

CORNELL UNIVERSITY LIBRARY

REPORT TO THE DIGITAL LIBRARY FEDERATION FALL, 2003

Table of Contents

I. Collections, services, and systemsII. Projects and ProgramsIII. Specific digital library challenges

I. Collections, services, and systems

A. Collections

A. D. White Collection of Architectural Photographs

The Andrew Dickson White Architectural Photographs document a wide range of 19th- and early 20th-century architecture of Europe, the Middle East and the Americas, including structures, panoramas and habitats that have vanished due to wars and urban development. The images also represent the work of important photographers, such as William James Stillman, the Bisson Frères, Felix Bonfils and Edouard-Denis Baldus. The collection has received substantive curatorial attention and conservation treatment since September, 1999, when it was awarded a grant from the Gladys Krieble Delmas Foundation. The 13,000 photographs that comprise the A. D. White Photographs Collection are now being catalogued and digitized and offered to the public via Luna Insight's Browser Insight® II software. The project is a collaboration of the Department of Preservation & Conservation, the Cornell Institute for Digital Collections and the Division of Rare and Manuscript Collections. http://rmc.library.cornell.edu/adw

Agriculture Network Information Center (AgNIC)

AgNIC provides agricultural information collected by the National Agricultural Library (NAL), land-grant universities and other governmental and non-governmental agricultural organizations. It is an Internet portal to agricultural information that provides both subject content and expertise in agricultural topics. Materials are accessible via World Wide Web and include full text reports and articles as well as statistical and other data. Staff at the Albert R. Mann Library, Cornell University, worked with the National Agricultural Library to develop a new technical infrastructure for a consortium of land-grant institutions. The new infrastructure improves the functionality, interoperability, and public interface for the more than 25 institutions participating in the alliance. http://www.agnic.org/

Archives of the College of Veterinary Medicine: Historical Photographs Collection

Cornell's Archives of the College of Veterinary Medicine holds more than 5,000 photographs which

document the history of the college as well as the evolution of the veterinary profession in New York State. Subjects include veterinary education, disease control, public health, agriculture, and more. The photographs are now being catalogued to provide electronic access to information about this rich and rare resource on veterinary history.

http://www.vet.cornell.edu/library/archives/

ArXiv.org

ArXiv.org is a fully automated electronic archive and distribution server for research papers in physics, computer science, mathematics, and other scientific communities. Users and authors interact with the arXiv using a web interface, ftp, or e-mail. Authors can update their submissions if they choose, though previous versions remain available. Users can also register to automatically receive an email listing of newly submitted papers in areas of interest to them. Physicist Paul Ginsparg, the creator of the arXiv, joined the Cornell faculty in the fall of 2001. He and the arXiv are credited with starting a revolution in the way physicists, mathematicians, and computer scientists engage in scholarly communication. The arXiv receives approximately two million visits to its Web site per week, with about 65% coming from outside the U.S. Currently receiving more than 3,000 new submissions per week, it now contains over 180,000 articles, all of which are immediately accessible online at no submission charge. The benefit to the communities served is immediate awareness of, and equal access to, the newest research results in their areas. CUL staff administer the daily submission process and are rewriting some of the software to streamline these procedures.

http://www.arxiv.org

Beautiful Birds: Masterpieces from the Hill Ornithology Collection

Beautiful Birds traces the development of ornithological illustration in the 18th and 19th centuries and highlights the changing techniques — from metal and wood engraving to chromolithography — during that period. This site highlights Cornell University Library's Hill Ornithology Collection, which chronicles the pre-1900 development of ornithology as a science, and depicts the growth of bird illustration as an art form, with particular concern for comprehensiveness in North American ornithology.

http://rmc.library.cornell.edu/ornithology/

City of New York, Office of Collective Bargaining Decisions

The Martin P. Catherwood Library at Cornell's School of Industrial & Labor Relations, by special arrangement, makes collective bargaining decisions from this New York City agency available in full-text with this searchable archive. The Office of Collective Bargaining is an impartial, tri-partite agency created by local law as authorized by the New York State's Taylor Law. It was established by the City of New York after negotiations and agreement with unions representing City employees. The OCB provides assistance to management (the City), and labor (unions representing city employees) in resolving their differences.

http://www.ilr.cornell.edu/library/keyWorkplaceDocuments/local/nycocb.html

Claire Holt Collection

The Division of Rare and Manuscript Collections has digitized 1,733 slides from the Claire Holt Collection. Claire Holt, a specialist in Indonesian culture, was a feature writer and art critic for the *New York World*. In the 1930s, she traveled to Bali, where she studied and became an expert on Balinese dance, working with Margaret Mead and other anthropologists, archaeologists, and cultural historians. She came to Cornell in 1954 as a Senior Research Associate in the Southeast Asia Program. She

continued to do field work in Indonesia, with the support of the Rockefeller Foundation. In 1967, she published *Art in Indonesia: Continuities and Change*, introducing readers to the infinite varieties of Indonesian art, both past and present. The collection includes slides of Indonesia created for the Indonesian Arts Project. Subjects include art, architecture, ceremonies, landscapes, paintings, people, sculpture, textiles, and theatre. Many of them provide visual documentation for Holt's detailed notebooks of her trips to Indonesia, and portray artwork that may no longer be available in the original. A selection of the images is included at the URL below. The full set of images can be viewed using the Luna Imaging's *Insight*® client software.

http://rmc.library.cornell.edu/holt/

Computer Science Technical Reports

The Computer Science Technical Reports is a collection of 2100 technical reports produced by students, faculty and staff of the Cornell University Computer Science Department. Spanning a period from 1995 to the present, this is a searchable collection which was sponsored originally by the Computer Science Department and is now supported by Library Systems. New functionality is planned for this collection to enhance viewing and searching.

http://encompass.library.cornell.edu:8081/

Contemporary African Artists Database

This database is the result of a Rockefeller and Ford Foundation funded initiative designed to document and disseminate contemporary African art, as well as promote networking between African artists and art institutions. The computerized database will also be used to generate a series of bio-bibliographic dictionaries. The database is classified by country and includes artists who have been working since the 1920's, in addition to important artists from earlier dates. Both database and printed volumes include sections on public and private art museums, galleries, archives, collections, art schools, and other resources relevant to each country. In conjunction with Salah Hassan, Associate Professor in Africana Studies and the History of Art departments at Cornell University, and the John Henrik Clarke Africana Library, Cornell Institute for Digital Collections (CIDC) is providing infrastructure and systems support for the Contemporary African Artists Database (CAAD) project. CIDC staff developed a database that is used to organize and characterize information about the artists, such as artistic genre and media, nationality, and exhibitions. The contemporary African artists database is accessible via the web for searching. In addition, authorized users can update and add to the database via the web site. CIDC has linked up to five representative images to the database record for each artist, thus providing a sample of the artist's work.

http://arts-lib.library.cornell.edu:8080/aafweb

Core Historical Literature in Agriculture (CHLA)

A companion compilation to the Making of America database, CHLA is a core electronic collection of agricultural texts published between the early nineteenth century and middle to late twentieth century. Full-text materials cover agricultural economics, agricultural engineering, animal science, crops and their protection, food science, forestry, rural sociology, and soil science. Scholars have selected titles in this collection for their historical importance. The collection includes 846 full-text monographs with over 300,000 scanned pages. Ultimately CHLA will have the full text of more than 2,000 monographs and 150 journal titles.

http://cdl.library.cornell.edu/chla/

Cornell University Geospatial Information Repository (CUGIR)

