

THE ART LIBRARY AS SPACE, PLACE, AND EXPERIENCE



Smithsonian Institution

*A study prepared by the
Smithsonian Office of Policy and Analysis for
Smithsonian Institution Libraries and
Smithsonian Office of Facilities Engineering and Operations*

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PHOTOS: *Cover*, Doris and Henry Dreyfuss Study Center reading room, Cooper Hewitt National Design Museum ♦ *pg. iv*, Smithsonian American Art Museum/National Portrait Gallery Library reference area ♦ *pg. 4*, Warren M. Robbins Library work space, National Museum of African Art ♦ *pg. 8*, Freer Gallery of Art and Arthur M. Sackler Gallery Library stacks ♦ *pg. 11*, Hirshhorn Museum and Sculpture Garden Library ♦ *pg. 19*, Hirshhorn Museum and Sculpture Garden Library stacks ♦ *pg. 21*, Smithsonian American Art Museum/National Portrait Gallery Library work space ♦ *pg. 25*, Warren M. Robbins Library stacks, National Museum of African Art ♦ *pg. 29*, Freer Gallery of Art and Arthur M. Sackler Gallery Library work space ♦ *pg. 35*, Cooper Hewitt National Design Museum Library Stacks.

SOURCES: CHNDM files and M. Reis, OP&A.

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Preface

The Office of Policy and Analysis (OP&A) was pleased at the reception accorded its first study of library spaces conducted for the Smithsonian Institution Libraries (SIL) and Smithsonian Office of Facilities Engineering and Operations (OFEO). Last fall, our inquiry looked at the National Museum of American History – Behring Center (NMAH), the National Museum of Natural History (NMNH), and the Smithsonian Institution Service Center (SISC). This inquiry examined current practice and future projections of use at the libraries that support the Smithsonian’s art activities in the Cooper-Hewitt, National Design Museum, Hirshhorn Museum and Sculpture Garden, National Museum of African Art, Arthur M. Sackler Gallery, Freer Gallery of Art, National Portrait Gallery, and Smithsonian American Art Museum.

Both OFEO and SIL worked closely with OP&A to define the study and raise new questions for exploration as our work proceeded. I would like to thank them for their assistance and guidance. The core data for the report came from interviews, conversations, and emails from staff, fellows, and interns of the art museums, SIL and OFEO staff, individuals from external organizations, and private researchers and scholars. All users, from those located in the building in which OP&A has offices to a scholar in Bheran, India, were unanimous in stressing the importance of the libraries to their work and in their praise of the SIL collections. We appreciate their cooperation and constructive comments and criticisms.

In OP&A, Zahava D. Doering and Andrew Pekarik were responsible for the data collection, analysis, and report preparation. Three OP&A interns, Stephanie Johnson, Bianca Yip, and Marilynn Reis, extended their knowledge of libraries by helping with transcription, bibliographic research, drafting report sections, contacting and interviewing staff at selected external organizations. Whitney Watriss’s helpful criticism and insights were very much appreciated by the study team.

Carole M. P. Neves
Director, Office of Policy and Analysis

Executive Summary

This study by the Office of Policy and Analysis (OP&A) addresses space and use of art libraries that support research at the Cooper-Hewitt, National Design Museum (CHNDM), Hirshhorn Museum and Sculpture Garden (HMSG), National Museum of African Art (NMAfA), Arthur M. Sackler Gallery/Freer Gallery of Art (FSG), National Portrait Gallery (NPG), and Smithsonian American Art Museum (SAAM). The purpose of the study is to provide input into the master space planning for libraries overall being conducted by the Smithsonian Institution Libraries (SIL); into the Smithsonian Office of Facilities Operations and Engineering's (OFEO) future comprehensive master planning being conducted by OFEO for SIL; and lastly into planning for renovations in existing museums and replacement of the Smithsonian Institution Service Center (SISC) located at 1111 North Capitol Street. This report is based on both primary and secondary data. Primary data were collected through interviews (in-person and telephone) or correspondence with internal and external users of one or more of the art libraries, as well as with librarians, senior managers of the museums, senior Smithsonian art officials, and external experts. About 140 individuals were contacted in the course of the study.

FINDINGS: CONVERSATIONS WITH USERS, LIBRARIANS, AND MANAGERS

Users

The primary users of the Smithsonian art libraries are researchers working in the museums with which these libraries are associated. These scholars emphasize that their work is integrally bound to the libraries, and that any changes in the libraries affect how they conduct their research. External scholars, students, and specialized professionals, such as art dealers, are secondary users. At CHNDM, students of the Parsons School of Design's graduate program in the History of Decorative Arts & Design are major users of the library.

Services, Materials, and Facilities

The assistance of professional, trained, experienced art reference librarians is a critical library resource that most users valued and needed. Interlibrary loans, electronic databases, books, journals, specialized reference books, vertical files, auction catalogues, and rare books were all mentioned as essential to research.

The various equipment that users employ in the art libraries includes computers (both for catalogue access and e-mail), photocopiers (color and black & white), scanners, microfilm/microfiche readers, video/audio equipment, and fax machines.

Along with materials, equipment, and services, the art libraries provide a location for reading, studying, and meeting. Critical elements mentioned in connection with these uses included carrels, desks and seating, electrical outlets for laptops, and a quiet place removed from telephones and interruptions.

Access Methods and Uses

Many researchers begin their library-related activities by accessing the SIL catalogue online, sometimes in the library, but most often in their office or even at home. Some use interns to locate information. When researchers go to the library, they value direct access to an experienced reference librarian and direct access to the stacks as a spontaneous method for discovering and accessing relevant materials.

Staff researchers can check books out of the library and keep them in their offices indefinitely. However, they return them immediately should another user need them. Library hours were a problem for some researchers, generally solved informally. It was more of a problem for external researchers

Needs and Trends

All but one of the libraries are experiencing space shortages or envision shortages in the near-term. This space pressure affects users in two ways: increased crowding of shelves, ultimately leading some SI libraries to shelve materials offsite; and shrinkage of the working/reading space, as more shelving is added in the work areas. Crowded work spaces were more of a problem for non-staff researchers. Some interviewees would like to have additional types of user space, such as meeting spaces where discussions could be held without interfering with other library patrons, and reading areas with comfortable couch-like seating.

Most of the present spaces were considered poorly designed. Interviewees saw the need for: shelf space on which to put down books while working in the stacks or while copying or scanning, appropriate shelving for reference books, and some seating in stack areas. Criticisms regarding the work areas included the need for better lighting and seating, well-designed carrels (e.g., computers not on work surfaces), secure lockers (e.g., for storing laptops while going to lunch) and coat racks. Researchers also suggested more rational layouts (e.g., photocopiers in spaces separate from the reading areas, better separation of user spaces from library staff work spaces, and seating near the current periodical racks.)

Increasing reliance on electronic materials meant that researchers saw a need for highly trained reference librarians who could guide them in their research, especially with electronic materials, access to materials from home and complex searches.

There was a call for more and better copy machines, especially for non-staff who did not have borrowing privileges, as well as for scanning devices, including digital scanners that would not damage the bindings of books, scanners that would produce PDF files directly as well as photo files, and scanners that could be handheld. More computers in the library spaces, more outlets for laptops, ethernet connections at every desk, and/or Wifi coverage, were viewed as essential.

Offsite Shelving

In considering offsite shelving, proximity was a key issue for two main reasons: quick access to library materials is a more efficient use of increasingly rare research time; and having many different kinds of materials close at hand makes it possible to discover and develop ideas across a range of materials. Interviewees had different personal standards for what was “too far.” “Far” was described both terms of spatial distance (e.g., one block, two blocks, ten blocks, twelve blocks), and time (e.g., five minutes, ten minutes, fifteen minutes, one-half hour).

No matter how distant the location, users were concerned about how quickly material would be delivered. Some interviewees assumed that material would be available in 24 hours, others that it would take 48 hours or more.

Consolidation of the libraries

Interviewees generally assumed that any consolidated location would not be unreasonably distant and, in some cases, might even be very close to the present location.

The main advantages mentioned in connection with consolidation included: easier access to some materials and services; higher levels of technology due to economies of scale; improved access to related, interdisciplinary, or contextual materials; and reduction of duplicate holdings.

Researchers expressed the opinion that a consolidated location that is not as convenient as the current one would increase the difficulty and inefficiency of research by requiring more time and breaking the workflow. In addition, some mentioned other negative implications, including: researchers would be encouraged to “hoard” books in their offices; complicated issues would arise around different levels of control and priorities (e.g., book purchases); the existing administrative consolidation of some libraries with SIL has lowered the quality of the art libraries; access to checked-out materials would be more limited; and consolidation would be a sign of diminished regard for research.

FINDINGS: SELECTED BEST PRACTICES AND FUTURE TRENDS

OP&A undertook a literature review specific to art libraries, taking the results reported in the first phase report (OP&A 2007) as the starting point. In addition, interviews were conducted with external experts during visits to selected non-Smithsonian libraries, and telephone interviews were conducted with staff from about twenty art libraries, primarily at academic institutions.

Physical Space and Books

The continued presence of physical libraries is seen as long-term and essential among art librarians. The growth of electronic publications in art is just not comparable to that of the sciences. Art libraries have electronic subscriptions to journals and try to increase the number; however, e-journals are not replacing hard copies in most instances.

Alternative Uses and Organization of Space

Even the most traditional library users acknowledged the importance of considering user needs and technological realities in both the reconfiguration of existing spaces and the design of new ones. Key to new designs is flexibility and user-friendliness. Obviously, technological advances will continue, yet they can only be anticipated, not predicted.

