HATHITRUST

A Shared Digital Repository

# HathiTrust: An Update for The University of California

University of California
California Digital Library
February 23 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

- Google Library Project announced (2004)
- 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

HE Law of the Jungle —which is by far the oldest law in the world—has arranged for almost every kind of accident that may befall the Jungle-People, till now its code is as perfect as time and custom can make it. You will remember.

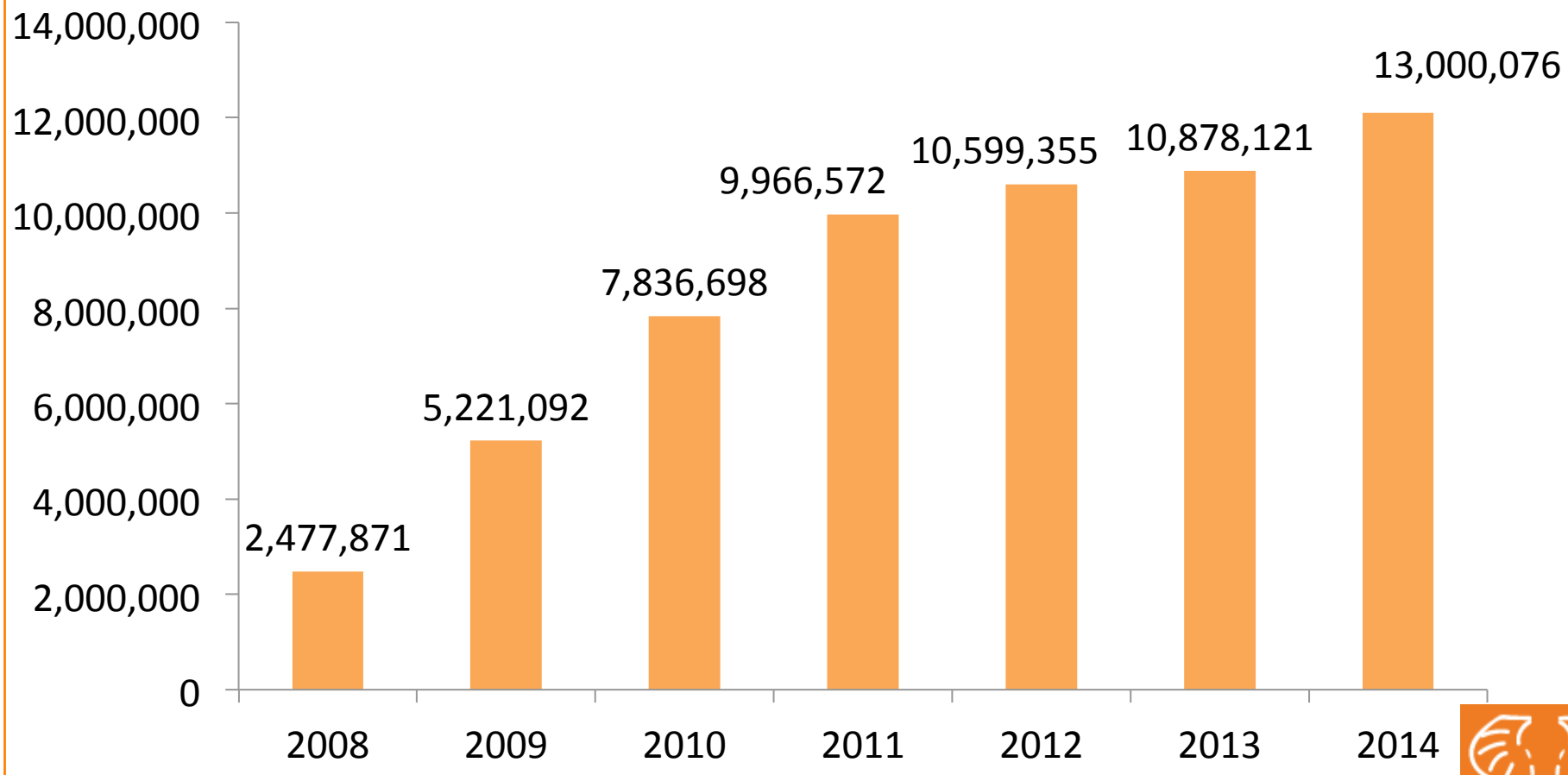
# Preservation with Access

- 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 January 2015

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

# Growth of Collection

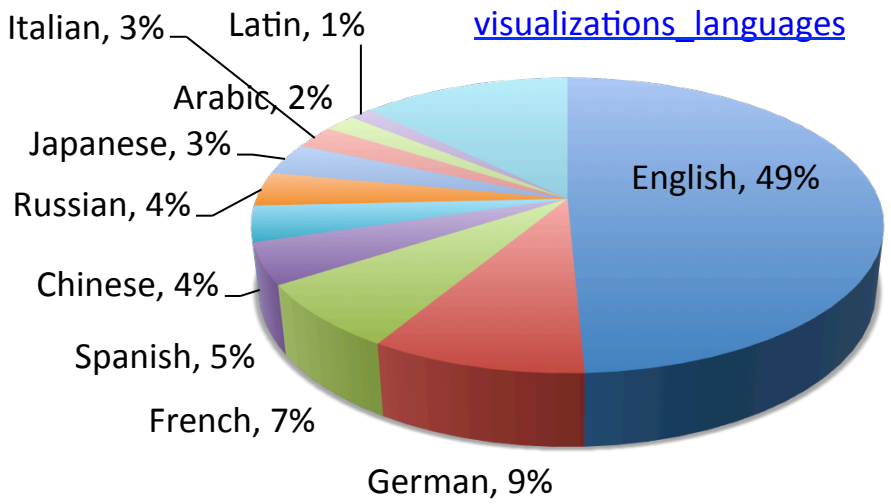


# 2014: Largest Contributions (by volumes)

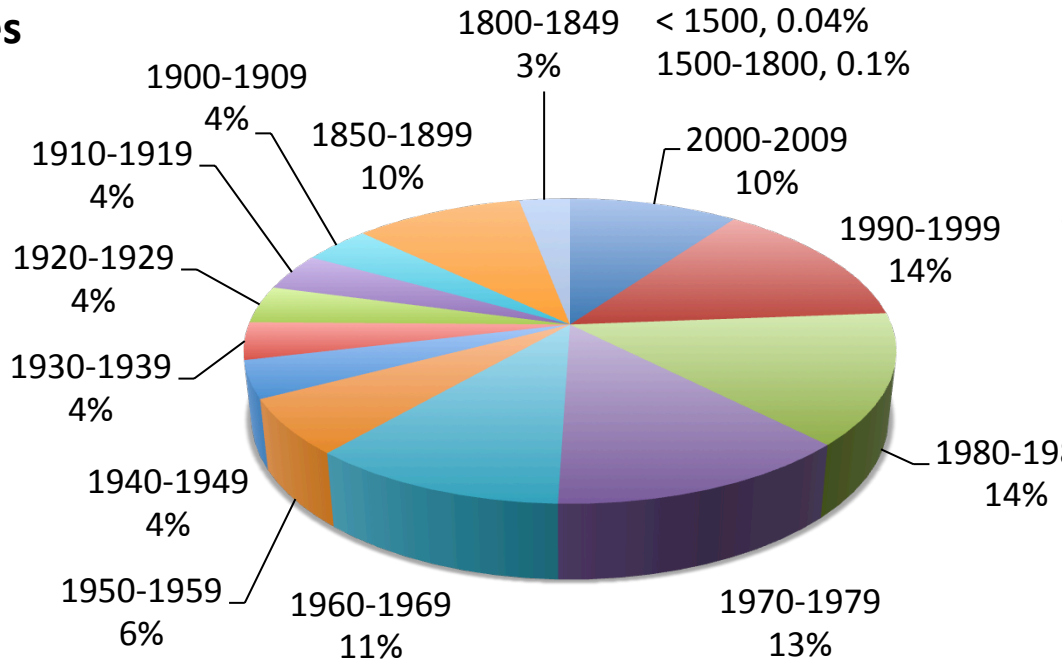
| Volumes Added | Jan-Dec 2014 | Total Volumes | Pct Growth |
|---|---|---|---|
| Harvard University | 600,675 | 838,110 | 71.67% |
| Indiana University | 333,231 | 528,811 | 63.02% |
| Penn State University | 319,513 | 387,717 | 82.41% |
| University of Illinois | 205,156 | 318,131 | 64.49% |
| University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