CUGIR is an active online repository providing free access to searching, browsing and downloading of geospatial data and metadata for New York State. CUGIR began in 1998 and represents New York State within the National Spatial Data Infrastructure. With the recent release of CUGIR 1.5, the site now includes more accurate and effective methods for searching including the addition of a New York State place name gazetteer and quick links to popular data sets. CUGIR 1.5 also includes an enhanced and completely comprehensive Help System for describing, downloading, and using different geospatial data formats. With the next scheduled release of the latest version, CUGIR 2.0, the site will include online web-mapping for preview and display of CUGIR data themes in combination with data themes from other web-mapping servers across the country. All CUGIR data files are cataloged in accordance with FGDC standards then converted to MARC for wider distribution and sharing among other libraries worldwide.

http://cugir.mannlib.cornell.edu/

CTHEORY Multimedia

CTHEORY Multimedia is a journal of Web based interactive art grouped around a common conceptual theme. The site complements CTHEORY, an existing electronic review of theory, techno-culture and society. The Cornell Library provides the staff and systems necessary to publish and maintain networked availability of the CTHEORY Multimedia site. The first issue of CTHEORY Multimedia published at Cornell appeared in spring, 2001. This issue addressed the theme of "Tech Flesh: The Promise and Perils of the Humane Genome Project." The next issue appeared in February 2002 and addressed the theme of "Wired Ruins: Ethnic Terror and Digital Paranoia". A new issue, Net Noise, appeared in summer, 2003.

http://ctheorymultimedia.cornell.edu/

Death Penalty Web (Portal) Site

In collaboration with the Cornell Law School Death Penalty project, the Law Library makes available a variety of resources devoted to the subject.

http://www.lawschool.cornell.edu/lawlibrary/death/

Key Workplace Documents

The Martin P. Catherwood Library at Cornell's School of Industrial & Labor Relations collects key materials on workplace issues by special arrangement with government offices, commissions, task forces, and non-governmental associations. Formerly the Electronic Archive, Key Workplace Documents is a unique repository for materials which encompass aspects of the employer-employee relationship. Access to key government documents, public policy position papers, and statistics is offered free of charge. Many items, like the Glass Ceiling Commission materials, are officially archived at this site.

http://www.ilr.cornell.edu/library/keyWorkplaceDocuments/default.html

European Mathematical Information Service (EMIS) Mirror Site

CUL mirrors with live updates the European Mathematical Society's EMIS (European Mathematical Information Service) site. The EMIS mirror provides outside links to several mathematics databases and stores the content of 62 math journals.

http://emis.library.cornell.edu/

Ezra Cornell Materials

The papers of Ezra Cornell include over 30,000 scanned pages from letters, diaries, photographs, documents, and publications, and represent the Cornell University Library's first effort to make a large manuscript collection digitally available.

http://moa.cit.cornell.edu/cdl/EZRA.html

Fantastic in Art and Fiction

Graphic material from the Cornell witchcraft collections provides an unusual and rarely seen counterpoint to a comparative literature course analyzing German, Anglo-American, French, and Latin-American works from the late 18th century to the present. The project is a model for new and unusual ways of incorporating digitized resources into teaching. http://fantastic.library.cornell.edu/

Global Performing Arts Database (GloPAD)

The Global Performing Arts Database (GloPAD) is a project of the Global Performing Arts Consortium (GloPAC; see description under Projects). GloPAD includes images, sound recordings, and video clips of the world's performing arts with detailed descriptions in standardized formats to enable effective cross-cultural searching. The database, which currently contains approximately 3,600 digital objects, will continue to grow with the addition of digitized materials from partner libraries, museums, and individuals.

http://www.glopac.org/

HeinOnline

The Law Library collaborated with Cornell Information Technologies and the Hein Publishing Company in making historical law reviews available over the Internet, both in image form for authenticity, as well as uncorrected OCR text to allow for manipulation of the text.

http://heinonline.org

Herbert F. Johnson Museum of Art, Museum On-Line

Over 17,000 images of works of art contained within the Johnson Museum of Art are currently available for viewing using Luna Imaging's *Insight*® software which allows for several display and database search options. Cornell's art repository includes paintings, prints, sculptures, and published graphical images (woodcuts, etc.). By putting the collection on-line, students, faculty, visitors, and users on the Internet have been able to electronically explore and research the collection from their home, office, or one of the workstations in the museum. Users can learn about artists and their works, and use Insight tools to view high quality images and groups of images. http://insight.library.cornell.edu/

Historic Monograph Collection

441 monographs that were originally scanned in the 1990s as part of a joint digital preservation research project with Cornell University Library and Xerox are now available for online viewing. These books are part of a group of materials that included the Historical Monographs in Mathematics, Cornell Dissertations, New York State Historical Literature, and Core Historical Literature of Agriculture. http://cdl.library.cornell.edu/class

Historic Monographs in Mathematics

The Cornell University Historic Math Collection consists of 512 titles. The original collection was scanned as a result of a research collaboration between Cornell University and Xerox Corporation, with the support of the Commission on Preservation and Access in the early 1990's. Since then a few additional tiles have been added to the collection. All titles are available for public online viewing and on-demand print facsimile reproductions are available for sale. http://moa.cit.cornell.edu/dienst-data/cdl-math-browse.html

Home Economics Archive: Research, Tradition, and History (HEARTH)

Funded by the Institute of Museum and Library Services, HEARTH is a core electronic collection of home economics texts published between the early nineteenth century and mid-twentieth century. The digital library covers home economics in its broadest sense, with full-text materials covering applied arts and design; childcare, human development and family studies; clothing and textiles; food and nutrition; home management; housekeeping and etiquette; housing, furnishing and home equipment; hygiene; institutional management; retail and consumers studies; and teaching and communication. Scholars selected titles for this collection based on their historical importance. The collection will contain approximately 1500 volumes and 600,000 pages, and we plan to continue to add content, as funding permits.

http://hearth.library.cornell.edu

Icelandic and Faroese Photographs of Frederick W. W. Howell

The photographs of Iceland and the Faeroes by Frederick W.W. Howell, along with photographs of Iceland by Henry A. Perkins and Magnús Ólafsson, comprise an important visual record of Icelandic and Faroese life and landscapes at the close of the 19th century. This project makes available through Luna *Insight*® some four hundred images contained in six albums in the Fiske Icelandic Collection. The work constitutes a first phase in efforts to make similarly available nearly all photographs in the Fiske Collection, to elaborate on historical information associated with each photograph and to create collaborative initiatives of this thematic nature with Icelandic and other institutions. http://cidc.library.cornell.edu/howell/

International Association of Law Libraries (IALL) Web Mirror Site

In cooperation with the IALL, the Law Library hosts the site of this international organization. http://www.iall.org

International Court of Justice Web Mirror Site

In partnership with the International Court of Justice, the Cornell Law Library created the first official Web site for the Court, and was instrumental in the Court starting its own official Web site. The Law Library makes available for the Americas complete and simultaneous access to the full-text decisions, documents, and other materials produced by the World Court. The Law Library captures this information twice a year in order to archive the entire Web collection as presented at a given time. This ensures permanent access in Web format in a way similar to the various editions of a print publication. http://www.lawschool.cornell.edu/library/International Resources/ici.htm

International Labor Organization Web Mirror Site

In partnership with the International Labor Office in Geneva, Switzerland, the Cornell Law Library makes available for the Americas complete and simultaneous access to the full text reports, documents, and other materials produced by this distinguished organization. The Law Library intends to capture this information twice a year, in order to archive the entire Web collection as presented at a given time. This ensures permanent access in Web format in a way similar to the various editions of a print publication. http://www.lawschool.cornell.edu/library/International Resources/ilo.htm

