5

Old Texts, New Networks
HathiTrust and the Future of Shared Print

Heather Weltin and Natalie Fulkerson

THE CHALLENGES AND OPPORTUNITIES FACING LIBRARIES IN THE DIGITAL age are well documented. Budget pressures, questions of relevance, new publishing and licensing models, and changing expectations on the part of researchers and scholars are all impacting library services. Newer pressures, including climate change and the recent COVID-19 outbreak, place additional stress on library budgets, spaces, and collections.

As libraries evaluate their priorities and functions in the twenty-first century, new collaborative models are emerging. Advances in computing power, improvements in discovery, and the rising power of the internet have rapidly shifted user expectations away from library shelves and toward digital access. Mass digitization and the growing presence of born-digital media are driving new modes of content delivery and demand for new services. Consequently, many libraries have responded to this "digital shift" by moving lesser-used books and serials off campuses and converting physical stacks into spaces for computing, study, and collaboration.

Yet the fundamental purpose of research libraries has not changed. Library employees still curate, organize, share, and preserve the scholarly record. In a 2008 press release, Indiana University declared,

> Preserving materials for the long term has long been a mission and driving force of leading research libraries. Their collections, accumulated over centuries, represent a treasury of cultural heritage and investment in the

broad public good of promoting scholarship and advancing knowledge. The representation of these resources in digital form provides expanded opportunities for innovative use in research, teaching and learning, but must be done with careful attention to effective solutions for the curation and long-term preservation of digital assets.[1]

The advent of mass digitization has facilitated the wide dissemination of materials previously only available through direct access to physical volumes. This new access pathway broadens the reach of the research library and deepens its capacity to support research, teaching, and learning through new services and new ways to think about local collections. The proliferation of shared print programs is an important and vibrant example of how libraries are evolving their print collection management strategies to complement advances in electronic delivery. Similarly, the formation of HathiTrust can be understood as part of the trend toward digital access and services. HathiTrust is unique among library organizations in both scope and scale, leveraging collective investment by its member libraries to collect and manage vast digital collections, and to offer an array of services that support both the common and the public good.

The HathiTrust Shared Print Program expands and extends research libraries' commitments to long-term preservation of the print scholarly record. Through its ongoing investment in shared print, HathiTrust will continue to play an active and engaged role in the management of library print resources as a resource for patrons today and tomorrow.

EVOLUTION OF SHARED PRINT IN THE UNITED STATES

Shared print grew out of local needs experienced across the library community. Changes to library budgets and spaces, the emergence of mass digitization programs, and evolving library priorities pushed libraries to look externally for new collection management opportunities. Working with existing library partners and consortia became critical in managing collection changes and demands. The first shared print programs evolved in response to these pressures, and today they are central to many libraries' collections.[2]

In 2012, Kieft and Payne defined a shared print program or agreement as "a formal program in which multiple libraries coordinate long-term retention

of print materials and related services by one or more participants to support preservation and allow space recovery among campus collections."[3] Although several specific traits of their original shared print agreements have evolved over time, this definition remains the standard for shared print today.

The benefits of a shared print program can vary greatly depending on its specific characteristics, its scale, and local collection decisions made by participating libraries. An important benefit centers on the ability for libraries to collaboratively manage their existing local and global collections with a shared goal of preservation and access. Each library designates a portion of its physical collection for long-term retention, thereby freeing other partners to make different decisions with their copies of those same volumes. In some instances, shared collections are moved to a central location shared by all participating libraries, while in others, collections are housed locally or in high-density shelving facilities. Both options allow participating libraries to make local collection decisions based on this shared commitment to retention. Libraries can make local decisions regarding which items to retain, where they should be housed, and how many copies are needed locally and for their shared print program. This frees up building space previously used to store collections and makes it available for other purposes. By collaboratively managing collections, partners are able to save precious square footage while still meeting the needs of their communities. The majority of shared print programs began with a focus on serials due to duplication across libraries, availability in digital formats, and the benefit of space savings. Today, shared print programs involve many different formats.

The origin of shared print can be found in the history of print repositories, including the Library of Congress and the American Antiquarian Society. These repositories demonstrated a commitment to preservation through retention of physical volumes, but they lacked the cooperative services and shared collection collaborations that many libraries sought in order to make informed local collection decisions. Libraries looking for new ways to manage collections needed cooperative services and commitment to preservation; and shared print offered that opportunity.

