtual Museums, Museum Professional Resources, and Specialization Resources. Each of the four sections have links to each other, as well as e-mail comment links.

The first section, "Museums On the World Wide Web" lists museums that have sites on the Internet. These can be chosen from three web lists, the Oxford Virtual Library, the Natural History Museum of Los Angeles County and the Museum Online Resource Review. The Oxford Virtual library selection offers two lists, one of museums in the United States and the

other of the whole world. This was included because the home page is primarily directed at a United States audience.

The second section lists "Virtual Museums." These are museums that don't exist as real places; that is, they are only sites on the World Wide Web. Three major sites are included on the page, WebMuseum, Museum of the Internet, and Expo Virtual Exhibits.

The third section provides "Museum Professional Online Resources." This includes the Museum Computer Network, ICOM (International Council of Museums), Conservation Online, as well as the Foundation Center for Grants and the National Endowment for the Humanities. This section contains information on the Museum-L mailing list, for users who have access to Usenet.

The Fourth section is entitled "Specialization Resources." It contains links to the Electronic Frontier Foundation, a non-profit civil liberties group concerned with online rights, and the Cornucopia of Disabilities site, which addresses ADA (Americans with Disabilities Act) regulations. The page is then broken down into Art Resources, Education Resources, History

Resources, and Science Resources. These are connected to sites with extensive indexes in the specialization areas.

The home page's format was designed to have the page start with general information and get more specific as it was read. Many of the graphics are smaller versions of ones from the real sites and give the page an attractive colorful look. Since the page is linked to other lists, updating addresses is low maintenance, and the page is more reliable over time.

Although these pages come together online, the plain text or Hypertext Mark-up Language (HTML) is a series of "tags" or instructions on placing graphics and links to other places on the Internet.

CONCLUSIONS

Although Internet technology is in its infancy, this should not deter museum staff from getting involved in it. It is clear museums can set up web sites inexpensively and easily, but another area of importance is using the Internet as a tool for museum work. Museum-L is quite simple technically in that it is basically an e-mail system, yet it is one of the most useful tools to get questions answered in the museum field. In terms of registration and collections management, the Internet is ideal for cataloguing and searching for data regarding objects or shipping information.

To encourage the use of the Internet, the Museum Professional Home Page is a basic starting point. It displays the range of resources that are available online. Many professionals with busy schedules don't have time to search the Internet for museum information. The home page puts all the sources in one index.

The e-mail responses to the page have been largely positive, but this is not an indication that people will use the site. The four-hundred-and-twenty "visits" to the page indicate that people are showing an interest. However the counter

numbers only indicate visits to the cover page, so it is impossible to tell whether people search the site in depth or how long they spend looking at it.

Some changes to the Museum Professional Home Page are clearly needed. First, the text-only pages can be removed in favour of a different HTML set up, that would allow graphic pages to be viewed by text-only browsers as well. Second, the issue of copyright and use of logos will have to be checked to avoid any conflicts. This can be done by e-mailing the different organizations that have logos on the page and asking them for written permission.

The responses to the Museum Professional Home Page do show some interest; therefore, the site will be kept open and maintained over the next six months. A new section on the site is being considered which will allow museum professionals to submit articles for online publication. This will give the site exclusive content. With the growth of larger, staff-maintained resource sites, such as Museum Online Resource Review, the home page might become obsolete. At this point, it is too early to determine if it will still be useful in the future.

The Internet is still in its infancy, but growing very fast. Many people have big expectations that the Internet will change the way people live. While it may change the way society communicates, it will not change the nature of humankind; that is virtual will never replace actual.

RECOMMENDATIONS

In the mainstream media, one is often bombarded with stories of cyberspace, virtual realities, and the wonders of doing almost everything on computers in the future. Within the education field, teachers must evaluate the Internet's uses and be selective. After all, television never replaced the teacher, and neither will the Internet. Educators must remember that human contact is a primary motivator in learning. Virtual museums, in which one can walk around a museum without leaving a computer station, will soon be a reality. The medium should supplement the museum experience, and not try to simulate or replace it. Real museum experiences are often social, not isolated virtual walk-throughs. Societies' excitement over three-dimensional media has always dissipated shortly after it is introduction. Three-dimensional movies and television were invented but didn't last. Television still remains two dimensional. In short, educators must be realistic in their assessment and uses of technology.

All museums should have a home page on the World Wide Web. Costs are low; for instance, the Museum Professional Home Page costs only four dollars a month for server usage. Home pages don't have to be large, fancy pages with links to all

the departments in a museum. They can be as simple as just listing opening times, current exhibits and directions to the museum. Not surprisingly, many of the museum on the web currently have affiliations with universities which have computer science facilities, and it's just a matter of allotting a museum some disc space for a home page. In other cases a home page is the result of one persons work, such as Jim Angus at the Los Angeles County Natural History Museum. Mr. Angus compiled existing brochures and created a site. He showed it to the staff and they approved.

Museums need to create committees to oversee Internet publication. Staff members as well as computer specialist could oversee a home page, and once online it could be maintained by a few staff members. Hiring outside consultants isn't necessary because HTML can be learned easily, and the technology isn't as confusing as it looks. Suzanne Quigley, head Registrar of The Guggenheim Museum of Art said "Lets face it, its easy to put up a web site, but it's not easy to gather good content. Content has to come from content specialists and that means curators, but they are too busy with developing collections, organizing exhibitions and doing actual research, that they have little time to develop web site content." 18 A web site committee could

make decisions and report to curators. Web sites don't necessarily have to be online versions of current exhibits.

Before going online, museums should also ask the public what it would want in a museum web site. The online community could be asked by using survey forms on Usenet groups. Many of the really fancy sites have so many large graphics that they cannot be looked at with slow computers, and not everyone has an ISDN hook-up to the Internet.

The fate of the Museum Professional Home Page is largely based on if it proves to be a useful tool for navigation on the Internet. If responses to the page continue to be positive and people find it useful, the page will continue to be maintained. The John F. Kennedy University server might possibly allow a "mirror" site of the home page, or incorporate some of the home page's links into the Department of Museum Studies home page when the department goes online.

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APPENDICES

APPENDIX A: GLOSSARY OF INTERNET AND COMPUTER TERMINOLOGY

Anonymous FTP (File Transfer Protocol)- A file transfer which allows one to by-pass traditional ID and Password verification on a remote computer network, and allow one to download files and programs which are open to the public.

Archie- A program which finds files on the Internet by giving one addresses of remote computers (specifically FTP sites). See also Veronica and Jughead.

ASCII- The American Standard Code for Information Interchange. ANCII is a worldwide standard of codes used for characters in text. (sometimes called a plain text file).

Browser- A browser is a software application which allows one to view the World Wide Web. Simple browsers can view HTML, while others can also utilize FTP, gopher and Usenet. The most popular browsers today are Mosaic and Netscape.

Backbone- A high speed Internet connector which links slower connections together.