International Women's Periodicals

Magazine and journal publications were an important form of communication during the mid 1800s through 1920s. Written primarily for women by both men and women, these periodicals offer a wide array of views about the roles of women in society and business. Suffrage and anti-suffrage writing, domesticity columns, and literary genres from poetry to serialized novels are included in these periodicals. The International Women's Periodicals is a tool designed to assist scholars and researchers on all levels achieve faster, easier and more flexible access to a world-class resource in women's studies. http://historical.library.cornell.edu/IWP/

Louis Agassiz Fuertes Image Database and Guide to Papers

Louis Agassiz Fuertes was a native of Ithaca, New York and the nation's most notable ornithological painter since Audubon. Cornell University holds a large collection of Fuertes' bird illustrations, as well as his personal papers. Here, you will find a database with 2500 of these illustrations and a guide to the Louis Agassiz Fuertes Papers from 1892-1954, respectively.

http://rmc.library.cornell.edu/Fuertes2000/

<u>http://cidc.library.cornell.edu/xml/webdev.asp?xml=RMM02662</u> (Requires Internet Explorer version 5.0 or later)

Making of America (MOA)

The MOA project is a multi-institutional initiative to create and make accessible over the Internet a distributed digital library of important materials on the history of the United States. The project represents a major collaborative endeavor in preservation and electronic access to historical texts. The Cornell University Library and the University of Michigan libraries cooperated in the initial phase of MOA, which was funded by The Andrew W. Mellon Foundation and The Charles E. Culpepper Foundation. This site provides access to 267 monographs and over 100,000 journal articles with 19th century imprints.

http://cdl.library.cornell.edu/moa/

National Endowment for the Humanities Agricultural Monographs

The Cornell University Library NEH Agricultural Monographs is a collection of selected Agricultural monographs from the Cornell Library's extensive collection. These materials were selected for a project funded by the National Endowment for the Humanities where microfilm was generated from digital surrogates. These materials were digitally scanned and these images were transferred directly to microfilm.

http://historical.library.cornell.edu/neh/index.html

New York State Historical Literature Collection

691 monographs and pamphlets that were originally scanned in the early 1990s as part of a joint digital preservation research project with Cornell University Library and Xerox are now available for online viewing. These books are part of a group of materials that included the Historical Monographs in Mathematics, Cornell Dissertations, New York State Historical Literature, and Core Historical Literature of Agriculture.

http://cdl.library.cornell.edu/nys/

New York State School of Human Ecology: Historical Photographs

This collection contains over fourteen hundred photographs of students and faculty, buildings and scenes that portray the College from its founding through 1969. http://he-photos.library.cornell.edu/

Numerical Recipes Mirror Site

Cornell University Library and the authors of the highly used Numerical Recipes books (with the direction of co-author Professor Saul Teukolsky) are pleased to announce a collaboration in which the full text of the complete Numerical Recipes books in C, Fortran 77, and Fortran 90 are now being served on-line via CUL servers, for free, to the world in Adobe Acrobat PDF format at: http://www.library.cornell.edu/nr/nr_index.cgi

Permanent Court of Arbitration Web Mirror Site

The Cornell Law Library cooperates with the Permanent Court of Arbitration, in the Hague, the Netherlands, in making several of their documents available. http://www.lawschool.cornell.edu/library/pca/default.htm

Physical Review Online Archive (PROLA) Mirror

Cornell University Library houses a live mirror of PROLA. PROLA is The American Physical Society's Physical Review Online Archive. PROLA is the concrete expression of APS's commitment to ensuring the immediate and long-term accessibility all journal content that we publish. http://aps.library.cornell.edu/

Project Euclid

Project Euclid is Cornell's principle electronic publishing initiative, whose mission is to advance affordable scholarly communication in the field of theoretical and applied mathematics and statistics. Designed to address the unique needs of low-cost independent and society journals, Project Euclid helps journals make the transition to the online environment in a way that helps them stay competitive with the large commercial journals. Through a collaborative partnership arrangement, publishers join forces and participate in an online presence with advanced functionality while maintaining their intellectual and economic independence and their commitment to affordable subscription prices. The end result is a vibrant online information community that is based on a healthy balance of commercial enterprises, scholarly societies, and independent publishers. Project Euclid, a SPARC Scientific Communities Partner, is a venture by the Cornell University Library and is funded by The Andrew W. Mellon Foundation. Project Euclid is Open Archives Initiative compliant. http://projecteuclid.org

RLG DigiNews

Produced for RLG by the Cornell University Libraries Instruction, Research, and Information Services (IRIS) Division, *RLG DigiNews* is a bimonthly Web-based newsletter focused on issues of vital interest to managers of digital initiatives. Now in its seventh year of publication, *RLG DigiNews* provides filtered guidance and pointers to relevant projects, improving awareness of evolving practices in image conversion and digital archiving, while featuring announcements for related publications (in any form) that will help staff attain a deeper understanding of digital issues. http://www.rlg.org/preserv/diginews/

Rome Photo Collection

This collection of aerial photographs of Rome is indexed by category and includes shots of major architectural monuments as well as streets, aqueducts and land features. The photos were a gift of J.H. Aronson to the Cornell Fine Arts Library. The photos were digitized and the site was created by the Cornell Institute for Digital Collections. Access is limited to the Cornell University community. http://cidc.library.cornell.edu/romeaerialphotos/romephotos/default.html

SagaNet

SagaNet provides digital access to the central corpus of the Icelandic Saga literature. Scholars and researchers worldwide are able to access online full texts/images of Icelandic saga literature and epics, handwritten and printed. This large scale digital collection has been created through the combined efforts of the National and University Library of Iceland, the Arni Magnusson Institute in Iceland, and Cornell University Library, which owns the Fiske Icelandic Collection. SagaNet servers are installed in both Iceland and Ithaca.

http://saga.library.cornell.edu/

Samuel May Anti-Slavery Collection

The Samuel May Anti-Slavery Collection gathers together over 8,500 of the important pamphlet and leaflets relating to the anti-slavery struggle at the local, regional, and national levels. Many represent the original copies held in the personal libraries of the movement's leaders. Sermons, position papers, off-prints, local Anti-Slavery Society newsletters, poetry anthologies, Freedmen's testimonies, broadsides, and Anti-Slavery Fair keepsakes all document in an intimate manner the social and political implications of the movement. Supported by the federal Save America's Treasures program, Cornell has cataloged and digitized all items (300,000 pages) in a manner that protects the originals while ensuring full capture of the text, illustrations, annotations, markings, and embossments. The electronic surrogates will be made broadly and comprehensively available via the World Wide Web through the ENCompass development project. Full conservation treatment is restoring these items to a useable state for current and future scholars requiring access to the original artifacts. http://www.library.cornell.edu/mayantislavery/

The Essential Electronic Agricultural Library (TEEAL)

TEEAL provides the full text literature -- complete with all graphics and illustrations -- of over 140 agricultural journals, stored on compact disk. Designed to support agricultural research in regions where there is an urgent need for increased food production, TEEAL is available at low cost to 109 of the lowest income food deficit countries (as listed in the World Bank's 1998/1999 World Development Report). As of April 2003, seventy-four institutions in forty countries have purchased TEEAL sets. TEEAL is the result of historic cooperation between Cornell University's Albert R. Mann Library and

leading scientific publishers, with the generous support of the Rockefeller Foundation. TEEAL is currently collaborating with FAO (Food and Agricultural Organization), CGIAR (Consultative Group on International Agricultural Research), Yale University and leading scientific publishers to develop an online initiative to provide free or low-cost access to agricultural journals, to institutions in developing countries.

