Unpaywall

Heather Piwowar

@researchremix

Our Research

inspired by Open Repositories 2019

https://lecture2go.uni-hamburg.de/l2go/-/get/v/24979

can't out-Google Google

but the thing is: we did.

together, because Unpaywall is the result of the work of everyone in this (webinar) room, we did.

Much of Unpaywall approach and early code based on:
BASE
dissemin
Open Access Button

Currently uses data from:
Crossref
DOAJ
PubMed
EuropePMC
and thousands of OAI-PMH repos!

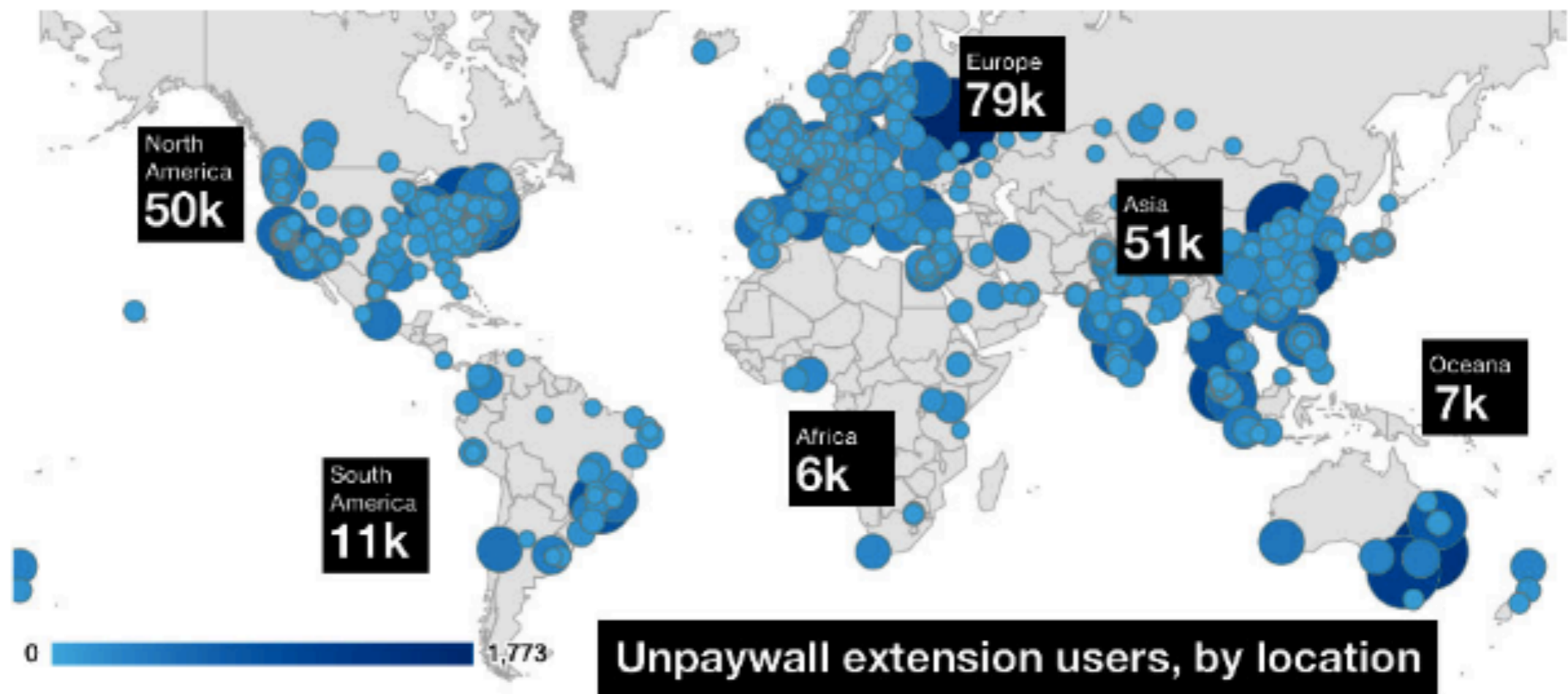# An open database of 23,441,938 free scholarly articles.

We harvest Open Access content from over 50,000 publishers and repositories, and make it easy to find, track, and use.

LEARN MORE   GET THE EXTENSION

Unpaywall extension adds 200,000th active user

≡ We're thrilled to announce that we're now supporting over 200,000 active users of the Unpaywall extension for Chrome and Firefox!

North America 50k

Europe 79k

Asia 51k

Oceana 7k

Africa 6k

South America 11k

0 — 1,773

Unpaywall extension users, by location

Articles

About 3,140,000 results (0.04 sec)

My profile   My library

Any time
Since 2018
Since 2017
Since 2014
Custom range...

Sort by relevance
Sort by date

☑ include patents
☑ include citations

✉ Create alert

Climate change effects on plant disease: genomes to ecosystems

KA Garrett, SP Dendy, EE Frank... - Annu. Rev ..., 2006 - annualreviews.org

Research in the **effects** of **climate change** on plant disease continues to be limited, but some striking progress has been made. At the genomic level, advances in technologies for the high-throughput analysis of gene expression have made it possible to begin discriminating ...

☆ 🔖 Cited by 687   Related articles   All 16 versions

[PDF] vt.edu

[BOOK] Biotic interactions and global **change**

PM Kareiva, JG Kingsolver, RB Huey - 1993 - osti.gov

... The conference was divided into six parts as follows: patterns and determinants of **climate** and landscape **change**; physiology and population responses to environmental **change**; evolutionary responses to environmental **change**; community responses to environmental **change** ...