Bandwidth- The capacity of information a cable (fiber-optic or copper wire) can transmit. The higher the bandwidth the more data can get through. For video conferencing one must have maximum bandwidth, while e-mail requires much less.

Baud- Coined after Emile Baudot, a telecommunications inventor, baud is the system of measurement for the speed of a modem. bps or bits per second is also a common term for measurement. Most Internet connections that use the WWW have at least speeds of 14.4 bps, to support rapid graphic downloading.

BBS (Bulletin Board System)- A computer which is accessed via modem, which offers e-mail, message services, chat rooms, and files and software downloading, as well as the opportunity for uploading. Traditionally BBS are not connected to the Internet, thus they are accessed locally, but some are beginning to be linked up to the Internet through command based systems such as telnet.

Beta- The term used for software in its testing stage. Usually one may download a beta application from the Internet and use it, and then report any problems or bugs the software might have

to the programmer. The software can then be adjusted before it is put on the market.

Byte- The name for a unit of information on a computer which consists of a fixed number of bits. One byte usually consists of a series of eight bits.

CD-ROM- Compact disc read-only-memory-data stored on a compact disc which cannot be erased or changed, hence ROM. A compact disc can usual store about 600 megabytes of data.

DARPA- The U.S. Defense Advanced Research project Agency. The funders of the original Internet system.

Domain Name- This is part of the hierarchy of the Internet. They are within a site address and tell what type of site one is looking at. Common domain names are .edu for educational institutions, .com for commercial sites, .org for organizations, .gov for government and .mil for the U.S. Military. Countries other than the U.S. often have domain names as well.

Download- To retrieve copies of files from a remote computer via a computer network.

E-mail (Electronic Mail)- A system in which one can exchange messages with people or bulletin boards on other computers though a network.

Encryption- An algorithmic code used to make information private when sending it through computer networks. Credit card numbers are a example of information one may want to have encrypted. Ecash or virtual money is also being developed for encryption so that one may buy things on the Internet.

Fiber Optic- Instead of copper telephone wires, fiber optic cables (small glass wires) allow faster transfer of data over phone lines. In the future all copper wires will be replaced with these.

Finger- A computer program which can receive information about network users on local or remote systems. Information such as log in time, name etc. can be found.

Flame- E-mailing people insults, usually as a result of an online bulletin board posting. Flammers are mostly people with nothing better to do than vent their hostilities as faceless, anonymous people on the Internet.

Freenet- A community based bulletin board system which provides the public free access in computer networks, usually through libraries.

FTP (File Transfer Protocol)- Same as Anonymous FTP, except one must give a name and password while logging onto the computer system.

GIF (Graphic Interchange Format)- A graphic compression system developed by Compuserve. GIF graphics are one of the standard file formats for the WWW.

Gigabyte- A billion bytes of memory.

Gopher- A document retrieval system which allows one to access information through a menu of collected data from computers on the Internet. The name comes from the mascot of the University of Minnesota, where it was created.

Hacker- A person who breaks into computer systems illegally. Usually they are skilled programmers who can out-smart password systems. Although many of these acts are considered criminal, Hackers are a symbol of rebellion to "big brother" computers. Often they just crack codes and cause no damage to

the computer system. Other hackers however steal files and credit card numbers and cause serious computer damage.

Home page- The first page you see on a World Wide Web Site which gives an index or table of contents for what is available. Home pages come in many forms. Companies, universities and individuals can make pages and link them to other pages.

HTML (Hypertext Mark-up Language)- The standard language for the WWW. Tags or codes are added to text so that browser software can read it and allow it to organize pictures and text as well as links to other sites on the Internet. Highlighted words or pictures on the computer screen can be clicked on with a mouse, thus commanding the computer to go to the site chosen. Some of the basic HTML tags are included in the Appendices.

The Internet- The name for the global network of computers (currently numbering over 46,000). More precisely it is a network of networks.

IRC (Internet Relay Chat)- A program that allows one to have real time typed conversations with multiple users through channels. Channels all over the planet can be joined, so you can talk to people around the world.

ISDN (Integrated Services Digital Network)- Five times faster than a standard phone line, ISDN is the international standard for transmitting data. An ISDN line has three channels, two carry voice, the other data. Since it is digital it allows clearer voice and visual data. The real Information revolution will be when all homes are supplied with ISDN, which can transmit 155 megabits per second unlike the standard 14,400 bits per second modem hook up.

JPEG (Joint Photographic Experts Group)- A graphic compression technique. JPEG's are the common name for graphic files using this. They are one of the standard graphic files used on the WWW. For photographs JPEG offers good resolution, while on software rendered images GIF is considered better.

Jughead- A search system limited to the remote computer system on which one is logged onto. see also Archie and Veronica.

Kilobyte (K)- 1024 bytes.

Listserv (or list server)- An automated mailing list distribution system on which one can send and receive e-mail.

Lurker- The name given to people who look at Newsgroups, but do not post messages. It is a good idea to lurk to get the general tone of a group before one posts.

Megabyte (MB)- 1024 kilobytes or 1,048,576 bytes.

Modem- (short for modulator/demodulator)- The modem is the primary tool to link ones computer to the online world. Its a device which takes digital information and makes it into analog sounds so that it can be transmitted on phone lines. On the other end another modem changes the sound back into digital data. This allows the computers to 'talk" to each other.

Mosaic- A WWW browser developed by NCSA (National Center for Supercomputing Applications), a non-profit organization. The software is free.

MUD (Multi-User Domain) (sometimes Multi-user Dungeon)- Programmed versions of rooms and places one can "visit" on the Internet, some support graphics rather than just typing, but one has to have local graphic files. In some ways it's a very fancy IRC.

Netscape- The commercial equivalent of Mosaic, designed by the makers of Mosaic. Netscape is rapidly becoming the prefered software among Internet users for it's ability to do more advanced tasks such as reading background textures on pages.

Newbie- A person who is new to the Internet and may commit cyberspace faux pas.

Newsgroups- A collection of messages or a bulletin boards concerning a specific topic. Part of the Usenet system.

Node- Any single computer on a network.

Online- Any computer or data which is linked to a computer network or the Internet.

Packet Switching- Messages from one computer to another are broken down into packets on the Internet. Each packet is sent a different way depending on what the communications traffic is like. When they all arrive at the same destination they are re-assembled into a single package again. This allows for messages to get through even when Internet traffic is high, because smaller pieces take up less bandwidth.

Point Of Presence or POP- A site on a server where telecommunications equipment is located.

PPP (Point-to-Point Protocol)- A way of transmitting packets that allows one to dial into the Internet instead of using the provider's server system. Once the PPP connection is made one can use any Internet software to get around.

Protocol- The rules set in how computer networks communicate with each other (format, speed, error control etc.)

Serial Line IP (or SLIP)- Serial Line Internet Protocol-much like PPP, SLIP tricks your computer into thinking it's permanently connected to the Internet rather than just connected to it via a modem.