http://www.teeal.cornell.edu

UN21 Interest Group Newsletter

The Law Library publishes and archives the newsletter from the American Society of International Law. http://www.lawschool.cornell.edu/library/International_Resources/asil.htm

USDA Economics and Statistics System

The USDA Economics and Statistics System (ESS) is a dynamic partnership between Mann Library and the USDA to provide the public with fast and free electronic access to vital agricultural information via the World-Wide Web. In the past, the old print publication format of USDA documents required several days or longer for delivery to end-users. Through its ESS service Mann Library makes close to 300 data files available to the public within minutes after their release from three USDA economic agencies (Economic Research Service, National Agricultural Statistics Service, and the World Agricultural Outlook Board.) These materials cover U.S. and international agriculture and related topics. Users can browse and download data from the ESS site or they register with Mann's USDA Reports by Subscription service to receive specific electronic reports automatically upon their release by the USDA. In July 2003 the ESS expanded to include over 1500 time sensitive wire reports from a fourth USDA agency, the Agricultural Marketing Service (AMS). These AMS reports are available to the public via email.

http://usda.mannlib.cornell.edu/

Utopia

Utopia is a database of images of European Renaissance art, primarily from the fifteenth and sixteenth centuries. It is a joint project of Cornell's History of Art Department, College of Arts and Sciences, the Knight Visual Resources Facility, College of Architecture, Art, and Planning, the Herbert F. Johnson Museum of Art, and the Rare and Manuscript Collections of the Cornell University Library. The collection is now accessible to members of the Cornell community using Luna *Insight*® software. http://insight.library.cornell.edu/insightbrowser2/launcher.asp

Veterinary Procedures Collection

The Veterinary Library, in collaboration with the College of Veterinary Medicine faculty, has created a collection of digital video clips portraying veterinary medical procedures and techniques that are covered in the problem-based curriculum and later used in treating animals in the students' clinical rotations. These clips are available to students and faculty through streaming video over the internet, providing instant access from any location throughout the college. (Restricted to the College of Veterinary Medicine community.)

http://vprocs.vet.cornell.edu/

Workplace Issues Today

The Martin P. Catherwood Library at Cornell's School of Industrial & Labor Relations established Workplace Issues Today (WIT) in 1999 as a selective news center where faculty, students and interested

public could go for the late breaking news on workplace issues. All news items are placed in a searchable archive in the hope that it can represent, in an abbreviated form, a chronology of workplace issues of major concern to the public. In addition, it should give some guidance to the researcher about the who, what, when, where, and how of the workplace over time. One can subscribe to the free e-mail service and get vital news about the workplace delivered to the desktop. WIT is published Monday through Friday mornings, except University holidays. Access is free to the public. http://www.ilr.cornell.edu/library/wit/

Zentralblatt MATH Mirror Site

Cornell University Library houses a mirror site of Zentralblatt MATH in cooperation with the European Mathematical Information Service (EMIS). The Cornell mirror established in 2000 is one of nine mirrors worldwide. Zentralblatt MATH covers the entire spectrum of mathematics including applications in computer science, mechanics, and physics. The database includes about 1.8 million entries dating back to 1931 and publishes about 60,000 new abstracts and reviews produced by more than 5000 scientists every year. References to the worldwide literature are currently drawn from about 3000 journals and serials, from conference proceedings, collections of papers and books. http://euclid.library.cornell.edu/

B. Services

Americans with Disabilities Act (ADA) Station

Through a partnership with Cornell's Office of Student Disability Services, Mann Library is home to one of the only publicly accessible Americans with Disabilities Act (ADA) workstations in Tompkins County. The workstation features a broad suite of assistive technology software that offer the ability to selectively magnify objects on the screen and also read the text on the screen aloud through a variety of voices. An attached scanner allows the user to scan documents, optically recognize the characters, save as text or braille, and then print the document to the attached brailler. Online documents can also easily be converted to braille, magnified or read aloud.

http://www.mannlib.cornell.edu/computing/wares/software_types.html#ats

Alumni and Friends Access

Cornell University Library's new Alumni and Friends Access service offers seamless, integrated way to explore and use Cornell's library collections and services online. This suite of information resources and library services is designed by university librarians and information specialists to support the lifelong learning needs of our alumni and friends. It represents a rich array of collections and services from Cornell's 17 campus libraries.

http://alumni.library.cornell.edu/

Central Depository for Digital Collections

Cornell University Library has produced a two-part report on depository guidelines for digital image materials. This work has been funded in part by the Institute for Museum and Library Services. The first section outlines requirements for those wishing to transfer digital image resources to the central depository, and covers selection criteria, legal issues, technical imaging requirements, metadata, and storage. A research team, with the assistance of an advisory committee, has also developed a detailed description of the role, responsibilities, and resources required to establish the Depository itself. [See Common Depository System in the Systems section.]

http://www.library.cornell.edu/imls/

Cornell Copyright Information Center

Coordinated by the Library, the goal of the Copyright Information Center is to provide Cornell faculty, staff, and students with Cornell-specific and general information about copyright. The Website serves as an information clearinghouse and contains Cornell policies, general information, reference materials, and information on the University's copyright awareness and education programs. Also included is information about the copyright clearance and consultancy services to assist the Cornell community with copyright-related questions.

http://www.copyright.cornell.edu/

CreationStation

The Cornell University Library offers students the opportunity to use leading edge multimedia technology at its Creation Station facilities, allowing them to create multimedia presentations for class projects. These facilities consist of high-end workstations, digital cameras, digital video cameras, scanners, quickcams and software for creating multimedia presentations. Windows-based Creation Stations are located in the Uris, Mann, Physical Sciences and Engineering Libraries; in addition, Mann Library has a Macintosh Creaton Station that includes a DVD burner, a wide range of audio/video editing software, a slide scanner, plus an analog-to-digital converter for digitizing videotapes. All locations have new equipment and current software, allowing the library to continue to offer high-end products and multi-media consulting services of value to faculty and students for whom such resources would be otherwise inaccessible.

http://www.library.cornell.edu/okuref/creationstation/overview.htm

Digital Consultancy and Production Services (DCAPS): Digitization, Copyright, Metadata, Technology Support

Cornell University Library's Digital Consulting and Production Services (DCAPS) is comprised of associated services necessary to ensure cost-effective planning, creation, management, use, and preservation for digital collections. It offers a suite of digital asset management services supporting digital resource development from feasibility assessment to full-scale production. The *Digitization* studio provides expert scanning of photographs, manuscripts, text-based materials, and rare artifacts, using the latest hardware and software applications. The DCAPS *Metadata* unit increases the value of digital resources by making them easier to access, use, share, and re-purpose. *Technology Support Services* experts determine how to best manage your digital collection after its creation and can provide ongoing support. *Copyright Services* staff assist you in investigating and seeking permissions for collections that will be digitized and also help determine your rights and secure protection for your own intellectual property.

http://www.library.cornell.edu/dcaps

Digital Imaging Tutorial: Moving Theory into Practice

This online tutorial offers base-level information on the use of digital imaging to convert and make accessible cultural heritage materials. It also introduces some concepts advocated by Cornell University Library, in particular the value of benchmarking requirements before undertaking a digital initiative. The tutorial has been translated into Spanish and French.

http://www.library.cornell.edu/preservation/tutorial/

Digital Preservation Management Workshop: Implementing Short-Term Strategies for Long-Term Solutions

