

# “Social Machines”

## Opportunities and Challenges for Research Libraries

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University Librarian and Dean of the University Library

The University of Chicago



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Library

Jahrestagung des AK Bibliotheken der Leibniz-Gemeinschaft  
(online) keynote, September 07, 2022

Once upon a time



# The argument about the death of libraries

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## The Death of Libraries?

Digitization of print could reduce today's libraries to musty archives.

By TR Staff May 1, 2005

The end of libraries

James Thompson ▾

The Electronic Library  
ISSN: 0264-0473

Article publication date: 1 April 1983 [Reprints & Permissions](#)

DOWNLOADS  
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And so, with these things in mind, it's hard not to imagine a future where the majority of libraries cease to exist — at least as we currently know them. Not only are they being rendered obsolete in a digital world, the economics make *even less* sense. One can easily envision libraries making their way to the forefront of any budget cut discussions.

I know this sucks. Libraries have been an invaluable part of human history, propagating our culture and knowledge over centuries. But recognizing the changing times and pointing out the obvious shouldn't be considered blasphemy. It is what it is.

Informationsgewinnung

### Wozu noch Bibliotheken?

Das Informationsmonopol, das wissenschaftliche Bibliotheken jahrhundertlang hatten, ist gekippt. Wer heute rasch eine Information braucht, geht nicht mehr in eine Bibliothek, sondern benutzt eine Suchmaschine im Internet.

Von Michael Knoche | 17.12.2017

### Is the library dead? The answer is complicated

Laura Rosenfeld, Tech Times | 11 September 2014, 02:09 pm

*“I am still standing”*



# The actual death of the (public) library

According to the Chartered Institute of Public Finance and Accountancy, national spending on the library service topped £1bn in 2009/10 but **dropped to under £750m** by 2019/20. This has coincided with the **closure of some 773 library branches**. [...]

It has been suggested that libraries have found themselves in a **vicious circle of low funding**, causing the provision of a poorer service, leading in turn to further diminishing popularity with the public. [...]

By contrast, others point out that the decline in library usage, and thus the potential waning of the traditional library model, is more the **inevitable consequence of modern behavioral trends**.

<https://www.politics.co.uk/reference/public-libraries/>



# Is it inevitable, is it just about the digital shift?

Libraries are dying - but it's not about the books

*Simon Jenkins*



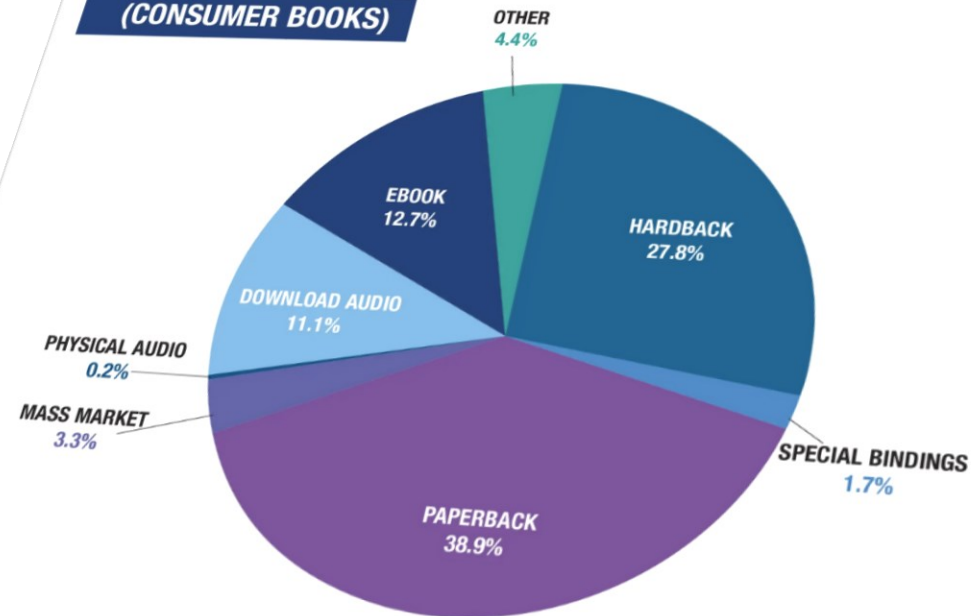
The internet stole the monopoly on knowledge but it can't recreate a sense of place. Revival is possible



▶ 'The library must rediscover its specialness. This must lie in exploiting the strength of the post-digital age, the 'age of live.' Illustration: Ellie Foreman

## PERCENTAGE OF TOTAL TRADE SALES IN JUNE 2022 (BY FORMAT)

(CONSUMER BOOKS)