Server- A computer system which "serves" out files to other computers on a network. Uploading from other computers to the server can be done as well.

Shouting- In most cases TYPING IN ALL CAPS is considered shouting on the Internet

Smiley- Characters resembling a sideways-face-smiling, also called an emoticon, used in e-mail or IRC to convey the emotional tone of text sent. There are many, but basically they look like this: :-) or ;-{} or :~(.

Spam- Any junk postings on bulletin boards and Usenet, usually in annoyingly long threads. Spam can cause some to flame the poster, but this just creates more spam.

SYSOP- A systems operator, one who oversees a specific computer system or bulletin board on the Internet.

Surfing- Exploring the Internet without any specific goal in mind, for fun.

Telnet- A terminal-emulation protocol or program that allows one to directly log onto a remote computer through the Internet.

TCP/IP- Transmission Control Protocol/Internet protocol. A standard set of transport protocols which allow different types of computers to exchange data.

Thread- A group of posted messages which are strung together around a certain topic (usually the first posting in the thread).

UNIX- The dominant computer operating system on the Internet that runs by a series of commands.

Upload- To put ones files onto a remote computer via a network.

URL (Uniform Resource Locators) - Addresses for the Internet that follow a specific protocol depending on the type of Internet system one is trying to contact. A URL is in the general form of:

http://host.name/path/file	(for HTTP connections)
file://host.name/path/file	(for FTP connections)
ftp://host.name/path/file	(another way to specify FTP)
gopher://host.name/path/file	(for Gopher connections)
telnet://host.name	(to open a telnet session)
news:news.group.name	(reading USENET newsgroups)

Usenet (user network)- A group of thousands of newsgroups or bulletin boards on which one can read and post notes. Some groups are moderated, but none are censored.

Veronica- A keyword search of gopher server menus on the Internet. see also Archie and Jughead.

Virus- A program that intentionally does damage to a computer, usually hidden within other programs. A virus can be "caught"off the Internet, but programs have been developed to stop many of them.

The World Wide Web, WWW or W3- The hypertext system of the Internet which allows one to view graphics, download movies and sound, as well as applications and files.

Worm- A program that can duplicate itself and move its way through an entire network. The "Great Worm" of 1988 went out of control and crashed many computers on the Internet before it was stopped.

APPENDIX B: TAGS FOR WRITING HTML

This guide is intended as an introduction to the basics of HTML to get a general sense of how it works. There are more advanced features of HTML, such as color backgrounds, image maps, and forms. HTML consists of plain text with a series of tags which are read by a WWW browser.

Tags should be written in plain text files such as Macintosh Teach Text.

Text size and spacing:

<Title>Title of the page here</Title>

<H1> Header text for page here <H1> sizes can vary from <H1>,<H2>,<H3>,<H4>,<H5>, and <H6>. <H1> is the largest.

<I >makes the text italic <I>, <B>makes the text bold <B>

<blink> makes text blink</blink>

<p> breaks text into new paragraph

<HR> Horizontal rule , <HR size=4> is the size used for the Museum Professional Home Page.

Pictures:

<IMG SRC= "directory/file.gif">
Picture put into page (shows were to find picture file)

<IMG Align=top SRC= "directory/file.gif"> aligns the picture to the top of the paragraph. align left, right, center and bottom are other options.

Linked Text:

<A HREF= "http://web address"> Text (that is clicked on to go to web address) </A>

example:
<AHREF="http://www.comlab.ox.ac.uk/archive/other/usa.html">Museums in the U.S.</A>

On a Browser the page would only read: Museums in the U.S., but when clicked on, it would go to the address in the HTML text.

Linked Pictures:

<A HREF="http://web address"><IMG SRC=
"Directory/file.gif"></A>

example: <A HREF="http://www.catcom/diet.html"><IMG
SRC="index 1/cat picture.gif"></A>

On a browser one would see a picture of a cat (cat picture.gif) and when clicked on, the browser would go to the address in the HTML which is the "diet.html" file.

The following text is an example of one of the finished pages of the Museum Professional Home Page when viewed as plain text, rather than read by a browser.

<HTML>
<HEAD>
</HEAD>
<BODY>
</BODY>
</HTML><TITLE>Lists</TITLE>
<IMG Align=Top SRC="www.gif"><P><HR size=4>

<IMG Align=Bottom SRC="VM.GIF"><H2>The Virtual Library At Oxford: Museum Lists</H2>Maintained by Jonathan Bowen<P>One of the oldest and most well known listings of Online Museums.The lists are constantly maintained so they are quite reliable.

<A HREF =
"http://www.comlab.ox.ac.uk/archive/other/museums/usa.html"><IMG Align=Top SRC="usa.GIF">Museums in the U.S.

<A HREF =
"http://www.comlab.ox.ac.uk/archive/other/museums/world.html"><IMG Align=Top SRC="world.GIF"> The World</A><HR size=4>
<A HREF = "http://cwis.usc.edu/lacmnh/other.html"><IMG Align=Top SRC="la2.GIF"><P>
<H2>The Natural History Museum of Los Angeles County: Guide to Museums and Other Cultural Resources</H2></A><P>Listings by individual countries, it contains an "add a site" feature as well. Maintained by Jim Angus with support of the University of Southern California and the Molecular System Laboratory.<HR size=4><P>
<A HREF = "http://gate.okc.com/morr/"><IMG Align=Top SRC="online2.GIF"><P></A>
An annotated directory of Museum Online Resources published by Overall Knowledge Company Inc. The site includes museum products and services, web sites, usenet newsgroups, E-mail discussion groups and ftp sites.<HR size=4><A HREF = "vr.html"><IMG Align=Top SRC="vrmini.GIF">Virtual Museums</A><A HREF = "res.html"><IMG Align=Top SRC="resmini.GIF">Online Resources</A><A HREF = "special.html"><IMG Align=Top SRC="specmini.GIF">Specialization Resources</A><P><HR size=4>
Comments: robinson@sirius.com

APPENDIX C: E-MAIL COMMENTS

The following section consists of e-mail responses received during the development of the Museum Professional Home Page. Some of the mail was not saved on hard disk, so this collection is not complete, but it does give some of the general reactions to the page. The ">" symbol refers to questions that were asked in e-mail previously sent to the sender .

