HathiTrust, Collective Action, and Local Services

University of California Davis
February 25, 2015
Mike Furlough
Executive Director, HathiTrust
Mission

To contribute to the common good by collecting, organizing, preserving, communicating, and sharing the record of human knowledge.

Efforts include, but are not limited to

...building comprehensive collections co-owned and managed by partners.
...enabling access by users with print disabilities.
...supporting computational research with the collections.
...stimulating shared collection storage strategies among libraries.
Timeline: Highlights

- Launch (2008)
- TRAC certification (2011)
- Constitutional convention (2011)
- 10 million volumes (2012)
- New governance established (2012)
- Current bylaws and fee structure (2013)
- 13 million volumes (2014)
Today’s Conversation

• HathiTrust Today
  – Collections
  – Organization
  – Current Initiatives
  – Short term plans

• HathiTrust Tomorrow
  – How has the world changed?
  – How should we change it?
Collections
The Name

• The meaning behind the name
  – Hathi (hah-tee)--Hindi for elephant
  – Big
  – Never forgets
  – Secure
  – Trustworthy
Preservation with Access

• Preservation
  – TRAC-certified
  – Long-term commitments on digital content facilitate planning, decision-making

• Discovery
  – Bibliographic and full-text search of all materials
  – Mechanisms for local loading of records

• Access and Use
  – Full text search (all users)
  – Public domain and open access works (all users)
  – Print on demand (all users, selected works)
  – Collections and APIs (all users)
  – Lawful uses of in-copyright works (members)
HathiTrust in 2015

• 13 million total items
  – 6.7 million book titles
  – 345,000 serial titles
  – 604,000 US federal government documents
  – 4.9 million items open (public domain & CC-licenses)
  – A handful of images and thimbleful of audio files
Growth of Collection

- 2008: 2,477,871
- 2009: 5,221,092
- 2010: 7,836,698
- 2011: 9,966,572
- 2012: 10,599,355
- 2013: 10,878,121
- 2014: 13,000,076

25 February 2015
# Largest Contributors (end 2014)

<table>
<thead>
<tr>
<th>Volumes Added</th>
<th>Total Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Michigan</td>
<td>4,712,752</td>
</tr>
<tr>
<td>University of California*</td>
<td>3,612,596</td>
</tr>
<tr>
<td>Harvard University</td>
<td>838,110</td>
</tr>
<tr>
<td>University of Wisconsin</td>
<td>560,775</td>
</tr>
<tr>
<td>Indiana University</td>
<td>528,811</td>
</tr>
<tr>
<td>Cornell University</td>
<td>510,065</td>
</tr>
<tr>
<td>Penn State University</td>
<td>387,717</td>
</tr>
<tr>
<td>University of Illinois</td>
<td>318,131</td>
</tr>
<tr>
<td>New York Public Library</td>
<td>294,835</td>
</tr>
<tr>
<td>Princeton University</td>
<td>252,808</td>
</tr>
</tbody>
</table>

**Davis:**
- Total: 39,823
  - Google: 36,194 (all public domain)
  - IA: 3629

**NRLF:**
- Total: 2,600,753
  - Google: 2,530,463 - including 323,738 public domain
  - IA: 70,290
2014: Largest Contributions (by volumes)

<table>
<thead>
<tr>
<th>Volumes Added</th>
<th>Jan-Dec 2014</th>
<th>Total Volumes</th>
<th>Pct Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvard University</td>
<td>600,675</td>
<td>838,110</td>
<td>71.67%</td>
</tr>
<tr>
<td>Indiana University</td>
<td>333,231</td>
<td>528,811</td>
<td>63.02%</td>
</tr>
<tr>
<td>Penn State University</td>
<td>319,513</td>
<td>387,717</td>
<td>82.41%</td>
</tr>
<tr>
<td>University of Illinois</td>
<td>205,156</td>
<td>318,131</td>
<td>64.49%</td>
</tr>
<tr>
<td>University of California</td>
<td>164,426</td>
<td>3,612,596</td>
<td>4.55%</td>
</tr>
<tr>
<td>Keio University</td>
<td>90,094</td>
<td>90,094</td>
<td>100.00%</td>
</tr>
<tr>
<td>University of Alberta</td>
<td>76,106</td>
<td>76,106</td>
<td>100.00%</td>
</tr>
<tr>
<td>Cornell University</td>
<td>72,574</td>
<td>510,065</td>
<td>14.23%</td>
</tr>
<tr>
<td>Ohio State University</td>
<td>61,129</td>
<td>61,129</td>
<td>100.00%</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>46,720</td>
<td>4,712,752</td>
<td>0.99%</td>
</tr>
</tbody>
</table>
Copyright Distribution

