

*Preserving America's Print Resources:
Toward a National Strategic Effort
Report on the Planning Day Discussions*

Summary

During a day of intensive discussions representatives of the major sectors of the American library world expressed an acute sense of the urgency of acting together to preserve the nation's print heritage materials. Budget crises at the state and national levels, reduced endowment earnings, and the escalating cost of building and managing traditional and electronic resources are compelling even the largest U.S. libraries to rely more heavily than in the past on other libraries to maintain collections of important research and heritage materials. Conferees evinced a readiness to work together to ensure the continuing availability to scholars of a rich and diverse corpus of print materials.

The day's discussions focused on the question, "How can the nation's libraries build upon existing regional and national efforts to optimize management of critical knowledge resources in printed form?" *PAPR* participants believed that the need for such action was particularly urgent in the areas of newspapers, government documents, and journals. Inexpensive storage was considered to be only a partial solution, in itself of little value unless combined with rigorous, active management of materials and metadata.

Participants enumerated the ideal characteristics of a national effort to optimize management of print, which would have to reconcile participating libraries' work on behalf of the larger community with their obligations to local constituencies. Conferees encouraged the Center for Research Libraries to provide a framework to permit greater inter-reliance among libraries, consortia, and library sectors. Such a framework would enable the community to "synchronize" existing and emerging print archiving and collection of record efforts undertaken at the regional and national levels, and would provide the information, tools and activities with which individual libraries could calibrate their decisions and actions to exploit those efforts.

Discussions produced an action agenda for putting such a framework in place. That agenda, outlined below, prescribes two important measures the Center for Research Libraries can take to support the research libraries community in ensuring the survival of critical heritage materials in print form.

PAPR Action Agenda

1) Strengthen the heritage network of print archives, depositories, and "libraries of last resort," clarifying and formalizing the roles of those institutions, to provide a reliable "safety net" for American research libraries.

a) Strengthen the network of print archives, depositories, and other collections of record upon which the larger library community relies.

b) Support planning for the GPO's Federal Depository Libraries Program, the Library of Congress Heritage Copy Preservation program, and other collections of record and "libraries of last resort" programs clarify their roles and benefits to the community.

c) Coordinate the major archiving and preservation efforts for newspaper collections in American libraries.

2) Support informed local preservation decision-making by libraries and consortia by promoting the exchange of information on print archiving and collections of last resort.

a) Increase and enrich the information available to libraries and scholars on the holdings of print repositories and collections of last resort.

b) Create a risk management framework for print archiving.

c) Promote the exchange of information on print archiving and collections of last resort activities.

d) Enable the fluid deployment of collection assets in dealing with partners in the commercial sector.

I. Background

Preserving America's Printed Resources: the Roles of Repositories, Depositories, and Collections of Record was a two-part event held in Chicago on July 21-22, 2003. The event was organized by the Center for Research Libraries and was supported by a grant from the Institute for Museum and Library Services.

Day One was an open conference that brought together a slate of presenters from the U.S. and abroad who are actively engaged in major repository and "collection of record" programs. Presenters outlined a range of cooperative collection management and print preservation efforts, including regional print repositories in the U.S., national repository and print preservation programs abroad, and national-level "collections of record" efforts in the U.S., notably the Library of Congress's prospective Heritage Copy Preservation Program and the American Antiquarian Society's comprehensive archiving of U.S. pre-1877 imprints. Presenters detailed the successes and innovations of existing inter-institutional efforts, and proposed measures that might strengthen those efforts to ensure the long-term survival of printed heritage materials. The papers presented will be published in a forthcoming issue of the journal *Library Collections, Acquisitions, and Technical Services*.

The present report summarizes the second part of the event: a planning meeting held on Tuesday, July 22. On that day conference presenters and other invitees participated in an extended discussion on the theme of repositories and collections of record. Discussion focused on the question, "How can libraries work together to optimize management of the nation's knowledge resources in printed form?" Conferees agreed that management of these resources is "optimized" when it provides the scholarly community the greatest possible richness and diversity of knowledge resources, minimizes inadvertent losses, and makes the most efficient use of available human and financial resources.¹

The planning meeting brought together prominent representatives of the major sectors currently engaged in the stewardship of the nation's print library materials.

- Library of Congress
- Government Printing Office
- Independent research libraries
- Large academic libraries
- Small and mid-sized academic libraries
- Law libraries
- State libraries

¹ For purposes of discussion the activities falling under the print management rubric were understood as follows: selection, control, retention, reformatting, storage, access, delivery, exposure of information on holdings, exposure of information on activities (archiving commitments, standards, auditing), disposal or reallocation, strategic redundancy, and validation of holdings.

Regional repositories and consortia (ReCAP, CIC, Orbis Cascade, Five Colleges of Massachusetts, Washington Research Libraries Consortium)
Policy-makers (Council on Library and Information Resources, Association of Research Libraries)
Funders (IMLS, Andrew W. Mellon and Gladys Krieble Delmas Foundations)

Also in attendance were representatives of national repositories abroad, including the National Library of Canada, National Repository Library of Finland, and the CARM Centre in Australia. The Center for Research Libraries convened the meeting, and will pursue follow-up actions. A list of the individual attendees is appended to this report.

The day's intended outcome was to be an agenda consisting of realistic near- and long-term national-level actions, and identifying the appropriate participants in those activities (including CRL) and the roles those participants might play. That action agenda is outlined in Section VI below.