Date: Sat, 01 Jul 95 05:38:59 0700
From: Jim Angus <aonghais@cco.caltech.edu>
Mime-Version: 1.0
To: robinson@SIRIUS.COM
Subject: Comments
X-Url: http://www.sirius.com/~robinson/www.html

One thing you probably ought to be careful about is the use of copyrighted materials...you show the Natural History Museum's logo without their permission. Being web manager of the museum, I feel that you've used it appropriately, however you ought to cover yourself and get written permission to use such things! (but I'm quite pleased to see a
link to our site)

:0)

Jim Angus
Web Manager, Natural History Museum of Los Angeles County

Date: Sat, 1 Jul 1995 09:28:33 -0400
To: robinson@SIRIUS.COM
X-Url: mailto:robinson@sirius.com
X-Personal_Name: Jesse Anderson

From: jesse@nesc.org
Subject: RE: Your Web Site & Text Browsers

Most, if not all, text-only browsers now support the ALT= tag to supply a block of text. If you want, you could use them, and avoid needing the second set of pages (it will save *much* maintenance).
-j

Date: Sat, 1 Jul 1995 09:45:20 -0400 (EDT)
From: Tim Daniels <td6560@xx.acs.appstate.edu>
To: robinson@SIRIUS.COM
Subject: good site
Mime-Version: 1.0

good site. I'll add it to my book mark list.

Date: Sat, 1 Jul 1995 09:17:15 -0500
X-Sender: ashleyg@mail.utexas.edu
Mime-Version: 1.0
To: robinson@SIRIUS.COM
From: ashleyg@MAIL.UTEXAS.EDU (ashley b. golliher)
Subject: spellcheck

Hi Harold! I just took a quick glance at your museum page. Unfortunately, I was not able to see the graphics so I am going to try to access it differently to get the full effect. I did want to notify you quickly to the misspelling of navigation on the first page. I'm sure I wasn't the first to write you. Sorry if this is a redundant message.

I'm interested in exploring it a bit further. It looks good to me! Good luck.

Date: Sun, 02 Jul 95 01:54:00 0500
From: Quigley <squigle@panix.com>
X-Mailer: Mozilla 1.1N (Macintosh; I; 68K)
Mime-Version: 1.0

To: robinson@SIRIUS.COM
Subject: your web project
X-Url: http://www.sirius.com/~robinson/special.html
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
X-UIDL: 804657807.000

I just saw your posting on Museum-L. I think you've done a nice, clear job here! Not cluttered, not trying to list every museum site in the world on your own, etc. Be sure to put up AAMDO (Associ of Art Museum Directors Online) as soon as it pops up - which should be very soon. Also, in the relatively near future, there will be regis-l (or some similar name) a list serve for registrars. I don't know if it will be a private or public list serve yet, but you will find out about it in due course on museum-l. BTW, there is also Nagpra-l and AAT-l which deserve mention. What are your plans for updating this into the future?

Suzanne Quigley
Head Registrar
Guggenheim Museum
squigle@panix.com

Date: Mon, 3 Jul 1995 15:28:29 -0600 (MDT)
From: David Dodd <ddodd@serf.uccs.edu>
X-Sender: ddodd@alf
To: Harold Robinson <robinson@SIRIUS.COM>
Subject: Re: Howdy!
Mime-Version: 1.0

On Mon, 3 Jul 1995, Harold Robinson wrote:

> a question about citing Internet locations- My Kate Turabian Writing Manual mentions nothing on how to write footnotes for URL's. Do you have any sources for this?
> Thanks, Harold
>
Harold--

Yes, you should probably use the Chicago Manual of Style, 14th edition, which has a section on citing electronic sources. They allow quite a bit of leeway...
You can take a look at the bibliography I have posted for my Grateful Dead project, which includes electronic resources, at:
http://www.uccs.edu/~ddodd/biblio.html

Generally, what you would do is say:

"The Annotated Ramble On Rose" in The Annotated Grateful Dead Lyrics
[database online]. Available from
http://www.uccs.edu/~ddodd/gdhome.html.

Hope this helps!

--David

David Dodd, Assistant Professor, Library/ Cataloger & Archivist
Univ. of Colorado at Colorado Springs

Mime-Version: 1.0
Date: Tue, 4 Jul 1995 11:28:26 -0500
To: robinson@SIRIUS.COM (Harold Robinson)
From: squigle@panix.com
Subject: Re: The Museum Professional web site

Hi Harold,

Harold Robinson wrote:
> What is the status of the Guggenheim Museum Online? I haven't seen a web site for your museum.

We're working on it - starting out with something on our current exhibition
(Georg Baselitz).

>How do you feel about Museums and the Internet in general?

Sort of a broad question..... I certainly think museums have their place on the Net - the have several places in fact.... Frankly, I think searchable databases are more interesting than maps and open hours, I don't particularly care to wait for downloads to look at low resolution images of art works, unless their is some interesting interpretive material accompanying the image. As a registrar, I look forward to being able to share crate lists, object lists, loan agreements, etc. over the net - I suppose that would be through something like a list serve for registrars. I would also love to be able to have a preview of any museum I was going to if I'd never been there before. A list of staff, directions on how to get to the museum (like a city map on the web)... gee the possibilities are endless. I can only see the role of the net and the web expanding. Museum shop people are already exploiting the web for their products. I do think too few museums realize the potential and aren't throwing sufficient resources at utilization possibilities. Lets face it, its easy to put up a web site, but its not easy to gather good content. Content has to come from content specialists and that means curators, but they are too busy with developing collections, organizing exhibitions and doing actual research -that they have little time to develop web site content. I ramble.....

You should join Museum Computer Network if these issues interest you....

Suzanne Quigley
Guggenheim
squigle@panix.com

X-Sender: aonghais@pop-server.caltech.edu
Mime-Version: 1.0
Date: Wed, 5 Jul 1995 07:57:48 -0700
To: robinson@SIRIUS.COM (Harold Robinson)
From: aonghais@cco.caltech.edu (Jim Angus)
Subject: Re: Comments

Consider this to be written permission to use the museum sabertooth tiger logo in your web page as it appears in the URL

http://www.sirius.com/~robinson/musprof. It is not under any circumstances to be used for any commercial purpose.

>How many people run our web site? Just me.

>How do we decide what to put in our site? I decide.

>Are there any committees? Nope.

>Why haven't some of the higher profile museums got their web sites up?
Committees are making the decisions and they are probably looking for outside help.

My 'real job' is to run a DNA research lab at the museum. But since I have a strong interest in the Internet, I called some friends at USC and asked them to assign me a directory on their web server. Then I took existing museum brochures, and adapted them to the web. I added additional material after extensive interviews with various departments and staff. Then... and only then did I show it to the administration. They liked it, so it remains up. They've pretty much given me complete control, although I would love to see more staff participation. I was able to do the 'basic' site, but now I need to enlist the support of the entire staff to develop more specific information and presentations.

But honestly, most museums that got their sites up early usually just had some computer geek (like me) who wanted to do it.

Jim

Date: Fri, 7 Jul 1995 00:18:14 -0400
From: Pwohlmut@aol.com
To: robinson@SIRIUS.COM
Subject: homepage

Harold, this looks great. I love the colors and the info is interesting. You must have put in a lot of work. one thing we never got up was the page that had 7332 bytes. It took forever so

I finally gave up. But the rest is very nice. Thanks for your help on my survey. How long did it take you? I think it may be too long.

See you next time.