Cornell University Library is offering a new digital preservation training program supported by funding from the National Endowment for the Humanities. The program consists of an online tutorial and a series of five one-week workshops to be held in Ithaca, N.Y. The primary goal of this program is to enable effective decision making for administrators who will be responsible for the longevity of digital objects in an age of technological uncertainty. The Digital Preservation Management workshop series is intended for those who are contemplating or implementing digital preservation programs in libraries, archives, and other cultural institutions. The goals of this initiative are to foster critical thinking in a technological realm and to provide the means for exercising practical and responsible stewardship of digital assets.

http://www.library.cornell.edu/iris/dpworkshop/

Electronic Document Delivery (EDD)

EDD is provided from the Cornell University Library's off-site storage facility, the Library Annex. Digital copies of requested journal articles or tables of contents are made available on a Library Web server for two weeks in Adobe PDF format and the patron is sent an email with the link. Similarly, Interlibrary Loan supplies electronic delivery of items that they receive electronically from other institutions. The Mann, the Industrial and Labor Relations, and the Veterinary libraries are exploring using ILIAD software from Atlas to provide students and faculty electronic delivery of journal articles, book chapters, and conference papers of material in those libraries. The Engineering, Mathematics, and Physical Sciences libraries have implemented a desktop delivery service of articles and conference papers from materials held in those libraries.

http://www.library.cornell.edu/okuaccess/annex/edd/http://www.library.cornell.edu/EMPSL/EDD/

GIS Workstation at Mann Library

The GIS workstation is a high performance computer loaded with the latest versions of ESRI GIS software. As software versions are updated by ESRI (usually annually), the newest versions are made available at Mann Library for public use. Anyone is free to use the GIS workstation, which also includes a full set of reference texts for using ESRI software, as well as the full 9-CD ESRI Data and Maps Media Kit found directly next to the machine. Currently installed GIS programs on the workstation computer include ArcView 3.2 and all extensions, and the ArcGIS 8.3 suite (ArcMap, ArcToolbox and ArcCatalog) with associated extensions like Spatial Analyst and ArcScene.

InSITE

InSITE is a current awareness service of Cornell Law Library. InSITE highlights selected law-related Web sites in two ways: as an annotated publication issued electronically and in print; and as a keyword-searchable database. The law librarians at Cornell evaluate potentially useful Web sites, select the most valuable ones, and provide commentary and subject access to them.

http://www.lawschool.cornell.edu/library/International Resources/insitearch/insite.htm

MyLibrary: MyLinks, MyContents, MyUpdates, MyCatalog

MyLibrary provides personalized library services to Cornell University students, faculty, and staff. It consists of a suite of four tools. MyLinks is a tool for collecting, organizing, and maintaining links to electronic resources on the World Wide Web for private use by a patron. Our patrons best understand

this service as a "traveling set of bookmarks." MyUpdates is a tool to help scholars stay informed of new resources provided by the library. MyUpdates periodically queries the Library Catalog to determine which resources are new and automatically notifies Cornell students, faculty, and staff via e-mail when books, recordings, networked resources and other library materials in the user's self-identified area of interest are cataloged and available in the library. MyContents provides Cornell library patrons with a free, convenient, journal table of contents (TOC) current awareness service for journals in our collection in a wide variety of disciplines. TOC can be received via e-mail or over the web in formats the user specifies (including EndNote and Reference Manager). MyContents runs on top of and adds value to common vendor TOC alerting services and is designed to work with multiple vendors at once. MyCatalog is a feature of the CU Library Catalog which allows patrons to customize their view of the Catalog and save search preferences, individual searches, and specific records they have specified to reuse later. Following are the URLs for MyLibrary and for a more in-depth description of the service: http://mylibrary.cornell.edu/

http://campusgw.library.cornell.edu/newhelp/res_services/mylib.html

Online Chat Reference

Chat Reference is a three-year-old digital service that lets patrons ask questions and get answers, in real time, from the reference staff in Olin, Uris and Mann Libraries, Cornell University. In 2002 Olin and Uris Libraries launched a collaborative project with the University of Washington in which Cornell provides service to Washington users early in the day and Washington provides service to Cornell users late in the day.

http://campusgw.library.cornell.edu/services/askalib.html

USDA Reports by Subscription

This is an e-mail subscription service providing quick and timely access to the agricultural and economic estimates that are available in the USDA Reports system maintained by the Albert R. Mann Library, Cornell University. Through this service, subscribers receive the reports of their choice within three hours of their publication via email. This service complements the Cornell Library's USDA Report System.

http://usda.mannlib.cornell.edu/mor start.html

VetAccess

VetAccess is a fee-based customized research and document delivery service providing up-to-date information on all aspects of veterinary medicine. The Veterinary Library reference staff researches requested topics using the published literature, article databases and other resources available in the Veterinary Library. Users of the service include pet owners, veterinarians, and any members of the public interested in animal health.

http://www.vet.cornell.edu/library/vetaccess.html

Veterinary College Reserves Database

The Veterinary Library, in collaboration with the Office of Educational Development, has created a unique system for e-reserves that ties into the veterinary problem-based curriculum. The Electronic Reserves Database is an integral part of the newly created Veterinary Students' Website. This website provides veterinary students with "one-stop shopping", including personalized links to course web sites, student services related information, access to the Library and other frequently sought information, and of course access to the Electronic Reserves Database.

http://drylab1.vet.cornell.edu/reservedb/index.asp

C. Systems

Common Depository System (CDS)

The CDS provides a focal point for digital preservation initiatives at Cornell. It began as a central depository for digital images and has evolved into a common depository system to address the preservation requirements of digital content in all formats. The name change reflects the need to establish a set of common preservation principles, policies, and practices for digital collections in an increasingly distributed environment. Each digital archive instance for which Cornell University Library accepts long-term responsibility will conform to the established CDS requirements. [See Central Depository for Digital Collections under Services.]

http://www.library.cornell.edu/iris/dpo/cds.html

DPubS

DPubS was software developed in the CUL Library Systems group and currently comprises the technical reports of the Cornell Computer Science Department, Computer and Information Science, the Cornell Theory Center, and the Reuleaux collection. DPubS is also the software used to present the Historical Collection and manage Project Euclid.

ENCompass

The Cornell University Library is a partner with Endeavor Information Systems Inc. on the development of ENCompass, a product designed to provide interoperability across digital collections as well to describe, index and search a variety of licensed electronic resources (i.e., provide "gateway" functionality.) The Cornell ENCompass Working Group brought the ENCompass e-Reference system into production in May, 2003. During the summer of 2003, the new system ran in parallel with the existing e-Reference Collection. In August, 2003, the new e-Reference system took the place of the existing one.

http://www.endinfosys.com/prods/encompass.htm http://www.library.cornell.edu/cts/encompass/EREF.htm

Electronic Reserves (E-reserve)

The electronic reserve system uses the latest in image scanning technology to provide electronic document delivery. The system allows students to find, view and print course materials that have been placed on reserve by instructors. Materials in the electronic reserve system include journal articles, exams, course syllabi, problem sets and other materials. Material may be retrieved by searching by instructor name, course title and number, author, or title of the material. Using the Endeavor Image Server client, a campus wide electronic reserve system, allows Cornell students to access course reserve materials via the Web.

http://www.library.cornell.edu/okuaccess/reservenew/er.html

ILLiad

The Cornell University Library runs Atlas Systems' ILLiad interlibrary loan system. Library personnel can access all data about ILL requests in a searchable database. Patrons can get information about the status of requests through the Web at any time. Copyright clearance, which was previously processed by hand, is now automatically generated. An electronic document delivery service that allows copies of articles requested through interlibrary loan to be delivered directly to patrons' desktops is in production

(see Electronic Document Delivery, under Services), as well as the ILLiad Lending module. For more information on ILLiad see:

http://kittrell.mannlib.cornell.edu/illiad/ILLiadFAQ.html

Music Listening Stations

The Music Library's reserve music listening is available through networked, digital streaming technology. Access is provided through state-of-the-art computers, on a fast dedicated network, in a listening lab located in the Music Library in Lincoln Hall. Reserve music listening required for course work is made available to students through a familiar Web interface, affording a level of control and features not possible using traditional analog media. Future developments in the enforcement of copyright concerns may enable the Library's music listening reserves to be made available to authorized listeners in their dorms, apartments and offices. During 2002/03 we experimented with a mirror cite on a CIT server that allowed two large classes to do their listening from where ever was convenient on a double password protected streamed sound website.