II. Discussion Overview

Abby Smith, from the Council on Library and Information Resources, set the tone for the day's discussions with a summary of the urgency of cooperative action. To meet the exorbitant and rising costs of maintaining electronic resources and preserving unique and endangered audio-visual materials, Smith noted, libraries must free up some of the human and financial resources that hitherto have been devoted to maintaining heavily redundant legacy print holdings. In the quest to reduce redundancy, however, the danger of inadvertent loss of important print materials must be avoided and the "national imprint" secured in a non-circulating collection. Smith pointed out the necessity of "closing the porosity" of the current system, which has resulted in losses and attrition of content. Smith also stressed the need for libraries to engage scholars in this endeavor and to clearly convey to them "the how and why of what librarians must now do."

To introduce and facilitate discussion there were brief overviews of the state of attrition in four key collection areas, augmenting the information provided in the conference papers. The areas were:

- *Newspapers and Monographs (Nancy Davenport and Ellen Dunlap):* On the basis of the Heritage Health Index survey, it is clear that newspapers, especially low-circulation U.S. ethnic titles and foreign newspapers, and paperbacks are seriously at risk. This is due to poor paper quality, inadequate climate control in holding libraries. It was also noted that several major U.S. academic libraries and independent research libraries have recently been forced to retire or replace low-use foreign newspaper holdings with microfilm.

To remedy these problems the American Antiquarian Society is creating a comprehensive archive, for research use, of all pre-1877 U.S. imprints, including newspapers. The Library of Congress's proposed *Heritage Copy Preservation Repository* program, discussed by Nancy Davenport in her paper the previous day, would aspire to comprehensively preserve the monograph publishing output of the United States, drawing from materials submitted to the Library as copyright deposits.

- *Government Documents (Judith Russell)*: The government is moving aggressively to shift its publications to electronic format and to reduce the number of depository libraries that hold legacy publications in printed form. The federal depository libraries' traditional role of maintaining numerous comprehensive collections of federal government documents is increasingly difficult to sustain, as many of the depositories are under severe economic strains. US Geological Survey maps are particularly at risk.
- *U.S. Legal Publications (Judith Wright)*: Many law libraries are losing storage space to other law school needs, and the existing collections of primary source U.S. state and federal legal publications produced before 1950 are actively being disposed of although they are neither archived in print form nor comprehensively preserved in electronic versions. Law librarians have recently begun to discuss forming a single print archive of these publications.
- *Journals (Edward Shreeves)*: Driven by high subscription costs academic libraries are beginning to discontinue print subscriptions to journals and rely entirely on electronic delivery; in some instances there are efforts to maintain shared sets of the journals. Archiving of retrospective journals, chiefly those made available in electronic form by JSTOR, is being undertaken by several consortia, with varying degrees of success.

An interim report on CRL's Mellon-funded Distributed Print Archive Project (Melissa Trevvett) pointed out the advantages and challenges of this approach to sharing print management. Using JSTOR journals as a test bed of materials, the project is developing a distributed archiving network whereby archiving services are provided by various community members according to terms set forth in a set of formal agreements. (A copy of the Depository Agreement is appended to this report.)

III. Summary of the Action Agenda: "Pluralities and Singularities"

To be viable, a national cooperative effort would have to enable individual libraries to reconcile the tension between contribution to the national good and obligations to local constituencies. In the past, conflict between local needs ("singularities") and the larger national good ("pluralities") undermined ambitious cooperative collections efforts like the Farmington Plan, National Periodicals Center, and the Research Libraries Group

Conspectus. The current budgetary crisis at the state and local levels, combined with growing local demands on libraries' resources, will for the foreseeable future prevent most libraries from undertaking efforts that satisfy a greater public good. In such an environment the most viable approach to concerted action will involve facilitating informed preservation decision-making by libraries and consortia at the local and regional levels, and encouraging libraries to manage their own print holdings in ways that support and contribute to, rather than duplicate, the efforts of others.

Conferees believed that concerted effort is most likely to be achieved where local need so greatly exceeds locally available resources as to render investment in collective solutions palatable and financially prudent. Libraries are experiencing such need on three critical fronts, i.e., in their efforts to manage journals, newspapers, and government publications. These are areas in which, as one conferee put it, "the greatest pain is being felt."

Conferees concurred on the need to mobilize user communities around the effort to preserve print materials, and noted that such communities are already formed and intensively engaged in the struggle to preserve print materials on three critical fronts. (Section IV). Conferees saw opportunities on these fronts to bridge boundaries that hitherto have separated the different communities of interest and library sectors and to foster cross-fertilization and economies of scale among existing efforts, optimizing the application of increasingly scarce human and financial resources to managing print.

Two broad objectives of an action agenda to support a national preservation effort emerged from the discussion:

- 1) ***Synchronize and expand print archiving and "collections of record" efforts.***
The overlap between many of the print management and preservation activities undertaken by the Library of Congress, Government Printing Office, CRL, regional repositories, and independent research libraries strongly suggests that inter-institutional and cross-sector cooperation could promote the rational and economic use of scarce resources, and greater scholarly confidence in library preservation efforts.
- 2) ***Enable informed local preservation and retention decision-making by libraries and consortia.*** The availability of robust holdings data for print archives and collections of record, and information on the strategies, terms, conditions, and standards adopted for those collections and archives, would enable greater inter-reliance among libraries in the preservation of important heritage materials.