**AAP** ASSOCIATION OF AMERICAN PUBLISHERS



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Library

# What about academic libraries though?

THE REVIEW



## Academic Library Autopsy Report, 2050

By *Brian T. Sullivan* | JANUARY 2, 2011

*“Insensible of mortality, and desperately mortal.”*

—Shakespeare

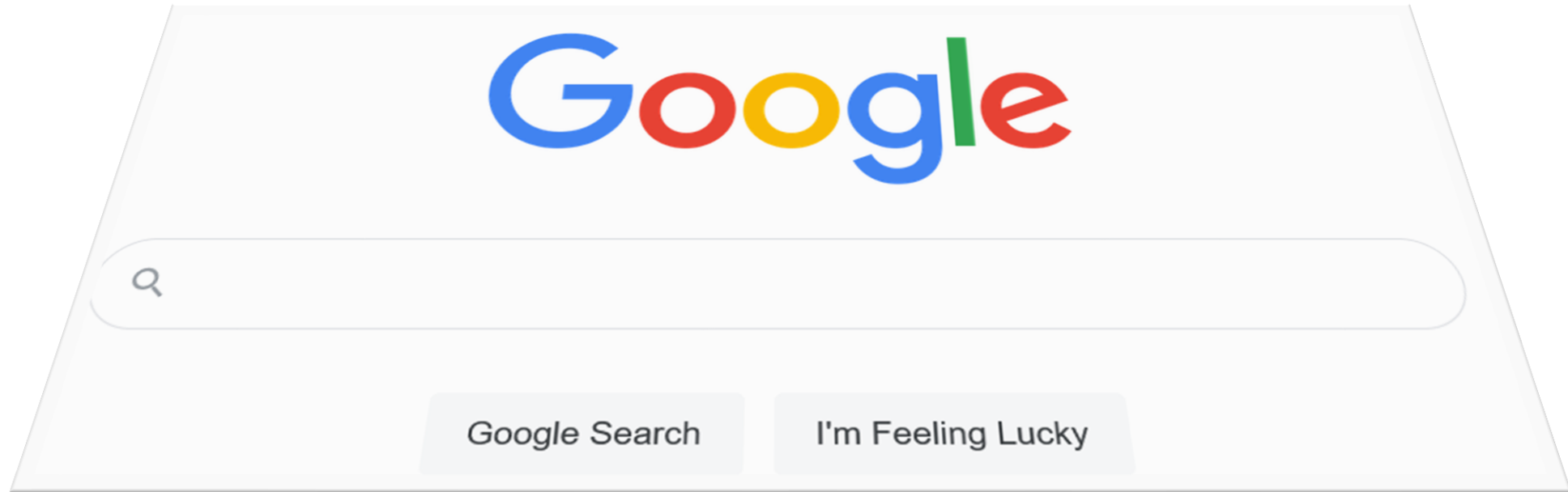
The academic library has died. Despite early diagnosis, audacious denial in the face of its increasingly severe symptoms led to its deterioration and demise. The academic library died alone, largely neglected and forgotten by a world that once revered it as the heart of the university. On its deathbed, it could be heard mumbling curses against Google and something about a bygone library guru named Ranganathan.



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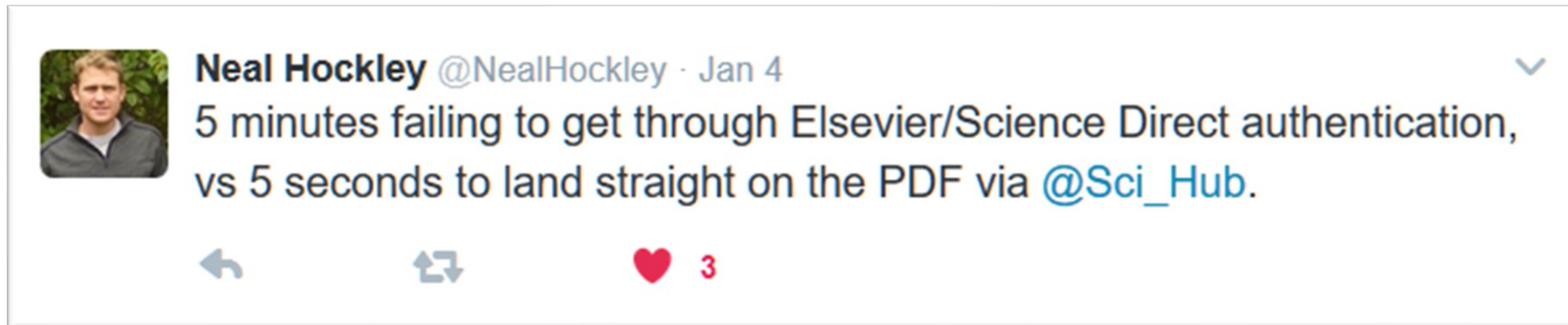
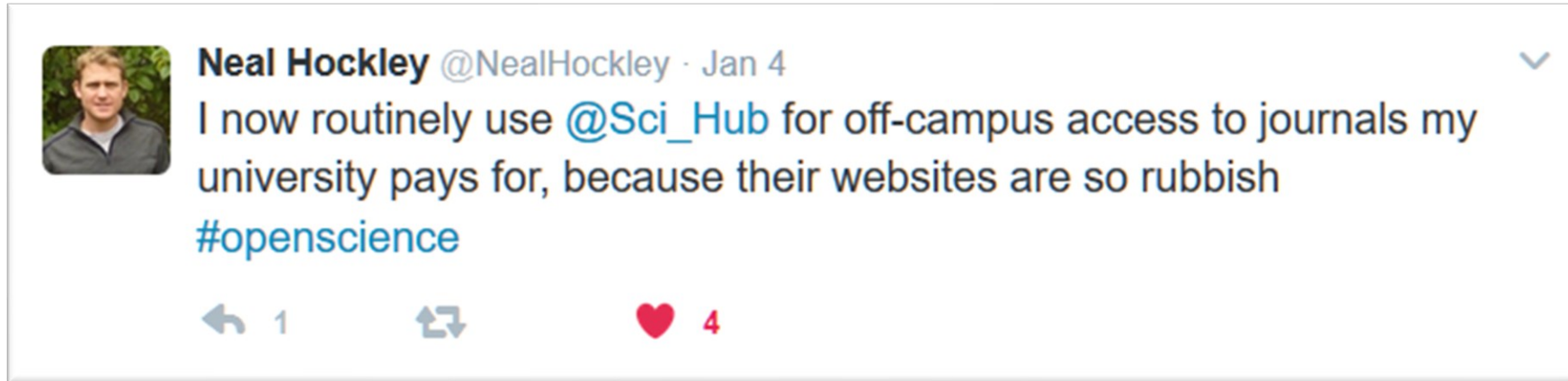
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# Discovery – no longer in the library