Formal shared print programs in the United States began in 1949 with the Midwest Inter-Library Corporation, now called the Center for Research Libraries (CRL). The Midwest Inter-Library Corporation, a group of ten

universities supported by a grant from the Carnegie Corporation, created a "cooperative interlibrary center" with the goal "to establish and maintain an educational, literary, scientific, charitable and research interlibrary center; to provide and promote cooperative, auxiliary services . . . to establish, conduct and maintain a place or places for the deposit, storage, care, delivery and exchange of books."[4] These university libraries relocated monographs, journals, and other library materials to the newly formed Midwest Inter-Library Corporation to store them, preserve them, and through resource sharing make them available for future researchers. In the 1960s, the program expanded from the Midwest to become a national entity dedicated to "preservation and collection development efforts."[5] Unlike print repositories such as the Library of Congress and the American Antiquarian Society, CRL established a commitment to maintaining and growing a diverse collective collection and services based on partnership priorities. As the first US shared print program, the Midwest Inter-Library Corporation demonstrated the benefits and the success of shared print and established the groundwork for future programs.

Shared print programs soon entered a new phase of growth, with developments like the creation of Project Gutenberg in 1971 and other mass digitization initiatives in the 1990s facilitating access to works previously only available in print. Digitization projects such as Project Gutenberg and JSTOR, along with others spearheaded by organizations including the Internet Archive and Google, spurred libraries to begin thinking about collections in new ways. This "digital shift" catalyzed new opportunities for cost and space savings achieved by more efficient access to print volumes through resource sharing and a general move toward collaboration.[6]

During this period, literature in the library and information sciences began to more seriously explore the concept of shared print and the potential benefits for participating libraries. One paper of note, *Evidence in Hand*, published by the Council on Library and Information Resources in 2001, focused on the increasing volume of scholarly publishing and the challenges libraries encountered in managing this new scale of collecting in conjunction with changing collection policies, budgets, and space. Despite these challenges, the authors asserted the value of retaining the physical item rather than relying solely on a digitized version. They recommended that libraries "advocate for the development of regional repositories of artifactual collections that reduce

duplication of effort, create economies of scale, and ensure that the greatest number of unique or scarce priority items are preserved and made accessible to researchers."[7] This recommendation began to align the need to save space with the need to consider preservation. This important document set a national vision for preservation and shared collections.

By the 2000s, more libraries were relying on high-density storage facilities to solve local space constraints by relocating low-use items, locally unique materials, or print materials with digital counterparts to efficient storage systems for retrieval upon request.[8] This type of facility affords efficient ways to house collections and enables further opportunities for the shared management of collections.

Today, the number of shared print programs in the United States is growing. Major programs include Eastern Academic Scholars' Trust (EAST), Florida Academic Libraries Repository (FLARE), HathiTrust, Scholars Trust, and Western Regional Storage Trust (WEST). Each of these programs is organized around principles of access and preservation, and an emphasis on partnerships and shared collection management.

As shared print has continued to grow, several groups of shared print programs have started working together to develop ever-larger initiatives with a national reach. The Rosemont Shared Print Alliance includes representatives of programs from numerous research and academic libraries. Focused on serials management, partners include the Big Ten Academic Alliance (BTAA), EAST, FLARE, Scholars Trust, and WEST. The Partnership for Shared Book Collections was formed in 2018 with a focus on monograph shared print programs. These new partnerships across national shared print programs demonstrate a clear desire for a national collective discussion around collection management. With such an array of shared print programs now engaging in national discussions, shared print has become a major focus of many libraries' collection strategies.[9]

When Kieft and Payne defined the term *shared print* in 2012, they imagined a library community set in a future 2020 in which users had access to both digital and print materials as needed, and where libraries shared resources and managed them collectively.[10] We are closer to realizing this vision than ever before. The continued expansion of shared print programs has furthered a shift toward libraries acting not as individual entities, but as a shared

community dedicated to the preservation of the scholarly record and management of our national collections with a purposeful eye toward future use. Shared print programs have begun to ensure a future of print that responds to changing priorities in libraries, yet assures scholars that print materials will survive to enable future scholarship.