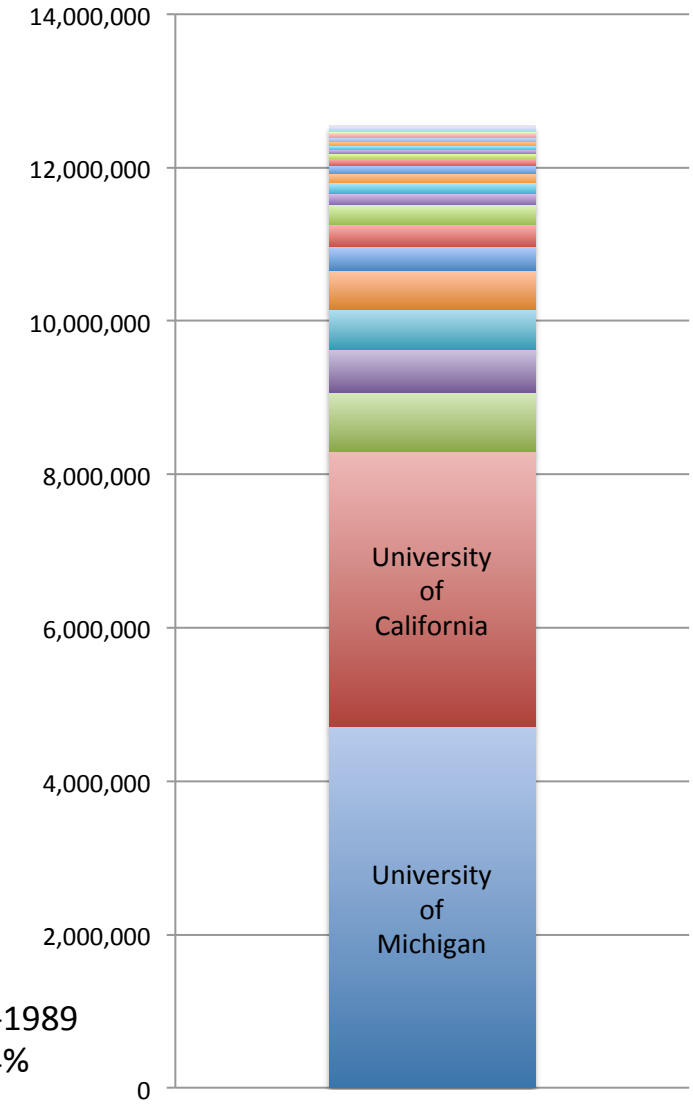
## Top 10 Languages

http://www.hathitrust.org/visualizations_languages

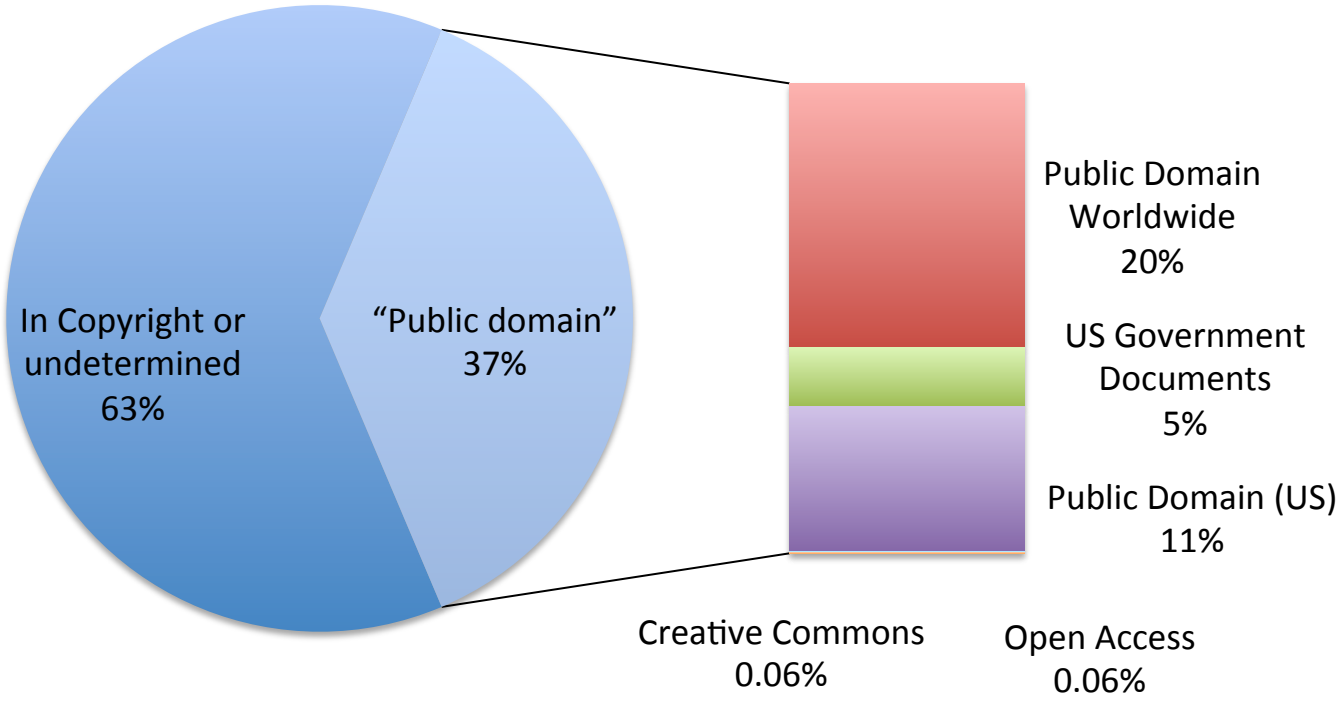



## Dates



# Copyright Distribution



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

* 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.
3. Godey's Magazine, v.40-41, 1850.
4. Pennsylvania German pioneers: A Publication of the Original Lists of Arrivals in the Port of Philadelphia from 1727 to 1808, by Ralph Beaver Strassburger.
5. The Book of a Hundred Hands, by George Brant Bridgman.
6. Indian boyhood, by Charles A. Eastman.
7. Roster of the Confederate soldiers of Georgia, 1861-1865, v.2.
8. Solid mensuration, by Willis F. Kern and James R. Bland.
9. The Five Laws of Library Science, by S. R. Ranganathan.
10. Roster of the Confederate soldiers of Georgia, 1861-1865, v.1.

# Shared Stewardship

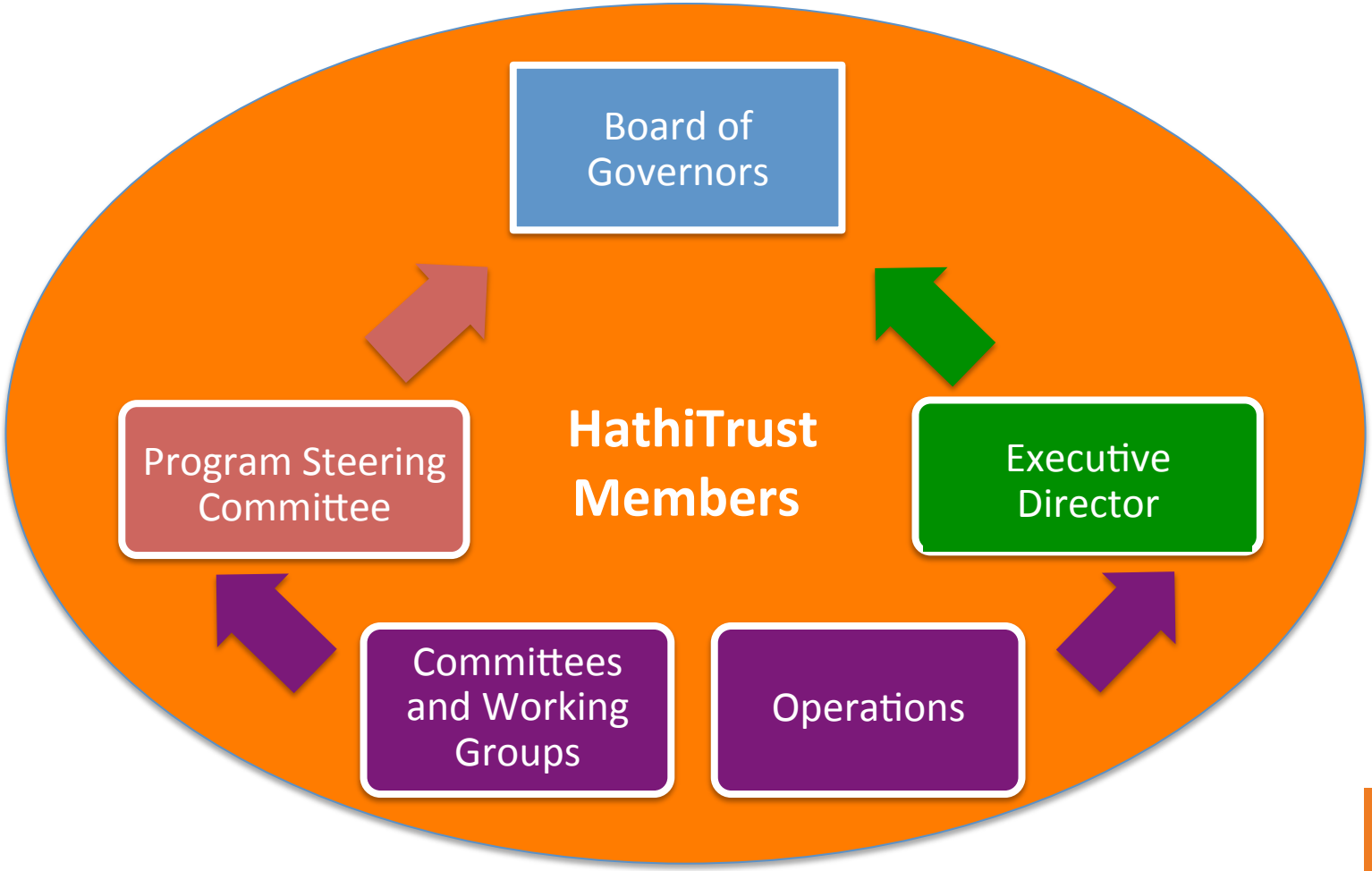
# HathiTrust Members

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**
**Davis**
**Irvine**
**Los Angeles**
**Merced**
**Riverside**
**San Diego**
**San Francisco**
**Santa Barbara**
**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

# 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


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

**Five-year terms (beginning Jan 2013)**
Betsy Wilson (University of Washington)
Bob Wolven (University of Columbia)

**Four year terms**
Richard Clement (University of New Mexico)
VACANT (appointment/election to come)

**Three year terms:**
Carol Mandel (New York University)
Sarah Michalak (University of North Carolina-Chapel Hill)

**Members appointed by the founding institutions:**
James Hilton (University of Michigan)
Carol Diedrichs (Ohio State University)
Laine Farley (California Digital Library)
Wendy Lougee (University of Minnesota)
Brian Schottlaender (UC, San Diego)
Carolyn Walters (Indiana University)

**Ex Officio (Board, PSC, Executive Committee):**
Mike Furlough, Executive Director

Executive Committee
- Chair
- Past Chair
- Treasurer
- Chair of PSC
- Executive Director