Two types of new spaces are “Centralized Information Commons” and “Social Gathering Centers.” In the first type, the reference desk and materials are near the computer workstations, creating one central area for research and inquiry. In the second, social space with external users and institution staff interacting are being created in ways that do not disturb those trying to work in silence.

Library Structure: The Future is Here

Libraries in which all materials have been converted to their digital form (“bookless libraries”) are far from a current option for art libraries; However, several universities have moved to a completely digital medium at the undergraduate level.

Reading rooms are somewhat of a transition between the traditional print library and completely digital library of the future. Despite the availability of printed works, most of the reading room resources are available online. Recent issues and publications are available for a predetermined period of time, and then taken to offsite shelving to make room for newer works. Reserve materials and core books are stored permanently in the library.

Offsite Shelving/Storage Facilities

Art libraries are less inclined to accept offsite shelving/storage as a solution as compared with natural or social science libraries. Some art libraries are expanding onsite even though offsite shelving would be less costly, while others are moving materials offsite.

Library consortiums are one method for dealing with the shelving/storage and sharing of materials between different libraries. Universities and public libraries with previous affiliations, find that consortiums are valuable in addressing issues related to limited resources. They allow for sharing of materials between different institutions and possible cost savings.

Digitization and Access

The advantages and disadvantages of digitization are continuously debated in the art library world. Supporters acknowledge that the ability to digitize materials such as artists’ files, auction catalogues, old journals, and slides can relieve shortages of space to some extent and increase use of the materials. Further, electronic access to materials alleviates time barriers and physical limitations. Searching through an online catalogue or electronic materials is easier and more efficient than searching through print materials. Copyright laws are seen as a major impediment to increased digitization.

Changing Roles of Library Staff

The major shift in roles in the next decade will be from an emphasis on knowledge of the collection's subject matter to an expertise with the tools required to access that information.

DISCUSSION

The Digital World

Art libraries are changing as a result of the expanded availability of digital materials and use of digital technologies. All interviewees agreed with that assessment and they all also agreed that the continued growth of library collections, difficulty of finding ways to expand the space for shelving, and increased efficiency of book retrieval and delivery systems, including interlibrary loans, are leading to increased use of offsite shelving by libraries everywhere. This assessment holds true at all of the Smithsonian art libraries included in this study, as well as at external art museum libraries and university art libraries.

Offsite Shelving/Storage

From the point of view of researchers of historical art materials, as the interviewees made clear, the more material that is removed from convenient locations, the more difficult some tasks become, even if other tasks are made easier through digital systems. If materials need to be moved offsite, it seems clear that researchers will still need direct access to them, so that they can continue to engage in the kind of stack searching that so many of them said they found useful and important. Journals, especially those with limited use and with digital versions, are probably the easiest to move offsite.

Consolidation of the Art Libraries

Responses to the idea of consolidating the art libraries were mixed overall. While the issue of proximity was clearly involved, there was also some appreciation of the possible advantages that some consolidation might bring. Some researchers were clearly aware that changing research directions might be aided by some consolidation. Researchers did not seem to be opposed to the principle of consolidation as much as to its being implemented in a way that would make their work more difficult rather than less so. Alternative consolidation scenarios would have to be worked through and carefully considered in order to achieve the maximum benefit with the least loss.

RECOMMENDATIONS: PLANNING FOR THE FUTURE

The study team makes these recommendations with the recognition that any plans for art libraries will need to be made within a context of system-wide planning for SIL as a whole and within the framework of the individual strategic and master plans of the art museums.

1. It is important to establish a state-of-the-art offsite location for the art libraries.
2. The five SIL libraries currently serving the arts community could be reconfigured as follows:
 - A CHNDM library;
 - A reading room at HMSG and consolidation of HMSG materials with AA/PG; and
 - A combined FSG/NMAfA Library

The current plan to move the CHNDM from the main museum spaces to the Fox-Miller building next door, together with plans for offsite shelving, should take care of its more pressing needs for improved shelving and work spaces well beyond the period that will be covered by the SIL master plan.

The HMSG reading room could include a core of books relating the artists in the core of the HMSG collection, books published within the past year, vertical files, and recent periodicals, together with a comfortable reading area and work spaces for accessing digital data, picking up and returning books, and other essential functions.

A combined FSG/NMAfA library could be re-established somewhere else in their shared building, perhaps in space now identified as the International Gallery.

3. In designing/redesigning library spaces, emphasize usability for all work spaces, and review the services provided to external users with special attention to standardizing regulations with respect to stack access.
4. Set aside adequate space for high quality reproduction and scanning systems both in the libraries and at the offsite facility.

Introduction

The genesis of this study was a request from the Smithsonian Institution Libraries (SIL) to the Smithsonian Office of Facilities Engineering and Operations (OFEO) to develop a master space plan for the libraries Smithsonian-wide. At the time (March 2006), planning for library spaces in the National Museum of American History – Behring Center (NMAH), the National Museum of Natural History (NMNH), and the Smithsonian Institution Service Center (SISC) located at 1111 North Capitol Street was underway. As renovation of the buildings housing the first two has begun; and the SISC lease may terminate in 2008. The Office of Policy and Analysis (OP&A) was asked to undertake phased studies to help inform the planning. The initial OP&A study focused on NMAH, NMNH and SISC (OP&A 2007). The second phase, reported in this document, focuses on libraries in art spaces. The final phase will focus on the remaining libraries.

Like its predecessor, the purpose of this study is to provide input to both SIL and OFEO as they work together to develop master plans for library spaces and eventual replacement of SISC. The emphasis is both on the present and the future – to describe the current use of the art libraries and to address questions of what research support these libraries need to provide to the Smithsonian community over the next twenty years, the timeframe of the master plans. In addition, the study considered various options to reconfigure or consolidate the separate library spaces as well as to address offsite shelving needs for library collections.

Since research does not take place in isolation from the broader academic and museum communities, OP&A also solicited comments and opinions outside the Smithsonian on the current use and future development of research libraries and the attendant space implications.

OVERVIEW OF THE SMITHSONIAN ART LIBRARY SPACES INCLUDED IN THE STUDY

The Smithsonian art community, as well as its outside constituents, is served by five separate art libraries¹:

- The *Cooper-Hewitt, National Design Museum (CHNDM) Library* is located on the third floor of the museum's main building at the corner of 91st Street and Fifth Avenue in New York City. The library's main area is a long rectangular space with a large reading table. Some reference materials are shelved in this reading room. The library's 70,000 volumes are stored in rooms adjacent to the reading room. Also adjacent are two offices used by library staff and volunteers. The collection includes 6,500 rare books (e.g., 18th century trade catalogues and first edition design manuals), primary

¹ The library descriptions were derived from the Smithsonian Institution Library website (<http://www.sil.si.edu>), the individual museum websites, and Julianne Bailey's *Libraries of the Smithsonian*, Washington, D.C.: Smithsonian Institution Libraries. 2006.

source materials (e.g., samples of 18th century wallpaper), a collection of the 1939 World's Fair literature, and a pop-up and movable books collection. Volumes cover American and European design and decorative arts, with concentrations in architecture, graphic design, interior design, ornamental patterns, furniture, wall coverings, textiles, metalwork, glass, ceramics, and jewelry. As part of expansion planned by the museum, the CHNDM library is scheduled to relocate to an adjacent building (Fox-Miller) in 2009 and move some of the library's holding to an offsite facility.

- The *Hirshhorn Museum and Sculpture Garden (HMSG) Library* was founded at the same time as the museum (1969). Since 2000, it has been administered by SIL. The library is located on the fourth floor of the museum, in an area with limited space for users its holdings. It has a research collection devoted to modern and contemporary painting, sculpture, drawings, prints, photography, video, and emerging art forms. The library has books and related materials (exhibition catalogues, auction catalogues, serials, and ephemeral material) from 1880 to the present. The collection emphasizes artists in the Hirshhorn's collection and artists featured in the museum's exhibition program. The library has more than 65,200 volumes, 50 current serial titles, and about 100 drawers of ephemeral materials (called "vertical files") on 5,200 individual artists. There are approximately 13,000 slides of works of art by more than 900 contemporary artists. Microfiche, microfilm, and archival material on the founding of the museum, the Hirshhorn family (letters and photographs), and the exhibition program are also available. The HMSG is currently considering how to address the scarcity of space for activities and resources throughout the museum, including the library.
- The *Warren M. Robbins Library at the National Museum of African Art (NMAfA)* was founded in 1971, before the museum became part of the Smithsonian. In 1979, when the museum was integrated into the Smithsonian and moved into its current location, the library moved into space specifically designed for it. The library, named after the museum's founding director, is the major resource center in the United States for the research and study of the visual arts of Africa. It has a collection of more than 32,000 volumes covering all aspects of African visual arts, including sculpture, painting, printmaking, pottery, textiles, crafts, popular culture, photography, architecture, rock art, and archaeology. This includes 120 current and 400 not-current serial publications. The library holds significant supporting collections of African ethnography, musicology, performing arts, theater, cinema, oral traditions, religion, creative writing, and arts in the African Diaspora, as well as general information on the history of African countries. There are about 300 vertical files on contemporary African artists and on topics relating to African art, culture and history, a small collection of videos, posters, and maps, and an expanding library of African children's literature. Adjacent to the library, and administered by the NMAfA, is the Eliot Elisofon Photographic Archives, a research and reference center of approximately 300,000 items, including rare collections of glass plate negatives, lantern slides, stereographs, postcards, maps, and engravings.