HATHITRUST AND SHARED PRINT

Although the Google Books Library Project made it clear that Google saw tremendous value in mass digitization of the world's library collections, especially as it pertained to Google's search services, participating academic and research libraries quickly identified preservation of these digitized materials as a core function that could not be trusted to commercial entities.[11] Soon after the Google Books Library Project was announced, several of Google's earliest library partners, including those within the Committee on Institutional Cooperation (CIC; now the BTAA) and the University of California, joined together to form a "Shared Digital Repository," with the goal of collectively managing and preserving the scanned copies of their physical collections produced by Google through their partnerships with Google Books.[12] In 2008, the Shared Digital Repository was officially launched as HathiTrust.[13] See figure 5.1 for relevant milestones in HathiTrust's founding and growth.

FIGURE 5.1
Developments Leading to the HathiTrust Shared Print Program

2004 Google Books Library Project announced

2007 The Committee on Institutional Cooperation and the University of California form the Shared Digital Repository

2008 HathiTrust launched

2010 Full-text search added

2011 HathiTrust launches the HathiTrust Research Center; TRAC certification

2017 HathiTrust launches its Shared Print Program

HathiTrust is unique in both the scope of its ambitions and in the deep, ongoing funding commitment made by its member libraries. HathiTrust is fully funded by its members, and as such is not beholden to investors or commercial interests. In this way, HathiTrust provides a community-driven alternative to "commercial hosting of research library content" at web scale.[14] Members derive specific benefits related to the preservation of their digital files as well as the ability to make related decisions about their physical collections through the lens of the broader collective. Moreover, HathiTrust is unique in its commitment to providing the broadest access legally possible to the materials in its collection. As a result of initiatives like its copyright review program, nearly 40 percent of the collection is publicly available to anyone in the United States with access to the internet, regardless of institutional affiliation.[15]

Since its founding in 2008, HathiTrust has grown and diversified its membership, its digital collection, and its portfolio of services, including access for computational research.[16] Today, HathiTrust has over 200 members, including both public and private institutions, large research universities, and smaller liberal arts colleges, as well as the Library of Congress. HathiTrust also has a growing international footprint, with member libraries in Canada, Europe, the Middle East, and Australasia. What began as a preservation repository is now a fully realized digital library, with offerings that serve both its members and the broader public.

HathiTrust exemplifies library collaboration in the digital age. It is both a solution to the problem of ensuring the perpetual preservation of mass-digitized materials and an exemplar of cross-institutional cooperation. According to John Wilkin, founding executive director of HathiTrust, the endeavor has transformed library collections: "Before this collaboration, the collections in each library existed in isolation. Now we are bringing them together, pooling resources and eliminating redundancies and producing a valuable research tool that will be greater than the sum of its parts."[17]

In the context of libraries' response to the digital shift, HathiTrust can be viewed as a means to build and sustain the collaborative infrastructure needed to store and preserve digital copies of its members' physical collections. Thirteen years after its founding, HathiTrust has a broader mission: "to contribute to research, scholarship, and the common good by collaboratively collecting, organizing, preserving, communicating, and sharing the record of human knowledge."[18]

TABLE 5.1
HATHITRUST AT A GLANCE

Monograph volumes	11,853,166	68.21%	Unique monograph titles	8,550,353	94.60%
Serial volumes	5,492,757	31.61%	Unique serial titles	469,229	5.19%
Other	31,340	0.18%	Other	18,981	0.21%
TOTAL VOLUMES	17,377,263	—	TOTAL	9,038,563	—

The HathiTrust Digital Library contains nearly 17.4 million volumes, including monographs, serials, and other formats such as manuscripts and music scores (see table 5.1). Within this vast collection are materials in over 450 langauges, covering a wide breadth of subjects; figures 5.2 and 5.3 present the titles in the collection by language and by Library of Congress Classification.[19] The dataset for these figures is from a direct query of the HathiTrust systems in May 2020.

The HathiTrust Shared Print Program further expands our ability to preserve the scholarly record by working directly with members to secure retention commitments on physical copies of the many volumes held in our digital collection. Just as shared print programs grew out of an awareness that local collections decisions made today will impact libraries and scholars for years to come, the HathiTrust Shared Print Program exemplifies the evolution in library partnerships and collections. Because of the size and diverse nature of its membership, the HathiTrust Shared Print Program has made significant strides in safeguarding the print scholarly record. Today, it is the largest monograph shared print program in the world.