# HathiTrust Board of Governors

# 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

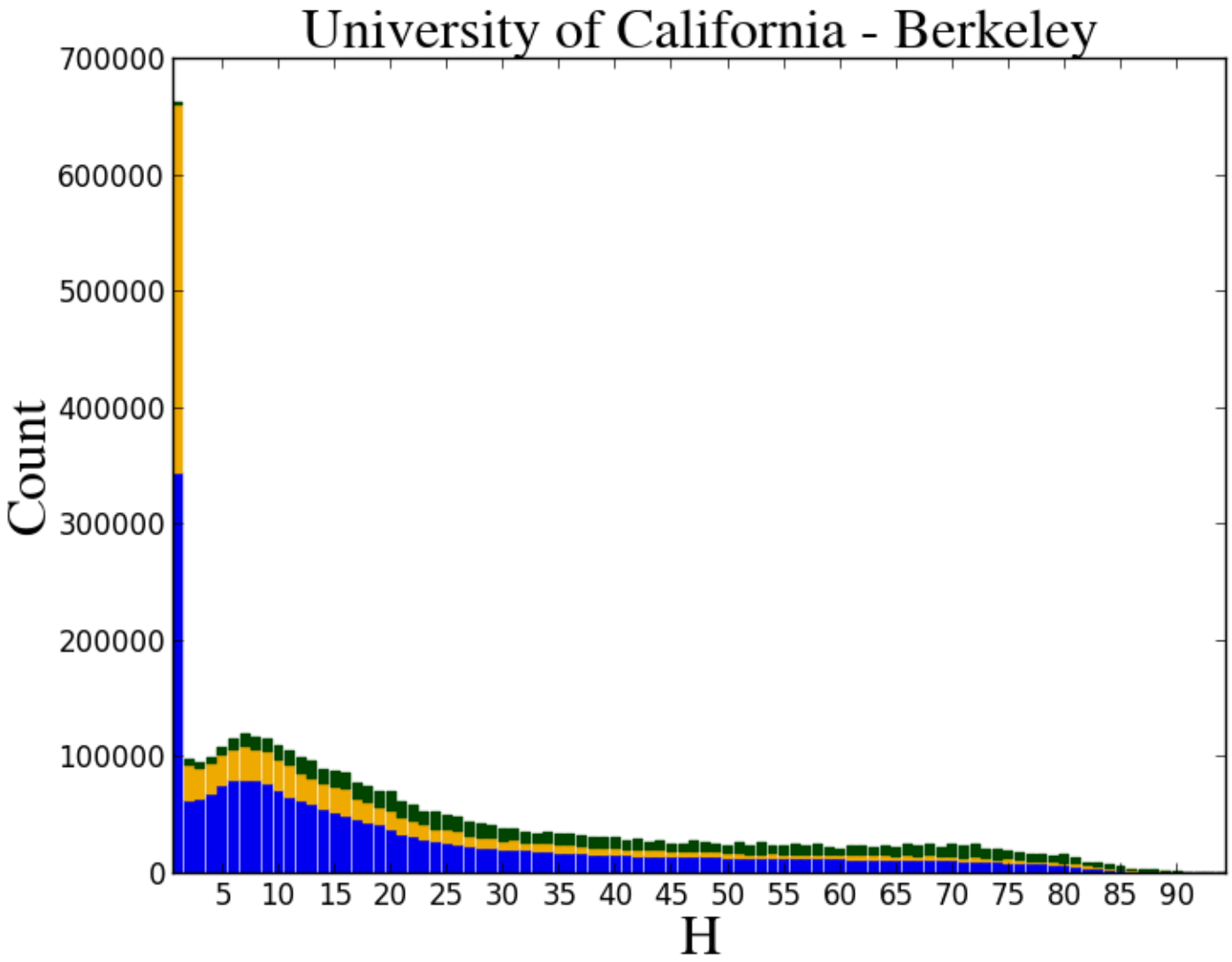
- Ballot Initiative passed at the 2011 HT Constitutional Convention (Con-Con)
  - "To develop a print monographs archive corresponding to volumes represented within the HathiTrust"
- Focus
  - Ensure preservation of print and digital collections
  - Catalyze national/continental collective management 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)