- In Copyright or undetermined: 63%
- "Public domain": 37%

Public Domain Worldwide: 20%
US Government Documents: 5%
Public Domain (US): 11%
Creative Commons: 0.06%
Open Access: 0.06%

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<table>
<thead>
<tr>
<th>Type of work</th>
<th>Searchable (bibliographic and full-text)</th>
<th>Viewable*</th>
<th>Full-PDF download</th>
<th>Print on Demand</th>
<th>Print disabilities*</th>
<th>Preservation uses (Section 108)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public domain worldwide</td>
<td>Worldwide</td>
<td>Worldwide</td>
<td>Partners only if 3rd-party restrictions, if not, worldwide.</td>
<td>Worldwide</td>
<td>Worldwide</td>
<td>N/A</td>
</tr>
<tr>
<td>Public domain (US) – Non-US works published between 1873 and 1923.</td>
<td>Worldwide</td>
<td>When accessed from with the United States</td>
<td>Partners in the US if 3rd party restrictions, if not, anyone in the US</td>
<td>Available within the United States</td>
<td>Partners in the US; partners worldwide where laws permit</td>
<td>N/A</td>
</tr>
<tr>
<td>Works that rights holders have opened access to in HathiTrust</td>
<td>Worldwide</td>
<td>Worldwide</td>
<td>Worldwide (if digitized by Google, full-PDF only available if opened with CC license)</td>
<td>Worldwide with permission</td>
<td>Worldwide</td>
<td>N/A</td>
</tr>
<tr>
<td>Works that are in-copyright or of undetermined status</td>
<td>Worldwide</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Partners in the US; partners worldwide where laws permit</td>
<td>Partners in the US; partner worldwide where laws permit</td>
</tr>
</tbody>
</table>

* Note: Access to in-copyright works is subject to conditions listed in HathiTrust’s policies on Access and Use.
Access: Lawful uses of in-copyright works

• Sensitive to multiple legal regimes
  – Full-text search (everyone everywhere)
  – Access to users who have print disabilities (through member proxy in US, and where law permits)**
  – Access works that are damaged or missing and also out of print and unavailable (members in US only)

**Terms and conditions at http://www.hathitrust.org/access_use#ic-access
Collective Action: Copyright Review

• Copyright Review Management System
  – Systematic manual review of copyright registrations to determine status of portions of the HathiTrust Collection
  – CRMS US: Published in US, 1923-1963
    • 318,887 reviewed / 168,248 PD (~53%)
  – CRMS-World: Published in UK (1874-1944), Canada, Australia (1894-1964)
    • 175,681 reviewed / 92,919 PD-world 9 (~53%)

Supported generously by IMLS
Top Ten Titles January 2015

1. The Human Figure, by John H. Vanderpoel
2. Quicksand, by Nella Larsen.
5. The Book of a Hundred Hands, by George Brant Bridgman.
Shared Stewardship
HathiTrust Members

Allegheny College
American University of Beirut
Arizona State University
Baylor University
Boston College
Boston University
Brandeis University
Brown University
California Digital Library
Carnegie Mellon University
Case Western Reserve
Colby College
Columbia University
Cornell University
Dartmouth College
Duke University
Emory University
Florida State University
Getty Research Institute
Georgetown University
Georgia Tech
Harvard University Library
Indiana University
Iowa State University
Johns Hopkins University
Kansas State University
Lafayette College
Library of Congress
Massachusetts Institute of Technology
McGill University
Michigan State University
Montana State University
Mount Holyoke College
New York Public Library
New York University
North Carolina Central University
North Carolina State University
Northeastern University
Northwestern University
Oklahoma State University
The Ohio State University
The Pennsylvania State University
Princeton University
Purdue University
Rutgers University
Stanford University
State University System of Florida
Syracuse University
Temple University
Texas A&M University
Texas Tech University
Tufts University
Universidad Complutense de Madrid
University of Alabama
University of Alberta
University of Arizona
University of British Columbia
University of Calgary
University of California Berkeley
University of California Davis
University of California Irvine
University of California Los Angeles
University of California Merced
University of California Riverside
University of California San Diego
University of California San Francisco
University of California Santa Barbara
University of California Santa Cruz
The University of Chicago
University of Connecticut
University of Delaware
University of Houston
University of Illinois
University of Illinois at Chicago
The University of Iowa
University of Kansas
University of Maine
University of Maryland
University of Massachusetts, Amherst
University of Miami
University of Michigan
University of Minnesota
University of Missouri
University of Nebraska-Lincoln
University of New Mexico
The University of North Carolina at Chapel Hill
University of Notre Dame
University of Oklahoma
University of Pennsylvania
University of Pittsburgh
University of Queensland
University of Tennessee, Knoxville
University of Texas
University of Utah
University of Vermont
University of Virginia
University of Washington
University of Wisconsin-Madison
Utah State University
Vanderbilt University
Virginia Tech
Wake Forest University
Washington University
Yale University Library