In October 2011, HathiTrust members approved an initiative to develop a distributed print monographs archive that would seek to obtain shared print commitments corresponding to digitized volumes preserved in the HathiTrust Digital Library.[20] Linking print preservation with preservation of and access to digitized works was a significant extension of HathiTrust's services. By 2015, the HathiTrust Print Monograph Archive Planning Task Force had outlined a vision for HathiTrust's Shared Print Monograph Program that "mirrors the monographic holdings of the HathiTrust digital archive and is built from and regionally distributed amongst the collections of its members."[21] The proposed

FIGURE 5.2
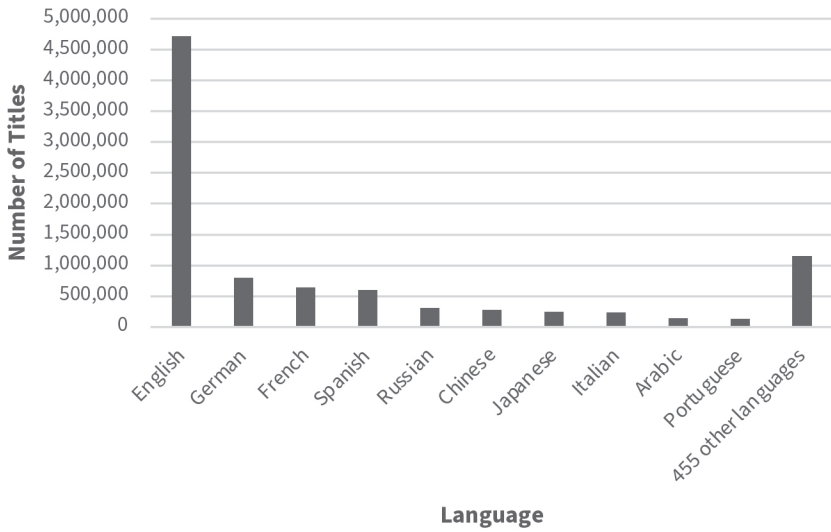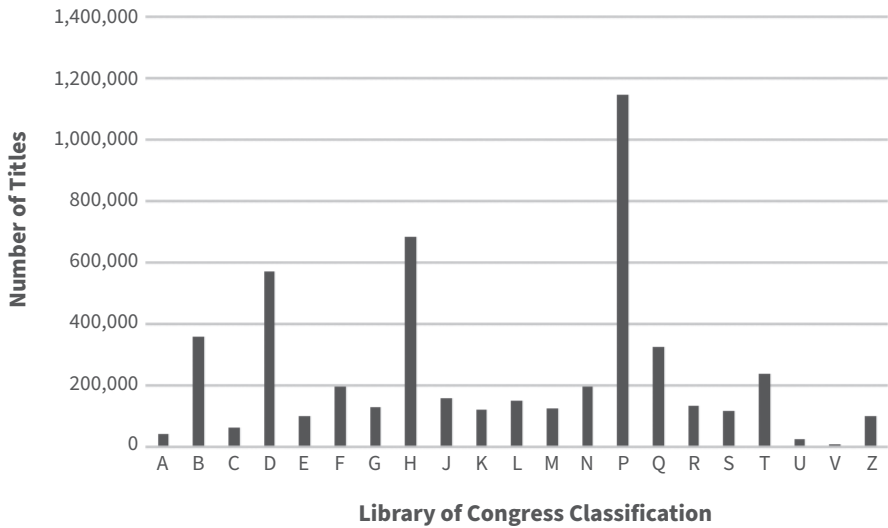**Number of Titles by Language**

FIGURE 5.3
Number of Titles by Library of Congress Classification

goal for this effort was to secure a retention commitment of an equivalent print copy of every digital monograph in the HathiTrust Digital Library's corpus and to do so quickly. The HathiTrust Shared Print Program, launched in 2017, adopted many of the task force's recommendations.