- The *Freer Gallery of Art and Arthur M. Sackler Library* has its beginnings in Charles Lang Freer's original gift to the nation of his collection and his books. The library, considered one of the finest Asian art libraries in the United States, contains over 84,000 volumes, including scholarly monographs, exhibition catalogues, 1,400 serial titles, and 1,200 rare books. The rare books collection includes Edo-period Japanese woodblock printed books, Chinese books published in the Ming and Qing dynasties, and the Paul Marks Collection of research material on the American painter James McNeill Whistler. While the collection is predominantly focused on Asian art and archaeology, the library also collects items relating to the late nineteenth- and early twentieth-century American painters represented in the Freer's art collections. In addition, the Conservation Library, housed separately in the Freer Gallery of Art, has a collection of research materials on the conservation and restoration of Asian art. About half of the library's publications are in Chinese or Japanese. The library is experiencing space problems for its holdings and the museum is planning to reallocate space and put additional compact shelving in the user area.

- The *Smithsonian American Art Museum/National Portrait Gallery (AA/PG) Library* is a shared facility. The AA/PG Library was formerly housed together with the staff of the two museums and the collections in the Old Patent Office Building (now called the Donald W. Reynolds Center for American Art and Portraiture). Currently, the library, AA/PG staff, and holdings and staff of the Archives of American Art are all in the Victor Building, about a block from the Reynolds Center. The library's collection consists of over 150,000 books, exhibition catalogues, catalogues raisonnés, periodicals, and dissertations that concentrate on American art, history, and biography, with supporting materials on European art. The AA/PG Library also collects artists' books, auction catalogues, scrapbooks, microforms, and vertical files. The latter include uncatalogued exhibition catalogues, newspaper and magazine clippings, exhibition announcements, and illustrations on American and European art, artists, art institutions, collectors, and special subjects. The library occupies an open, spacious corner on the second floor of the Victor Building, and space on the concourse level of the building, where part of the collection is housed in compact shelving. [Also on the second floor, directly across from the AA/PG Library, is the Archives of American Art (AAA) reporting directly to the Under Secretary for Art. AAA's holdings include over 16 million items, 5,000 collections, and 2,000 oral history interviews. AAA is the world's largest and most widely used resource on the history of art in America.]

The CHNDM Library and AA/PG Library are located one or two floors from their main users – the curatorial staff of their respective museums. In the case of the HMSG, NMAfA, and Freer and Sackler libraries, the curatorial staff's offices are adjacent to the respective libraries.

METHODOLOGY AND ORGANIZATION OF THE REPORT

This report is based on both primary and secondary data. Primary data were collected through interviews (in-person and telephone) or correspondence with internal and external users of one or more of the libraries, as well as with senior managers of the museums, senior Smithsonian art officials, and external experts. The users included curators, museum specialists, research assistants, collections management staff, fellows, interns, and volunteers. External users included scholars, academicians and graduate students. Interviews were conducted with external experts during visits to selected non-Smithsonian libraries, and telephone interviews were conducted with staff from about twenty art libraries, primarily at academic institutions. All the librarians, most of their assistants, and SIL management were also interviewed, and the opinions of OFEO staff were solicited. (See Appendix A. for a list of participants' organizations.)

The literature review took the materials reviewed for the predecessor report as a starting point and focused on materials relating specifically to art or art research libraries. (See Appendix B. Bibliography).

The Findings section reflects the main points that emerged from the study. The Best Practices and Future Trends section is based on the literature review and the visits to and telephone conversations with staff at external libraries. All primary data were analyzed using content analysis software. The Discussion and Recommendations sections reflect the study team's deliberations.



Part A. Findings

Conversations with Users, Librarians, and Managers

This section of the report summarizes interviews with 140 individuals, including library users (both from inside and outside the Smithsonian), librarians at SIL and art libraries nationwide, senior managers in the museums within which the libraries are located, and Smithsonian senior managers. The content is organized into the following sections:

1. Current Usage of the Art Libraries
 - Users
 - Services, Materials, and Facilities
 - Access Methods
 - Uses
 - Use Patterns
2. Needs and Trends
 - Needs
 - Offsite Shelving
 - Consolidation of the Libraries
 - Digital Systems and Materials
 - The Future

Each section features a summary of the overall findings within this topic, along with a note of the differences among the SI art libraries with respect to that topic. A few verbatim excerpts are included from the interviews; these appear in *italic font*.

1. CURRENT USAGE OF THE ART LIBRARIES

USERS

Smithsonian staff

According to interviewees, the primary users of the Smithsonian art libraries are researchers working in the museums with which these libraries are associated. These scholars emphasize that their work is integrally bound to the libraries, and that any changes in the libraries affect how they conduct their research. In several museums, most notably HMSG, numerous interns facilitate the work of these researchers. In some cases the interns have more direct interaction with the library facilities than the curators who supervise them.

Other museum departments, such as education, conservation, development, and public affairs, also make use of the art libraries. However, their usage was usually described as more infrequent (although it can be intense during specific periods, for

example, when planning educational programs or preparing written materials). In some museums (e.g., FSG), departments have established their own small, specialized departmental libraries outside of the SIL system. Some staff members also have extensive personal libraries in their field of research.

External Scholars

Fellows who are working at the Smithsonian for an extended period of time through a formal arrangement rely heavily on the art libraries, although they do not have the same privileges as staff, such as full access to the stacks in some libraries, borrowing privileges, and office space.

Other external scholars generally use the libraries for shorter periods than fellows, although some use it just as much, if not more heavily, than fellows.

Students

Local area students (New York City and Washington, DC) are the major non-staff users of the art libraries. At CHNDM, in particular, students of the Parsons School of Design's graduate program in the History of Decorative Arts & Design are major users of the library. In other cases, such as FSG and AA/PG, use by students is seasonal, focused on the time period just before major papers are due.

Other Public Users

Fewer in number are specialized users in the commercial art business, such as dealers, auction specialists, designers, and publishers. Such use is most notable at the CHNDM.

A few SI management interviewees would like to see their art libraries be more available to the general museum-visiting public. They acknowledge, however, that the current location of the spaces and access issues make such use difficult.

SERVICES, MATERIALS, AND FACILITIES

Librarian Services

The assistance of professional, trained, experienced art reference librarians is, according to interviewees, a critical library resource that most users valued and needed. Interns, fellows, and new staff rely on these services to orient them to available materials. Staff members assume that the reference librarians can alert them to new resources for their work. Several librarians were commended for assembling skeleton bibliographies for scholars. Researchers bemoaned the loss of one senior reference librarian and expressed a concern that the position would not be filled by someone with a similar level of experience.

Interlibrary Loans

The art reference librarians frequently assist with interlibrary loans, and the art libraries serve as staging areas for the receipt of interlibrary loans that researchers request.

Electronic Databases

The most fundamental electronic database is the Smithsonian Institution Research Information System (SIRIS), available to all library users. SIRIS is an interactive, integrated system that manages, describes, and provides access to research resources held in the libraries. FSG has a separate digital catalogue in its art library.

The journal indices, especially those that include full-text articles, are also widely used. Some art libraries' users said they found art sales databases, image databases, and specialized research databases (such as the *Proquest* databases) to be especially important for their work. Some acknowledged that these tools are changing the way they approached their work, as well as making new types of studies possible.

Books

Although most of the books in these libraries are art books, a number of the libraries are also strong in history and other context fields important to art research. Interviewees frequently referred to new books, exhibition catalogues, and monographs as distinct categories of books. Some users acknowledged that changes in the art world and increasing globalization have widened the scope of the types of books they find useful.

Journals

The libraries have extensive collections of periodicals/journals both in hard-copy and digital forms. At present, digital versions of journals have not replaced the availability of hard-copy versions at the SI art libraries.

Reference Books

Specialized dictionaries were most often mentioned in the reference book category.

Vertical Files

Vertical files are files of materials relevant to research but in non-book formats. They include brochures, invitations to openings, copies of articles, and ephemera of various types. They are organized by artist, by person, or by topic and are kept in folders in file cabinets. There is a publicly web accessible index of names of artists covered in the vertical files across several SI art libraries, but the index does not identify the contents of the files.

Rare Books

Exceptional books that are particularly valuable, scarce, or important are kept in a separate, secure section in each library. As one librarian pointed out, the library plays a service role for users but also a curatorial role for its materials as objects. Particularly at CHNDM and FSG, some interviewees pointed out that the library collections as a whole are thought of as part of the museums' overall collections, rather than just as part of the library.

Auction Catalogues

Interviewees emphasized the importance of auction catalogues, not only for research, but also for such practical uses as establishing insurance values for works that are sent on loan.

Miscellaneous Materials

The art libraries also have some slide, photo, and microfilm and microfiche collections, videos, and audio tapes, although these are usually small in number and rarely used.

Equipment

The various equipment that users employ in the art libraries includes computers (both for catalogue access and e-mail), photocopiers (color and black & white), scanners, microfilm/microfiche readers, video/audio equipment, and fax machines.

Space

Along with materials, equipment, and services, the art libraries provide a location for reading, studying, and meeting. Critical elements mentioned in connection with these uses included carrels, desks and seating, electrical outlets for laptops, and a quiet place removed from telephones and interruptions.

“There are no lockers for storing research materials overnight or to stick a laptop in during a quick break for lunch.”



ACCESS METHODS

Online Access

According to interviewees, many researchers begin their library-related activities by accessing the SIL catalogue online, sometimes in the library, but most often in their office or even at home. (Some of the other electronic resources cannot be accessed from home unless the user has established a special type of digital connection.) The reference can then be printed and taken to the library.

“Being able to use the variety of electronic resources available makes my in-person use of the library more focused. I can go grab the exact issues or editions of journals and reference works that I need.”