| | Submitted | In Hathi | Percent |
|---|---|---|---|
| single-part monographs | 9,766,951 | 3,332,926 | 34.1% |
| multi-part monographs | 985,087 | 467,318 | 47.4% |
| serials | 349,422 | 89,545 | 25.6% |
| TOTAL | 11,101,460 | 3,889,789 | 35.0% |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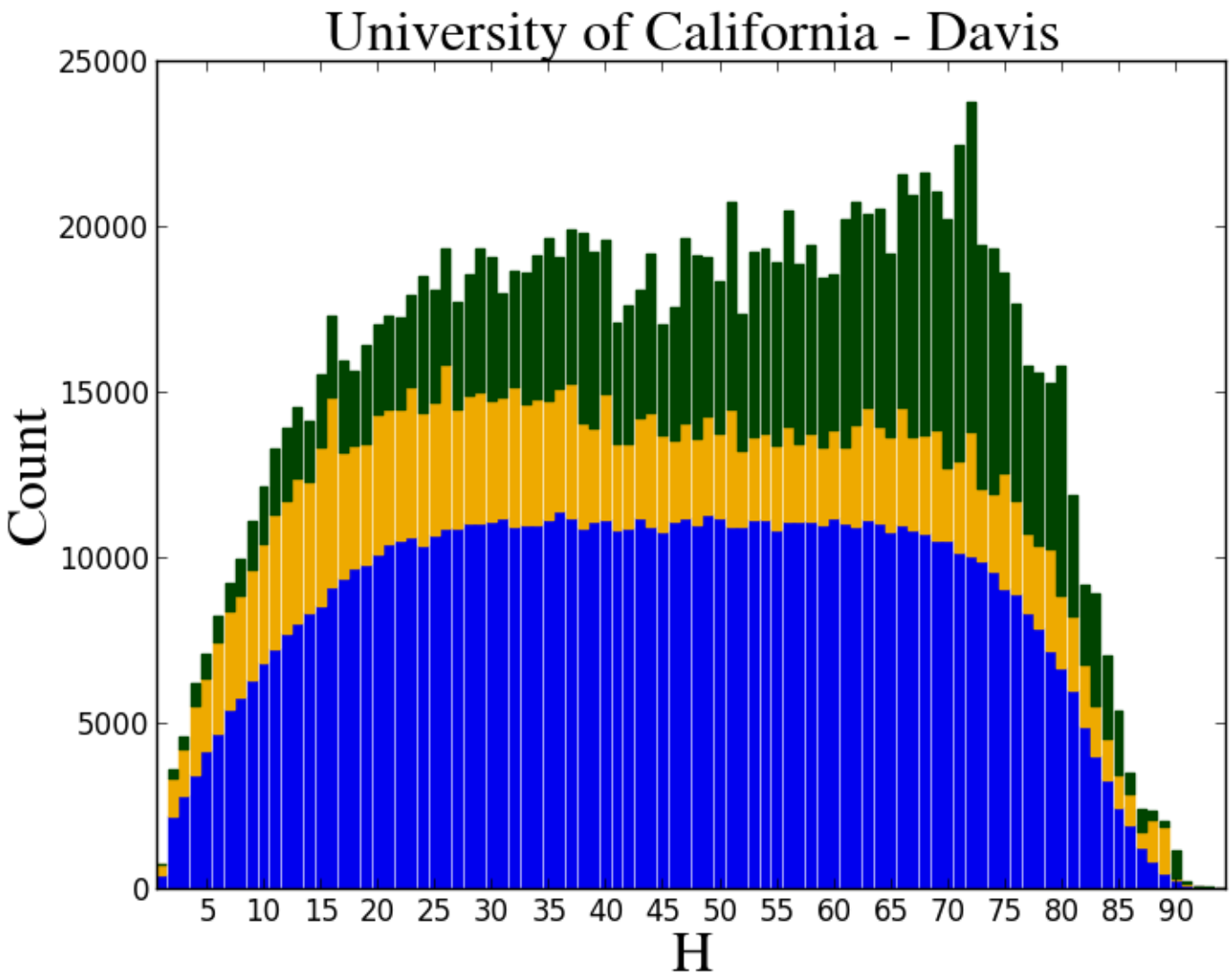