The primary goals of the Shared Print Program "are to ensure preservation of print and digital collections by linking the two, to reduce overall costs of collection management for HathiTrust members, and to catalyze national/continental collective management of collections."[22] To achieve these goals, the following components were identified as essential to the program:

- Secure retention commitments for print holdings that mirror book titles in the HathiTrust digital collection
- Maintain a lendable print collection distributed among HathiTrust member collections
- Reflect support by and provide benefits to all HathiTrust members
- Build on existing shared print and resource-sharing arrangements and avoid disturbing members' other affiliations[23]

Phase 1 of the program, which launched in June 2017 and continued through September 2017, secured retention commitments from fifty members on 16 million monograph volumes, which is equivalent to 4.8 million individual titles (about 65 percent of all HathiTrust digital monographs at the time phase 1 commitments were registered). To simplify the process and encourage participation, HathiTrust asked libraries to identify titles held by HathiTrust that they were willing to retain. Libraries were free to develop their own internal processes to identify their proposed commitments. All commitments were accepted, regardless of duplication across retention libraries. This lightweight process resulted in an overall volume of commitments that exceeded the expectations for the program outlined in the 2015 Task Force Final Report.

Participating members were asked to sign a memorandum of understanding (MOU) agreeing to a twenty-five-year commitment period. The MOU outlines responsibilities for HathiTrust and for participating retention libraries, as well as guidelines for early withdrawal and assessment of the program. Detailed operational policies and guidelines were published in a separate document. By utilizing a minimal MOU and separate operation policies document, the program enables changes in policies as needed without the need for revised MOUs.

Phase 2 of the program ran from May 2018 through May 2019. This phase called for a more intentional process of identifying needed commitments by relying on analysis prior to the call for participation. HathiTrust worked with OCLC's Sustainable Collection Services to identify items in the digital collection that did not receive retention commitments in phase 1, and then identify potential retention libraries for each of those items based on physical holdings data reported to OCLC. Each participating library received a list of all the items held in their physical collections for which commitments were needed and was asked to identify which of those items they would commit to retain. With guidance from a member advisory committee, HathiTrust decided to seek commitments of up to five copies of each candidate title, distributed across US Census regions where possible (Northeast, Midwest, South, and West).[24] Libraries were again able to identify their own internal process for selecting commitments to propose. Phase 2 secured retention commitments on an additional 1.5 million monographs, representing around 750,000 individual titles.

Combining both phases, the HathiTrust Shared Print Program has now secured commitments on more than 5.4 million individual titles held in the HathiTrust Digital Library (almost 18 million monographs at the closure of phase 2). This is around 76 percent of all digital monographs in the HathiTrust Digital Library. In just a few years, the HathiTrust Shared Print Program has achieved success beyond the task force's initial estimates and demonstrated its members' dedication to shared print.

FUTURE DIRECTIONS

"Print will always have some role in teaching, research, and reading."[25]

The formation and endurance of HathiTrust ensures a future for a substantial portion of both the digital and print scholarly record.[26] As a global partnership based in and committed to the preservation of the cultural record, HathiTrust's Shared Print Program will continue working to make sure this record is accessible not just for the current commitment of twenty-five years, but also for the twenty-five years after that, and beyond. Together, our members are making an impact on library preservation efforts, and our diverse membership allows us to focus on a greater shared print impact for a wider variety of libraries across the globe. HathiTrust ensures both print and digital will continue to be available regardless of the format future users prefer.

Although libraries have made significant progress in securing the print record through shared print, more effort is needed to make certain that the print record is adequately preserved. Most MOUs have fixed end dates, and many libraries lack clear plans for shared print commitment continuation after these dates have passed. Shared print infrastructure and adequate data reporting are also lacking, making it difficult to know which program is committing to what and for how long. Further, recognized and nationally accepted standards are needed around the number of copies required to ensure preservation. It is also worth noting that materials can only be preserved via shared print if they are held in library collections to begin with; therefore, efforts to reexamine acquisition practices are also needed to ensure collections are inclusive and more broadly represent the global cultural record. To achieve these ambitious goals, new ideas, collaborations, and partnerships will certainly be needed in the future.