Indirect Access

Curators who are working with interns or curatorial assistants often assign them the task of locating a book and either copying or scanning the necessary information or borrowing the book. Some interviewees, notably interns, utilize databases unaffiliated with SIL (such as their university’s) to gather information.

Direct Access

When researchers go to the library, an important aspect of their work is having direct access to the stacks. A number of interviewees emphasized the importance of this kind of spontaneous method for discovering and accessing relevant materials.

Researchers also valued direct access to an experienced reference librarian, who could show them how to use the systems, especially the databases, to find what they need and could suggest areas that might yield useful directions.

Books to Offices

When staff researchers checked books out of the library and kept them in their offices, they had the most convenient access of all. All the art libraries facilitate this borrowing, although in some cases researchers were constrained by the limited size of their offices. Although researchers are allowed to keep the books they need indefinitely, they are to return them immediately should another user need them.

“Even when I am not actually visiting the library, I am working daily with books I have checked out in my name, articles or vertical file materials we have Xeroxed, or online database resources. Daily access is crucial.”

Library Hours

The fact that these libraries are not open past normal working hours was a difficulty for some interviewees, although both researchers and the librarians in a number of cases have worked out ways to minimize the problem. It seems that this is more of a problem for external users, such as fellows and students (who have more limited time at the Smithsonian) than it is for staff researchers. The exception is at the CHNDM, where students in the Parsons School of Design’s graduate program in the History of Decorative Arts & Design have extended access. Depending on the availability of student workers, the library is open until 8:30 PM most weekday evenings and Saturday and Sundays between 10:00 AM and 5:00 PM. Museum staff can also take advantage of these hours; however, external users are not admitted.

USES

Discover

Whether through the use of electronic searching, browsing the stacks, examining new books, perusing recent journals, or consulting a librarian, researchers often make use of the library to uncover new sources for ideas and information that might aid or support their work. Some interviewees spoke eloquently of the importance of this random searching activity, which is quite different in method and result from the more directed, focused searches governed by keywords or known references.

Locate

The library provides the means to locate known resources, whether they are items listed in the catalogue, ephemera likely to be found in the vertical files, references gathered elsewhere, or images cited by others.

Obtain

Aside from using the electronic catalogue, the use most frequently mentioned by interviewees was borrowing books. But they reported many other ways that they obtained information in the library, including making copies (either by using the copy machines or printing online materials), scanning text or images (and sending them to themselves as e-mails), and applying for and picking up interlibrary loans.

“It is impossible to do in-depth research without the actual book and catalogues.”

Work

Although most staff researchers worked in their offices more than in the library, along with external researchers they used the art libraries to consult electronic databases, compare images, read, take notes, think, write, and collect data (e.g., regarding the contents of auction catalogues or periodicals).

“Space is at a premium and if I arrive without space being available, the day is really lost.”

Meet

Some staff used the art libraries as places to meet and talk with other researchers, although the extent to which the library has a social function depends on the librarian. At some art libraries social exchange is permitted and even encouraged. At others, it is strictly prohibited.

USE PATTERNS

Frequency

The frequency of use varied widely among interviewees. Some researchers visited the library three times a day, others once a day, others once or twice a week, and others three or four times a year, all

“I use the online resources the most to search for articles. I also have access to all online resources at my desk, so I access them more that way than from the actual library computer. I physically go to the library to look for books and usually spend at most an hour per visit....”

depending on the nature of their work and whether they were staff, fellows, interns, or external scholars. The interviews left the impression that researchers visited the library's online materials more frequently than they visited the library itself.

Duration

Some research visits were extremely brief, e.g., to pick up a book, check an image or reference, find the answer to an e-mailed question, make a copy of something, or take the item to be scanned or copied elsewhere. Other visits were longer, e.g., to browse a topic, search for references, review journals, and examine new books. And some users were in the library nearly all the time, e.g., interns who had no assigned office space, fellows and external researchers who had no other space, and researchers whose offices were too small.



2. NEEDS AND TRENDS

NEEDS

Space

Since the book and periodical collections continue to grow, the libraries always need more space. This space pressure affects users in two ways: increased crowding of shelves, ultimately leading some SI libraries to shelve materials offsite; and shrinkage of the working/reading space, as more shelving is added in the work areas. A number of interviewees spoke specifically of the trade-off between the growth in the libraries' collections and the decline in the quality of the libraries' spaces and raised it specifically to point out that they would rather see crowding than offsite shelving. While crowding is an inconvenience, offsite shelving requires a change of work process that is more fundamental (see Offsite Shelving below).

Crowded work spaces were more of a problem for non-staff researchers, i.e., for those who did not have nearby offices to which they could take library materials. In some cases space is so tight that external users called ahead to ascertain that there would be room for them to work when they arrived.

"The major deficiency I currently see is a lack of work space. I regularly go in to use the references, and it's hard to find space at a table to work. Even though each table has about six chairs around it, far fewer people can really use the same table while working. Because of the amount of books researchers use, each table can really only handle about three active researchers with their piles of books and folders."

The lack of space for non-staff users indirectly affects staff as well, since, as one interviewee noted, the decreasing number of museum staff is leading to more dependence on volunteers and interns, who often have to work in the library.

In an ideal world, some interviewees would like to have additional types of user space than what most libraries currently make available. Chief among these were: meeting

spaces where discussions could be held without interfering with other library patrons; and reading areas with comfortable couch-like seating.

Redesign

Aside from the problems with space, interviewees in many art libraries thought that the present spaces were poorly designed. Criticisms regarding shelving areas included the need for:

- Shelf space on which to put down books while working in the stacks
- Shelf space on which to put down books while copying or scanning
- Appropriate shelving for reference books, and
- Some seating in stack areas.

Criticisms regarding the work areas included the need for:

- Better lighting (and lighting that could be controlled,

"A larger room that was not also used as a passage would be a distinct advantage, as would in-floor electric plugs beneath all readers' tables for laptops. Ideally, the photocopier would be in an adjacent room, plus a dedicated printer for readers, rather than one shared with museum and library staff."

- e.g., desk lamps)
- Better seating
- Well-designed carrels (e.g., computers not on work surfaces)
- Secure lockers (e.g., for storing laptops while going to lunch)
- Coat racks
- Photocopiers in spaces separate from the reading areas
- Better reference shelving (so books could be viewed in place)
- Better separation of user spaces from library staff work spaces
- More rational layout (e.g., seating near the current periodical racks)

“Need to separate ‘work areas’ from public areas. Boxes and stacks of books in hallways look bad and could pose a safety hazard. Library literature studies abound that show that ‘stack appearances’ are important to maintain, as disarray leads to even more disarray.”

Improved Access

Some interviewees wanted better access to library materials: access to all library databases from their homes or their office (for those who do not currently have from their offices); and in the library through arrangements for late-night and weekend access.

Better Services

A number of interviewees emphasized the importance of having more assistance, especially from highly trained reference librarians who could guide them in their research, especially with electronic materials. A few interviewees noted that as a result of decreased library staffing, books were not always shelved promptly or were mis-shelved.

“It will become increasingly helpful if the library can amass a holding of DVDs of contemporary artists’ film and video works. Also, it will be useful to get access to digital images of artworks through the library for lecture purposes.”

More Electronic Materials

Some users also would like to see more electronic resources available to them, especially, as noted, from their desktops. Specific requests included *American Periodical Index* and *Project Muse*.

Improved Collaboration

Some interviewees noted areas where they would have liked to see more collaboration among the various Smithsonian art libraries; between an art library and other units (e.g., between AAA and the AA/PG Library); or between the art library and other museum departments (e.g., between the library and other museum departments that maintain collections of digital images).

More and Better Equipment

Copy machines were at the top of the list, especially for non-staff who did not have borrowing privileges. A number of interviewees, however, emphasized the value of scanning devices, including digital scanners that would not damage the bindings of books, scanners that could produce PDF files directly as well as photo files, and scanners that could be handheld. Other equipment requests included video-viewing equipment.

"The library needs more as well as larger scanners, although I'm thrilled that at least there is one! I wish there was another way for me to be able to read the texts – because it isn't a circulating library, I'm at that scanner quite a bit. I just really wish there was a faster, almost hand-held device that could easily and extremely quickly scan texts/visuals."

Users would also have liked more computers in the library spaces, and printers that did not have to be shared with library staff. Those who brought laptops would have liked more outlets, Ethernet connections at every desk, and/or Wifi coverage.

OFFSITE SHELVING

Proximity

The number one issue for many of the staff researchers interviewed was closeness to the library. As one interviewee said, "Adjacency trumps everything." Interviewees presented two main arguments for proximity to the materials:

"I need to be able to use the library without advance preparation and get my hands on materials quickly."

- 1) Having quick access to library materials is a more efficient use of increasingly rare research time. Pressures on staff time are felt to be growing, especially as there are many fewer positions for assistants of various kinds than there were in the past. Several interviewees noted how much longer it takes to do comparable research in the Library of Congress because of the lag time in receiving materials from the stacks. When libraries or library materials are not

"The most important and precious aspect of the collection is that it is available and easily accessible, with all books, etc. being on hand."

nearby the researchers, even small questions can require a significant amount of time to research. As questions sit unanswered pending the arrival of offsite materials, the backlog becomes unmanageable.

- 2) Having many different kinds of materials close at hand makes it possible to discover and develop ideas across a range of materials. Researchers use many different types of materials at the same time. Shelving materials offsite might make research particularly difficult for visiting scholars whose time in the library is already limited.