Consensus also emerged during the day's discussions on the desirable characteristics of a national print management effort. These characteristics built upon a list of traits enumerated by Winston Tabb the preceding afternoon in his summary of the conference session. Conferees agreed that a national print management effort must be visionary and comprehensive in scope, inclusive of research libraries of all sizes and types, and economically sustainable. It must be collaborative in nature, should favor distributed activities over centralized ones, and must enlist the voluntary participation of an international array of libraries and organizations. It must also be accountable to the research community and be transparent in its terms and operations. Finally, the national effort must be based upon both standards and trust, and must involve the equitable sharing of investment and benefits. (Section V)

Conferees also identified action items that could be taken to realize the two broad objectives. The actions would provide information, tools and support to promote coordinated, rational efforts to manage a wide range of print holdings at the regional and national levels. (Section VI)

Finally, some discussion was devoted to the roles various parties would play in further defining and carrying out a coordinated national effort. Roles were outlined for the Library of Congress, Government Printing Offices, CRL, Council on Library and Information Resources, and various consortia in working to achieve the two goals. There was also general consensus that CRL should expand its recent efforts to promote cooperation and the exchange of information and best practices. It was also generally agreed that funders like the Institute of Museum and Library Services, National Endowment for the Humanities, private foundations, and others will have important roles to play in advancing the PAPER agenda.

IV. Critical Fronts: "Communities of Interest/Pain"

Conferees cited three critical fronts in the effort to preserve the nation's print heritage materials where libraries were experiencing intense need, or "pain," and where strong communities of interest exist. These fronts are: 1) journals, 2) newspapers, and 3) government and legal publications. Each of these collection areas has identifiable constituencies, such as historians, preservationists, government document librarians, the general public, law librarians, and others, who are already, or might readily be engaged in independent preservation efforts. The areas of overlap and complementarities among these efforts (for instance, between the archiving of U.S. primary legal documents and establishing key depositories for government publications) suggested that synchronizing some activities and affiliating their interest groups might indeed help libraries optimize management of print resources.

1) Journal: Shared Print Archives

CRL, JSTOR, ReCAP, the University of California, and several regional consortia recently began to assemble "light" and/or "dark" archives of JSTOR print journals to reduce the costs of storing and maintaining materials that are also available in electronic form.

Responding to the high price of combined print-cum-electronic subscriptions to scholarly journals, other libraries are joining together to share the cost of a single print subscription to titles published by Elsevier, Academic Press, Kluwers, and other electronic publishers, and thereby creating shared collections of the titles. Maintenance of the shared titles is then undertaken by a repository or by one or more libraries on behalf of the purchasing consortium. Shared subscription programs are also being developed by state and regional consortia in California, Texas, Illinois, Florida, New England, and elsewhere.²

Information about practices, methodologies, costs, and the standards used to assemble and validate the various retrospective archives could, if shared, enable

² Some libraries are simply discontinuing subscriptions to these titles in print form and relying entirely on the electronic versions.

the individual efforts to achieve proper levels of redundancy and access. It was noted, for instance, that two prospective efforts, JSTOR's creation of comprehensive dark archives of its journals with page-by-page validation, and the development of a "heritage copy" program at the Library of Congress, would provide high levels of assurance for the survival of certain journals and monographs, allowing light archives of those materials elsewhere to be of a lesser standard.

In addition, information about what material is maintained under such print archiving efforts, where available, could be factored into individual libraries' decisions about maintaining and developing their own holdings. Disclosure of holdings and validation information, like the very rich bibliographic data assembled by JSTOR and the various region- or language-based holdings information on journals contained in various union lists, would inform local decision-making and planning and the creation of other, complementary archives.

Similarly, individual libraries that join in shared print subscription programs might also benefit from the open exchange of programmatic information. Information about the participating libraries and their responsibilities, agreements, terms, formulae for allocating costs, and other details might facilitate ready adoption of best practices and promote greater rationalization in this activity.

2) *Newspapers: Libraries of Record*

As rich primary source documents, newspapers have a special importance to the research community. Unfortunately they also present special problems and costs to libraries that hold them. As a result, newspapers, particularly U.S. ethnic and other foreign-language newspapers, represent a body of materials that is especially at-risk.

As ever fewer libraries are able to maintain strong newspaper collections, the community must increasingly rely upon the "collections of record" held by the Library of Congress, CRL, independent research libraries such as the American Antiquarian Society and the New York Public Library, and certain large academic libraries. With open, transparent knowledge of such holdings, especially at libraries with comprehensive collections, it would be possible for libraries throughout the nation to tailor their policies and calibrate their decision-making to manage their collections in relation to those with comprehensive collections.

Unfortunately, holdings information at the item level for all kinds of serial publications, particularly newspapers, is often either unavailable or not complete enough to support such decision-making. (At present, for instance, detailed newspaper holdings information of two major collections of record, the Library of Congress and American Antiquarian Society, exists only in locally held files.) Rationalizing the way print collections are managed therefore requires new and innovative ways of cataloging serials holdings. Such innovation must be high on the collective agenda if progress is to be made.

As the costs of storage and preservation of newspapers lead to continuing attrition in the newspaper holdings of individual libraries, aggressive efforts will have to be made to strengthen the "collections of record" infrastructure for newspapers. The American Antiquarian Society and CRL have assumed some

leadership in this arena.³ But several conferees believed that LC, AAS, and CRL should more closely synchronize their efforts and hence better serve the academic, public, and other major independent research libraries.