Shared print programs help ensure a legacy of print for libraries and future scholars. These collections will continue to connect generations of students, scholars, and users through the preservation of essential print materials. As libraries continue to expand the ways they manage and make available the scholarly record, shared print programs like HathiTrust's help secure the print collection and ensure the long-term preservation of corresponding digital surrogates. As Mike Furlough, executive director of HathiTrust, has observed, we "need to be thinking about what future we are trying to create."[27] Although the ways users access and interact with materials may change over time, the need for print will not. Shared print programs secure our ability to engage with print over the long term.

ACKNOWLEDGMENTS

REFERENCES

Armstrong, Kimberly L., and Thomas H. Teper, "Library Consortia and the CIC: Leveraging Scale for Collaborative Success," *Serials Review* 43, no. 1 (2017): 28–33. https://doi.org/10.1080/00987913.2017.1284493.

Blumenthal, Ralph. "College Libraries Set Aside Books in a Digital Age." *New York Times*, May 14, 2005.

Christenson, Heather. "HathiTrust: A Research Library at Web Scale." *Library Resources & Technical Services* 55, no. 2 (April 2011): 93–102. https://journals.ala.org/index.php/lrts/article/view/5226/6352.

Dempsey, Lorcan. *The Emergence of the Collective Collection: Analyzing Aggregate Print Library Holdings*. Dublin, OH: OCLC Research, 2013. www.oclc.org/content/dam/research/publications/library/2013/2013-09intro.pdf.

Erickson, Chris. "Light, Dark and Dim Archives: What Are They?" *Digital Preservation Matters,* May 6, 2013. http://preservationmatters.blogspot.com/2013/05/light-dark-and-dim-archives-what-are.html.

Furlough, Mike. "What We Talk About When We Talk About Repositories." *Reference & User Services Quarterly* 49, no. 1 (January 2009): 18–32. https://doi.org/10.5860/rusq.49n1.18.

Genoni, Paul. "An International Review of the Development and Implementation of Shared Print Storage." *Australian Academic & Research Libraries* 44, no. 1 (2013): 50–66. https://doi.org/10.1080/00048623.2013.773867.

Hahn, Trudi Bellardo. "Mass Digitization: Implications for Preserving the Scholarly Record." *Library Resources & Technical Services* 52, no. 1 (January 2008): 18–26. https://alair.ala.org/handle/11213/8913.

HathiTrust Print Monograph Archive Planning Task Force. *Final Report*. Ann Arbor, MI: HathiTrust, 2015. www.hathitrust.org/files/sharedprintreport.pdf.

Kieft, Robert H., and Lizanne Payne. "Collective Collection, Collective Action." *Collection Management* 37, no. 3–4 (2012): 137–52. https://doi.org/10.1080/01462679.2012.685411.

Nichols, Stephen G., and Abby Smith. *The Evidence in Hand: Report of the Task Force on the Artifact in Library Collections.* Washington, DC: Council on Library and Information Resources, 2001. www.clir.org/pubs/reports/pub103/.

Payne, Lizanne. *Library Storage Facilities and the Future of Print Collections in North America.* Dublin, OH: OCLC Programs and Research, 2007.

Reilly, Bernard F., Jr., and Barbara DesRosiers. *Developing Print Repositories: Models for Shared Preservation and Access.* Washington, DC: Council on Library and Information Resources, 2003. www.clir.org/pubs/reports/pub117/.

Sandler, Mark. "Collection Development in the [Begin Strikethrough] Age [End Strikethrough] Day of Google." *Library Resources & Technical Services* 50, no. 4 (October 2006): 239–43. https://alair.ala.org/handle/11213/8908/.

Toobin, Jeffrey. "Google's Moon Shot: The Quest for the Universal Library." *New Yorker*, January 28, 2007. www.newyorker.com/magazine/2007/02/05/googles-moon-shot/.

Young, Jeffrey R. "In Case Google Bails Out on Its Library Project, Universities Create a Backup." *The Chronicle of Higher Education* 55, no. 9 (October 24, 2008): A10.