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Cooperative Work

• Draw upon knowledge across institutions
• Distributed Functions and Services
  – Preservation repository and access services
    • University of Michigan
    • Mirror site: Indiana University
  – Metadata management services
    • California Digital Library
  – HathiTrust Research Center
    • Indiana University and University of Illinois
Governance

HathiTrust Members

- Board of Governors
- Program Steering Committee
- Executive Director
- Committees and Working Groups
- Operations

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Committees and Working Groups

• Program Steering Committee
• Collections Committee
• Zephir Advisory Group
• User Support Working Group

• Rights and Access Working Group
• Government Documents Initiative Planning and Advisory Group
• Print Monographs Archive Planning Task Force

• On Hiatus
  – Communications
  – User Experience
Current Initiatives
Current Initiatives

1. Developing a shared print monographs archive
2. Expanding coverage and access to US government publications
3. Expanding support for computational (non-consumptive) research
4. Development Priorities
Shared Print Monographs Archive

• Ballot Initiative passed at the 2011 HT Constitutional Convention (Con-Con)
  – “To develop a print monographs archive corresponding to volumes represented within the HathiTrust”

• Focus
  – Ensure preservation of print and digital collections
  – Catalyze national/continental collective management of collections
Why A Shared Print Archive Program

• Many regional efforts, but limited national/international coordination

• Strengthens preservation commitments
  – Connects both print and digital preservation

• Significant need and desire to reduce costs of collection management and associated footprint
## UC Collection Overlap (by titles)

<table>
<thead>
<tr>
<th></th>
<th>Submitted</th>
<th>In Hathi</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>single-part monographs</td>
<td>9,766,951</td>
<td>3,332,926</td>
<td>34.1%</td>
</tr>
<tr>
<td>multi-part monographs</td>
<td>985,087</td>
<td>467,318</td>
<td>47.4%</td>
</tr>
<tr>
<td>serials</td>
<td>349,422</td>
<td>89,545</td>
<td>25.6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>11,101,460</td>
<td>3,889,789</td>
<td>35.0%</td>
</tr>
</tbody>
</table>
Government Documents Initiative

• Ballot Initiative: provide “expanded coverage & enhanced access to U.S. Government Documents.”

• Activities:
  – Developing a registry of US Federal Government Documents
  – Locate materials for inclusion in the collections
  – Improve search and discovery
US Gov’t Publications by Source Library

- **Michigan**, 34.75%
- **California**, 14.30%
- **Minnesota**, 13.22%
- **Illinois (UC)**, 12.71%
- **Purdue**, 7.30%
- **Penn State**, 6.92%
- **Cornell**, 3.61%
- **Virginia**, 1.41%
- **Northwestern**, 1.18%
- **Florida**, 1.16%
- **Princeton**, 0.58%
- **Wisconsin**, 0.75%
- **NYPL**, 0.49%
- **Indiana**, 0.52%
- **LC**, 0.25%
- **Ohio State**, 0.22%
- **Chicago**, 0.24%
- **NYPL**, 0.49%
- **LC**, 0.25%
- **Ohio State**, 0.22%
- **Others**, 0.36%

US Government Publications by Source Library

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US Gov't Publications by Date

82.3% of the Govt Docs collection was published in 1993 or before

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The Registry

• Goal: “....include metadata for the comprehensive corpus of U.S. federal documents. This will include materials produced at U.S. government expense, in all formats, at the item level, from 1789 to the present.”

• Why?
  – Limited knowledge of this corpus.
  – Collection gap analysis
  – Digitization sourcing
Near/Intermediate Term Activity

• Bibliographic and collections analysis
  – Registry and holdings work

• Focus first on known and cataloged materials
  – Prioritize print, post-1976 materials
  – Identify collections for inclusion (and get them)
  – Digitize where needed

• Publicize the efforts
  – Within the library community
  – To the general public
Computational Access

• HathiTrust distributes public domain datasets
• HathiTrust Research Center
  – Developed collaboratively by Indiana University and University of Illinois; launched July 2011
  – Funding from the Sloan Foundation, Andrew W. Mellon Foundation, and NEH Office of Digital Humanities.
  – Partially Funded by HathiTrust (2014-2018)
Goals for the Research Center