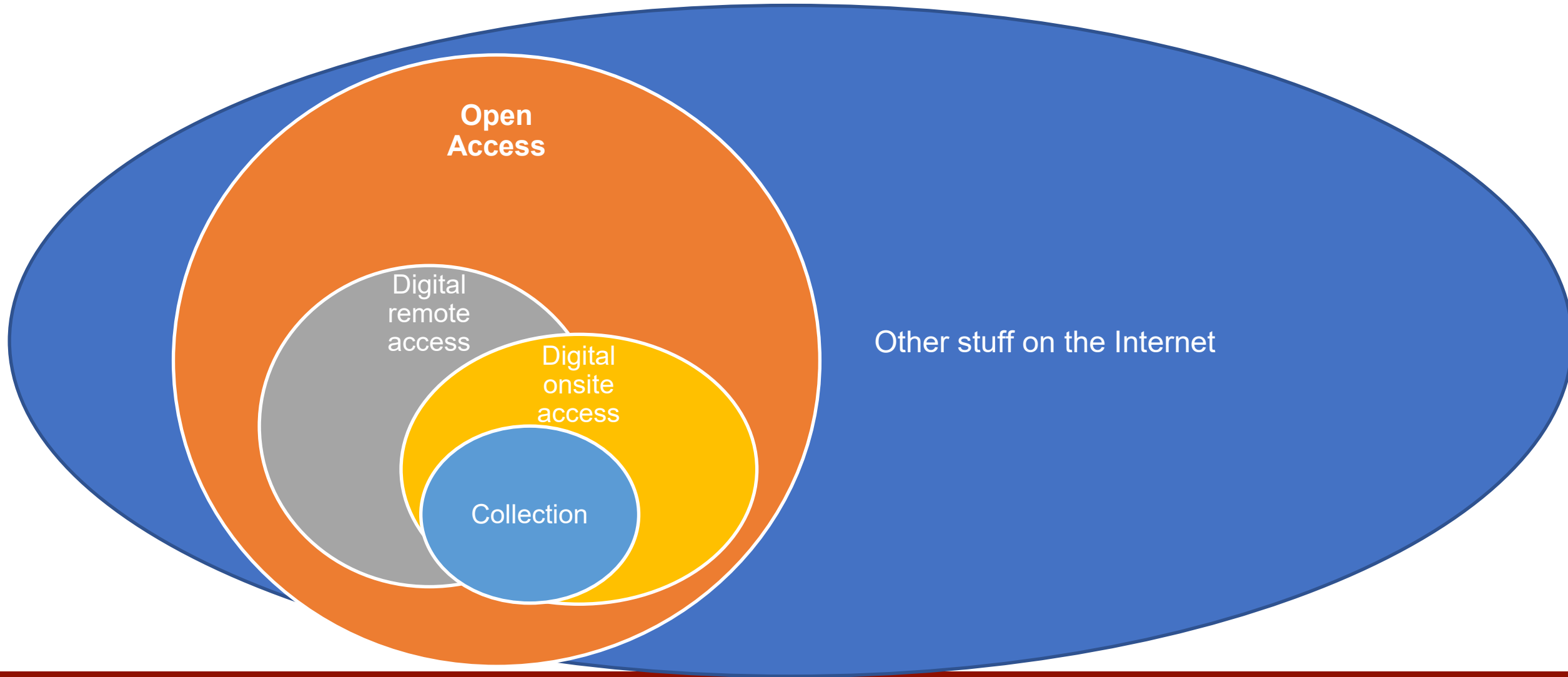




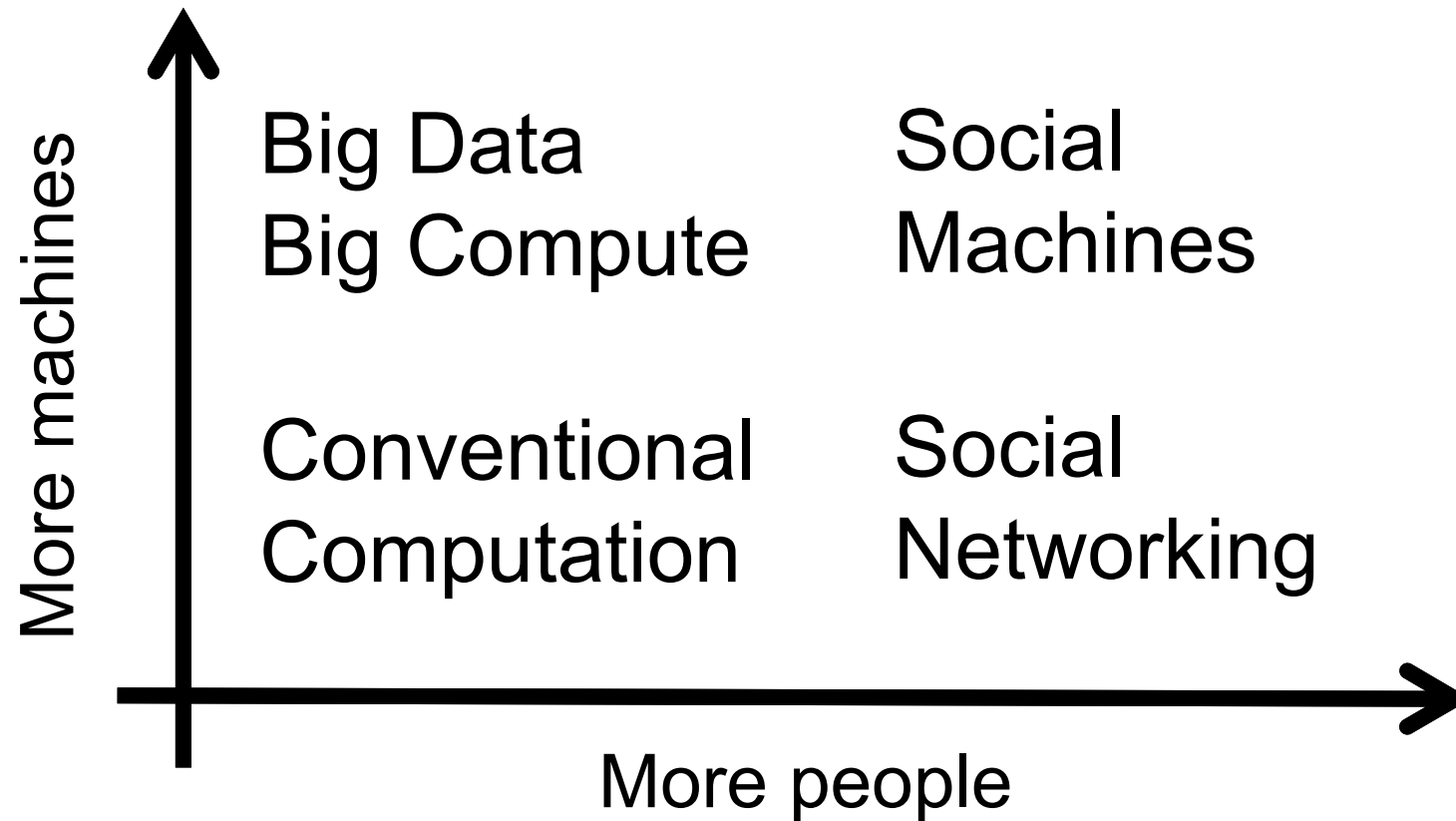
# User experience failures



# Our collections are shrinking



# Libraries and computational research?



[Dave de Roure](#), Oxford



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# Solution: a new model ~~army~~ library, pt1

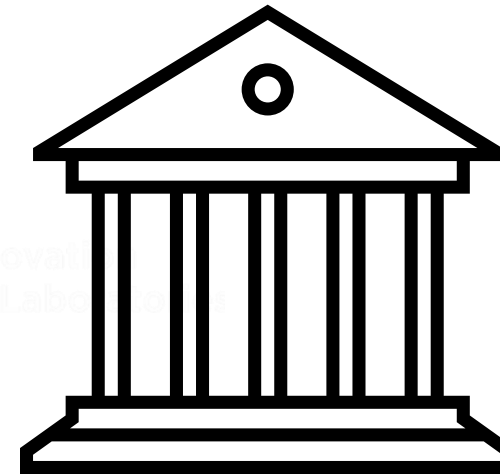
Publishers



Collecting



Archival



University



# Solution: a new model ~~army~~ library, pt2

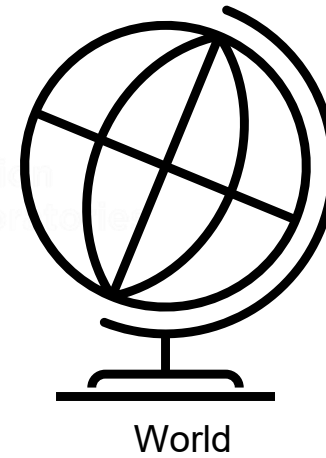
Academics



Students



Partners



A simple transition to a new model?

# Open access...what will be the role of libraries though?

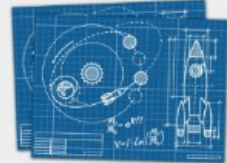