Sylvia

X-Sender: immaginario@140.105.13.4
Mime-Version: 1.0
Date: Sat, 8 Jul 1995 19:02:23 +0200
To: bandelli@arts90.area.trieste.it
From: Immagi@arts90.area.trieste.it (Laboratorio dell'Immaginario Scientifico)

Dear colleague,
I write to you from Laboratorio dell'Immaginario Scientifico in Trieste, Italy. Our center is one of the members of ECSITE, the European Collaborative for Science, Industry and Technological Exhibitions. Nowadays it counts almost 200 members, more or less all the European science museums, and from Thursday, 6 July, ECSITE has a series of Web pages describing its activities, its aims and goals, and the complete programme of the last annual general meeting with many speeches available on-line, and the preliminary programme for the next general meeting which will be in Cardiff, Wales, in November. This is the first step for raising a true conscience about the huge opportunities that the Internet offers to all the science museums.

I invite you to have a look at these first pages at the following address:
http://www.nmsi.ac.uk/ecsite/
The Web pages were made by my museum, with materials from the museum in Amsterdam, and are hosted at London's Science Museum. This first experiment has also proved to be a true international collaboration! It is in ECSITE's aims to provide more and more services on the Internet. But this requires time, resources and first of all a consensus from its members that we are building with every effort.

This is why I ask you to provide a link to our main page from your web site, in order to enlarge the collaborations of our network. Of course as soon as we provide a page with links to other resources and other services on the Internet (one of our short term projects) we'll thank you and include a link to your site.
If you need our logo, you're free to take it from our main page, end resize to fit your needs. A smaller logo of ECSITE is at the bottom of every page.
For any question, feel free to ask me, and I'll be grateful to you if you can let me know about your actions for us.

Your help will be much appreciated.
With the warmest regards,
Andrea Bandelli
head of telematic services,
LIS Trieste

bandelli@area.trieste.it

Date: Sat, 8 Jul 1995 18:57:04 -0400 (EDT)
From: john pearce <jpearce@s850.mwc.edu>
Subject: Museum Professional HomePage
To: robinson@SIRIUS.COM
Cc: John Pearce <jpearce@s850.mwc.edu>
Mime-Version: 1.0

Dear Harold Robinson, Many thanks for the posting of the address of the Museum Professional HomePage. I have had fun trotting 'round it a bit today, have added the address to my "Bookmarks" in Netscape, and will plan to give the address to the students in my course, "The History Museum," when we start up at the end of August. Perhaps you will have some other visitors from Mary Washington College.

Again thanks--and cheers!

John

John N. Pearce

Director, Center for Historic Preservation
(and James Monroe Museum and Memorial Library)
Mary Washington College
1301 College Avenue
Fredericksburg, VA 22401-5358
USA

Date: Thu, 13 Jul 1995 00:52:35 -0400 (EDT)
From: Chris Robinson <cr31@columbia.edu>
X-Sender: cr31@namaste.cc.columbia.edu
To: robinson@SIRIUS.COM
Mime-Version: 1.0

Superb! Loads fast, clean as a whistle -- info on the museum professional area is solid; now you need to get more hits. Suggest postings, besides yahoo, on all of the sources you mention. BTW, new article in WIRED about the web site for the Museum of Bad Art in Boston. Check it out, add it on. Seriously, your site is good enough to get you a job in "silicon alley" in New York. Send out resumes to multimedia geeks.

Chris

X-Sender: ljohnsto@communique.net (Unverified)
Mime-Version: 1.0
Date: Thu, 20 Jul 1995 08:15:59 -0500
To: robinson@SIRIUS.COM
From: ljohnsto@communique.net (Leslie Johnston)
Subject: Web Site

This site is really nice!
Thanks so much for the link to the MCN site. I do need to note that we've slightly changed our URL to:
http://world.std.com/~mcn/
I've recently (10 days ago) brought up our links to over 350 museums and museum-related sites worldwide, which you can access through our home page.We also have it available as a text file on our gopher site, which is also accessible through the home page.

Best regards,
Leslie Johnston
Historic New Orleans Collection
lesliej@hnoc.com or ljohnsto@communique.net
MCN President-elect

X-Sender: immaginario@140.105.13.4
Mime-Version: 1.0
Date: Fri, 21 Jul 1995 01:21:17 +0200
To: robinson@SIRIUS.COM
From: Immaginario@arts90.area.trieste.it (Laboratorio dell'Immaginario Scientifico)
Subject: ECSITE web pages

Dear Collegue,
some days ago I wrote a message announcing the new ECSITE web site. ECSITE is the European Collaborative for Science Industry and Technology Exhibitions. Its URL is:
http://www.nmsi.ac.uk/ecsite/
You'll find all the relevant information there. I hope you'll enjoy it and I would be very grateful to you if you could add a link to ECSITE's page from the Museum Professional Resources page.
Thank you very much,

Andrea Bandelli

Mime-Version: 1.0
Date: Fri, 21 Jul 1995 08:23:01 -0500
To: robinson@SIRIUS.COM (Harold Robinson)
From: ljohnsto@communique.net (Leslie Johnston)
Subject: Re: Web Site

Harold,

The old URL works because I kept a copy of it there while making sure that all the new links worked correctly and because

many people still have the old url in the bookmarks. I do have an "index.html" page there now as the default.

I would like to make the list searchable, but I am only one person working on this in my "free" time. I'm thinking about the next re-design, either breaking it up more alphabetically, or by country, or by type of museum. The categories are problematic, and many institutions cross categorical lines.

As for Spectra, we (the Board) have gone back and forth on the issue of putting it online. The current thinking is that it's a benefit for our members and will not be generally distributed.

Leslie Johnston
ljohnsto@communique.net

From: Brian Goldfarb <newmu@pipeline.com>
Date: Mon, 24 Jul 1995 23:14:49 -0400
To: robinson@SIRIUS.COM
Subject: Hi Harold!!!!!!! GREAT SITE!!!!!!!!!!V!E!R!Y!!!!!U!S!E!F!U!L!

Hi Harold,

I really enjoyed visiting this Web site. We're still in the process of planning our site--you know lots of meetings at TNM. Things are going well, though, and Jerry and Claudia and Susan say hello.

We're organizing an exhibition of youth produced media projects for the Fall of '96--let me know if you know of any interesting work by teens or young adults on the Internet, (or video tapes or computer interactive programs). Take care.

Brian Goldfarb
Education Curator, New Museum Of Contemporary Art, NYC

Date: Wed, 26 Jul 1995 11:50:48 -0700
To: robinson@SIRIUS.COM (Harold Robinson)

Subject: Yahoo Addition
From: cmalone@yahoo.com
Reply-To: cmalone@yahoo.com

Hi,

The URL you submitted
<url:http://www.sirius.com/~robinson/musprof>
has been added to Yahoo! It will appear in Yahoo on the next update, which will likely occur within the next 24 hours. You can find your keyword search after the next update.