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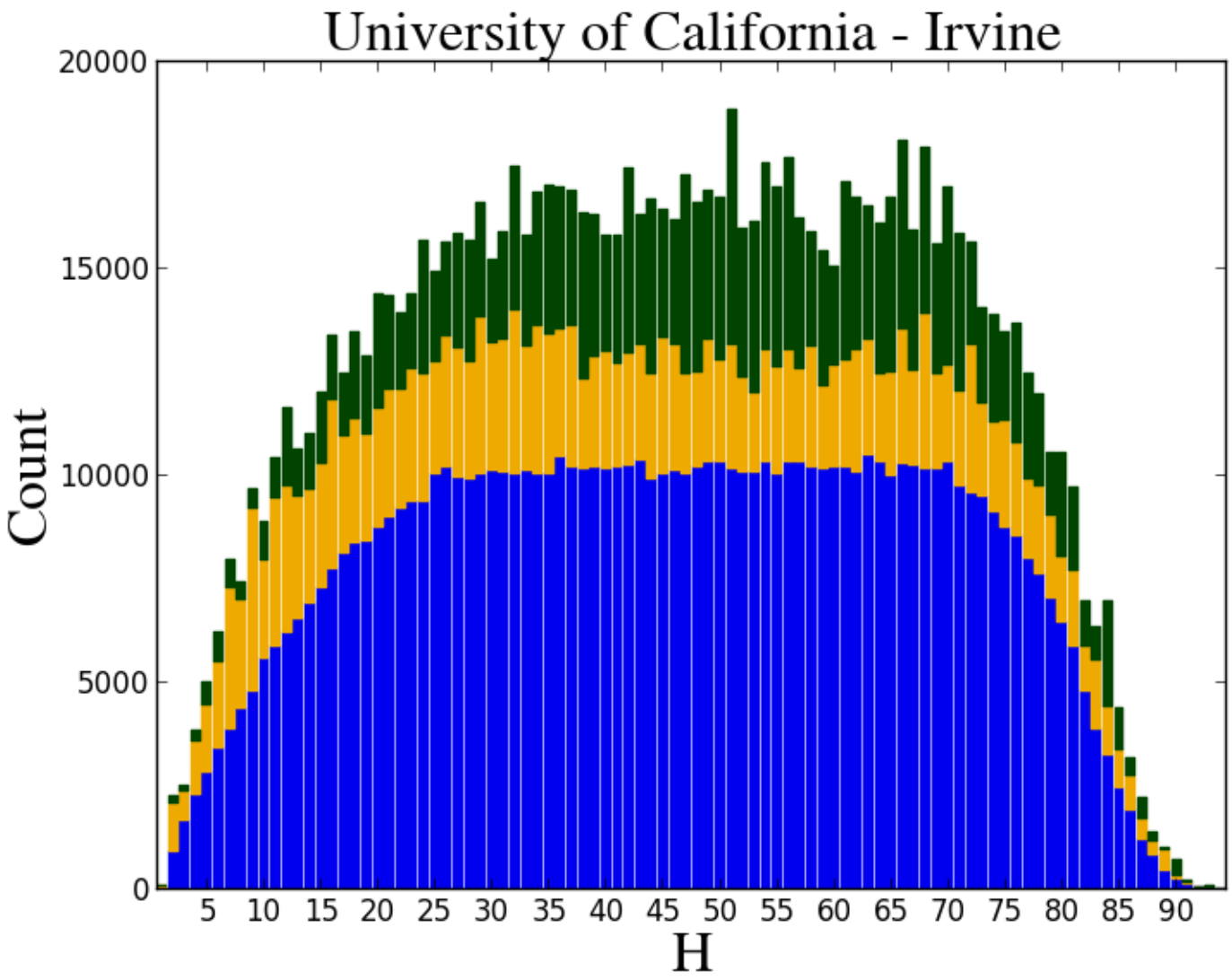
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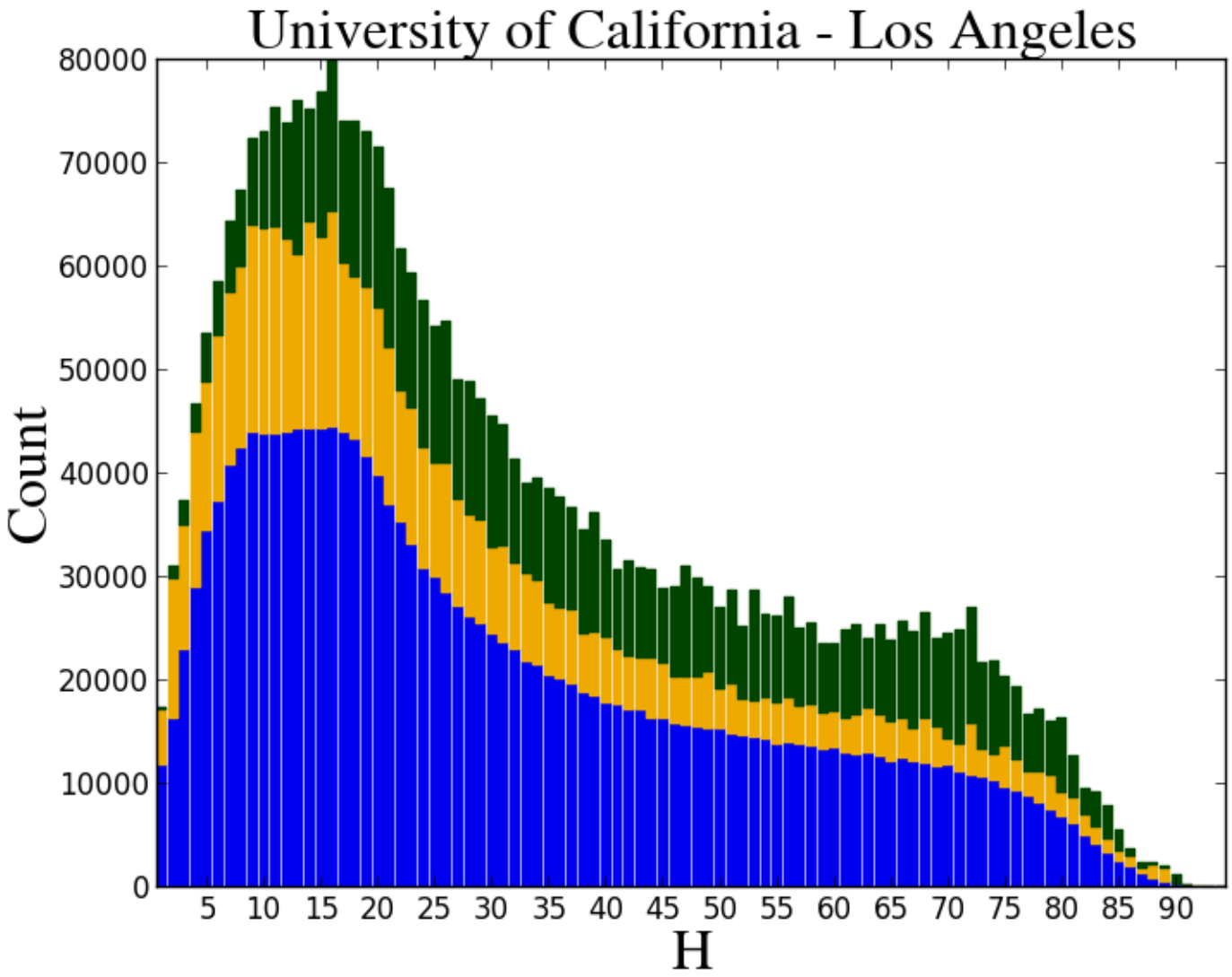
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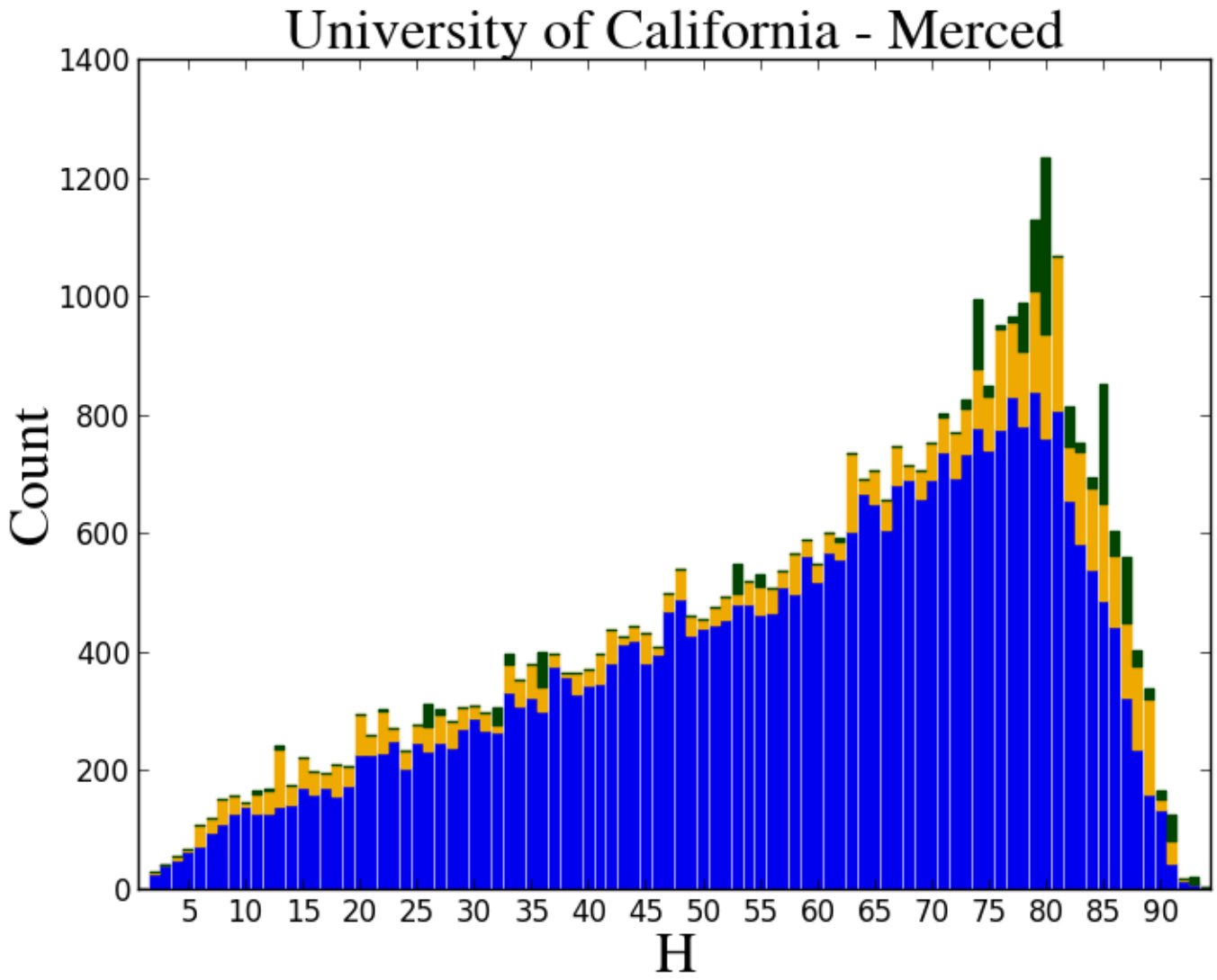
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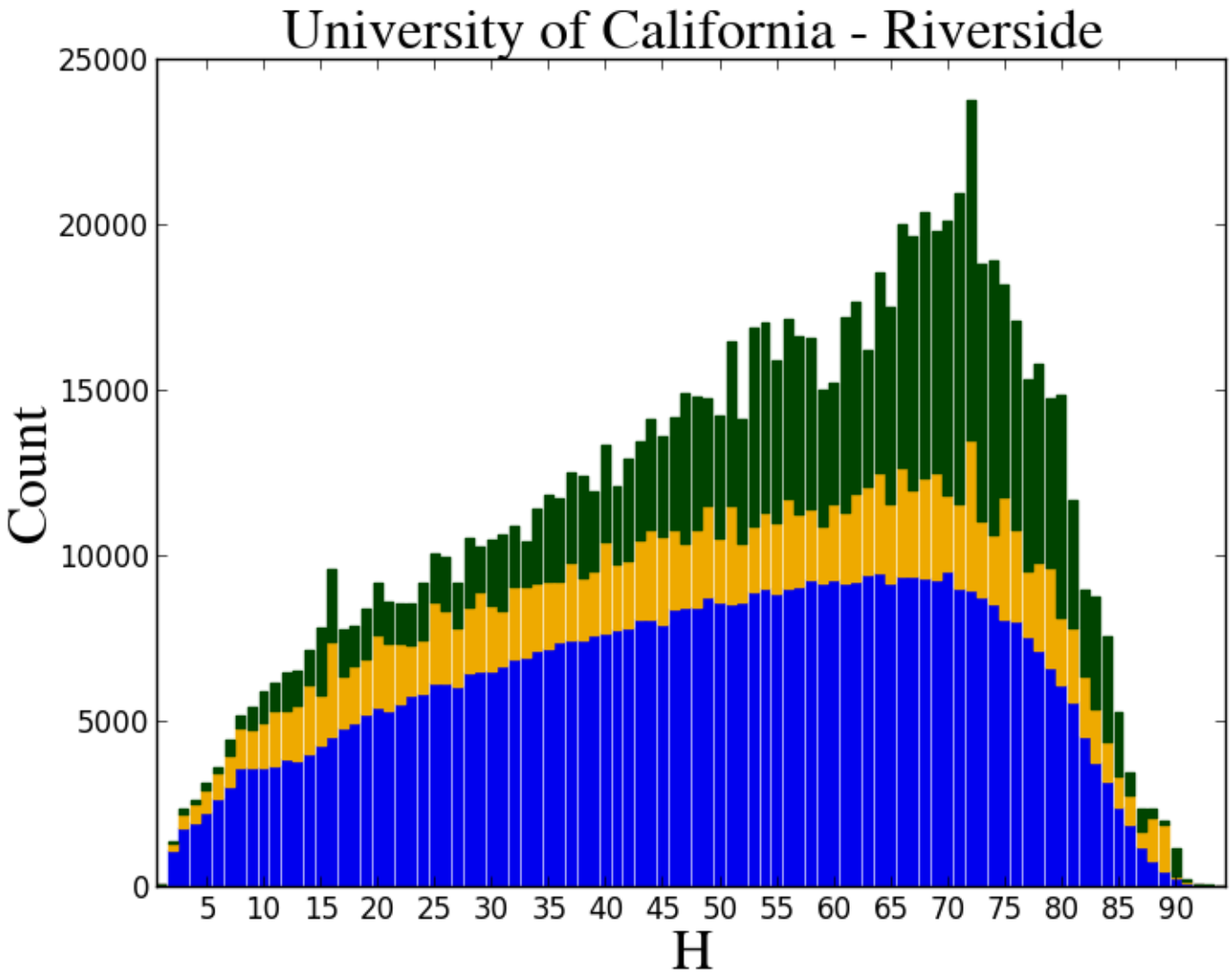