## "Unpaywall is transforming Open Science"

—Nature feature article, August 2018

### Used and trusted by top organizations



We're integrated into thousands of library systems, search platforms, and other information products worldwide. In fact, if you're involved in scholarly communication, there's a good chance you've already used Unpaywall data.



### Open Source and nonprofit

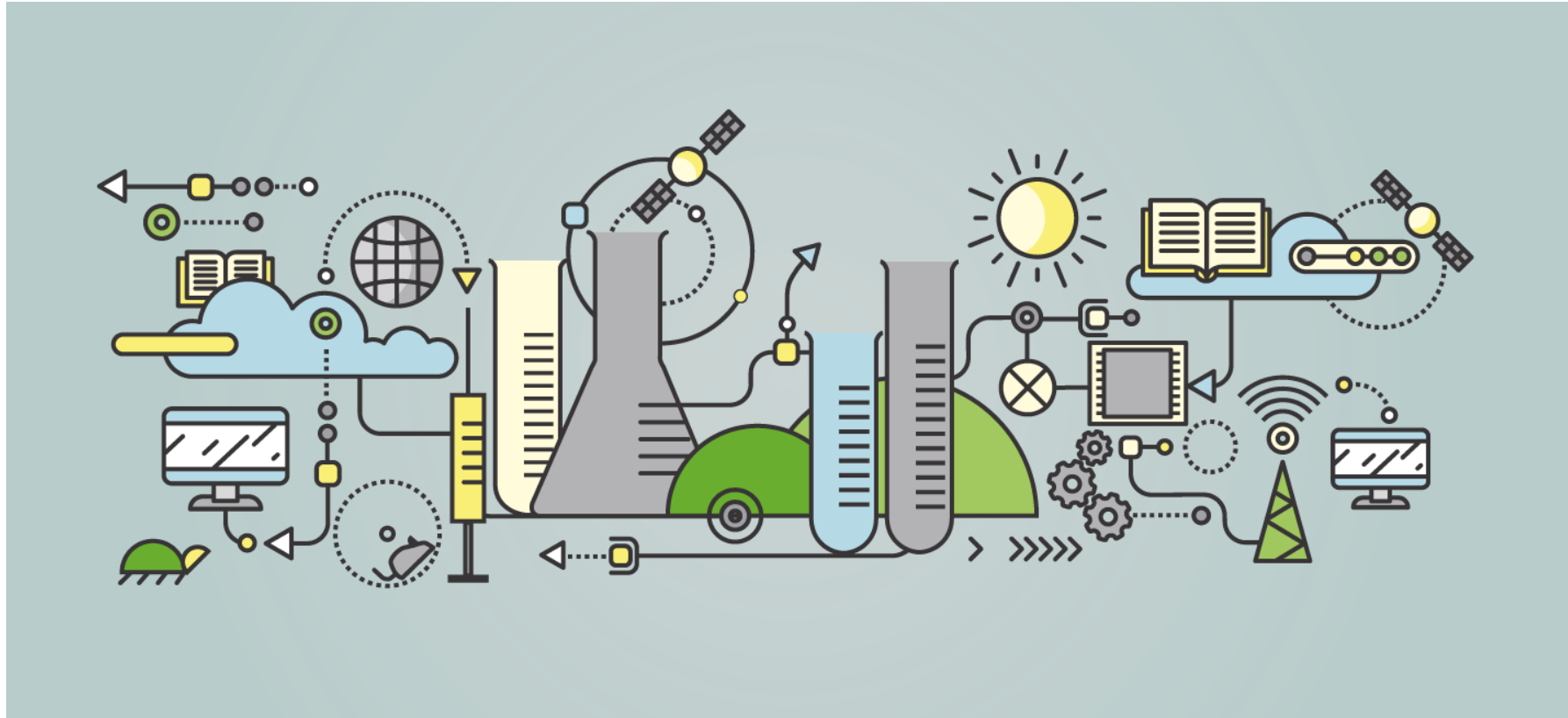
Unpaywall is run by Impactstory, a nonprofit dedicated to making scholarship more accessible to everyone. Open is our passion. So it's only natural our source code is open, too.