Voyager 2001.1

The Cornell University Library's library management system is Endeavor Information Systems Inc.'s Voyager 2001.1. To access the library catalog, go to: http://catalog.library.cornell.edu/

II. Projects and programs

Cornell Genomics Initiative

In support of an interdepartmental initiative to advance genomics research at Cornell, Mann Library is developing a federated thesaurus for use in genomics digital library projects. The thesaurus will facilitate the discovery and retrieval of a wide range of genomics-related resources from Cornell and beyond. It brings together into a single database over 229,000 terms relevant to genomics, the life sciences, and agriculture from four leading controlled vocabularies (the National Library of Medicine Medical Subject Headings, the National Agriculture Library Agricultural Thesaurus, the UN Food and Agriculture Organization's Agrovoc thesaurus, and the Gene Ontology Consortium databases.) The independent structural hierarchies and relationships of each source thesaurus have been retained even as individual common terms have been combined, allowing users to assess the acceptance of a term and navigate easily through any one or all four source thesauri. Mann's federated thesaurus focuses on the human user's need to move from non-preferred entry terms to the appropriate controlled vocabulary, follow consistent navigation pathways to broader, narrower, or related terms, and link directly to the source of a term, to online resources such as PubMed and the European Bioinformatics Institute, and to resources associated locally with the Cornell life sciences initiative.

Cornell Life Sciences Initiative

Interaction is one of the three organizing principles of Cornell's Life Sciences Initiative, the goal is to "catalyze a network of campus-wide research and educational activities to continue to bring together biologists, physicists, chemists, computational scientists, and engineers in an atmosphere where traditional departmental and college boundaries become secondary to the intellectual work itself." In support of this goal the library is developing a site that will highlight the relationships among existing web-based content, minimize duplication of information while greatly improving the opportunities for discovering the full breadth and depth of Cornell's life sciences activities. The site's function is to bridge

from a Google-like search front end directly to the individual service descriptive web pages maintained at other units throughout the university. This same front end would also provide users direct, searchable access to course descriptions, department and field information, events, faculty research, and library resources, as well as to the existing public information available on the Cornell Genomics Initiative and New Life Sciences Initiatives web sites.

Cornell University Library Digital Initiatives Web Site

Development of the Cornell University Library Digital Initiatives Web Site and metadata collection manager are efforts to meet CUL's goal of communicating its digital library and preservation research projects and implementation initiatives to a broad audience and to provide a mechanism for collecting up-to-date information from staff working on these initiatives. The site is currently in a development stage and is expected to go live in late 2003. http://rondev.library.cornell.edu/dig/

Cornell University Virtual Linguistics Lab

The Cornell University Virtual Linguistics Lab (VLL) is an initiative to create an online database that archives and organizes language acquisition data housed in the Cornell Language Acquisition Laboratory (CLAL) as well as 11 other national and international research partners. The CLAL has been under the direction of Barbara Lust, Professor of Human Development in the School of Human Ecology. Cornell's Mann Library is contributing to the project in two ways. First, Mann Library has been consulting the VLL team in the areas of information technology and metadata. In early 2003, Mann made the CLAL a data provider of the Open Language Archives Community (OLAC), a derivative of the Open Archives Initiative. OLAC is an international partnership of institutions and individuals who are creating a worldwide virtual library of language resources by: (i) developing consensus on best current practice for the digital archiving of language resources, and (ii) developing a network of interoperating repositories and services for housing and accessing such resources. Second, Mann Library is pursuing an experimental model and organizational framework known as the "Living Trust." The Living Trust is an agreement between the College of Agriculture and Life Sciences faculty and researchers would allow Mann Library to be a steward of data which entails acquiring, managing, preserving, and storing original data sets created by Cornell faculty and researchers. http://www.language-archives.org/archive.php4?id=5

Creating an Online Image Database of the Asian Collections of the Herbert F. Johnson Museum of Art

Supported by a two-year grant from the National Endowment for the Humanities, the Johnson Museum of Art and Cornell University Library are engaged in a collaborative effort to "enhance intellectual access to its permanent collection of Asian art through the use of digital technology." In the fall of 2002, work began on this project, which includes completing the remaining digital photography and subject cataloguing of 3500 works of Asian art and to add enhanced interpretive information for the entire Asian art collection of 7000 objects to the shared database. The proposed project is part of an ambitious multi-year effort in collaboration with the Cornell Institute for Digital Collections (CUL) to provide an online digital image database of the museum's entire permanent collection using Luna Imaging Insight software for purposes of public access, research and education. [See the Herbert F. Johnson Museum of Art, Museum On-Line entry under Collections.]

Development of a Distributed Digital Library of Mathematical Monographs

This three-year collaborative project of the University of Michigan Library, Cornell University Library

and the State and University Library Gottingen was funded by the National Science Foundation and the Deutsche Forschungsgemeinschaft. A realistic interoperable mechanism capable of unifying a single type of resource (retrodigitized books) within a single discipline (mathematics) across multiple access systems at multiple institutions will be developed over the course of the project. After a thorough evaluation of the effects and benefits, the system, if successful, will be maintained by the three libraries to allow users to access and exploit these collections in a new and more efficient way. http://www.library.cornell.edu/mathbooks/

Digital Mathematics Library (NSF/DML)

Cornell University Library has played the role of Planning Coordinator for an international group of stakeholders in this NSF funded project. The DML will facilitate cooperation and coordination among a number of currently uncorrelated digitization projects in mathematics that have emerged at separate institutions. Such a coordination of efforts will promote a systematic approach to digital preservation of mathematics materials, and provide users with an integrated means of accessing them.

Digital Himalaya

The Digital Himalaya project was conceived by Professor Alan Macfarlane and Cornell Postdoctoral Associate Mark Turin as a strategy for archiving and making available valuable ethnographic materials from the Himalayan region. Based in the Department of Social Anthropology at Cambridge University, the project began in December 2000 and involved the Cornell Institute for Digital Collections (CUL). Five ethnographic collections representing a broad range of regions, ethnic groups, time periods, and themes are slated for digitization in the first phase of the project. The current version of this Website introduces Digital Himalaya's objectives and content material. The site is updated on a regular basis with additional film clips, viewable photos, sample databases, technological tips, and other relevant information. Eventually users will be able to navigate through the Digital Himalaya collections by taking guided tours through the collections, searching the collections by topic, place, date, or other criteria, use map interfaces to select images by locations, and follow links from images to relevant text materials.