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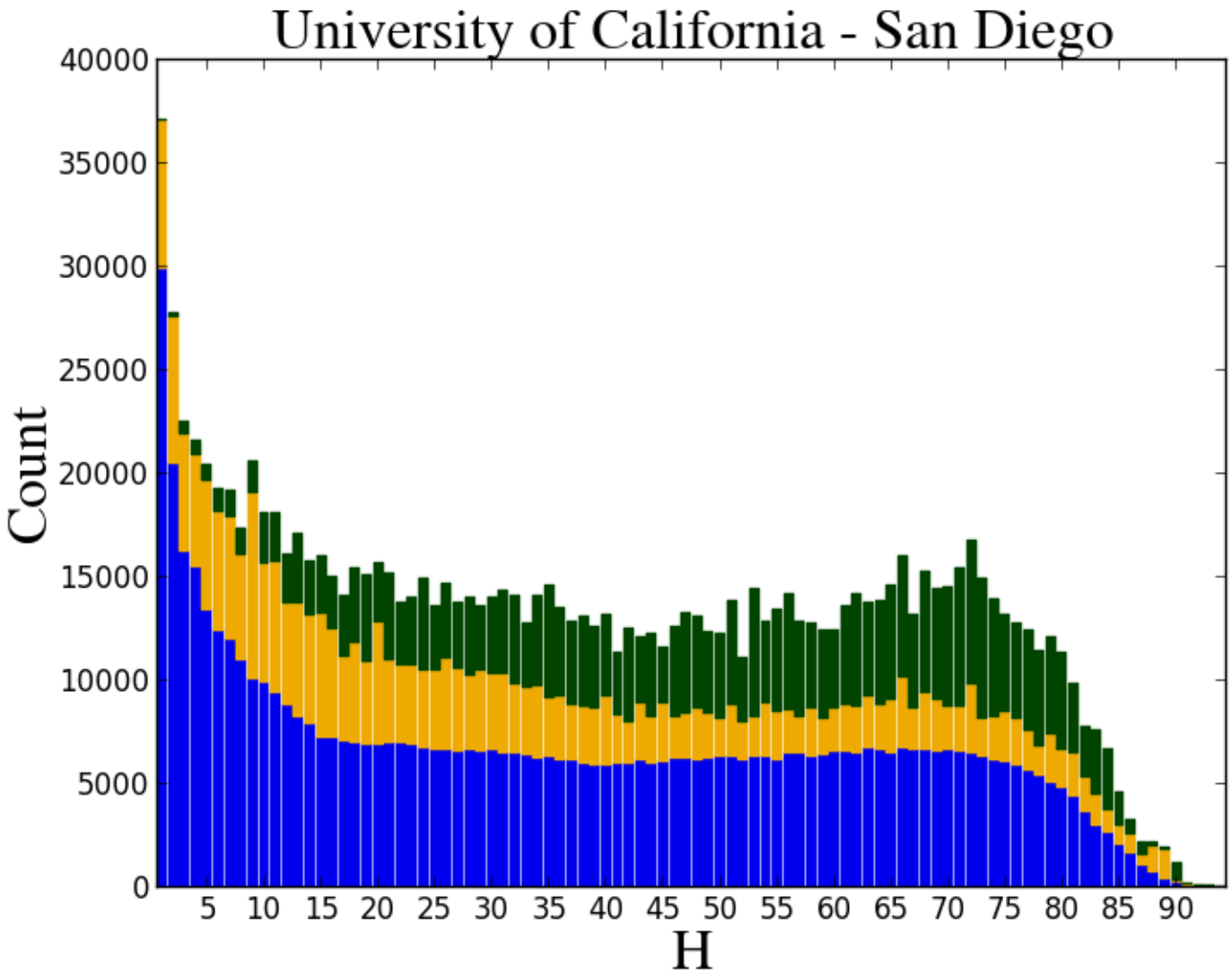
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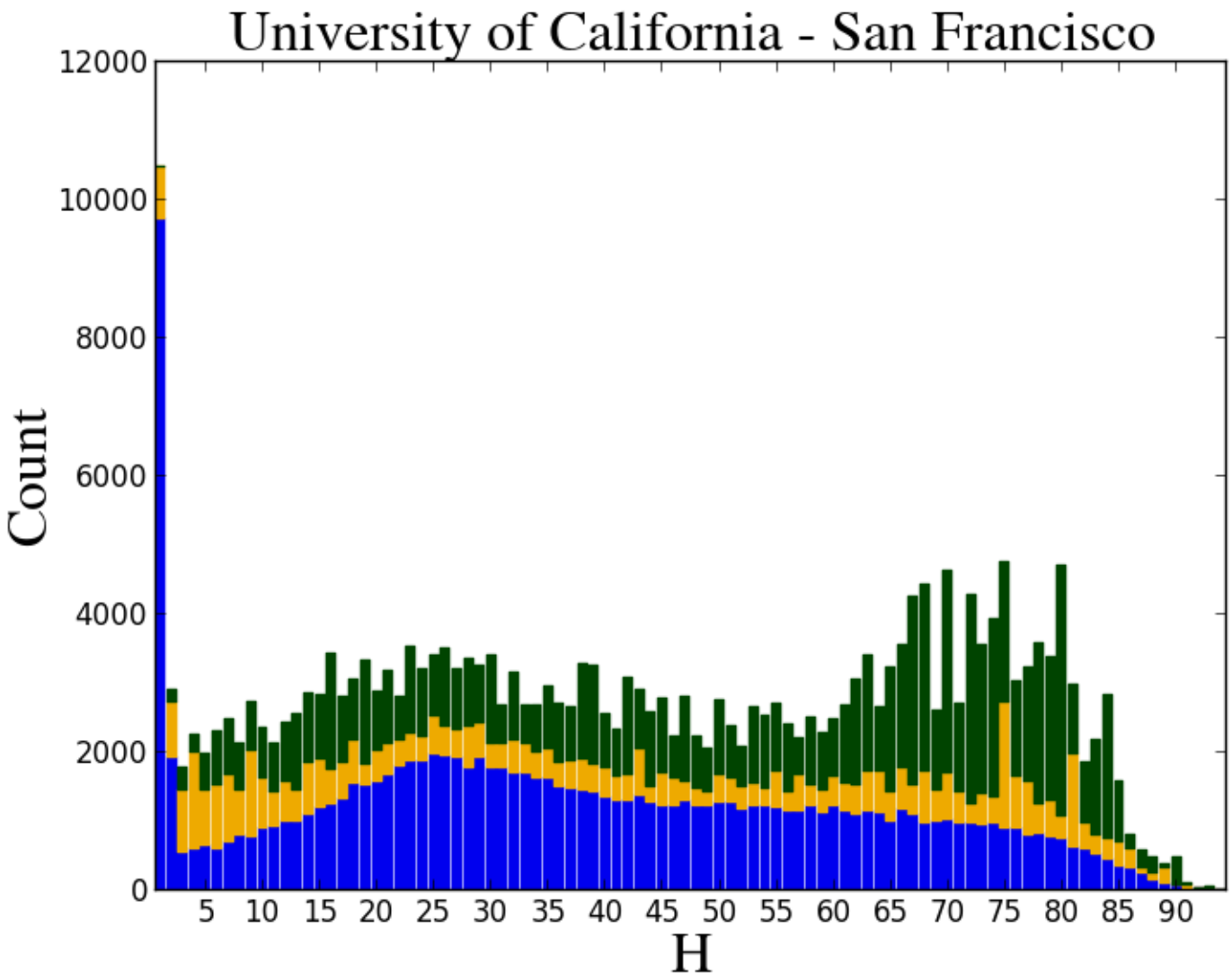
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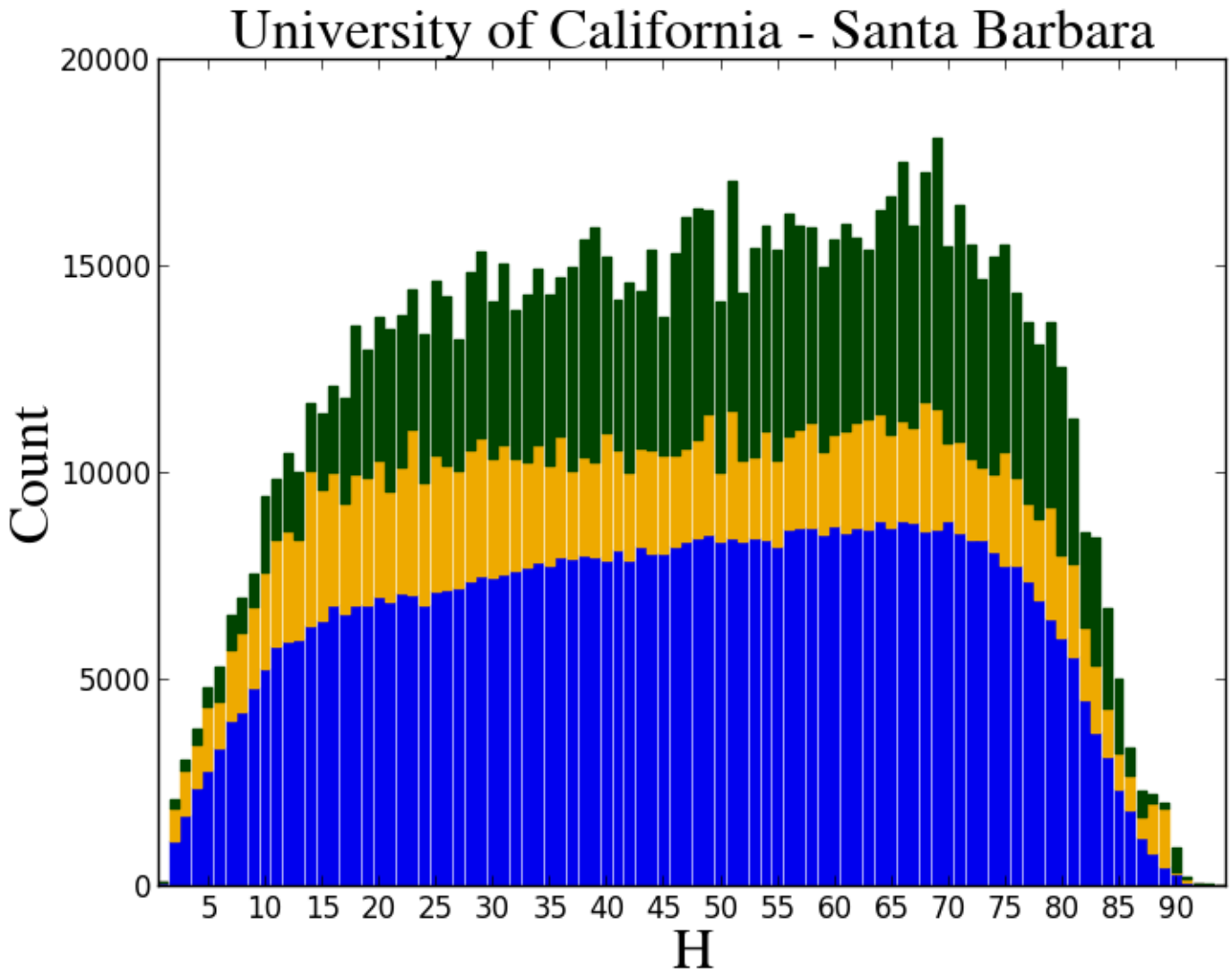
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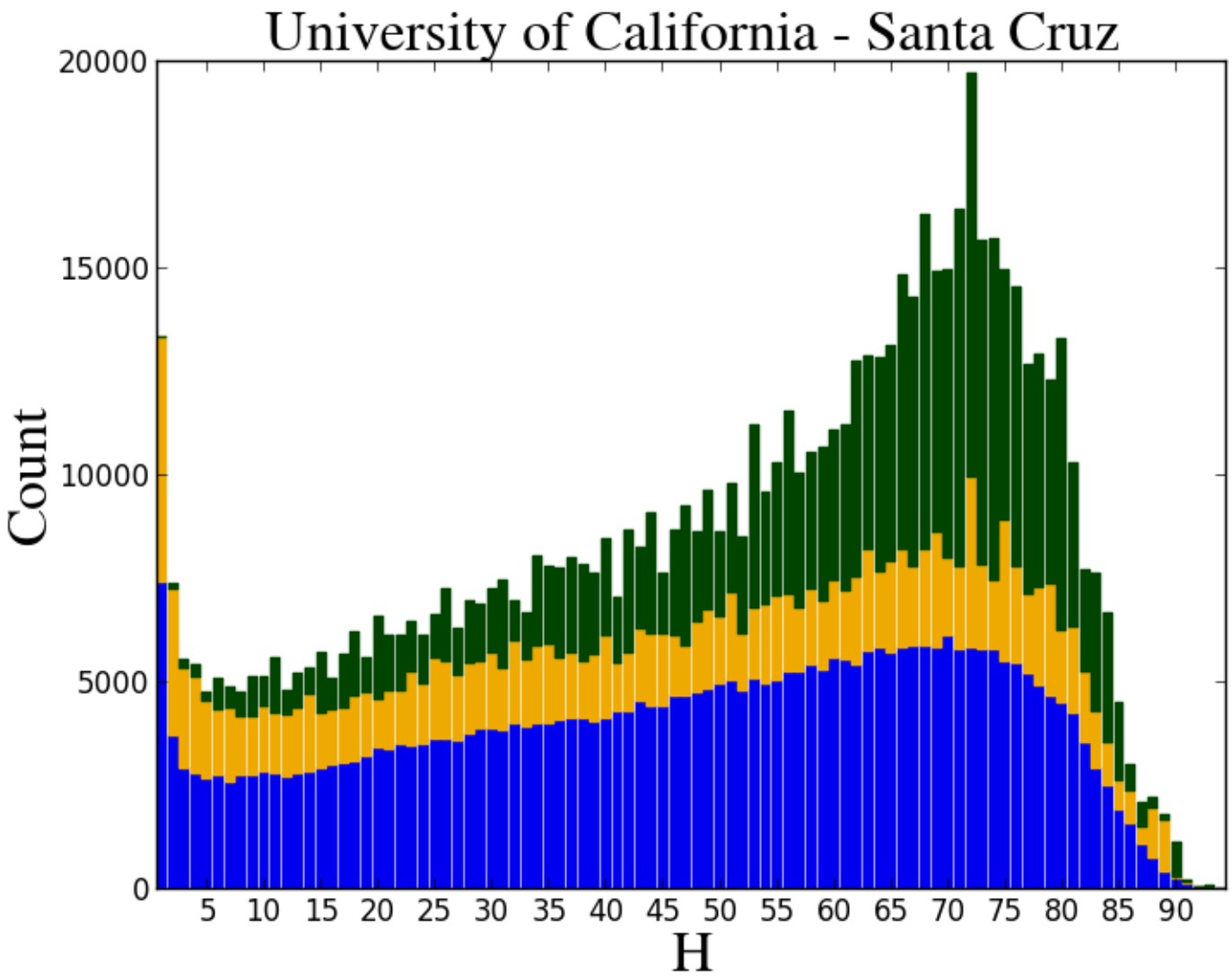