3) Government Documents and Legal Publications

The Government Printing Office (GPO) is developing a plan to reduce the number of depository libraries that maintain print copies of government publications, and to reduce the number of government publications that are issued in paper form. The intended shift aims to replace high redundancy, a traditional but costly means of ensuring wide and long-term availability of government-produced content, with greater accessibility through digital delivery. The GPO will accomplish its aims in part by persuading federal agencies to publish in digital formats whenever possible and by promoting the digital reformatting and delivery of government materials originally published in non-digital formats.

Libraries in all sectors have a vested interest in the GPO's transition strategy. The fifty existing U.S. regional depositories include academic, state, and public libraries. In developing its strategy the GPO is working directly with several depository libraries and with others through the Association of Research Libraries, GODORT, and other organizations to plan this transition.

Publication of the data and findings generated by the GPO's effort could yield useful new information about incentives for community support, auditing requirements and costs, interaction with the publishing community, etc., and might provide a useful strategic model for other libraries in managing the transition from print to electronic resources. More important, however, the GPO effort, if successful, could assure the survival and availability of a large and important portion of the "national imprint."

More than twenty U.S. law libraries recently initiated an effort to develop a comprehensive archive of U.S. primary state and federal government legal publications. This effort is moving forward under the auspices of the recently formed Legal Information Preservation Alliance (LIPA). Since federal legal publications are a subset of the larger body of U.S. government publications, there is clearly some potential overlap between the LIPA archiving effort and the GPO's effort to provide for the survival of legacy government materials.

V. Characteristics of a National Print Management Effort

Based in part on the previous day's presentations and commentaries, some general attributes emerged from the planning day discussions as desirable in a national strategic print management effort. Those were:

³ The American Antiquarian Society (AAS) is endeavoring to create a comprehensive archive of pre-1877 U.S. imprints, including newspapers. The Center for Research Libraries serves as a primary repository of foreign newspapers for academic and independent research libraries, and provides newspaper preservation and holdings information for a number of libraries of record through its International Coalition on Newspapers (ICON) Web site.

- *Visionary* - Participants believed that the times call for bold action, and what one participant termed “chutzpah,” on the part of librarians.
- *Comprehensive* - The effort should be able to accommodate management of all forms of traditional artifactual library materials.
- *Inclusive* - The effort will rely upon participation by small and mid-sized academic libraries and independent research libraries, as well as large academic libraries and state and national libraries.
- *Sustainable* - The network must be economically viable. While foundation and federal funding could serve its customary catalytic function, ongoing support should come from the community of beneficiaries. Conversely, efforts undertaken by individual libraries or regional organizations on behalf of the larger national community should be compensated.
- *Collaborative* - The effort will require cooperation among libraries, consortia, and all sectors of the library community; and also between the library community and publishers.
- *Distributed* - Activities should take place where strength, expertise, and commitment exist and are likely to continue to exist.
- *Voluntary* -- The effort should not impose obligations from above but rather permit libraries to choose to participate.
- *International* -- While preservation of the national patrimony (documentary heritage) is paramount, access to records and resources from countries outside the U.S. and North America and work with foreign libraries--especially other national libraries--will be an important component of the national effort.
- *Accountable* - The effort must provide the research community trustworthy access to important scholarly materials. This implies that the repositories’ commitments, although undertaken voluntarily, once made should be formalized and auditable.
- *Transparent* - Robust information about library of record print holdings, the conditions under which those holdings are maintained, and the terms of availability of same can allow informed preservation decision-making at the local level and inspire scholarly confidence that those materials will remain accessible.
- *Standards-based* - Effective concerted action will require agreement within the communities of interest, and there will have to be concerted effort within those communities to identify where such agreement is necessary.
- *Trust-based* -- The effort should be based upon established relationships of trust among libraries and library sectors, and consider the traditional interdependency among libraries, especially the need of many liberal arts colleges to rely upon larger libraries as “libraries of record.”
- *Equitable* - The effort should recognize and reward all forms of investment, including the heritage collections and human (“sweat”) equity of participants,

preserving a correspondence between the level of a participating organization's investment in the effort and the level of benefit derived by that organization.

VI. Action Agenda

Conferees identified strategic actions that could be taken to achieve the two broad goals of a national effort informed by the characteristics specified above. The actions would facilitate library efforts to achieve adequate and affordable levels of redundancy among their holdings, and permit allocation of a greater share of library resources to preserving unique and at-risk non-print heritage materials. Individual libraries and consortia would thereby optimize management of their important print heritage and research materials.

1) Strengthen the heritage network of print archives, depositories, and "libraries of last resort," clarifying and formalizing the roles of those institutions, to provide a reliable "safety net" for American research libraries.

Conferees saw the potential for natural linkages between some of the emerging independent print archiving efforts of libraries, consortia, and government, and linkages also among these efforts and those of the traditional "libraries of record."

a. Strengthen the network of print archives, depositories, and other collections of record upon which the larger library community relies.

As duplication among library print holdings decreases through strategic management and attrition, the use of remaining heritage and research materials that have hitherto been "low-use" will inevitably intensify. This will increase researchers' reliance upon certain institutions, repositories, and "libraries of record" to preserve these materials. In turn such reliance will require continued, even increased investment by the repositories in order to ensure that the "collections of record" they hold will remain available to the larger community on acceptable terms.

The question of incentives for "libraries of record" arose in planning day discussions. While the Library of Congress and the federal depository libraries are bound by statute to maintain and make available certain materials to the greater public, independent and academic research libraries will require other kinds of incentives. Conferees noted that the absence of such incentives limited the effectiveness of past efforts such as the Farmington Plan and Research Libraries Group Conspectus.