NOTES

1. "Major Library Partners Launch HathiTrust Shared Digital Repository," *IU News Room*, Indiana University, October 13, 2008, https://newsinfo.iu.edu/news/page/normal/9011.html.
2. For a general overview of shared print programs, see Paul Genoni, "An International Review of the Development and Implementation of Shared Print Storage," *Australian Academic & Research Libraries* 44, no. 1 (2013): 50–66, https://doi.org/10.1080/00048623.2013.773867; and Lorcan Dempsey, *The Emergence of the Collective Collection: Analyzing Aggregate Print Library Holdings* (Dublin, OH: OCLC Research, 2013), www.oclc.org/content/dam/research/publications/library/2013/2013-09 intro.pdf.
3. Robert H. Kieft and Lizanne Payne, "Collective Collection, Collective Action," *Collection Management* 37, no. 3–4 (2012): 142, https://doi.org/10.1080/01462679.2 012.685411.
4. "History of CRL," Center for Research Libraries, www.crl.edu/about/history/.
5. "History of CRL."
6. Dempsey, *Emergence of the Collective Collection*.
7. Stephen G. Nichols and Abby Smith, *The Evidence in Hand: Report of the Task Force on the Artifact in Library Collections* (Washington, DC: Council on Library and Information Resources, 2001), 73, www.clir.org/pubs/reports/pub103/.
8. Lizanne Payne, *Library Storage Facilities and the Future of Print Collections in North America* (Dublin, OH: OCLC Programs and Research, 2007), www.oclc.org/content/dam/research/publications/library/2007/2007-01.pdf.
9. The Center for Research Libraries has hosted the Print Archive Network (PAN) forum since 2010 as a place for shared print practitioners to discuss relevant topics and best practices.
10. Kieft and Payne, "Collective Collection," 142.
11. According to Google, the goal for the Google Books Library Project is to "make it easier for people to find relevant books—specifically, books they wouldn't find any other way such as those that are out of print—while carefully respecting authors' and publishers' copyrights" through creating "a comprehensive, searchable, virtual card catalog of all books in all languages that helps users discover new books and publishers discover new readers." See "Google Books Library Project," Google, https://books.google.com/intl/en-GB/googlebooks/library.html.

12. "Committee on Institutional Cooperation (CIC) Joins Google's Library Project," *News from Google*, June 6, 2007, http://googlepress.blogspot.com/2007/06/committee-on-institutional-cooperation_06.html. The Google library partner agreement stipulates that a copy of each scanned item will be returned to the originating institution, thus enabling each library partner to develop separate plans for preserving those scans.

13. "Launch of HathiTrust," HathiTrust, October 13, 2008, www.hathitrust.org/press_10-13-2008/.

14. Heather Christenson, "HathiTrust: A Research Library at Web Scale," *Library Resources & Technical Services* 55, no. 2 (April 2011): 93–102, https://journals.ala.org/index.php/lrts/article/view/5226/6352.

15. "Statistics Information," HathiTrust, www.hathitrust.org/statistics_info/.

16. "IU, University of Illinois launch HathiTrust Research Center for computational access to archives," IU News Room, Indiana University, April 18, 2011, http://newsinfo.iu.edu/news/page/normal/18245.html.

17. Jeffrey R. Young, "In Case Google Bails Out on Its Library Project, Universities Create a Backup," *The Chronicle of Higher Education* 55, no. 9 (October 24, 2008): A10.

18. "Mission and Goals," HathiTrust, www.hathitrust.org/mission_goals/.

19. For a full description of the Library of Congress Classification system, see www.loc.gov/catdir/cpso/lcco/.

20. "HathiTrust Distributed Print Monographs Archive Proposal," *HathiTrust Constitutional Convention Ballot Proposal*, www.hathitrust.org/constitutional_convention 2011_ballot_proposals#proposal1/.

21. HathiTrust Print Monograph Archive Planning Task Force, *Final Report* (Ann Arbor, MI: HathiTrust, 2015), 5, www.hathitrust.org/files/sharedprintreport.pdf.

22. "Shared Print Program," HathiTrust, www.hathitrust.org/shared_print_program/.

23. "Shared Print Program," HathiTrust.

24. Canadian libraries participating in the HathiTrust Shared Print Program were assigned to the census region geographically located nearest to them.

25. Mike Furlough (executive director, HathiTrust), interview with the authors, October 2, 2019.

26. Kimberly L. Armstrong and Thomas H. Teper, "Library Consortia and the CIC: Leveraging Scale for Collaborative Success," *Serials Review* 43, no. 1 (2017): 31, https://doi.org/10.1080/00987913.2017.1284493.

27. Furlough, interview.