### Easy access for everyone

We've helped with projects ranging from undergrad class assignments to global enterprise integrations. So no matter what your use case, we've probably got an easy way for you to access our data...after all, access is what this is all about.



# Open science – can we really support it?



<https://about.hindawi.com/blog/a-radically-open-approach-to-developing-infrastructure-for-open-science/>





# Persistent identifiers: end of local data?



## The PID Graph



One of the key goals of FREYA was to connect new and existing persistent identifier (PID) services to make the most of the information available in different PID systems. PIDs are not only important to uniquely identify a publication, dataset, or person, but the metadata for these persistent identifiers can provide unambiguous linking between persistent identifiers of the same type, e.g. journal articles citing other journal articles, or of different types, e.g. linking a researcher and the datasets they produced.



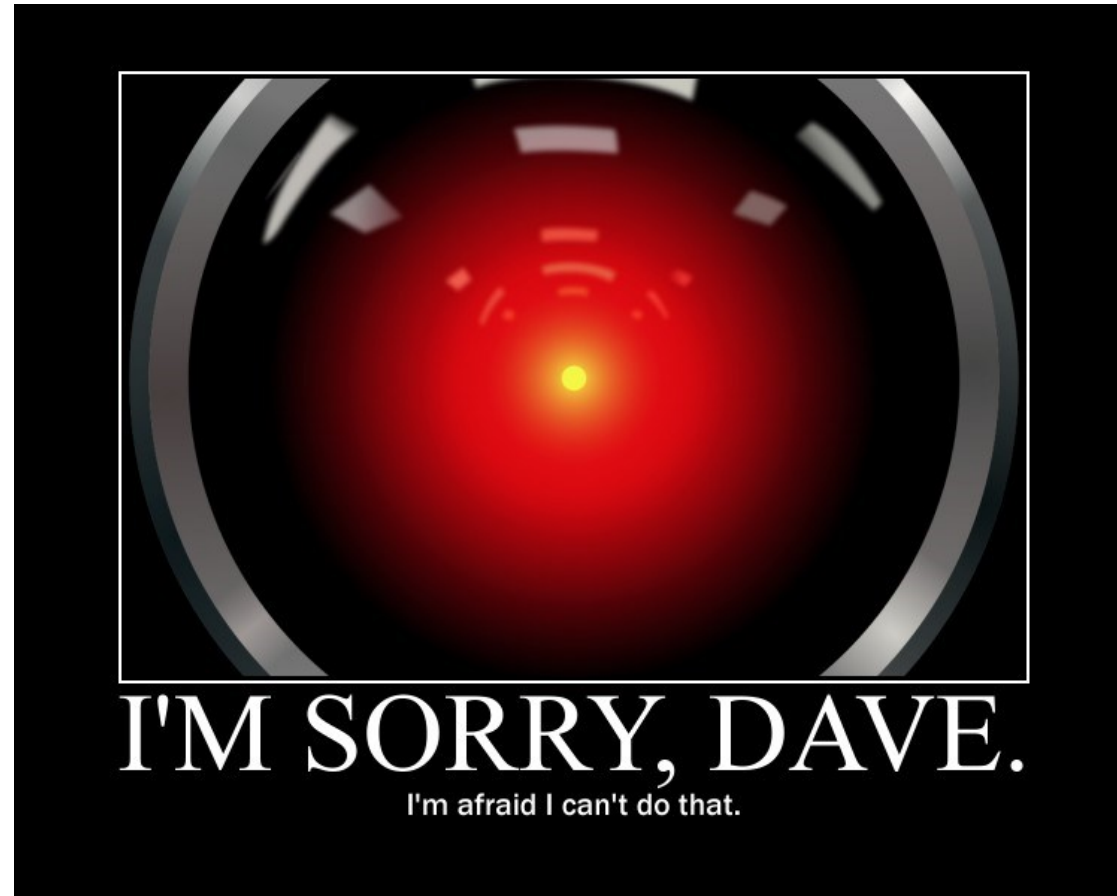
# Our #1 UI will be for software not people



[https://en.wikipedia.org/wiki/File:Card\\_puncher\\_-\\_NARA\\_-\\_513295.jpg](https://en.wikipedia.org/wiki/File:Card_puncher_-_NARA_-_513295.jpg)