• Research arm of HathiTrust
• Provide a persistent and sustainable structure to enable original and cutting edge research.
  – Leverage data storage and computational infrastructure at Indiana & Illinois
  – Stimulate community development of new functionality and tools
  – Use tools to enable discoveries that would not be possible without the HTRC

• Enable scholars to fully utilize content of HathiTrust Library while preventing intellectual property misuse within U.S. copyright law.
  – Provision secure computational and data environment for scholars to perform research using HathiTrust Digital LibraryIndiana University and University of Illinois
Example Projects Supported by HTRC

• Muñoz, Trevor, University of Maryland. “Distributed Metadata Correction and Annotation.”
  – Correction, annotation and enhancement of HT records and export as linked data

• Page, Kevin, Oxford University. “ElEPHâT: Early English Print in HathiTrust, a Linked Semantic Workset Prototype”
  – Development of secondary worksets based on both HT and the Early English Books Online Text Creation Partnership (EEBO-TCP).

• Burton, Vernon. “The South as ‘Other,’ the Southerner as ‘Stranger.’”
  – Explore how attitudes expressed in print about slavery, southerners, and non-southerners have changed over both time and space.

• Ted Underwood, Associate Professor of English at the University of Illinois, Urbana-Champaign.
  – Using public domain texts received from HathiTrust to explore changing relationships in literary genres from 1700-1899.
HTRC DataCapsule: Secure Access
Scholarly Commons
User Support Services

• Develop training materials
• Educational workshops
• Tool and workset support
• Collaborate with librarians and DH centers at HT institutions
• Assist researchers in HTRC text data mining research projects
• Collaboration: University Libraries, Illinois and Indiana
Advanced Collaborative Support Awards

- **Detecting Literary Plagiarisms: The Case of Oliver Goldsmith.** Douglas Duhaime. University of Notre Dame: *developing tools for detecting plagiarisms...to detect the literary thefts of Goldsmith.*

- **Taxonomizing the Texts: Towards Cultural-Scale Models of Full Text.** Colin Allen, Jaimie Murdock. Indiana University Bloomington. *...a cultural-scale investigation and topic modeling....random sampling to select collections according to the Library of Congress Subject Headings (LCSH).*

- **The Trace of Theory.** Geoffrey Rockwell, Laura Mandell, Stefan Sinclair, Matthew Wilkens, Susan Brown. University of Alberta, Texas A&M University, University of Notre Dame. *...aim to subset theoretical subsets from the HT public corpus and apply large-scale topic modeling... develop tools and computational methods for tracking the concept of "theory".*

- **Dr. Michelle Alexopolous**, University of Toronto...tracking technology diffusion through time using the HT corpus.
HTRC UnCamp

• MAR 30-31, 2015, Ann Arbor, MI
  – Workshops, speakers, demonstrations

• Keynotes
  Michelle Alexopoulos, Professor, University of Toronto
  March 30, 2015, 8:45 to 9:45 am

  Erez Lieberman Aiden, Assistant Professor, Baylor College of Medicine
  March 31, 2015, 11:00 am to 12:00 pm

http://www.hathitrust.org/htrc_uncamp2015
Some Thoughts on the Present and Future
How are we positioned?

• Our mission, collection, and the repository operations are all strong.
• Our brand reputation is outstanding.
• Our work is solidly supported by the law.
• We have expanded access in unprecedented ways.
• The partnership provides a solid base for action.
• We have very important programs underway.
What needs thought?

• Strategy, mission, and role in the future
  – (Inter)National digital infrastructure
  – Public policy
  – Membership growth
  – Collections program
  – Services portfolio

• Organizational
  – Engagement with researchers and libraries
  – Enabling more participation in plans and action
  – Standing on our own
Assumptions

• Our actions must align with the mission, goals, and purpose across our partnership.

• A few additional assumptions
  – We should pursue complementarity and cooperation, not competition and duplication.
  – Scale will continue to drive our strategies
  – Potential partners are not just other libraries and library organizations, but also readers, authors, publishers.
How to find out more

• About: http://www.hathitrust.org/about
• Resources: http://www.hathitrust.org/resources
• Twitter: http://twitter.com/hathitrust
• Facebook: http://www.facebook.com/hathitrust
• Monthly newsletter:
  – http://www.hathitrust.org/updates
  – RSS http://www.hathitrust.org/updates_rss
• Contact us: feedback@issues.hathitrust.org
• Blogs: http://www.hathitrust.org/blogs
  – Large-scale Search
  – Perspectives from HathiTrust
Thank you!

furlough@hathitrust.org
@MikeFurlough