We appreciate you taking the time to add your site to Yahoo. We rely on users like yourself to make Yahoo as complete and comprehensive as possible. In order to keep Yahoo accurate as well, please let us know of changes to your listing in the future.

Thanks again..

The Yahoo Team

Date: Wed, 26 Jul 95 13:22:04 0000
From: "Thos. R. Dyer" <sprig@wizard.com>
Mime-Version: 1.0
To: robinson@SIRIUS.COM
Subject: (no subject)
X-Url: http://www.sirius.com/~robinson/Homepage.html

Nice collection...and I haven't even perused it all yet!
Thought you might want to know, I couldn't open your page until I deleted the "musprof" at the end of the address. (This was just as well, since the term "museum professional" is somewhat of a joke, at least around here, seeming somewhat arrogant.
But hey, thanks for the time and interest in putting your stuff together. It's great!

Tom Dyer
NSM&HS, Las Vegas

X-Sender: todd@pointcom.com (Unverified)
Mime-Version: 1.0
Date: Mon, 28 Aug 1995 08:43:46 -0500
To: robinson@SIRIUS.COM
From: todd@pointcom.com (Todd Whitney)
Subject: The Museum Professional is Rated in the Top 5%

Congratulations!

Your home page has been rated among the top 5% of all sites on the Internet by Point Survey.
Point is a free service which rates and reviews only the best sites on theWorld Wide Web. We provide surfers with a standard of excellence: a catalog of the most lively, useful, and fun sites on the Net. If you haven't already seen Point, you can visit us at:
http://www.pointcom.com/ We think you'll find inclusion in Point will increase your exposure and attract new visitors to your site. Our Top Ten list has been featured on CNN and in many publications, and Point Survey ratings are provided to media around the world.

We invite you to display the prestigious "Top 5% of the Web" badge, which is only offered to sites included in Point Survey. It is available in the badge directory at: ftp://pointcom.com.

And we would, of course, be pleased if you would point back to our pre-homepage at: http://www.pointcom.com.

In case you're wondering, there is no "catch." Our ratings are based solely on merit as judged by our users and reviewers. In the next month Point will also be creating a daily events calendar to let our users know about celebrity Web visits, contests, and other Web features. Please feel free to inform us of new features on your site that you'd like to see featured in such a calendar.

Finally, to best serve our users and you, Point would like to include a screen shot of your home page on our service and in books containing our reviews. We need your permission to do so; we'll send you everything for this by regular mail. Please e-mail your postal address to:

todd@pointcom.com
Todd Whitney
Point Communications
voice: (212) 674-0200 x 155
fax: (212) 674-2700
Thanks -- and again, congratulations!

Sincerely,

Todd Whitney
Point Communications

Date: Sat, 02 Sep 1995 01:06:00 +0900
From: Jeff Kupperman <BXC03733@niftyserve.or.jp>
Subject: The Museum Professional
To: robinson@SIRIUS.COM

Dear Harold-

Suzanne Quigley, of the Guggenheim and editor of Spectra, suggested I contact you about a museum-related article I would like to put on the web.
The article is a summary of a Japanese book called _An Insider's View of Japan's Art Museums_, by Seiji Oshima, director of the Setagaya Art Museum in Tokyo. I had distributed a few copies of the article directly via email, but Suzanne said "This should be read by every non-Japanese museum director who is doing business with Japan," and suggested that The Museum Professional might be a good place to put it so that interested parties could have easier access to it. The whole article is about 3500 words and takes up 38K, so I wanted to contact

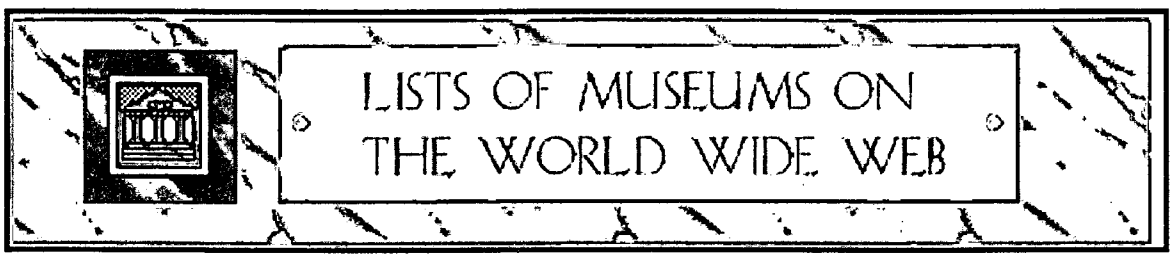
you first before I sent you such a big file. Would you mind taking a look at it, and if appropriate, putting it on your server? Let me know and I will send out the article.

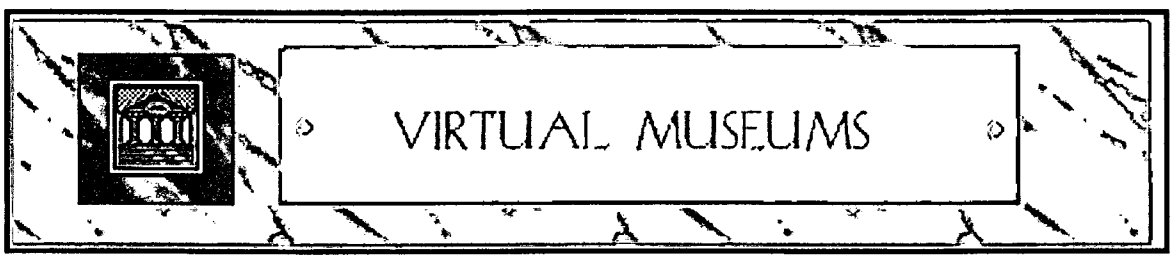
Sincerely--

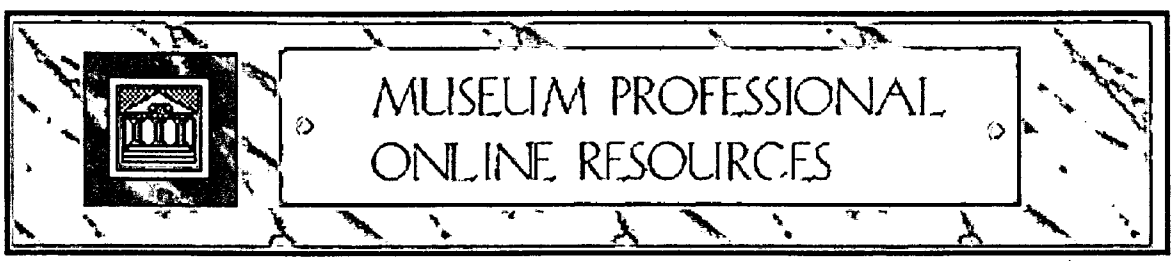
Jeff Kupperman
Atelier Aza, Tokyo
BXC03733@niftyserve.or.jp

THE MUSEUM PROFESSIONAL HOMEPAGE
{database online} available from:
http://www.sirius.com/~robinson/musprof