Incentives can be monetary, or can take the form of access to resources or other in-kind benefits. But whatever the coinage of exchange, conferees agreed on the larger community's need to have these commitments

formalized, rather than relying on tacit or spoken agreements. Formalizing the repositories' specific commitments and roles has been essential to the success of regional consortia like ReCAP and the Five Colleges of Massachusetts, Inc., where written agreements memorialize the terms governing retention, accessibility and other services built around cooperatively managed collections. Such agreements, once executed, should be auditable if not publicly available, to ensure the transparency of the cooperative effort and provide a sound basis for informed decision-making by other libraries.

- b. Support planning for the GPO's Federal Depository Libraries Program, the Library of Congress Heritage Copy Preservation program, and other collections of record and "libraries of last resort" programs clarify their roles and benefits to the community.*

Clearly the Library of Congress will play a central role in "securing the national imprint." LC has outlined a Heritage Copy Preservation Repository Program for the comprehensive prospective archiving of American imprints. Many aspects of this program are yet to be defined, including whether the archiving is "dark," (i.e., no-use) or merely restricted; whether its contents are comprehensive or selective; limited to single copies or multiple. It is also unclear whether it will be a distributed archive or "virtual national collection" and, if the latter, where its parts would best be located.

How the major "collections of record" are managed will become increasingly important to the larger community of North American libraries. Properly defined and realized, the Library of Congress's Heritage Copy program could support the greater library community's efforts to "secure the national imprint." The Government Printing Office's plans to develop comprehensive dark archives of federal documents could also bring energy, knowledge, and perhaps financial resources to bear on the effort to "secure the national imprint."

Conversely, other libraries and repositories, public and private, with strong Americana holdings might do more to share the Library and the GPO's heritage preservation burden by agreeing to maintain comprehensive print collections in certain domains. The American Antiquarian Society, for instance, has assumed responsibility for preserving pre-1877 U.S. imprints comprehensively in hard copy.

Strategically aligning these efforts could yield economies and leverage individual libraries' investment to serve all of the research communities: academic researchers, the users of state and independent research libraries, cultural heritage specialists, and others. Such an alliance of interests might also lend community support, and hence greater

legitimacy, to the Library's bid for appropriated funds to develop and sustain its own print preservation program.

Academic, independent, and public libraries have a vested interest in how the Library and GPO define their programs. Hence the policies and conditions of the program, and the materials archived under the programs, should be a matter of public record and auditable once determined.

c. Coordinate the major archiving and preservation efforts for newspaper collections in American libraries.

The collective newspaper holdings of the nation's libraries represent a singularly important and especially endangered heritage resource. The Library of Congress holds the most extensive existing corpus of U.S. and foreign newspapers, and most libraries count on the Library to continue to maintain this corpus. Conferees believed that efforts to preserve the Library's collection and the U.S. and foreign newspaper holdings of the other major collections of record such as the American Antiquarian Society and Center for Research Libraries should be aligned more closely with the NEH-funded U.S. Newspaper Project (USNP). Federal support might be given to enhancing the availability and quality of holdings information on newspapers, and to support the strategic "outplacings" to the American Antiquarian Society and other repositories, of newspapers that individual libraries are no longer able to preserve.

It was also believed that NEH should synchronize its strategy for digitizing retrospective U.S. newspapers under the United States Newspaper Project with other national-level efforts for managing news content in print and micro-formats. An integrated strategy might draw from the model being developed by the National Library of Canada for its Canadian News initiative and the *NewsPlan* program established in the U.K.

2) *Support informed local preservation decision-making by libraries and consortia by promoting the exchange of information on print archiving and collections of last resort.*

a. Increase and enrich the information available to libraries and scholars on the holdings of print repositories and collections of record.

A dire shortage of library storage capacity at a time of severe contraction in higher education, state, and municipal capital funding has created a crisis for libraries in managing their print holdings. Many libraries have joined together in regional or state-based consortia to create repositories where collections owned by different institutions are managed jointly. There is, however, a feeling that the effectiveness of these repositories is still limited by the high incidence of duplication in the collections they hold.

Determining the nature and amount of duplication among and within the various repositories would help the community understand where excessive redundancy and problematic gaps exist and better control or rationalize the costs of storage.

As an initial step, conferees agreed on the value of analyzing the overlap between the collections content of four regional repositories. Identifying how much and where duplication exists among these holdings might also enable a “layering of management” of the collections and hence the strategic application of resources to materials that are unique and/or of the highest importance. Such analysis will help demonstrate to universities and governments that libraries are acting responsibly to control costs through prudent use of available resources.

The activity would involve running catalog records for the holdings of several repositories against each other for content. (The repositories named were the University of California Regional Library Facilities, the Washington Research Libraries Center, ReCAP, and the Five Colleges Depository in Massachusetts.) It was noted that there may be too many items in these collections to be manipulated in any one system.⁴ In any event it will be useful to see what data can be obtained, determine how adequate the tools are, and perhaps specify more robust tools. Brian Schottlaender (UC San Diego) and Lizanne Payne (WRLC) will lead this effort.

Such an analysis might also be useful in measuring duplication, and complementarities, among individual libraries’ holdings. Paul Gherman of Vanderbilt University is working with libraries of the ASERL consortium to perform a similar overlap analysis on monographs held in storage repositories by ASERL libraries. This is to test the viability of a “distributed virtual print repository” as an alternative to building a cooperative storage facility. The effort proposed by the law libraries of the LIPA group, to create an archive of primary source legal materials, might also benefit from a similar analysis of the relevant holdings of potential contributor libraries.