http://www.digitalhimalaya.com

Donovan Nuremberg Trials Collection at Cornell Law School

The Donovan Nuremberg Trials collection consists of nearly 150 bound volumes of Nuremberg trial transcripts and documents from the personal archives of General William J. Donovan (1883-1959). In a collaborative effort between the Cornell Law Library and the editors of the Rutgers Journal of Law and Religion, the Law Library makes selected portions of the Donovan Nuremberg Trials collection available to the public on the Internet. The Law Library is making acid free print and digital copies of selected documents, and the editors are using the copies to solicit commentary and related articles from scholars, that will be published online at www.lawandreligion.com. The Law Library is also preparing a detailed index of the documents that can be accessed over the Internet. The first installment of the digitized pages provided by Cornell Law Library is available on the Rutgers Journal of Law and Religion web page, as Installment No. 1, July 6, 1945 - "The Nazi Master Plan: The Persecution of the Christian Churches" - A document prepared by the Office of Strategic Services (OSS) Research and Analysis Branch.

http://www.lawschool.cornell.edu/library/nuremberg

DSpace

DSpace is an open-source institutional repository system developed at Massachusetts Institute of

Technology (MIT) Library. Cornell University has joined the DSpace Federation along with five other universities plus MIT. Cornell's DSpace implementation will be managed, maintained, and housed by the Cornell University Library. DSpace communities and collections are currently being formed. http://dspace.org/

EAD/XML Finding Aids

The Division of Rare and Manuscript Collections is engaged in a major effort to convert about 1,000 paper or electronic finding aids to Encoded Archival Description (EAD), encoded in XML. The project builds on local encoding standards developed under an earlier experiment with EAD delivery options using XSL. Most of the conversion is expected to be completed in-house. To date, about 850 guides have been converted, with detailed container lists for 300. The Kheel Center in Cornell's Industrial and Labor Relations Library, which is also cooperating in the project, has about 140 guides, with detailed lists for about 75. For delivery, XML encoded finding aids are converted to HTML on the fly, using XSL style sheets. Further work will add guide navigation functionality and collection-wide search capability. DLXS software has recently been implemented and will provide enhanced searching capabilities for searching across all of the guides, as well as within individual guides.

http://rmc.library.cornell.edu/ead/ http://cidc.library.cornell.edu/xml/

Electronic Mathematics Archive Network Initiative (EMANI)

Four international academic libraries--Cornell University Library (U.S.), the State and University Library Göttingen (Germany), Tsinghua University Library (Beijing), and Orsay Mathematical Library (Paris) and the scientific publisher Springer-Verlag have announced a joint project with the European Mathematical Society's Electronic Library of Mathematics. EMANI is working to ensure long-term preservation and accessibility of mathematical information in digital form. It involves librarians, publishers, and scholars in the long-range strategic planning for its electronic publishing processes. In the future, EMANI may expand to include other scientific disciplines and publishers. The project coordinator for EMANI is Dr. Bernd Wegner, of the Technical University Berlin and Zentralblatt fur Mathematik.

http://www.emani.org/

Global Performing Arts Consortium (GloPAC)

The Global Performing Arts Consortium (GloPAC) is an international group of organizations and individuals committed to providing interactive, multimedia, and multilingual performing arts resources on the Internet, enabling people everywhere to explore the diversity and depth of the world's performing arts. GloPAC's projects include the Global Performing Arts Database (GloPAD; see description under Collections) and Global Performing Arts Resource Centers (GloPARC). The resource centers will draw on the database in creating innovative learning modules. The prototype focuses on Japan and includes an interactive playscript, streaming video performance, and dynamic slide show, as well as a multi-layered glossary, index of translations, and Web source station of Japanese clip art and Internet links. In 2002 the Cornell University Library received a three-year grant from the Institute for Museum and Library Services for GloPAC to create metadata standards for the performing arts. The grant will also be used to increase the number of digital objects in GloPAD and to make the user interfaces more effective. Cornell's partners on this project include the St. Petersburg Museum of Theatre and Music (Russia), the Museum of the City of New York, the San Francisco Performing Arts Library and Museum, the Gertrude Stein Repertory Theatre (New York), and the University of Washington Libraries. A description of the project, GloPAD, GloPARC, and a complete list of GloPAC's participating organizations and individuals can be seen at: http://www.glopac.org/

IMAG/CU Software Project

IMAG/CU is a shared university image catalog that incorporates collections from the Johnson Art Museum, the Rare and Manuscripts Collection of the Cornell University Library, the History of Art Slide Collection, and the Architecture, Art and Planning Slide Collection. Cornell Institute for Digital Collections (CIDC) administers the catalog using the museum collection management system Multi Mimsy 2000. CIDC also sponsors cross-unit meetings to develop common descriptive practices. http://cidc.library.cornell.edu/Info/imagcu.html

Images of Southeast Asia: Western Accounts of the Land and Life of the People

Cornell University Library's Echols Collection has been awarded a grant from the Institute for Museum and Library Services to conduct a two-year project (starting fall, 2002), entitled "Images of Southeast Asia." The project will foster emerging trends in teaching and research as well as increase general awareness of the region by creating a digital collection of 140,000 pages of text and 10,000 illustrations taken from Western travel narrations written from the early 17th century to the first quarter of the 20th century. This first large-scale digitization project of Southeast Asian content will explore several important aspects of digital presentation and use. The project will use ENCompass to manage, integrate, and deliver text and images from the database. The outcome will be a resource of great scope and depth, useful to the general public, scholars, and in the classroom.

Kinematic Models for Design Digital Library (K-MODDL)

With support from the National Science Foundation (NSF), Cornell University Library is building a digital library of mechanical models for teaching the principles of kinematics -- the geometry of pure motion -- as well as the history and theory of machines, and the mathematics of mechanisms. The core of K-MODDL is a collection of late 19th-century model machine elements designed for research and teaching by German engineering professor Franz Reuleaux (1829-1905), founder of modern kinematics and a forerunner of modern design theory of machines. Since 1882, Sibley School of Mechanical and Aerospace Engineering in Cornell's College of Engineering has held 220 pieces, the most complete extant set of the Reuleaux mechanisms in the world. Kinematic Models for Design Digital Library (K-MODDL) will come online in summer 2004 and will be included in NSF's National Science Digital Library (NSDL). An Explore Cornell gallery, which provides a small sample of the materials and services that will be available in the completed K-MODDL in the summer of 2004 may be seen at: http://explore.cornell.edu/scene.cfm?scene=Digital%20Library%20of%20Kinematics

National Science Digital Library (NSDL) Project

The NSDL is a broad program to build a digital library for education in science, mathematics, engineering and technology. It is funded by the National Science Foundation's (NSF) Division of Undergraduate Education. In summer 2000, Cornell received one of six one-year Core Integration demonstration projects; the task of Core Integration is to ensure that the NSDL is a single, coherent library, not simply a set of unrelated tasks. Cornell's demonstration project is known as Site for Science. In late 2001, the NSF consolidated the Core Integration funding into a single grant for the production release of NSDL. This grant was made to a collaboration of the University Center for Atmospheric Research, Columbia University, and Cornell University. The technical approach that is being followed is based heavily on the experience with Site for Science. The NSDL Project is a collaborative project between Cornell University Library and Cornell's Department of Computer Science.

http://siteforscience.org

http://nsdl.org/render.userLayoutRootNode.uP

Plant Management Network

Mann Library is working with Cornell faculty and Cornell Cooperative Extension (CCE) staff to provide increased public awareness of CCE publications. The Plant Management Network (PMN) is a unique cooperative resource for the applied plant sciences. PMN offers an extensive searchable database comprised of thousands of web-based resource pages from the network's partner universities, companies, and associations. In 2003 approximately 650 CCE publications have been identified and bibliographic metadata entered into the PMN database. http://www.plantmanagementnetwork.org/