This page was designed as a navigation tool for museum professionals and anyone interested in museums. It was created by Harold Robinson at the John F. Kennedy University Department of Museum Studies in Orinda,California, as part of a master's project on museums and the Internet. This home page is a basic starting point for the many listings and resources available online in the area of museums. Please send comments for evaluation. [text-only browsers here]





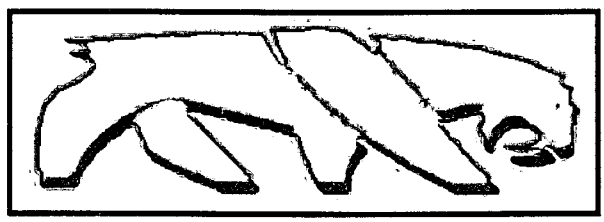


GUEST NUMBER 085

The Virtual Library at Oxford: Museum Lists

Maintained by Jonathan Bowen

One of the oldest and most well known listings of Online Museums.The lists are constantly maintained so they are quite reliable.  Museums in the U.S.  The World



The Natural History Museum of Los Angeles County: Guide to Museums and Other Cultural Resources

Listings by individual countries, it contains an "add a site" feature as well. Maintained by Jim Angus with support of the University of Southern California and the Molecular System Laboratory.

An annotated directory of Museum Online Resources published by Overall Knowledge Company

Inc. The site includes museum products and services, web sites, usenet newsgroups, e-mail discussion groups and ftp sites.

 Virtual Museums  Online Resources  Specialization Resources

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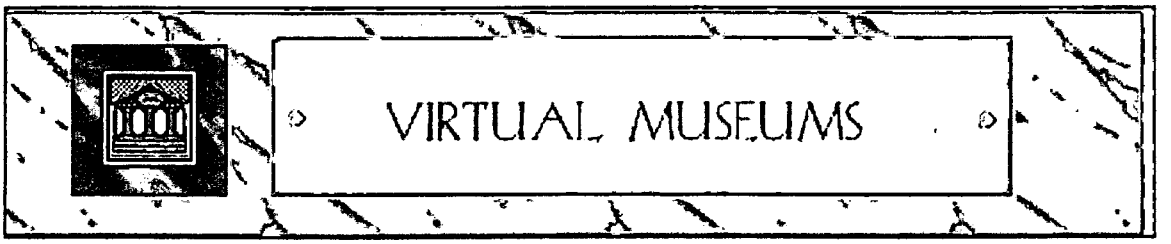
Comments: robinson@sirius.com



These museums solely exist as online sites.

Formerly WebLouvre, this site is a non-profit collaborative project maintained by Nicolas Pioch. It has an extensive network of mirrior sites around the world. This site is primarily a collection of art and famous paintings, but one can "visit" Paris as well.

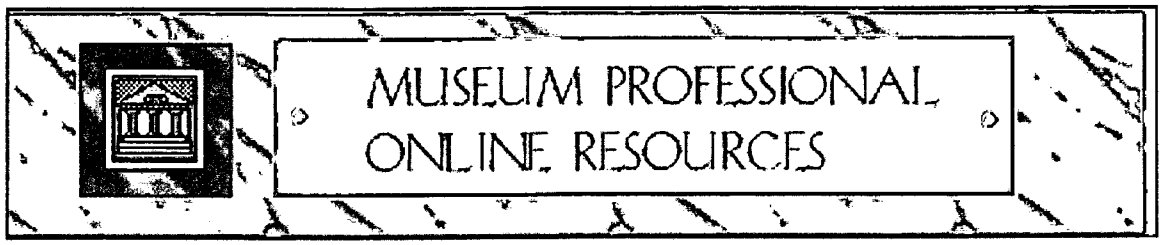
The Internet Arts Museum for Free

A non-profit site run by Artist For Revolution Through Technology On The Internet . The museum displays contemporary art, music and literature.

A Virtual Museum funded by the Library of Congress. Exhibits include the Vatican, the Soviet Archive, the 1492 Exhibit, the Dead Sea Scrolls, a Paleontology exhibit, and the Spalato Exhibit: The "Palace" of Diocletian at Split.

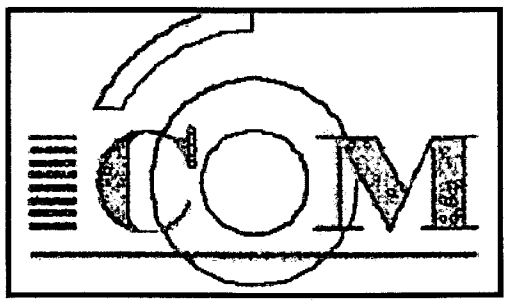

Lists of museums on the www 
Online Resources 
Specialization Resources

Comments: robinson@sirius.com



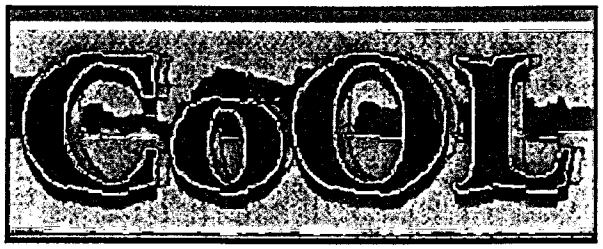
The Museum Computer Network Home Page

A non-profit organization of professionals dedicated to fostering the cultural aims of museums through computer technologies. Links to conferences, publications, the Consortium for the Interchange of Museum Information (CIMI), MCN gopher site, membership, and coverage of the American Association of Museums (AAM) 90th meeting in Philadelphia.



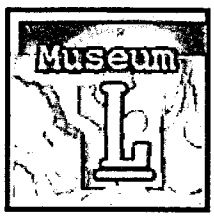
The International Council of Museums Home Page

This site contains links to the ICOM document repositories gopher, information on the e-mail list "ICOM-Announce," and a link to the host service, The Swedish Museum of Natural History.



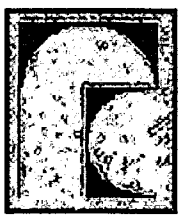
Conservation Online

Resources for conservation professionals: a project of the preservation department of Stanford University Libraries. Links at this site include publications and conference listings, IMS Needs Assessment Survey information, disaster planning and response, mailing list archives, and other conservation related material.



The Museum Discussion List (Museum-L)

A cross-displinary list for museum issues run by John Chadwick. There is also a Museum-L archive gopher. If the Usenet Gateway link on the logo above does not work on your browser, see Museum-L frequently asked questions for other ways of viewing the list.



The Foundation Center

A non-profit service dedicated to building public understanding of the foundation field by maintaining a database on foundations and corporate giving programs and the grants they give.

NATIONAL ENDOWMENT FOR THE
HUMANITIES

An independent agency of the United States Government for grants in history, languages, philosophy and other areas of the humanities. This site includes general information, what's new, an overview of 1995 programs, application guidelines and administrative information.