On another front, conferees acknowledged that not enough is known about the actual holdings of libraries of record like the Library of Congress and American Antiquarian Society to enable other libraries to determine with precision the comprehensiveness and integrity of those collections of record.

As an initial step, conversion of LC’s foreign newspaper holdings information (which exists only in a manual file) to electronic form might

⁴ Subsequent inquiry indicates that newer library systems produced by vendors including VTSL have such capacity. OCLC, for its Automated Collection Analysis Services (ACAS), has developed tools that provide collection management reports and cross-analyses of catalogs of multiple libraries and collections.

benefit the larger community. The resulting database would be a valuable asset to which holdings information from the other major newspaper “libraries of record” like the New York Public Library, CRL, American Antiquarian Society, and others could be added. The information so aggregated would be extremely useful to other libraries in managing their own newspaper holdings.

One conferee suggested that a coalition of interested libraries might be formed to support electronic conversion of this information, either through sharing conversion costs and activities or by supporting the Library’s bid for appropriated funds for the conversion. It was also proposed that LC, AAS, and CRL also work together to mobilize the other libraries and the scholars who have vested interests in the survival of newspapers to support this preservation effort.

b. Create a risk management framework for print archiving.

For the various print archiving efforts to safely optimize redundancy of print holdings among libraries, a risk management framework will be needed. The first element of such a framework would be a schema in which the various levels of For the various print archiving efforts to safely optimize redundancy of print holdings among libraries, a risk management framework will be needed. The first element of such a framework would be a schema in which the various levels of archiving and validation that print archiving programs might adopt are expressed and codified. For example, the high standards adopted by JSTOR’s “dark” archive effort, which involve page-by-page validation of content, optimal climate control, and no public access, might be placed at the top of such a hierarchy. “Light” JSTOR archives developed by ReCAP and archives that adhere to the terms or standards developed for CRL’s distributed print archives might represent other levels.

The risk management framework would eventually also provide metrics on the degrees of risk associated with various distribution strategies for archiving activities, (the relative merits of a single comprehensive archive vs. multiple partial archives vs. multiple redundant archives, for example) and the various conditions and terms of remote access (through ILL, document delivery, reformatting) afforded by the holding repositories.

These levels would be tailored to the differing behaviors of various kinds of materials (e.g., low-use vs. high-use) and kinds of users of those materials (academic scholars, independent scholars, curators) with respect to determining the optimal amount of access, redundancy, and care. Information on the relative merits and costs of various archiving and last copy strategies -- identifying the nature and degree of risk associated with each, -- would help libraries minimize the inadvertent loss of important print materials.

The second element of a risk management framework would be a definition of the requirements for “trusted” print repositories, the mechanisms necessary to ensure compliance with those requirements, and the associated costs.⁵

The data and tools thus developed would be useful to existing efforts by regional repositories and consortia to form JSTOR light archives and shared Elsevier print collections. They can guide the community consensus as to the right number of JSTOR light archives needed, the right number of GPO depositories needed, the number, distribution, and degree of validation needed for LC’s Heritage copies.

Abby Smith said that CLIR will work with others to begin developing the high-level framework. Initially this will involve a more explicit iteration of the analysis being done by Brian Schottlaender and others at the University of California of levels of archiving vs. levels of risk, based on object behaviors and use, and redundancy. With appropriate support and participation by CRL, LC, GPO, ReCAP, the University of California, and others the results of this analysis can then be expanded to provide a risk management framework applicable to print collections elsewhere.

c. Promote the exchange of information on print archiving and collections of record activities.

It was evident to conferees that optimizing management of print resources and minimizing accidental losses will require concerted action by all sectors of the library community: national and state libraries, independent research libraries, and academic libraries. It will also require increased inter-reliance among institutions and perhaps entail inter-institutional and inter-consortia sharing of decisions with respect to managing collections of critical importance to the community.

Conferees were aware of the many political and legal obstacles to such cooperation which have to be surmounted. Obstacles cited were the lingering importance to university administrations of local ownership and volume counts; resistance of scholarly users to reductions in accessibility, real or perceived; statutory restrictions on the disposition of library materials that are state and federal property; and the differing imperatives of funding and governance between public and private libraries and universities.

⁵ This activity would draw upon the work of the RLG Task Force on Digital Repository Certification (<http://www.rlg.org/longterm/certification.html>), which seeks to specify requirements for establishing and selecting reliable digital information repositories. Like the RLG effort the risk management framework should specify the appropriate mechanisms for third-party “underwriting” of the validation and archiving procedures adopted by last copy and copy of record programs, a necessary corollary to risk analysis.

Nevertheless an important initial step in promoting a networked approach to print management could be taken by providing a single “point of exchange” for information pertinent to local decision-making. Such information would include holdings data on repositories and “collections of record,” as well as information on the practices and strategies adopted by the regional repositories, consortia, and various national organizations like the Library of Congress and the GPO to optimize the management of print resources under their control.

Cooperative “prospective” print archiving efforts might also benefit by having at hand bibliographic and acquisition data from other libraries and consortia. Such data would enable parties to identify appropriate archiving partners and develop cooperative agreements among them.

Conferees believed that CRL has provided such a point of exchange for microfilming programs, and that expansion of this role should be high on CRL’s agenda.

d. Enable the fluid deployment of collection assets in dealing with partners in the commercial sector.