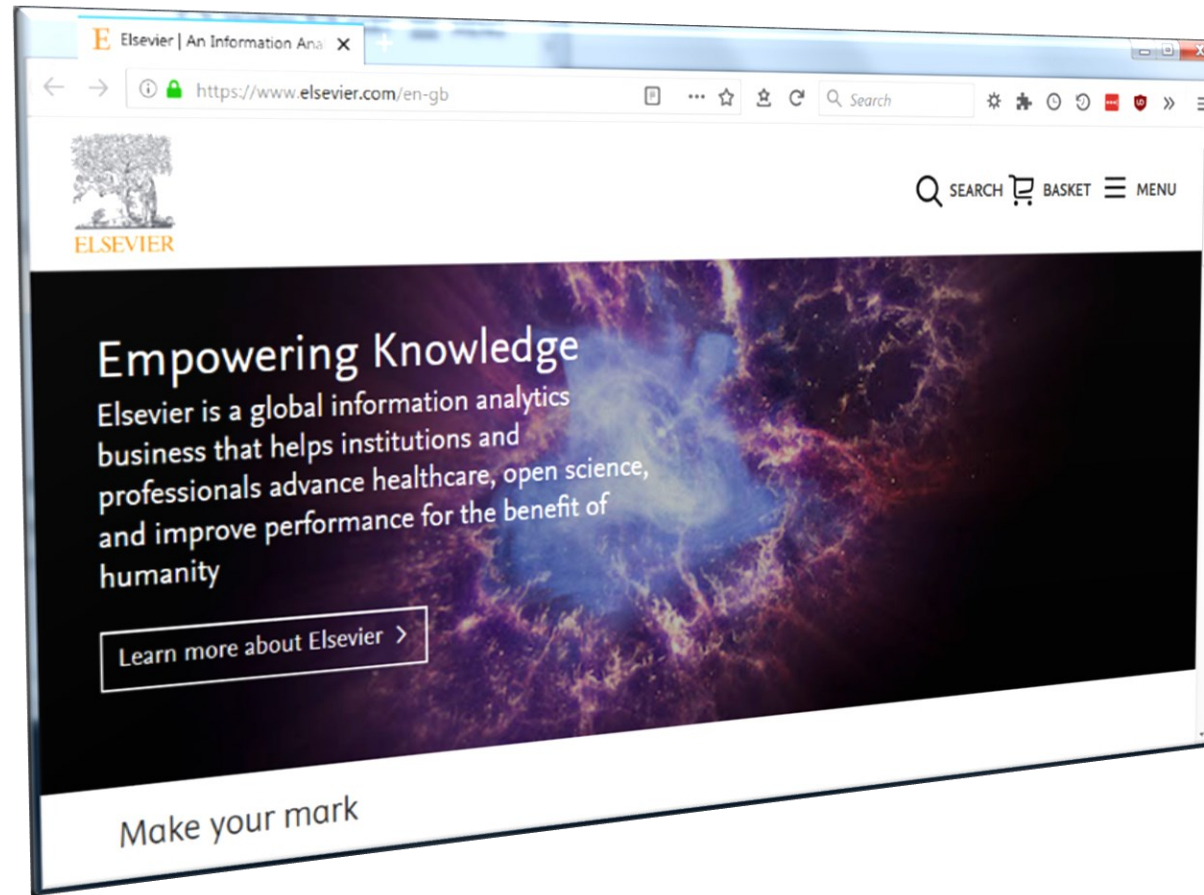
# Algorithms will manage our content



[https://commons.wikimedia.org/wiki/File:Motivator\\_HAL\\_9000\\_soory\\_dave.jpg](https://commons.wikimedia.org/wiki/File:Motivator_HAL_9000_soory_dave.jpg) CC BY 3.0



# Big publishers reborn as data companies



# A negative view on our future role

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- Role in discovery, access and managing content might be reduced
- We will procure, not run services and our information will be in the cloud
- Most of our digital services will actually be provided by a just few service providers
- Our role in open science services may be smaller than we expect
- Repositories could disappear behind commercial discovery layers
- Algorithms will control our content – and we won't control or even understand them

=> Loss of control and transparency



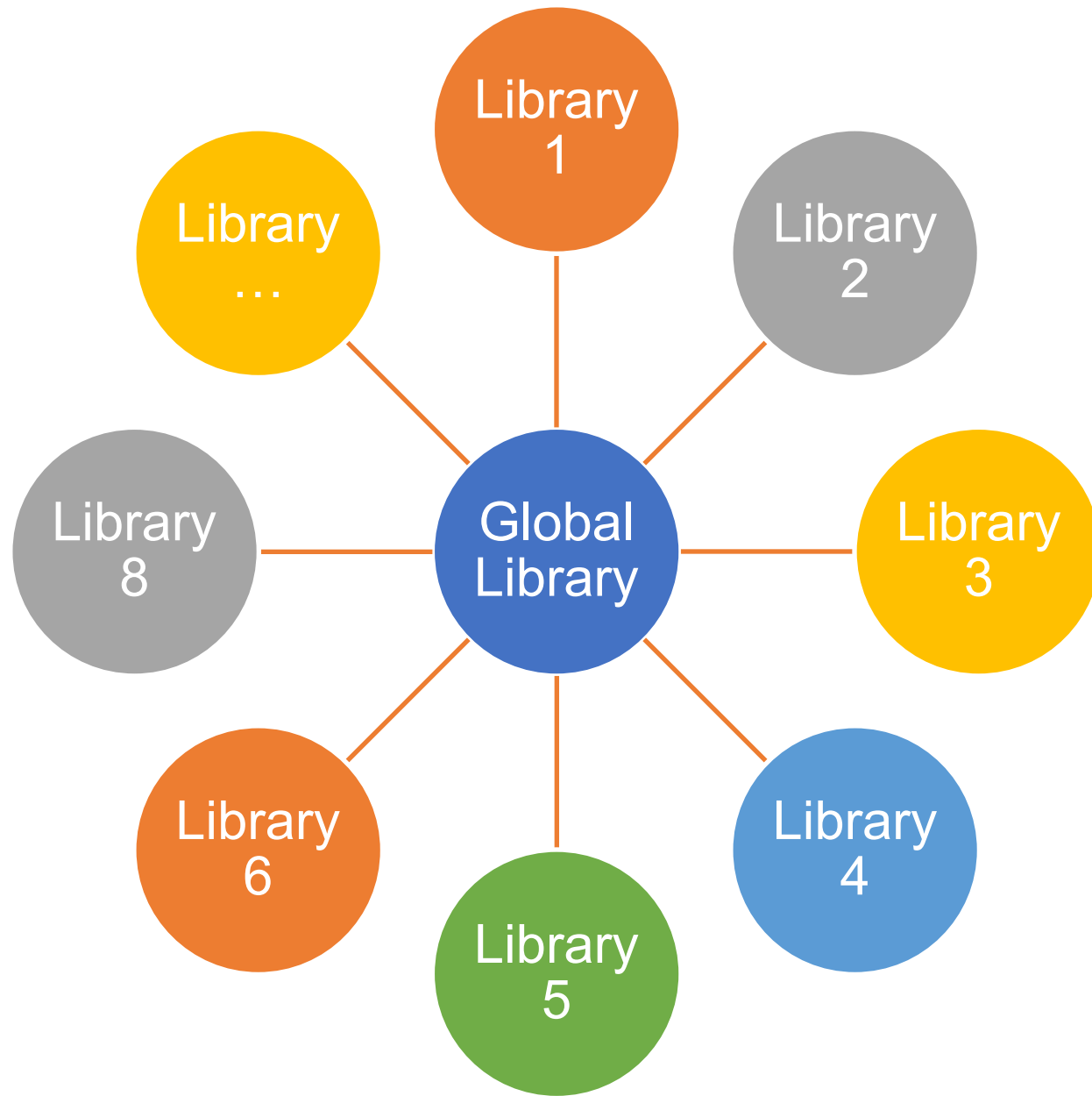
What to do about it?