Content

Some interviewees were concerned about the question of what would be selected to move offsite. How much a particular item has been used in the past might not be a good indicator of how necessary it might be in the future, especially in view of the differences among the interests of users. Art librarians suggested that hard copies of journals that are electronically available would be obvious candidates for offsite shelving, but after that the question of what to move became more difficult.

“It is critical to have access to the library collection in the same building as the curatorial offices, even though I frequently have to request books from other SI libraries. I usually check the online catalogue from my desk, and spend about half an hour in the library gathering materials.”

Distance

Although any separation between researchers and library raises the level of difficulty, interviewees had differing personal standards for what was “too far.” Some described the limit in terms of spatial distance (e.g., one block, two blocks, ten blocks, twelve blocks), whereas others described the limit in terms of time (e.g., five minutes, ten minutes, fifteen minutes, one-half hour).

Speed of Retrieval

No matter how distant the location, users were concerned about how quickly material would be delivered. Some interviewees assumed that material would be available in 24 hours, others that it would take 48 hours or more.

Other Issues

Several interviewees pointed out that offsite shelving involves both hidden costs and significant expenses in staffing and equipment to meet requests.

CONSOLIDATION OF THE LIBRARIES

Positive Considerations

Interviewees generally assumed that any consolidated location would not be unreasonably distant and, in some cases, might even be very close to the present location. Some people said that if the consolidated location were not nearby, they would be more inclined to send interns to get books.

The main advantages mentioned in connection with consolidation included:

- Easier access to some materials and services;
- Higher levels of technology due to economies of scale;
- Improved access to related, interdisciplinary, or contextual materials;
- The whole would be greater because some art libraries do not share;
- Some of the art libraries currently have overlapping interests;
- Reduction of duplicate holdings;
- Consolidation into several art libraries might be useful; and
- Greater efficiencies in shelving

Negative Concerns

A number of staff researchers expressed the opinion that a consolidated location that is not as convenient as the current one would increase the difficulty and inefficiency of research by requiring more time and breaking the workflow. In addition, some mentioned other negative implications, including:

- Books might be shelved in ways that were less useful;
- Researchers would be encouraged to “hoard” books in their offices;
- Researchers might be distracted by interesting but irrelevant materials;
- Researchers would be less likely to donate books they received;
- Complicated issues would arise around different levels of control and priorities (e.g., book purchases);
- The existing administrative consolidation of some libraries with SIL has lowered the quality of the art libraries;
- Access to checked-out materials would be more limited; and
- It would be a sign of diminished regard for research

DIGITAL SYSTEMS AND MATERIALS

When asked about the use of digital systems and materials in research, interviewees offered positive, neutral, and negative comments. These could be categorized according to the part of the research process that they referenced: **Identifying** (the activity of uncovering new directions, sources, and relationships); **Obtaining** (the activity of gaining access to specific, sought-after materials); and **Using** (the activity of working with the obtained materials).

Positive Comments

Identifying. A number of interviewees pointed out that the electronic databases of the libraries, whether the catalogue or more specialized databases, were often the first step in the research process. Having those resources accessible on one’s office desktop or, even better, at home was considered a very positive asset. As one researcher stated, “The library is an information resource – you want it on your desktop.” Some interviewees pointed out how valuable it would be to have additional databases (as noted), and also software to aid searches across all existing databases (known as “federated searching”) or to support advanced search methods that go beyond keywords (such as *Endeca*).

“I imagine that in the future more art periodicals will be digitized. This would be enormously useful for the kind of detail-oriented bibliographic work I’m doing now for the collection catalogue, but of course, it’s often necessary to browse through bound periodicals (to get the “big picture” of a particular time period, for example, instead of a series of disconnected facts that you have to search for by keyword), and so it would be a shame if these items became less accessible in the future.”

Obtaining. Researchers noted that they benefit from the ability to access the full text of articles or books from their home or office, since this access is 24/7 and can include links to other materials as well. In particular, it is appreciated when rare materials, normally not available except in distant locations, can be accessed online. The ability to access multiple libraries and to engage in new kinds of research (such as more use of auction catalogues) is an additional benefit of online access.

Using. Some researchers pointed out that they prefer to use digital materials – they can be magnified on-screen, they are easy to share and exchange, and they can be printed on demand. In addition, as one interviewee noted, electronic versions can save popular books from being worn out through overcopying or overuse.

Neutral Comments

Interviewees pointed out some aspects of digital systems that they saw as important considerations, without speaking of them either positively or negatively. The use of digital systems and materials requires new or special skills, good equipment, reliable connections, and frequent backups. There are also issues of the long-term preservation of digital materials. Researchers observed that they tend to print out materials rather than view them onscreen, mostly so that they can mark up the hard copy. Finally, a number of interviewees pointed out that the art world is overall less electronically oriented than the science world, and as a result, fewer materials are digitized, and less funding is available for digital systems.

Negative Comments

Identifying. Researchers spoke frequently of the importance of browsing books in the stacks as part of the process of discovery. This method has not transferred well to the digital medium. As one researcher said, “I need to be able to flip through the contents and index, skim pages, and get a feel for the whole book.” Most current digital search systems require specific search terms, and there is no way at present to keyword images. Current systems at the Smithsonian also do not allow searching across databases. Researchers are concerned that important materials will be lost if contracts for digital access are not renewed.

“An additional concern with the ongoing budget cuts, often resulting in SIL cancelling subscriptions to art publications, is sustained access to these materials in some format if the decision was made to cancel a subscription.”

Obtaining. Aside from the fact that most historical materials on art are not digitized, and that, for copyright reasons, materials printed since 1923 cannot be readily digitized, the main difficulty that researchers raised is the problem of images. Art research relies heavily on images, and digital materials are often deficient in a number of ways:

- Digital images are often lower quality than printed ones;
- Image quality can depend on the quality of the computer equipment;
- Color can be a critical aspect (some digital databases only use black and white);

- Color imaging can vary depending on the computer equipment (e.g., depending on the monitor, the printer, etc.);
- The electronic image has a different overall impact compared to a printed image;
- High quality scanned image files can be unwieldy because of their size;

In addition, even when a digital version of a journal can be accessed, it might differ in important ways from the printed version. In particular, advertisements (which may themselves be the subject of research) may be omitted, and important images can be left out of the digital version (due to copyright considerations).

“Online resources are not comparable to actual magazines when it comes to looking at pictures. So, although more inter-library loans, Xeroxes, and electronic sources seem appropriate for the historical and biographical aspects of our research, it is less appropriate for the art. We need our books and magazines available to look at pictures.”

Using. Some researchers found onscreen materials harder to read, in part because it was often more difficult to refer to footnotes and endnotes when reading onscreen. Print-outs were not always an option, since some digital articles exclude notes and references when printed.

Other. Some SI art researchers focused on the book itself as the subject of their work, and not just the information it contained. Such research can only be carried out with the books in hand.

THE FUTURE

More Digital

Interviewees agreed that art libraries of the future will be much more involved with digital materials than they are at present. There are likely to be:

- More digital materials (both digitized items and those born digital);
- Easier access to digital information (including at other libraries);
- Better digital images;
- More digital research tools;
- Closer collaboration between librarians and researchers; and
- Greater user familiarity/comfort with digital systems and materials

In part as a result of these developments, books will be seen more as historical, collection artifacts, and more research work will be done on office and home computers.

More Financial Pressures

Interviewees spoke of the impact of financial pressures on the operation of the art libraries. Many felt that these pressures will lead in many cases to:

“The library is cramped for space and drastically understaffed.”

- Book purchases falling further behind;
- More books being moved offsite; and
- More collaborative arrangements with other libraries and the potential of more joint purchases and more difficult access.

Some interviewees pointed out that the shift to digital materials would not be likely to lower costs in any meaningful way, since:

- Digital databases and other materials can be expensive;
- Technology needs to be regularly upgraded;
- Digitization is expensive;
- Heavy use of printers to make hard copies for convenient use; and
- Continual need for new tools and training.

Changing Position of Research

A fundamental concern of some researchers was that humanities research is generally less valued at the Smithsonian than it was in the past. From this framework, they interpreted changes to the art libraries as confirming this belief, especially in light of other developments that have made the life of a researcher more difficult, such as fewer assistant positions, smaller workspaces, separation of offices from collections, and managerial emphasis on other aspects of curatorial work. The strength of this feeling seemed to vary greatly depending on the museum.

It should also be noted that some researchers, especially those in contemporary art fields, expressed much less dependence on library materials than those in historical art fields. Such differences are likely to persist in the future.

Predicting the Unknown

A few interviewees pointed out that the future is inherently uncertain and in any area that involves technological change, the rate of change is unpredictable.