One participant asserted the need for increased flexibility in managing “surplus” library collection assets. Out-of-scope materials and other materials extraneous to the collecting and service missions of a particular library (a library’s “third copy of the Bay Psalm Book” was an example used) might conceivably be disposed of responsibly in a way that would benefit the preservation of core holdings. Private collectors, individual and corporate, have traditionally played an important role in preserving heritage materials, where there are strong economic and personal incentives for investment in preservation. There are serious political and legal hazards to be addressed in this kind of activity, not the least of which would be its impact upon perceptions of the library community. Some conferees believed that an ethical code for this kind of activity might enable libraries to free up some dormant assets.

Similarly, libraries might deploy other intangible assets more fully to advance their preservation efforts, such as rights of access to collections content and the intellectual property rights in that content. Indeed, as duplication wanes the value of access to unique collections of record will increase. Availability of important print holdings through ILL or document delivery will become an increasingly vital asset as more libraries choose not to retain those materials locally.

Optimizing management of collections also entails responsibly managing the rights to reformat those materials and the use of derivatives generated in their reformatting. Digital files, microfilm, and other derivatives represent potential bargaining chips for libraries in dealing with

commercial microform and digital publishers like UMI-ProQuest, Readex, Thomson, and others. These parties can bring valuable technical capabilities and services such as reformatting, marketing, and distribution to bear on libraries' efforts to preserve print.

Attentive stewardship of the rights and access to collections could provide leverage that the library community or specific communities of interest could wield if acting in unison, or at least with clear common objectives. Here again, consensus on a code or set of principles governing management of intangible collection assets might enable libraries consistently, if not collectively, to obtain greater support from their commercial partners for the use of those assets.⁶

In general, the ability to more fluidly manage the physical and intangible assets inherent in print collections could enable libraries and consortia to bring new resources to bear on the national preservation effort.

VII. Infrastructure Needs

It was clear to conferees that investments will have to be made in key infrastructure to enable cooperative preservation activity on a national scale. Once the standards and norms for archiving and collections of record, provided by a risk management framework, are accepted libraries will require new tools to fully implement them.

For libraries to depend upon other "heritage copy" and print archiving efforts they will need richer data about the completeness and physical integrity of print archive holdings, and on the conditions under which those holdings are preserved and the extent to which their integrity has been validated as well. The terms of availability of archived materials, e.g., eligibility requirements for users and borrowers, provisions for delivery of electronic copy, and other information, will enable libraries to determine the extent to which they can actually rely upon a collection of record as a potential resource.

Some of this information now exists in special databases and registries, and continues to be generated by various domain-specific preservation projects like CRL's International Coalition on Newspapers, the NEH United States Newspaper Project, and JSTOR. But it is not yet easily accommodated by major library utilities like OCLC's WorldCat and RLIN. Progress is being made on this front through such recent developments as the digital registry developed by OCLC and the Digital Library Federation, and the Research Libraries Group's work to refine

⁶ In an analogous manner, a number of astrophysical consortia formed to develop and maintain major common resources in the form of astronomical observatories and telescopes, have employed non-tangible assets as the basis for exchange with outside partners, enabling them for instance to barter observatory time for land.

and expand use of the MARC 533 field. But much remains to be done to make the tools match the challenge.

The continuing viability of “collections of record” and print archives will also hinge upon the ability to “move” their contents rapidly to where it is needed. Hence the ability of repositories to deliver original materials (through interlibrary loan) and surrogate copies (through electronic and film document delivery) will have to be strengthened. For independent research libraries, which normally do not lend materials except for exhibition, the ability to deliver content electronically will have to be increased. One conferee suggested that more resources might well be shifted from creation of digital libraries of entire reformatted collections to supporting on-demand or “just-in-time” production of digital copy.

For academic libraries, regional and consortium-wide ILL networks have proliferated, especially with the emergence of regional repositories, and the commercial shipping infrastructure in North America now allows quick and relatively reliable delivery throughout the continental land mass. Eventual improvement of this capability for overseas delivery, or expanded on-demand electronic delivery, could permit greater use by American scholars of “collections of record” held at repositories and national libraries abroad.

VIII. Next Steps: Promoting Partnerships and Exchange

The PAPER conference and planning event were intended to initiate the process of drawing together the major independent regional and national repository initiatives into a coordinated, community-wide print preservation effort. The papers from the conference will be published in a forthcoming issue of the journal *Library Collections, Acquisitions, and Technical Services*, and will also be available on the CRL Web site.

CRL will solicit comment on the PAPER recommendations and action agenda from members of the Independent Research Libraries Association (IRLA), the CRL Board, the Association of Research Libraries, and others. Once consensus on the major points of the agenda is achieved, CRL will work with the appropriate parties to forge the partnerships and identify the resources needed to accomplish the agenda.

A theme that recurred throughout the planning day was the need for an agency or organization to help libraries and consortia create the relationships and formalize the arrangements that would enable print preservation activities to be accomplished on a distributed basis. Conferees believed that synchronizing the efforts of the various parties positioned to play specific roles or to assume responsibility for specific domains, would require an active “brokering” of interests between and among repository and collections of record efforts. Such a role corresponds in many respects to the brokering function that Daniel Greenstein

advocated in his conference presentation as essential to distributed digital preservation efforts.