# Collective action



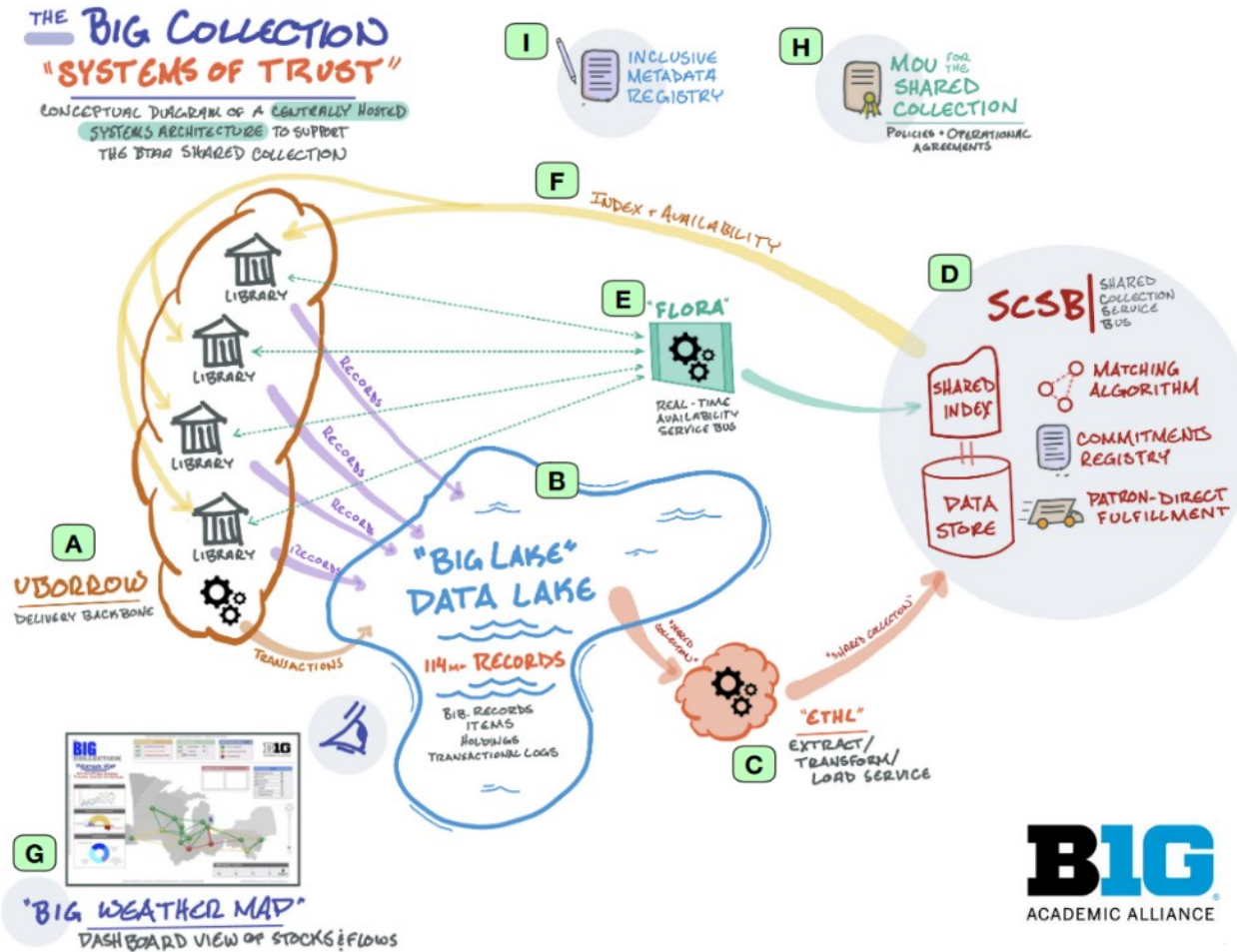
Photo by Alex Garland, shared CC By 2.0 by Backbone Campaign







# Example: BIG Collection



BIG 10 Academic Alliance (BTAA)

Member Libraries:

[University of Chicago](#)

[University of Illinois](#)

[Indiana University](#)

[University of Iowa](#)

[University of Maryland](#)

[University of Michigan](#)

[Michigan State University](#)

[University of Minnesota](#)

[University of Nebraska-Lincoln](#)

[Northwestern University](#)

[The Ohio State University](#)