Selected Best Practices and Future Trends in Library Space

The literature review conducted for the study of NMAH, NMNH, and SISC library spaces focused primarily on innovative services for users and the application of new technologies that might affect the physical space of the libraries. The previous study team concluded that most of the secondary literature on library space concerned public libraries or university research libraries, institutions that serve audiences with needs dissimilar to those at NMAH and NMNH (the foci of their study). As stated in its Executive Summary and explicated in the full report (OP&A 2007), and slightly paraphrased here, several key points emerged from that review that are applicable to the art museum libraries:

- In the foreseeable future, there will be an ongoing demand for physical libraries that offer hybrid collections of print and digital materials.
 - Highly specialized libraries, such as for law and medicine, may be able to convert to all-digital collections, but this is not likely for most research libraries. Less-used print materials and copyrighted books will probably not be digitized, and humanists and social scientists will continue to make heavy use of print monographs in their research. Cost considerations will also limit digitization in the near term.
- The preference for working with print/hard copy and browsing shelves of books will continue, even as availability and use of electronic materials expand rapidly.
- More electronic materials will not significantly reduce the space required to house collections.
- Providing users with access to specialized technology, such as multiple screen computers, copying and scanning equipment, and other emerging technologies will affect the physical attributes of libraries.
- In the design of new libraries and in renovations, a growing number of libraries are asking for designs that offer *flexible space tailored to user needs and readily adaptable to change*. There are examples of “learning commons” or “knowledge commons” designed for access and connectivity, socializing and networking, collective learning and research, and exhibition and cultural uses.
- Research libraries are addressing rising costs and space requirements with shared high-density, environmentally controlled offsite shelving/storage facilities. These facilities offer cost savings in construction, staffing, resource use, and preservation. Some use robotics to retrieve the boxes of materials.
 - From the user’s perspective, the success of a high-density offsite shelving/storage facility depends on there being a user-friendly, efficient, convenient process for requesting and accessing materials.
- The role of staff in research libraries will continue to shift from a focus on the quantity of information made available to the quality of information management and presentation. New and retrained librarians will organize information and offer information access and services.

The study team conducting this study took these observations as starting points for further exploration of the literature, specifically as it applies to art libraries. The observations were also the focus of conversations with experts and staff from both university and museum art libraries. From the perspective of art libraries, several areas merit discussion:

- Physical space and books
- Alternative uses and organization of space
- Library structure: the future is here
- Offsite shelving/storage facilities
- Digitization and access
- Changing roles of library staff

Each of these areas is discussed in turn.



PHYSICAL SPACE AND BOOKS

Within the world of art libraries, the continued presence of physical libraries is seen as long-term and essential. The growth of electronic publications in art is just not comparable to that of the sciences. “[O]lder publications remain valuable even as new resources are available. Not only is some information timeless in its significance, it may also be essential for a student to understand [a] contemporary reaction....” (Craig 2003). Staff at the Art Institute of Chicago Library, for example, emphasized that they continue to acquire thousands of print titles every year.

While many art libraries have electronic subscriptions to journals and try to increase the number, e-journals are not replacing hard copies in most instances. A study on behalf of the Council on Library and Information Sources found that 63% of humanists agree that “regardless of what happens with electronic archives of journals, it will always be crucial for libraries to maintain hard-copy archives” (Tenopir 2003). For example, the Fine Arts Library of the Ohio State University Wexner Center for the Arts has not cancelled one print journal, believing that print is better than what is currently available in digital databases. E-books are not very popular when it comes to art libraries. While an online search for resources is more popular than a search through printed materials, most users still prefer print materials for the actual research.

ALTERNATIVE USES AND ORGANIZATION OF SPACE

New Design Approaches

During discussions with external experts, even the most traditional library users acknowledged the importance of considering user needs and technological realities in both the reconfiguration of existing spaces and the design of new ones. Key to new designs is flexibility and user-friendliness. Obviously, technological advances will continue, yet they can only be anticipated, not predicted. Therefore, the focus of library design should be to “plan flexible interior space that can change with changing library uses” (Library Journal Staff 2005). Interviewees stressed that as online access begins to encroach on physical library use, it is important to provide a welcoming and energetic, yet peaceful environment. The comfort of users in the space can be promoted through lighting, the choice of colors, and ease of navigation through the library. Clear and consistent signage will assist users in their search and make it easier to ask for assistance, as the reference desk and staff will be visible (Smith 1991). Two types of areas are being carved out within existing spaces:

- *Centralized Information Commons* – Some libraries, like the Lucille Little Fine Arts Library of the University of Kentucky and The Arts Library of the University of California, Santa Barbara, are putting the reference desk and materials near the computer workstations, creating one central area for research and inquiry. This set-up is user-friendly in that the search for materials is located in one place – whether it involves searching through the library collection online or asking a librarian for help. It also brings the social space together so that users are not hesitant to ask for help, their interactions do not disturb those needing peace to read or study, and they can visit with other users.
- *Social Gathering Center* – Many art libraries welcome the idea of the library as a social space with external users and institution staff interacting, such as the Georgia and Philadelphia Museums of Art, the Clark Art Institute, and the University of Chicago art libraries. However, other libraries insist on a silent environment and accommodate both tranquility and social engagement in

different ways. The Ohio State University Fine Arts Library has set up comfortable seating in a foyer so that people can gather and talk without being bothersome to those working inside the library. Some libraries have offices or adjacent rooms that can be used for classes, meetings, or group study. There are libraries that rent some of these spaces to outsiders.

Furniture is important both to the flexibility of a room and as a means to address the space limitations experienced by almost every art library today. Although a few interviewees thought that users would be coming in less and less as increasing numbers have their own computers, public use computers are still vital to those seeking internet connection and assistance (Worpole 2004). Nearly every art library has computer workstations with internet access, and many have outlets to plug in laptops and/or provide wireless capabilities. Some libraries have lockers for personal materials, and those without lockers would like to have them or are trying to allocate space on shelves or at the reference desk for such a purpose. As Yale University's Art Library has found, study carrels seem to be an ill-advised option for workspace as compared to tables. Tables work best because users need to spread out large art books, which they cannot do at carrels because the art books take up so much space.

Special Needs of Art Libraries

At a superficial level, the users of art and science libraries are the same – museum and library staff, external researchers, and students. There are, however, differences in user needs in terms of space and technology. It is generally acknowledged that art books tend to be larger than others, and with so much emphasis on studying images, there is a greater need for table space. Art libraries are also more likely to have special collections that are in closed or limited access stacks. A special collections room for viewing these items or a greater allotment of space for their use benefits users. A study by the Art Libraries Society of North America in 2005 noted the need for art information professionals to be able to use “those tools vital to the visual art, architecture, and design fields” (Ball and Harrington 2005). The Clark Art Institute, along with many others, emphasizes the need for support in finding and creating visual resources and implementing the most current technology available to teach or conduct research with digital images. It is counterproductive to identify or create digital databases and then to display those images on poor computer screens. With digitization increasing, high quality scanners are almost indispensable to art libraries. Many art books come with supplemental DVDs and CDs, which require art libraries to have viewing and listening stations. Microfilm readers and printers and ultra-violet lamps for studying watermarks may also be pertinent to an art library, depending on the scope of the collection.

LIBRARY STRUCTURE: THE FUTURE IS HERE

Interviewees at various academic and university libraries discussed two alternative uses of space, both evolving from increased digitization and related space considerations: bookless libraries and reading rooms.

Bookless Libraries

Although “bookless libraries,” or libraries in which all materials have been converted to their digital form, are far from a current option for art libraries, several universities have moved to a completely digital medium at the undergraduate level. The University of Texas at Austin has been at the forefront of this revolution. Other universities, such as the University of Southern California, Emory University, and University of Georgia are beginning to utilize the model of the bookless library (Blumenthal 2005).

Dubbed by some as a “glorified computer lab,” bookless libraries are focused on the concept of “...flexible user space to serve a variety of emerging, somewhat unpredictable needs while continuing to provide the kinds of spaces libraries have provided for years...” (UC Merced Library 2007). These facilities include wireless and wired access to the internet, coupled with extended online resources linked to the library. Journals, databases, and digital collections are available within the library, whether by proxy or the library server. Students may use computer labs or check out laptops within the facility. Some libraries also provide podcast equipment, LCD equipment, and digital cameras for checkout (USC Libraries 2007).

The goals behind these libraries are flexibility, comfort, rapid access, and easy collaboration for students (University of Texas-Austin Library 2007). The focus on electronic materials is an attempt to address the future, which increasingly will place a heavier emphasis on digital media. Bookless libraries are also designed to fit the “Social Space” model for libraries, encouraging patrons to meet and share ideas in a central location. Space for other attractions, such as exhibitions of student projects, art, and multi-media presentations is intended to encourage use of the libraries. Such models are beginning to be adapted with art collections. For example, the University of California, Merced has a digital archive of Japanese art. Images, along with searchable materials, are available via the internet (UC Merced Library 2007).

The Reading Room

A less radical approach is that of the “reading room” library. Adopted, for example, by the University of Michigan Public Policy department, the reading room focuses on digital materials much like the bookless library. However, it still contains selected volumes of print material. Recent issues and publications are available for a predetermined period of time, and then taken to offsite shelving to make room for newer works. Reserve materials and core books are stored permanently in the library. The majority of the space is fitted for comfortable patron use. Desks with outlets for laptops support the use of online databases.

Some perceive the reading room model as a transition between the traditional print library and the completely digital library of the future. Despite the availability of printed works, most of its resources are available online. This library model is most useful for libraries that have a strong focus on current, “of the minute” issues or topics, as well as for those with extreme space constraints.



OFFSITE SHELVING/STORAGE FACILITIES

All libraries are confronting space issues, but art libraries are less inclined to accept offsite shelving/storage as a solution as compared with natural or social science libraries. This is due to the fact that resources of arts libraries are more limited, the growth rate of their collections tends to be slower, and older materials are still considered critical for study. An exception may be a number of art museums in New York City that are currently discussing joint offsite shelving.

Some libraries find themselves without options, as digital projects, relocation, and building expansion are often too costly. Yet, compared to other types of libraries, art libraries seem to put more effort into finding and creating more space onsite to house their growing collections. The Philadelphia Museum of Art and The Art Institute of Chicago art libraries, for example, are expanding onsite even though offsite shelving would be less costly. Wesleyan University has been culling its art library since 1989, when it began to run out of room. The art libraries of Yale University and the University of California, Santa Barbara have decreased their user space in order to accommodate continuing acquisitions. Adding more stacks, especially compact shelving units, is a common response, although even its proponents recognize that it will only suffice for the short term.