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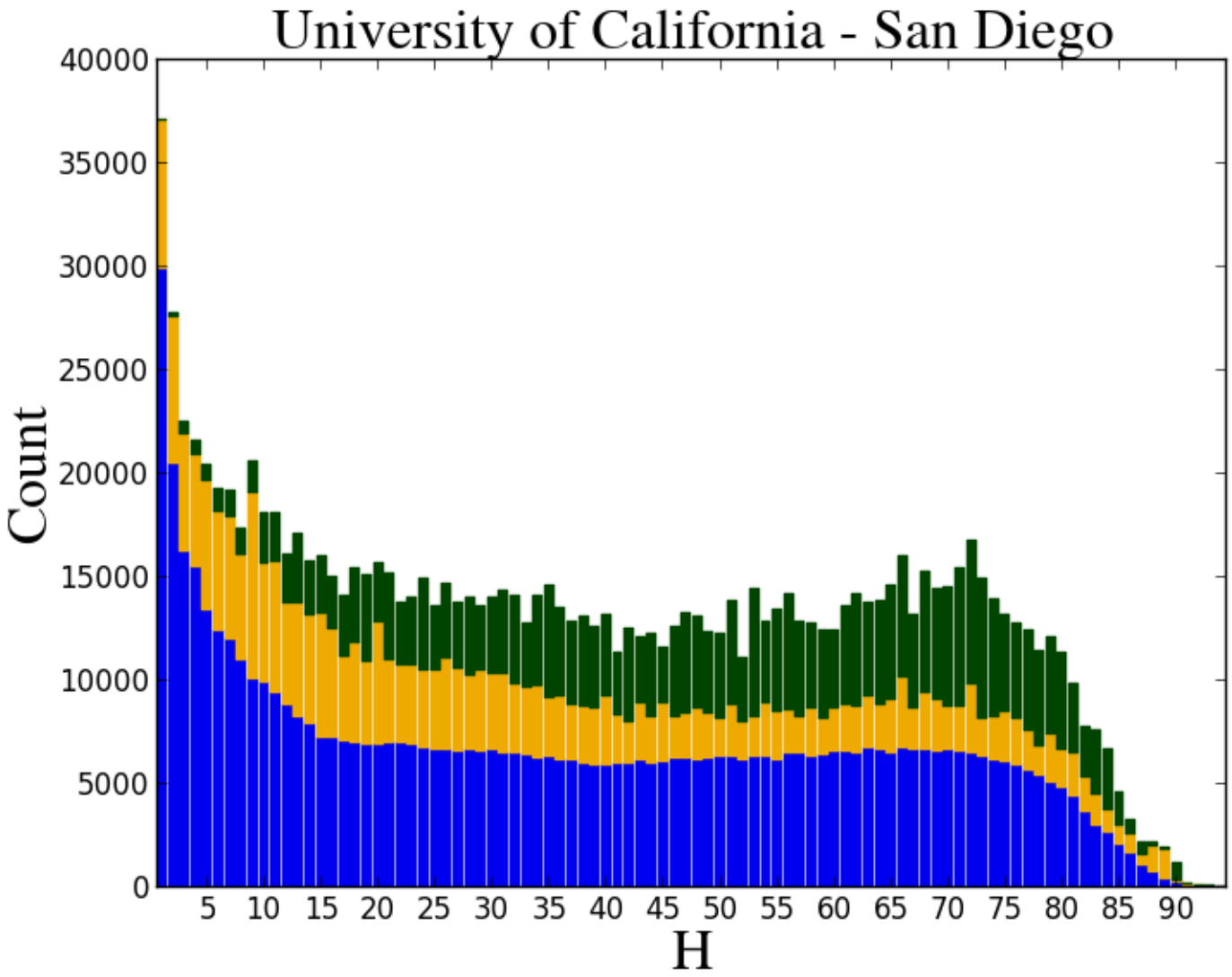
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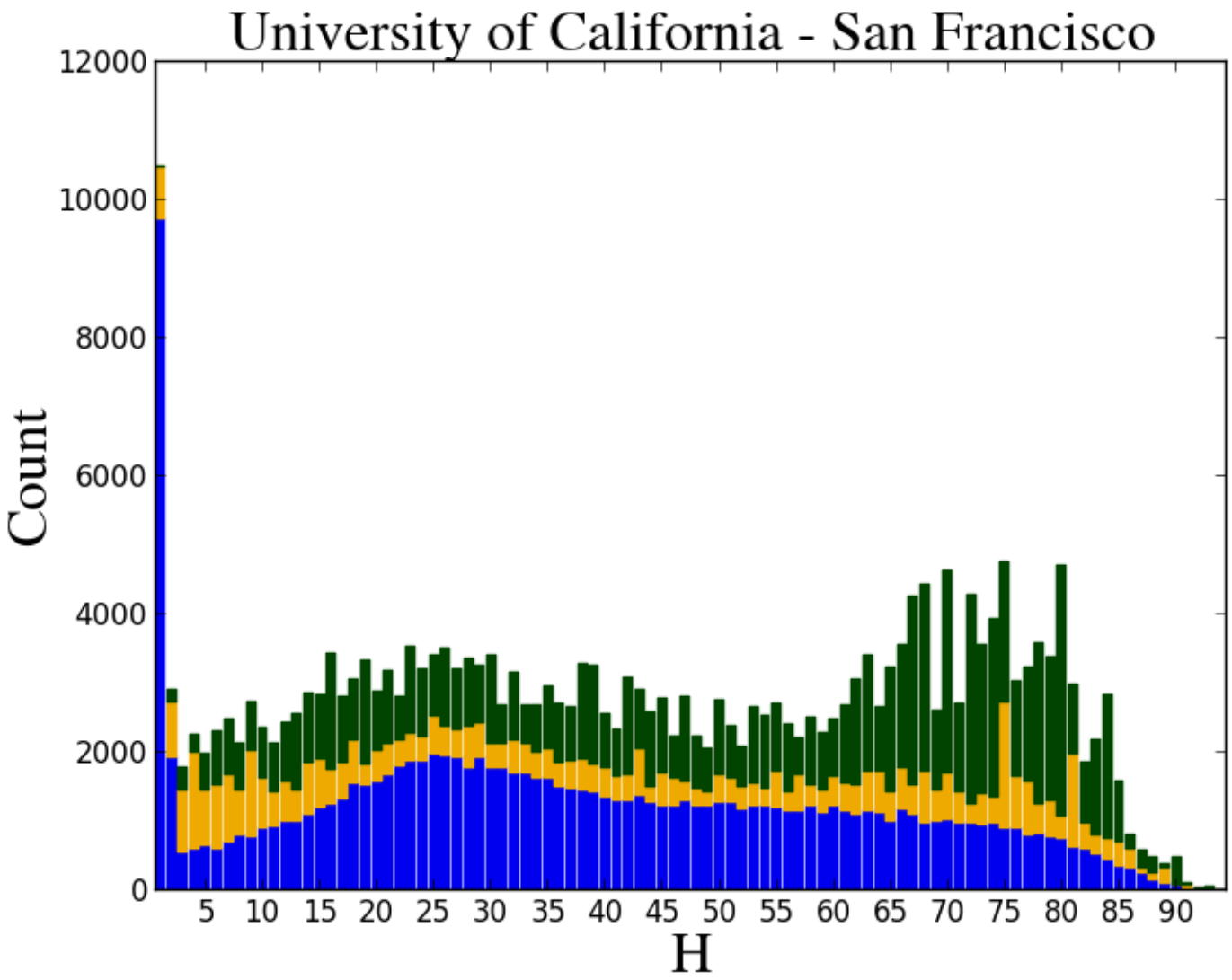
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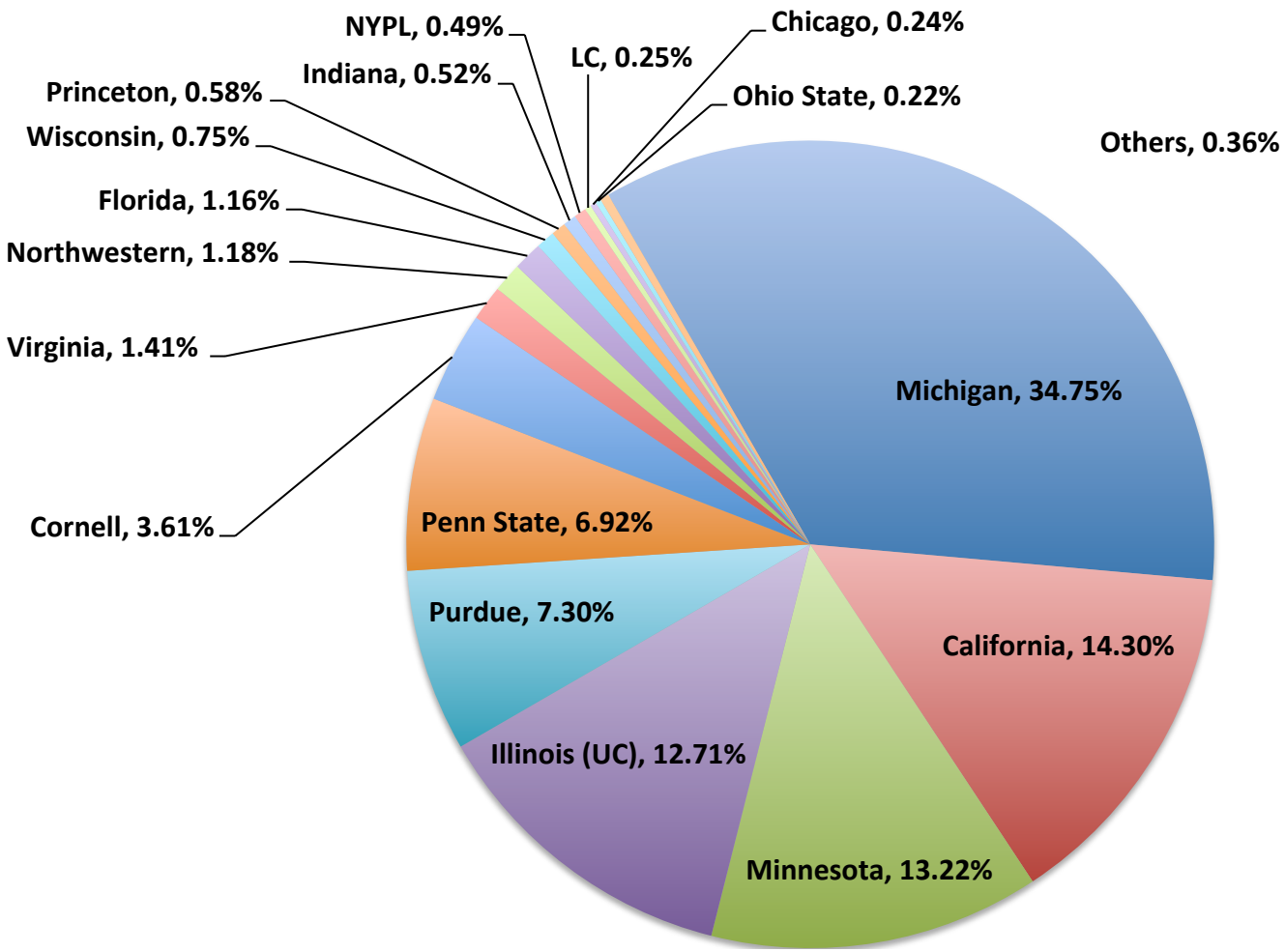
# Government Documents Initiative