Political Communications Web Archiving

Within the past decade the Internet has emerged as a vital channel of political communication. It now serves political parties, activists, popular fronts, and other nongovernmental organizations (NGOs) as a widely accessible and relatively unrestricted global message board. Critical documents such as manifestoes, constitutions, declarations, and treaties posted to the Web are the digital-era counterparts of the posters, pamphlets, and other forms of "street literature" that have long provided indispensable data on political activities and social and ideological trends. However, Web-based political communications tend to be produced sporadically and to change and disappear rapidly. Unless they can be preserved and archived in a format that will be accessible in years to come, their value as original source material will be lost. The Andrew W. Mellon Foundation awarded a grant to the Center for Research Libraries (CRL) for a project entitled Political Communications Web Archiving to produce a framework and general specifications for ongoing, sustainable archiving of such political material in terms of long-term resource management, curatorial practices, and technological requirements. Cornell University Library is one of four universities subcontracting with CRL to explore the possibilities. http://www.library.cornell.edu/iris/research/WebPolCom.pdf

Preservation and Digitization of Political Americana

The Institute of Museum and Library Services is funding a two-year project to preserve and digitize a major collection of published material, ephemera, and artifacts from U.S. national political campaigns, and to make the digitized images and associated information available and searchable on the World Wide Web. The material dates from 1800 to 1976, with the greatest bulk in the 19th century. There are 7,000 discrete items in the collection, and the finished collection will be represented by more than 35,000 digital images.

http://cidc.library.cornell.edu/political/history.htm

Project Prism: Virtual Remote Control for Web Resources

The rapid growth of the World Wide Web provides extensive new resources of interest to research libraries. There are numerous Web sites and pages that are neither owned nor controlled by libraries but may provide essential enhancements to existing resources or form the nucleus for new collections. Project Prism, funded by an NSF DLI2 grant, is a four-year collaborative effort between the Cornell University Library (CUL) and Cornell's Computer Science Department. Virtual Remote Control (VRC) is CUL's portion of Project Prism that has evolved over the past two years and is developing a risk management approach for monitoring and evaluating Web resources over time to ensure the longevity of these resources. VRC does not presume that resources will be captured, but looks for risk indicators to avoid loss and enables capture when appropriate. The research evaluates Web resources as individual pages, as pages on a site, as a site on a server, and as an asset that is managed by an organization that is

accessed in a range of external contexts. The six stages in the VRC model are: identify, analyze, appraise, strategize, detect, and respond. Appropriate tools are being identified, adapted, or developed to support each stage.

http://www.library.cornell.edu/iris/research/prism/index.html

Question Point (formerly: Cooperative Digital Reference Service Project)

The Cornell University Library is participating in the Cooperative Digital Reference Service Project, an international effort led by the Library of Congress and OCLC, which is intended to create a system of linked reference services. The Cornell Library has participated in the initial planning and all phases of this project.

http://www.questionpoint.org/

Rose Goldsen Archive of New Media Art

Under the sponsorship of the Division of Rare and Manuscript Collections of the Cornell University Library, the Rose Goldsen Archive serves as a research repository of new media art, with a current emphasis on digital interfaces and experimentation by international, independent artists. Named after the pioneering critic of the commercialization of mass media, the late Professor Rose Goldsen of Cornell University, the Archive houses art works produced on CD-Rom, DVD-Rom, and the internet, as well as supporting materials, such as unpublished manuscripts and designs, catalogues, monographs, and resource guides to new media art. Emphasizing multimedia artworks that reflect digital extensions of twentieth-century developments in cinema, video, installation, photography, and sound, its holdings include the vast selection of international works exhibited in the exhibition, Contact Zones: The Art of CD-Rom, as well as net art archived on the CTHEORY Multimedia site maintained by the Cornell Library. The aim of the Goldsen Archive is to provide researchers, faculty, and students with a better understanding of the transformation wrought on the artistic process by digital multimedia experimentation and development. To this end, access to the archive will be available via computer workstations in the Kroch Library and eventually via campus Internet servers that will permit the artworks to be accessed from Cornell libraries, classrooms, and dormitory spaces. The Archive is curated by Timothy Murray, Professor of Comparative Literature and English, Director of Graduate Studies in Film and Video, at Cornell University.

http://rmc.library.cornell.edu/news/Acq2003goldsen.html

III. Specific Digital Library Challenges

Addressing the challenge of managing and distributing access to digital sound and moving images in a comparable manner to our current support for text-based materials.

We retain this from our previous report as an on-going challenge. The steadily increasing size of sound and video collections (e.g., the Veterinary Procedures Collection of digital videos developed by the Veterinary Library, the Music Library's reserve music listening stations, the development of the Rose Goldsen Archive of New Media Art) presents storage, processing, and distribution challenges. Such collections are rapidly becoming commonplace and central to our digital library developments. To address this challenge, a Library-wide multimedia implementation team has been assembled.

Biology databases

One outcome of the 'genomics revolution' is an explosive growth in databases of biological data and the development of tools and techniques to manage those data, often called bioinformatics. That growth has

reached overload proportions for individual researchers. Furthermore, the databases are no longer an arena exclusive to clinical or purely genetics research. The resources are of use to a wide range of researchers looking at life sciences problems, from the computational scientists developing ways to visualize microarray expression data, to the plant breeder seeking to improve rice stocks, to the molecular biologist looking at protein structure. Libraries have the expertise to contribute discovery and acquisition/licensing activities, and to help researchers organize, build, and distribute their data. They can also help in the integration and data mining efforts. The Cornell Library is developing expertise in biology databases and establishing connections with campus bioinformatics researchers and in the units providing infrastucture support to the research and teaching programs of the University. A team of librarians from the science units is engaged in this program and Mann Library has redefined a position to focus on bioinformatics and life sciences services and is recruiting at this time.

Expanding development of Digital Consulting and Production Services (DCAPS)

DCAPS offers a suite of digital asset management services supporting digital resource development, from feasibility assessment to full-scale production. Leveraging the Library's existing experience and expertise, D-CAPS is comprised of associated services necessary to insure cost-effective creation, management, use, and preservation for digital collections. Presently the services include digitization, metadata, copyright, and delivery technology consulting and implementation support. Challenges include further elaboration of the business model underlying this entrepreneurial development, expansion of component services, and design and implementation of effective marketing strategies.

Geospatial Data preservation

The Cornell University Library has begun exploring digital preservation for geospatial data. This is an area where little progress has been made and little or no research has been done. At present there are no models (like the Open Archives Information System model) that work to effectively preserve the complex raster and vector geospatial data formats. Geospatial data is unlike any other format in terms of preservation due to complexities within multiple file component structures (i.e. shapefiles and coverages). These file structures make the "digital object" difficult to define and geospatial data formats are not often documented as coherent digital objects. True digital preservation of geospatial data is impossible to accomplish without first considering (1) how the data has evolved from the time it was created, and (2) the presence and quality of the metadata associated with it (or lack there of). The CUGIR working group, with their knowledge of geospatial data formats, has begun to formulate preservation policy considerations for the CUGIR repository.

Identifying a working set of preservation metadata elements for the Digitization Service while international standards development continues

Cornell University Library recently tested a model for developing policies and procedures in areas of shared responsibility by bringing together a core group of stakeholders that represented the digitization service development team, digital preservation and metadata expertise, and library system implementation initiatives. The Preservation Metadata Working Group sponsored by OCLC and RLG are working on a year-long project to provide implementation guidelines for preservation metadata (part 2 of their standards developments work (http://www.oclc.org/research/pmwg/). In the meantime, organizations need to continue working in a standards-aware manner. This is the Library's effort to do just that. The Working Meeting on Preservation Metadata can be found at: http://www.library.cornell.edu/iris/dpo/metadata.html