Library Consortiums

Library consortiums are becoming increasingly popular methods for dealing with the shelving/storage and sharing of materials between different libraries. Primarily utilized by universities and public libraries with previous affiliations, consortiums are valuable in addressing issues related to limited resources. They allow for sharing of materials between different institutions and possible cost savings. For example, they may split the costs for electronic journals or purchase fewer copies of the same book.

Consortiums address access to materials in two ways: electronically or physically. One version involves offsite shelving. Libraries are funding facilities that are environmentally controlled and allow for high-density storage of materials. Examples were provided in the OP&A 2007 study report. At the Washington Resource Library Consortium, patrons who wish to access the resources may make an online request with next day delivery or visit the facilities, which provide a reading room for those occasions (WRLC 2007).

Library consortiums may also rely on electronic access for its users, much like a federated database. The OhioLINK database allows even outside users to access resources via the internet, including electronic journals, citation indices, library catalogues, digital media, theses and dissertations, and e-books (The Ohio Library and Information Network 2007).

Consortiums are not limited to small collaborations among institutions. WorldCat, or Online Computer Library Center, is an index of more than 57,000 libraries in more than 112 countries. Along with a search engine, WorldCat offers services to libraries from indexing to cataloguing. Although users may not access materials listed on the server, they will know the location of those materials, providing an expanded network of possible resources for future reference and possible interlibrary loan. It could be easier to travel than wait for an interlibrary loan. WorldCat can also help the individual estimate the turn around time of an interlibrary loan request. If the resource is very far away, he or she might look for something similar and closer.

There are consortiums of art museum libraries. A well-known one, since largely replaced by ArtSTOR, was the Art Museum Image Consortium (AMICO). From 1997 to 2005, it offered a database of the collections of licensed digital versions of artwork of the prominent art museums from throughout the United States, including the Smithsonian American Art Museum, which were AMICO members. The database was available to universities and institutions that subscribed.

Although AMICO's members decided to disband, the consortium remains an example of the possibilities of collaboration. As an independent database, it provided benefits such as: standards in digitizing, catalogue management services, opportunities for collaborative funding, and copyright management services for participating institutions and subscribers. High-resolution images in the database were accompanied by core data, such as the image's location, dimensions, materials, and origin. Works ranged from the Americas, Europe, Asia, and Africa spanning from BC to the present. The database contained information not only on paintings, but also on a wide variety of works. The works included, but were not limited to, photographs, sculptures, drawings, textiles, jewelry, and books (AMICO 2005).

DIGITIZATION AND ACCESS

The advantages and disadvantages of digitization are topics of active discussion within art libraries:

- The ability to digitize materials such as artists' files, auction catalogues, old journals, and slides can relieve shortages of space to some extent and increase use of the materials. On the other hand, most libraries do not have definite guidelines for digitizing collections and do not want to discard or move materials offsite. In addition, even proponents acknowledge that the risks of preservation and maintenance of digital materials have yet to be eliminated and that migration issues arise as technology evolves (Thibodeau 2007).
- Electronic access to materials alleviates time barriers and physical limitations. Staff at the Pierpont Morgan Museum and Library found that visitors who have found an image and want to see the original come to the library. However, the tradition of restricted proxy access (user id and password) does not support the end goal of global accessibility for the user.
- Searching through an online catalogue or electronic materials is easier and more efficient than searching through print materials. Yet, with art research, two issues arise. "Rather than being coded into Web pages, images are often tucked away in databases – making them inaccessible to search engine 'spiders'. In order to find these images, you must first find the databases that contain them" (Technical Advisory Service for Images 2006). Second, because of "the diversity of controlled vocabularies and metadata schemes of the digital collections involved...search and discovery across aggregations of more varied and complex digital content in a robust and full featured manner is proving harder than initially perceived..." (Lopatin 2006)
- Art libraries can digitize their collections to enhance their prominence through web access, yet as "digital records are potentially more vulnerable to forgery and tampering" digitization can also jeopardize the institution's integrity if images are misused (National Research Council 2005).
- The publishing industry and copyright laws are a major impediment to increased digitization. Several managers of external art reference collections saw a need to sustain publishers because, in the mainstream art fields, it seems as though it is harder and harder to get monographs in print. It is important to protect intellectual property and privacy rights, but such protections are currently limiting the amount of electronic reproduction into the public domain (Tenopir 2003).
- "Download time is extremely important...users will simply leave your website without viewing it, if you exhaust their patience waiting for your pages to download, and users are known to have low thresholds when waiting to view web pages." Because high quality images take so long to load, the present quality of digital images accessed electronically is simply not better than that in print materials (Andreev, 2004).

As electronic access continues to be a growing feature within libraries, the availability of databases becomes increasingly important. However, along with more resources comes the need for easier navigation. The use of federated databases to aid

the search process is becoming more popular. Federated searching accesses all of a given library's databases simultaneously with a single interface, much like a Google search. By bringing all resources together, such a search capability saves time otherwise spent repeatedly looking for resources in many separate databases.

There are some issues regarding the use of federated databases. The main one is the compatibility of the various databases themselves, because they are often coded in very different ways. There are many models of federated databases, and finding the appropriate model for a library's collection can often be very challenging. Another issue is that federated searching only identifies the database that contains the sought-after materials; that accomplished, the user then often must look further into those databases to find more information (Hane 2003). Cost is a concern, especially for cash-strapped libraries. Despite the availability of pre-coded models from companies such as Webfeat or Webfeet, two different companies with similar products, database federation comes at a substantial cost, depending on the size of the library collection. Further, as with the introduction of most new technologies in a library, ease of use is an issue librarians must confront. The irony of electronic access is that searching is not always so easy. Libraries must train many individuals to utilize these databases, costing resources, be they staff time, space, or money (Western Health Organization 2007). Beyond the commercial products, several art libraries, including one with a major collection, are exploring the possibility of developing their own federated databases.

CHANGING ROLES OF LIBRARY STAFF

As libraries witness a shift in the ways that patrons access, utilize, and perceive materials, the role that librarians play in relation to the collections that they maintain and the people who use them is changing and will continue to change. The major shift will be from an emphasis on knowledge of the collection's subject matter to an expertise with the tools required to access that information.

Shifts in Perspectives of the Librarian

The librarian has traditionally been viewed as the "...interface between knowledge and dissemination" (Lucker 2003). Some librarians feel threatened by the promise of digital libraries and the stereotype of libraries as "mausoleums of the book" in the rush to "go digital." Such discussions can miss the importance of the library as a place and its larger cultural and educational role (Demas 2005). This often leads to the belief that a librarian's role will be completely transformed as the library is digitized. The truth is that librarians will still be charged with the same task: building, maintaining, and providing access to collections. The method by which they do so may be changing, but the goals are still the same.

Changing User Demand

The strongest source of this shift to electronic materials is the opportunity to utilize digital resources for research, an approach that the science library community

strongly advocates and frequently uses. The art library community has been very cautious about this medium because the extensive use of older materials is as critical as use of current ones, and the former are much less likely to be digitized.

Library users expect to get help navigating the new technologies that the libraries provide. Experience with the internet has led many users to believe that anything they want can and should be available digitally, despite the economic and practical hurdles. Library users are becoming increasingly familiar with technology. Yet, at the same time, they will have more technological and subject-specific inquiries requiring more collaboration between library and computing professionals if their needs are to be successfully met (Demas 2007). Despite the fact that libraries are becoming more automated, they are still highly labor-intensive.

Service Roles of Librarians

The role of librarians now or in the near future will shift from that of a librarian to “Cybrarian” or “Hybrid Librarian,” who continues to offer knowledge dissemination in traditional ways, but also through different formats, genres, and tools. Before long, librarians will likely expand their roles to include “...teaching users the skills necessary to locate and integrate a variety of information resources, assisting the design of local campus databases, and contributing to the design and management of national networked information systems” (Mahan and Rao 2006).



Part B. Discussion and Recommendations

Discussion

THE DIGITAL WORLD

Without question, everyone interviewed for this study – researchers, interns, managers, librarians, etc. – recognized that libraries are changing as a result of the expanded availability of digital materials and use of digital technologies. And they all also agreed that the continued growth of library collections, difficulty of finding ways to expand the space for shelving, and increased efficiency of book retrieval and delivery systems, including interlibrary loans, are leading to increased use of offsite shelving by libraries everywhere. This assessment holds true at all of the Smithsonian art libraries included in this study, as well as at external art museum libraries and university art libraries.

Although researchers interviewed for this study often went out of their way to stress the importance of books to their research and the value of having those books readily available nearby their workspaces, they never gave the impression that they were opposed to the use of digital systems or materials. To the contrary, many pointed out how they start their research with online searches, make wide use of electronic materials, and want to see more of them made available so that they can expand their research horizons.

Nevertheless, as some interviewees made clear, even if researchers want to use digital material, few historical art materials are being digitized. And the books themselves are an object of study for some researchers. An interviewee early in the study summed this up by saying that “the information in the book can be digitized, the leather binding and the paper, however, are important as well.”

In addition, the gap between the ways that the digital images of art and printed images of art can be accessed and used is still significant. Digitizing systems are designed to capture text quickly and efficiently, and, as a result, photographs often appear only in black and white or at resolutions that are much lower than what researchers require. In some cases, the images are not digitized at all, due to copyright considerations. Higher quality digital images of artworks, whether “born digital” or reproduced from printed images in high resolution, are becoming more available, but the researcher still needs either multiple monitors or a photo color printer to be able to compare images as easily as with printed texts.