ECSITE
European Collaborative for Science, Industry and Technology Exhibitions

"The European Collaborative for Science, Industry and Technology Exhibitions, is a non-profit collaborative of museums and science & technology centres. Its objective is to promote public understanding of science, industry and technology, through modern exhibitions and demonstrations." This site includes objectives, plans, conference documents, membership information, a list of the board of directors, and contacts.


Lists of museums on the www

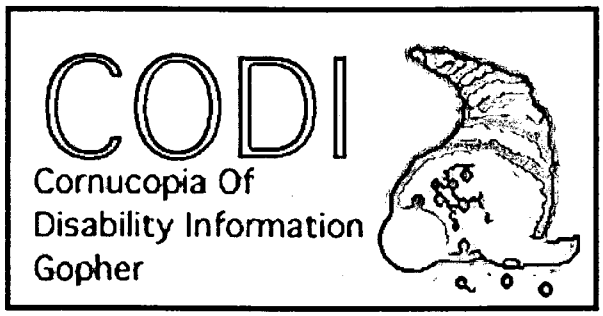
Virtual Museums

Specialization Resources

Comments: robinson@sirius.com

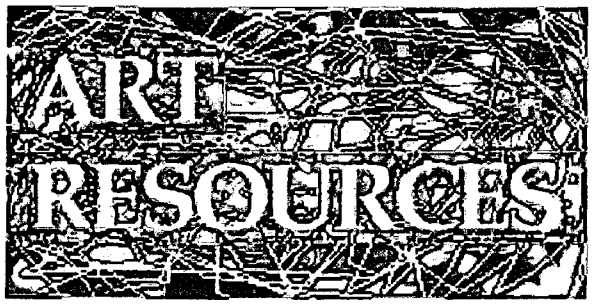
The Electronic Frontier Foundation

A non-profit civil liberties organization working in the public interest to protect privacy, free expression, and access to online resources and information. This site includes EFF Information, Alerts, the Current Newsletter, and Archives.



The Cornucopia of Disability Information Gopher Site

A large collection of information including Americans with Disabilities Act (ADA) regulations, and the Universal Design Information Network, which has specifics on exhibit structure etc.



Art Source: A collection of networked resources on art and architecture submitted by librarians, artists, and art historians.

Internet Art Resources: The Ferguson-Taylor Group, Inc. (FTG) created Internet ArtResources to bring the advantages and capabilities of the Internet to the art community. They have a long history of supporting the arts and feel the need for this technology to be opened up to artists, museums, galleries, art publications, and art shows.

The World of Arts Resources: This page, organized by The Ohio State University at Newark Art Gallery, attempts to compile all visual arts information that is available via the World Wide Web and also Internet.

EINet Galaxy List of Visual Arts

Art and Architecture Resources

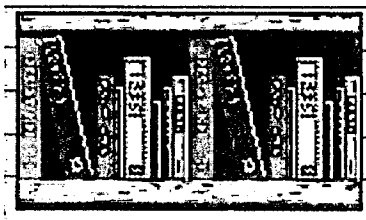
Art Serve: Art and architecture information mainly from the Mediterranean basin (also includes an online print collection). This Australian National University server contains over 1.2 gigabytes of data that include a variety of art historical images.

ArtNetWEB: An art colony in cyberspace.

Art on the Net: This is a virtual space where artists join together in sharing their art with others on the Internet.

The Getty Art History Information Program

Christus Rex: Images from Vatican City.



The Chronicle of Higher Education: Summaries of articles.

Education (Social Sciences) Index at EINet Galaxy

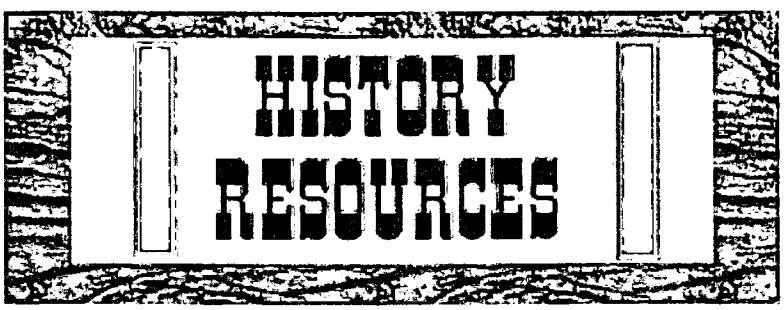
Educational Resources for Teachers: Helpful guides and teacher training "resources designed to help develop skills in navigating, conceptualizing and developing course material on the Internet. Also available are online help guides to get one started immediately. "Resources range from general information guides to Education specific services." Also: state departments of education, specialized resources by subject, and a list of resources pertaining to the Multi-User Dimension (MUD) text-based virtual environments.

ERIC - Education Resource Information Clearinghouse -A database of indexes to journals in education.

The NetSchool Project - A site creating the first K-12 school on the Internet.

Project America: A non-profit organization whose mission is to inspire and teach people across the country to take positive steps to improve their own communities, and to facilitate partnerships between volunteers and the organizations that need them.

The U.S. Department of Education: this site includes national education goals, a teacher's guide to the U.S. Department of Education, a researcher's guide to the U.S. Department of Education, major department programs (financial aid, research and statistics, ...), U.S. Department of Education main gopher server, newsletters, press releases, funding opportunities and other educational resources.



Archives & Archivists: An extensive listing of sites.

Association for History and Computing: WWW services for historians

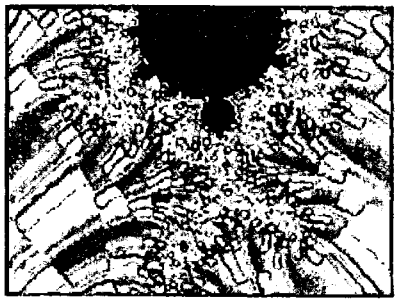
Association for History and Computing: Teaching Material for Historians

Digital Research in American History: Includes links to the Library of Congress, the Smithsonian, the History Network, as well as history gophers.

Index: Full Index of Resources (history and culture)

Native American Resource Page:The Office of Technology Assessment's Industry, Telecommunications, and Commerce Program is in the process of conducting a study entitled Telecommunications Technology and Native Americans: Opportunities and Challenges. This study was requested by the Senate Committee on Indian Affairs and will address Native Americans, Alaskan natives, and native Hawaiians.

U.S. Historical Documents Gopher



Science Resources

Computers: Pursuing Page Publishing: From Justin's Links from the Underground."So you want to settle your piece of cyberspace, huh? Good. Every individual and community-group should put their own pages up."

EcoNet(tm): The foremost online computer network linking people and organizations working for environmental sustainability.

The EnviroWeb: A project of The EnviroLink Network.

Research Resources Internet Links: Lists from The California Academy of Science

Scientific Web Resources: Pointers to useful networked information:These pages are intended to be a WWW resource guide for scientists, mathematicians and others working in related disciplines.