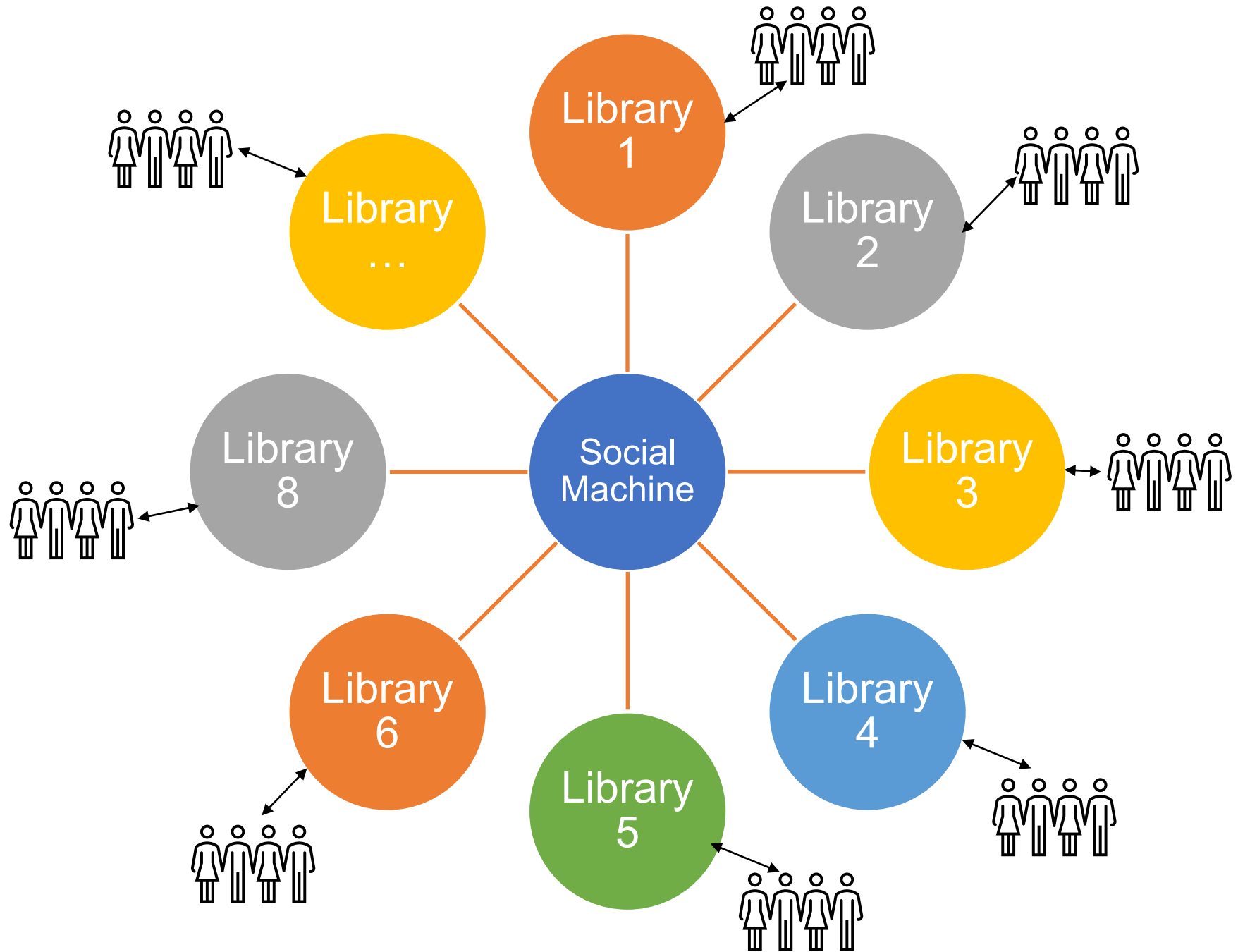
[The Pennsylvania State University](#)

[Purdue University](#)

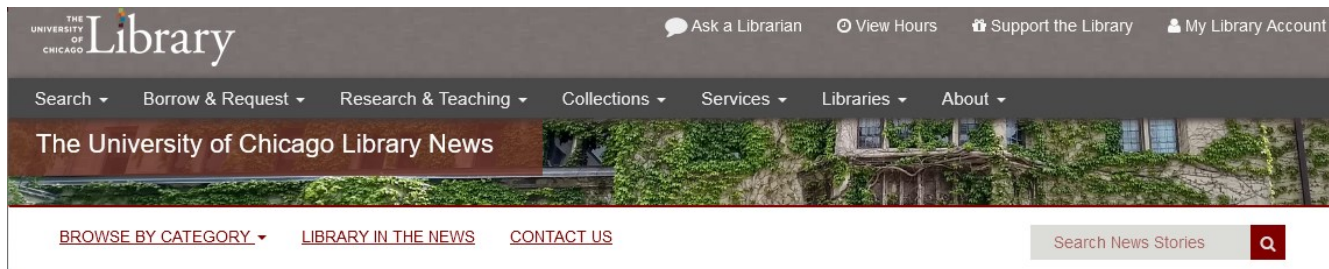
[Rutgers University](#)

[University of Wisconsin-Madison](#)

Image © Maurice York, Director of Library Initiatives at BTAA



# Community partners – libraries as campus interfaces and more



## How the Black Metropolis Research Consortium is transforming the field of African American history

Posted on Aug 30, 2022, by Tori Lee, the University of Chicago

Exhibition showcases UChicago-based organization documenting Black life and fostering the next generation of researchers



### WORKSHOPS & EVENTS

[OCT 12, 2022: DISSERTATION PROCEDURES FOR STUDENTS](#)  
Oct 12, 2022 | 10:00 am - 11:00 am

[OCT 27, 2022: DISSERTATION PROCEDURES FOR STUDENTS](#)  
Oct 27, 2022 | 3:00 pm - 4:00 pm

[View full calendar »](#)

### PRINT

[Libra \(newsletter\)](#)

### MEDIA CONTACT

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[rosenberg@uchicago.edu](mailto:rosenberg@uchicago.edu)



# Information literacy, skills and inclusion



# Building a global library social machine