This gap will undoubtedly narrow over time – as copyright issues are resolved, as imaging technologies continue to improve, as computer systems become more adept at managing large image files, as researchers have access to better equipment, as search systems become capable of handling images and become more sophisticated, and, perhaps, as art book publishing itself is transformed. In some fields, such as

contemporary art, where materials of interest are more likely to be available in digital media than in published form, the gap has already narrowed in many respects.

Thus, although the development of digital systems and the availability of digital images and information are likely to aid the historical art researchers' work, they are not likely to replace their need for access to books in the near future.

OFFSITE SHELVING/STORAGE

The issue of proximity of materials and offsite shelving is linked to the decision of where best to apply limited resources. Libraries that set research as a priority (e.g., the National Gallery of Art and Art Institute of Chicago) have gone to great lengths to ensure that books remain conveniently accessible to the greatest extent possible. The Smithsonian, like an increasing number of university libraries that have art collections and art museums (e.g., Yale University, Harvard University, and the Metropolitan Museum of Art), might decide otherwise. That is a management decision. From the point of view of researchers of historical art materials, as the interviewees made clear, the more material that is removed from convenient locations, the more difficult some tasks become, even if other tasks are made easier through digital systems. If materials need to be moved offsite, it seems clear that researchers will still need direct access to them, so that they can continue to engage in the kind of stack searching that so many of them said they found useful and important. Journals, especially those with limited use and with digital versions, are probably the easiest to move offsite.

There is also the possibility of establishing systems that would lessen the impact of offsite storage by providing fast-turnaround digitized copies of texts with high-resolution digital images of the photographs in them. This would require that the offsite locations be fitted with the latest digitizing equipment, capable of quickly producing images of high quality. Additional technology might be required to transfer those files to the user's desktop or to provide a near-equivalent hard copy.

By judicious choice of what to move offsite, accessibility to stacks, and fast delivery of digital imagery on demand, the manner in which an offsite location is designed could mitigate most of the negative factors that would inconvenience researchers.

CONSOLIDATION OF THE ART LIBRARIES

Responses to the idea of consolidating the art libraries were mixed overall. While the issue of proximity was clearly involved, there was also some appreciation of the possible advantages that some consolidation might bring. Some researchers were clearly aware that changing research directions (such as the expanding interest in contemporary art at multiple museums) might be aided by some consolidation. Researchers did not seem to be opposed to the principle of consolidation as much as to its being implemented in a way that would make their work more difficult rather

than less so. Alternative consolidation scenarios would have to be worked through and carefully considered in order to achieve the maximum benefit with the least loss.

The Future Space Needs of Smithsonian Art Libraries

Each library is in a slightly different situation with respect to space. One library (HMSG) has long outgrown its available space. One may be nearing capacity (AA/PG). Two are about to make changes that will ease the space pressures temporarily (CHNDM and FSG). One of these solutions (FSG) is at the expense of space for users. The other (CHNDM) will involve a move and offsite shelving. Only one art library (NMAfA) has enough space for the foreseeable future.

If we assume that major construction projects at these locations are not viable, that the role of research will continue to be critical at these museums, and that the researchers need to be well-served by the libraries, then there are three types of long-term solutions available:

- 1) **The traditional model:** Keeping the books and the researchers together in an offsite location. This is the course taken by NMAI, which keeps its collections, researchers, and library in Suitland, while dedicating its Mall space (including a reading room) entirely to the public.
- 2) **The digital model:** Working primarily with digitized materials, with most books offsite. It is impossible to say how soon this alternative might become realistic. Twenty years might not be sufficient.
- 3) **The mixed model:** Keeping as many books as possible nearby the researcher, and moving the rest offsite, to a location that would be accessible, though perhaps inconvenient, to researchers. This alternative would require the establishment of delivery systems (a combination of digital and physical) to minimize the inconvenience to researchers.

No matter which alternative is selected, the Smithsonian library of the future will need to continue to develop its capability for handling digital materials. In the art libraries, in particular, this means an improved ability to deal with digital images. It may be worth remembering that the high quality images that now appear in art books are themselves the result of relatively recent technological developments in image handling and printing. Twenty years ago it would have been hard to believe that an average consumer could use an inexpensive home printer to produce photographs that rival professional prints. Whatever the exact digital components required in the art library of the future, space will need to be set aside for this activity and its equipment, and the environment as a whole will need to support the researchers.

Interviewees offered mixed opinions on the value of consolidation. Obviously any consolidation of libraries would have to be considered collaboratively with the museums that they support. Nevertheless, some arguments for consolidation seem particularly compelling. The space limitations of the HMSG library, for example, are so extreme that they seem to require a radical, near-term solution. Since HMSG overlaps with AA/PG in its interest in contemporary American art, and with FSG in

its interest in contemporary Asian art, it would seem reasonable to consider a collaboration among these three libraries that would use resources – both space and books – more efficiently.

In addition, FSG and NMAfA currently exist within two halves of a shared building, and a consolidation of those two libraries might make it possible to gain enough space to offset the near-term need for extensive offsite storage, while also allowing for a more efficient use of staff and workspace. In general, consolidation could be considered beneficial if it allows for better facilities (e.g., more room for scanners, printers, etc.), and better services that support the researchers, while minimizing the inconvenience of a slightly more distant location. If, however, consolidation is seen only a way of cutting costs and providing the same facilities and services with less staff, then it would not be beneficial for researchers. Not to be overlooked is the increasing global orientation of the research of these museums, making integrated materials more important.

As is clear from the findings, users have many valid criticisms of the way that the current art libraries are physically set up. The degree to which these spaces are to be improved depends, in large part, on how management views its obligation to researchers (whether staff, fellows, interns, external scholars, or students) who are required to work inside the libraries. In addition to providing better facilities (e.g., more desks/carrels, adequate computer equipment, separate areas for printers and scanners, etc.), the art library workspaces should have desk lighting, lockers and coat-racks, better reference shelving furniture, greater separation between research workspaces and librarian workspaces, some more comfortable seating, and more efficient layouts.

It would also be beneficial to review the rules that currently govern the access of non-staff users. Although there may be valid reasons for these differences, they do seem to have negative impacts on some researchers. The study team did not closely investigate them as they have few implications for space planning.

Recommendations: Planning for the Future

The study team makes these recommendations with the recognition that any plans for art libraries will need to be made within a context of system-wide planning for SIL as a whole and within the framework of the individual strategic and master plans of the art museums.

The following recommendations would enhance the art libraries in the decades to come. The Smithsonian could implement them in ways that do not unduly compromise or endanger the critical role that the libraries play in supporting the research community of the art museums.

1. It is important to establish a state-of-the-art offsite location for the art libraries.

Such a site, whether independent or co-located with other libraries, would need to allow direct researcher access to the stacks, and would have to minimize the inconvenience of its location by providing timely access to materials through delivery service of books or digitization of materials.

Realistically, such an offsite location is needed, even if library spaces in the museums are reconfigured.

2. The five SIL libraries currently serving the arts community could be reconfigured as follows:

- A CHNDM library;
- A reading room at HMSG and consolidation of HMSG materials with AA/PG;
and
- A combined FSG/NMAfA Library

The current plan to move the CHNDM from the main museum spaces to the Fox-Miller building next door, together with plans for offsite shelving, should take care of its more pressing needs for improved shelving and work spaces well beyond the period that will be covered by the SIL master plan.

The HMSG reading room could include a core of books relating to the artists in the core of the HMSG collection, books published within the past year, vertical files, and recent periodicals, together with a comfortable reading area and work spaces for accessing digital data, picking up and returning books, and other essential functions.

A combined FSG/NMAfA library could be re-established somewhere else in the complex, perhaps in space now identified as the International Gallery.

3. In designing/redesigning library spaces, emphasize usability for all workspaces, and review the services provided to external users with special attention to standardizing regulations with respect to stack access.

The onsite work spaces of the libraries need to be better designed. In addition, it is difficult to understand why Smithsonian art libraries have different standards for external researchers.

4. Set aside adequate space for high quality scanning and image reproduction systems both in the libraries and at the offsite facility.

The art library of the future will increasingly be a digital environment, but there will always be need to compare high-quality images side-by-side in ways that require hard-copy versions. Accordingly, the libraries will need more state-of-the art equipment for managing digital images.



APPENDIX A

ORGANIZATIONS CONTACTED

Smithsonian Institution

Archives of American Art
Cooper-Hewitt, National Design Museum
Freer and Sackler Galleries of Art
Hirshhorn Museum and Sculpture Garden
National Museum of African Art
National Portrait Gallery
Office of Facilities Engineering and Operations
Office of the Undersecretary for Art
Smithsonian American Art Museum
Smithsonian Institution Libraries
Smithsonian Photography Initiative

External Organizations

The Art Institute of Chicago Library
Ashmolean Museum of Art and Archaeology
Boston Museum of Fine Arts Library
Brigham Young Museum of Art Library
The Clark Art Institute Library
The Corcoran Gallery
The Frick Collection
George Washington University
Georgia Museum of Art Library
Harvard University
Los Angeles County Museum of Art Library
Metropolitan Museum of Art
National Gallery of Art
Nelson-Atkins Museum of Art, Spencer Art Reference Library
New York Public Library
The Ohio State University Fine Arts Library
Parsons School of Design
Pierpont Morgan Museum and Library
Philadelphia Museum of Art Library
University of California, Santa Barbara Arts Library
University of Chicago, Joseph Regenstein Library
University of Kansas
University of Kentucky, Lucille Little Fine Arts Library
University of Michigan Art, Architecture and Engineering Library
Wesleyan University Art Library
Yale University Arts Library

APPENDIX B

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