- 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

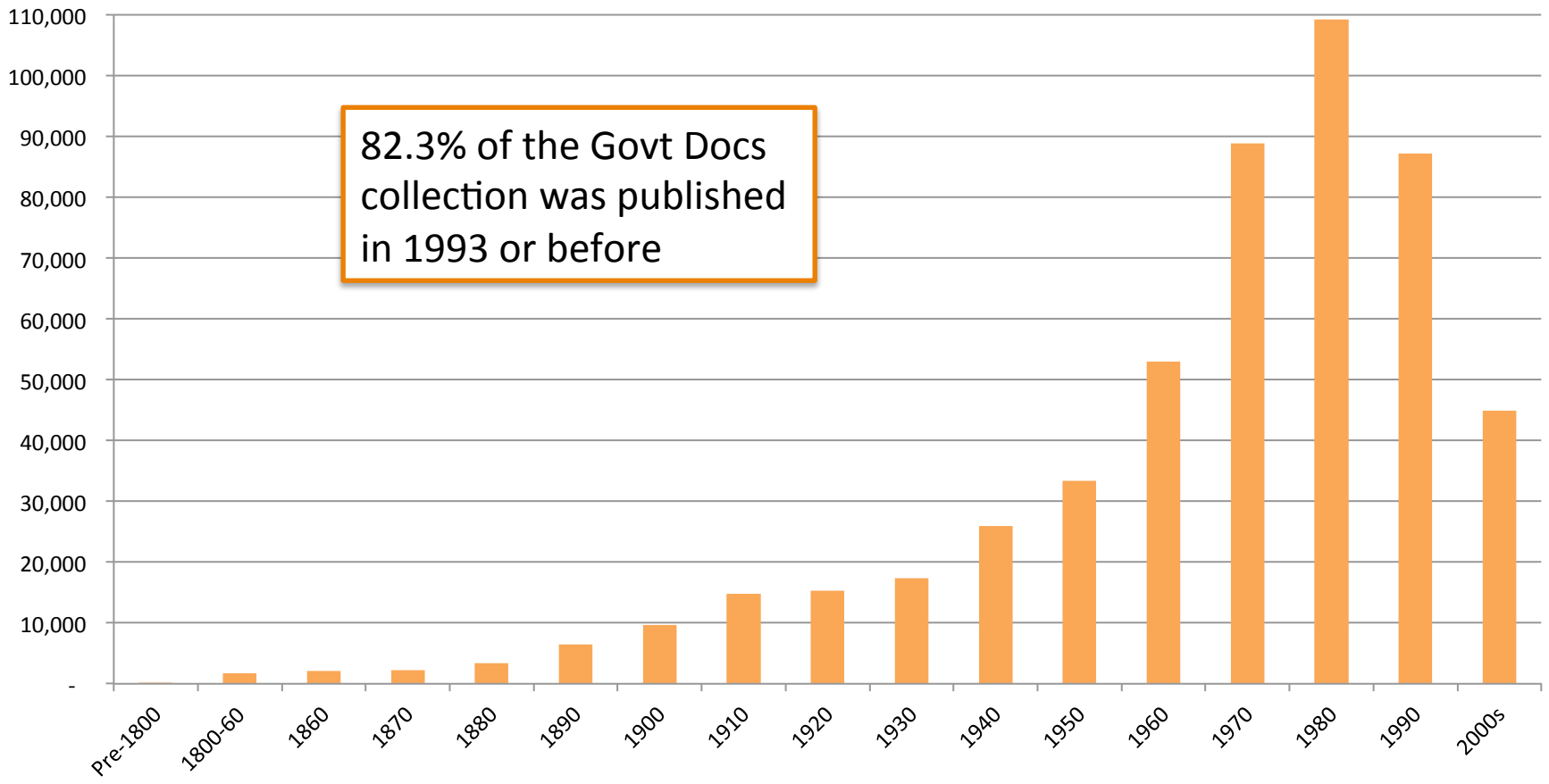


Photo detail from http://babel.hathitrust.org/cgi/pt?id=mdp.39015087610286;view=1up;seq=14

# US Gov't Publications by Source Library



# US Gov't Publications by Date



# 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.

# Initial Recommendations

- 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)

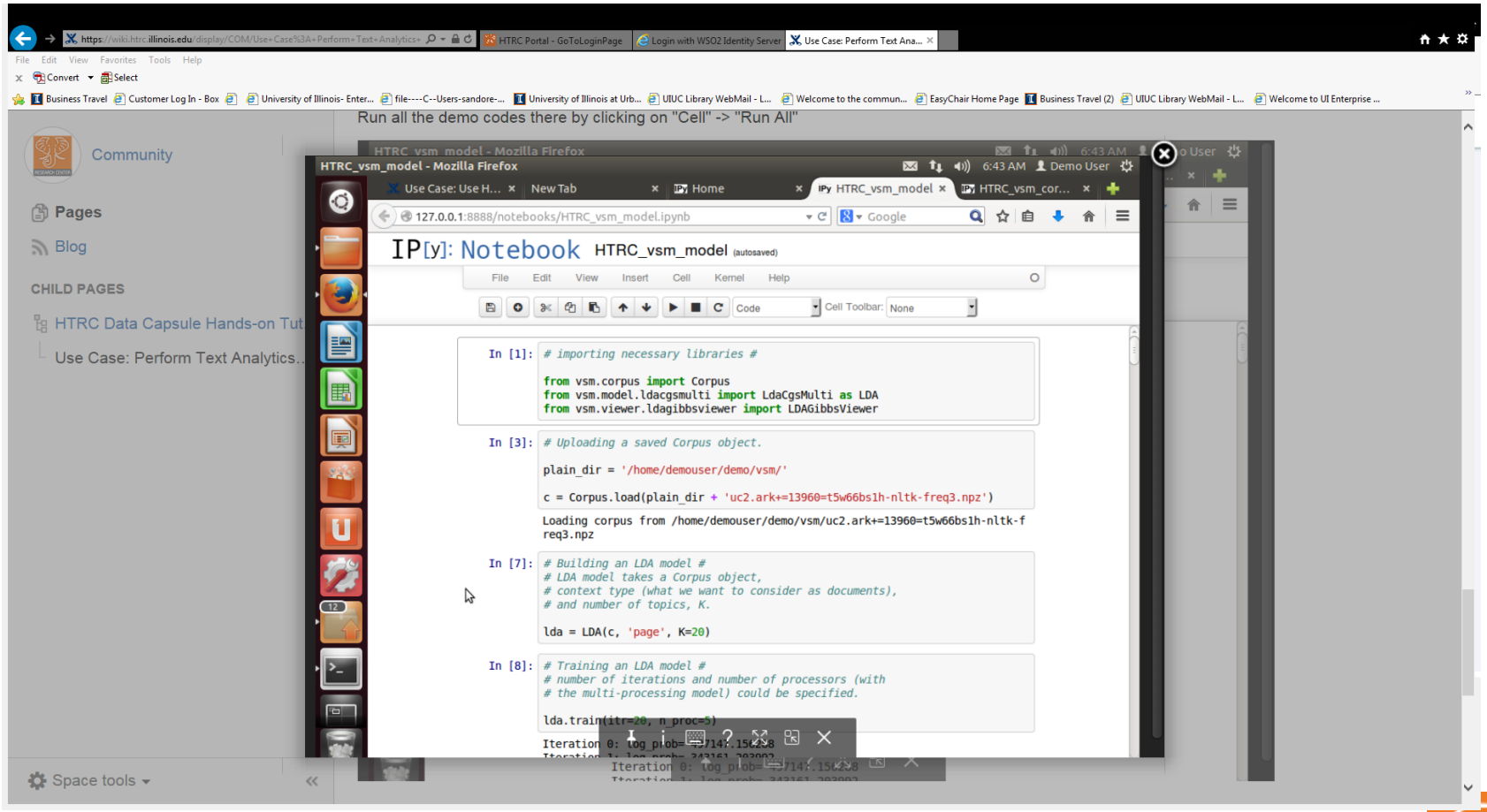
# Goals for HTRC

- 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 Library.

# Example Projects Supported by HTRC

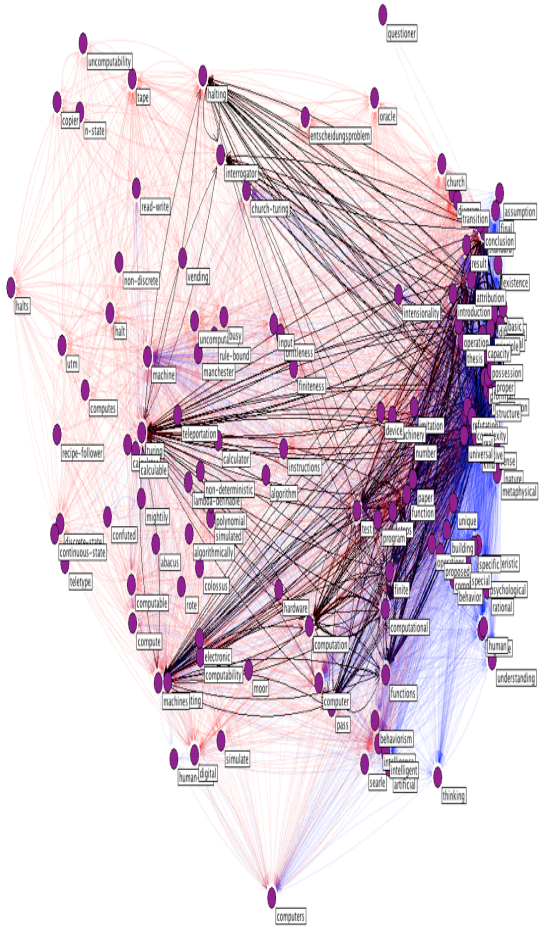
- Muñoz, Trevor, University of Maryland. "Distributed Metadata Correction and Annotation."
  - Correction, annotation and enhancement of HT records and export as linked data
- Page, Kevin, Oxford University. "ElEPHãT: Early English Print in HathiTrust, a Linked Semantic Workset Prototype"
  - Development 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

# Ballot Proposal: Approval Process Development Initiatives

- Goal: "…formalize a transparent process for inviting, evaluating, ranking, launching and assessing development initiatives from HathiTrust partner institutions."
- Issues
  - Determine threshold of resource need
  - Bi-directional process
  - Solicitation of statements of interest
- Referred to new Board for Implementation

# Current Status

- Assigned to Program Steering Committee, with discussion recently initiated.
- University of Michigan implementing an analogous internal process.
- HathiTrust staff ID short-term operational development while aligning these two processes.
  - Use previously vetted or understood strategic priorities to drive this process.

# Drivers to Set Immediate Priorities

- Improved user experience
  - Backlog of requested/vetted enhancements
  - Regular upgrades, problem fixes, etc
- Supports current initiatives
  - Registry project
  - GPO partnership
  - Research Center data transfers
- Positions us to improve service for users with Print Disabilities
  - Two factor authentication
- Positions us to expand service portfolio and the universe of what we collect.
  - Support for additional text formats, e.g., PDF, Epub, TEI.

# Issues Beyond Immediate Scope

- The following need broader discussion, and aren't ready for action
  - Support for different content types
    - Such as images, archival materials
  - Platform re-development/expansion
    - New/improved APIs, investigations of emergent repository techniques
  - Analytic services
    - Including collection analysis, intelligence tools

# Additional Pending Issues

- Program Steering Committee:
  - Reviewing working group recommendations
  - Quality metrics and assessment
  - Metadata policy and strategy
  - Additional content-types (non-text)?
- Collections Committee
  - Duplicates
  - Member survey
  - Content-types
  - Quality metrics and assessment

# 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!

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