The Center for Research Libraries is in many ways positioned to play such a role to support cooperative management of the nation's print resources. The role is consistent with CRL's mission, "to support advanced research and teaching in the humanities, sciences, and social sciences by ensuring the survival and availability of the knowledge resources vital to those activities." CRL is accountable by virtue of its membership to North American research libraries and has long developed and managed core collections of record on behalf of those libraries. Through its Area Microform Projects and International Coalition on Newspapers the Center also supports and coordinates the cooperative preservation microfilming of international newspapers, archives, and other paper-based collections, efforts involving many U.S. research libraries and several public and national libraries. Recently CRL has developed "distributed" print archiving arrangements for JSTOR journals with other major libraries.

To actively promote concerted action and inter-reliance among libraries and consortia, CRL must build beyond this base of archiving and preservation activities to actively catalyze the formation of partnerships among libraries and repositories to accomplish broader archiving and collection of record functions. Pursuant to the PAPER conference the Center's administration and board will hence take the appropriate steps to move the action agenda forward, form the needed partnerships, and sustain the effort to accomplish the PAPER agenda in the coming years.

Sustaining the effort may require new kinds of membership arrangements to enable CRL to engage non-academic libraries and libraries outside of North America. While CRL members include large, mid-sized, and small academic libraries in North America, an inclusive national effort must involve all library sectors. Hence CRL must strengthen and formalize its extant partnerships with the Library of Congress, British Library, and the National Library of Canada, particularly with the Library of Congress, and enlist in this effort the other major stewards of the nation's print heritage: regional consortia, the GPO, and certain independent research libraries.⁷

Participation in the PAPER conference by representatives of all major sectors of the research library community suggests the readiness of diverse constituencies to find common cause in preserving printed heritage materials. During the coming years these communities can build upon this sense of purpose to "provide the scholarly community the greatest possible richness and diversity of knowledge resources, minimize inadvertent losses, and make the most efficient use of available human and financial resources."

⁷ The Library of Congress, British Library, and National Library of Canada are founding members with CRL of the International Coalition on Newspapers.

Bernard F. Reilly, Jr.
Center for Research Libraries

Appendix 1

**Preserving America's Printed Resources: the Role of Repositories, Depositories,
and Libraries of Record
Chicago, Illinois - July 21-22, 2003
Attendees**

Joseph J. Branin, Director of Libraries for Ohio State University

Willis E. Bridegam, Librarian of Amherst College

Mary M. Case, Director of the Office of Scholarly Communication, Association of
Research Libraries

Nancy A. Davenport, Director of Acquisitions, Library of Congress

Paula De Stefano, Barbara Goldsmith Curator for Preservation and Head of the
Preservation Department, New York University Libraries

Ellen S. Dunlap, President of the American Antiquarian Society

Daniel Greenstein, California Digital Library

Sara F. Jones, Division Administrator of the Nevada State Library & Archives

Robert S. Martin, Director of the Institute of Museum and Library Services

Rob McGee, RMG Consultants, Inc.

Catherine Murray Rust, Chair of the Orbis Cascade Alliance Regional Library
Service Center Task Force

James Neal, Vice President for Information Services and University Librarian at
Columbia University

Steve O'Connor, Chief Executive Officer of CAVAL, Ltd

Lizanne Payne, Executive Director of the Washington Research Library
Consortium

Bernard Reilly, President of the Center for Research Libraries

Judy Russell, Superintendent of Documents, U.S. Government Printing Office

Brian E. C. Schottlaender, University Librarian at the University of California, San Diego

Edward Shreeves, Director for Collections and Information Services at the University of Iowa Libraries

Abby Smith, Director of Programs at the Council on Library and Information Resources

David H. Stam, University Librarian Emeritus and Senior Scholar in History at Syracuse University and a Trustee at the Gladys Krieble Delmas Foundation

Deirdre C. Stam, Associate Professor at the Palmer School of Library Science at Long Island University and the Director of the New York Center for the Book

Mary Jane Starr, Centre for Newspapers and the News in Canada, Library and Archives of Canada

Carla J. Stoffle, Dean of Libraries and the Center for Creative Photography at the University of Arizona

Winston Tabb, Dean of University Libraries and Sheridan Director of the Johns Hopkins University Libraries

Sarah E. Thomas, Carl A. Kroch University Librarian at Cornell University

Melissa Trevvett, Project Leader for the Distributed Print Archives Project funded by the Andrew W. Mellon Foundation

Pentti Vattulainen, Director of the National Repository Library of Finland

Donald Waters, Program Officer for Scholarly Communications at the Andrew W. Mellon Foundation

Judith Wright, Associate Dean for Library and Information Services and a Lecturer in Law at the University of Chicago

Appendix 2

**Preserving America's Printed Resources: the Role of Repositories, Depositories,
and Libraries of Record
Chicago, Illinois - July 21-22, 2003
Agenda**

Introductions:

Bernard Reilly, Center for Research Libraries
Charles Cullen, Newberry Library

Keynote:

Abby Smith, Council on Library and Information Resources

Report on Books and Newspapers:

Nancy Davenport, Library of Congress
Ellen Dunlap, American Antiquarian Society
Bernard Reilly, Center for Research Libraries

Report on U. S. Government Publications:

Judith Russell, Government Printing Office

Report on U.S. Legal Publications:

Judith Wright, University of Chicago Law Library

Report on Journals:

Edward Shreeves, University of Iowa and Committee on Institutional
Cooperation

CRL Distributed Print Archives Project:

Melissa Trevvett, Center for Research Libraries