☆ 🔖 Cited by 312   Related articles   »

Model-based assessments of **climate change effects** on forests: a critical review

C Loehle, D LeBlanc - Ecological modelling, 1996 - Elsevier

While current projections of future **climate change** associated with increases in atmospheric greenhouse gases have a high degree of uncertainty, the potential **effects** of **climate change** on forests are of increasing concern. A number of studies based on forest simulation models ...

☆ 🔖 Cited by 353   Related articles   All 12 versions

[PDF] psu.edu

Climate change effects on fishes and fisheries: towards a cause-and-effect understanding

HO Pörtner, MA Peck - Journal of fish biology, 2010 - Wiley Online Library

Ongoing **climate change** is predicted to affect individual organisms during all life stages, thereby affecting populations of a species, communities and the functioning of ecosystems. These **effects** of **climate change** can be direct, through changing water temperatures and ...

☆ 🔖 Cited by 445   Related articles   All 16 versions

[PDF] semanticscholar.org

Unpaywall is currently used by:

Web of Science
Scopus
Europe PMC
Dimensions
Lens
OCLC
ProQuest
EBSCO
Kopernio
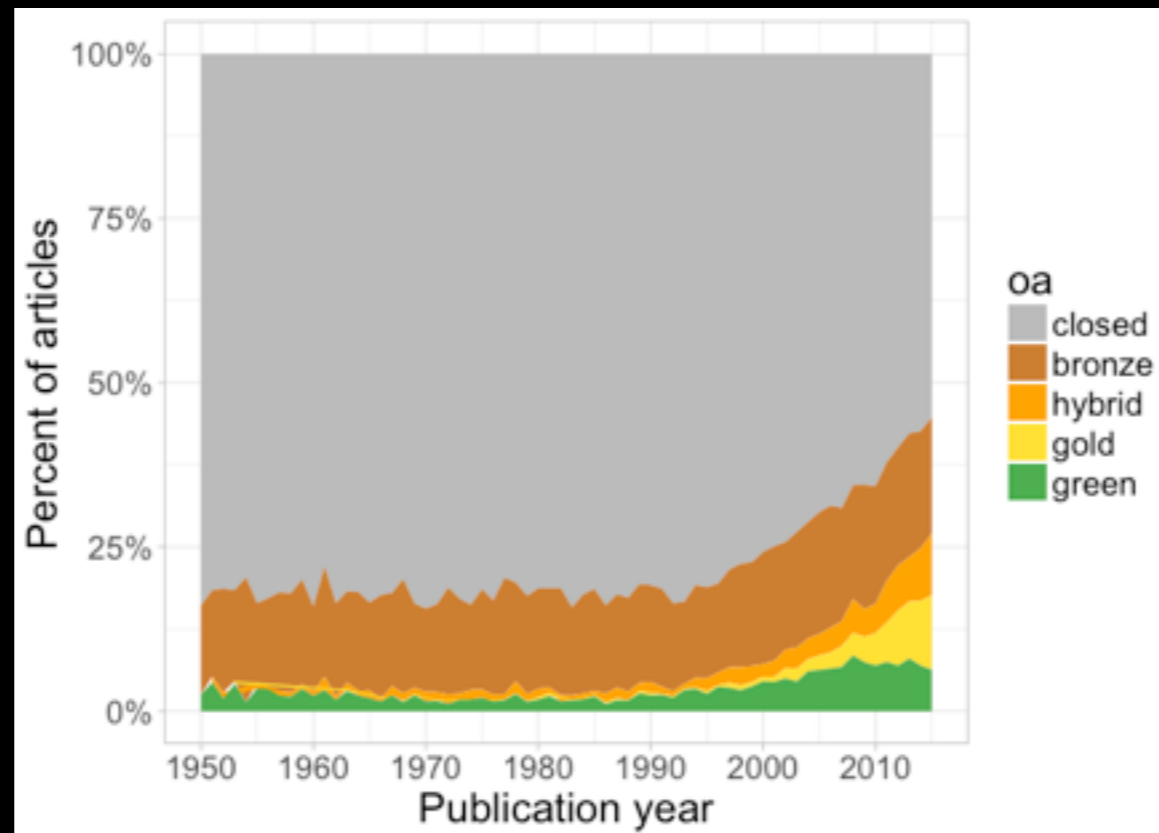Open Access Button
CORE
OpenAIRE
BASE
The Internet Archive
The British Library

All in the last 2 years!

and over 1,200 academic libraries worldwide

As well as the following reports:
- EU Open Science Monitor
- State of OA paper (Piwowar 2018)

- Leiden university rankings
- recent Nature News take on OA by country
and more...

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2 million calls/day

The rise and rise of Unpaywall

Non-profit is a gift to many academics — and tie-ins with established scientific search engines could broaden its reach.

BY HOLLY ELSE

After being kicked out of a hotel conference room where they had participated in a three-day, open-science workshop and hackathon, a group of computer scientists simply moved to an adjacent hallway. There, Heather Piwowar, Jason Priem and Cristhian Parra worked all night on software to help academics see how much of their work was freely available on the Internet. They realized how much time had passed only when they noticed hotel staff starting to prepare for breakfast.

That all-nighter, back in 2011, laid the foundation for Unpaywall. This free service locates open-access articles and presents paywalled papers that have been legally archived and are freely available on other websites to users who might otherwise have hit a paywalled version. Since one part of the technology was released in 2016, the service has become indispensable for many researchers. And firms that run established scientific search engines are starting to make good use of Unpaywall.

On 26 July, Elsevier announced plans to integrate Unpaywall into its Scopus database searches, allowing it to deliver millions more free-to-read papers to users than it does currently. Scopus's embrace of Unpaywall, along with similar moves by other search engines, means that much more open-access content is now at researchers' fingertips. These deals are also enabling funders, librarians and others to study open-access publishing trends comprehensively for the first time.

"Unpaywall is a groundbreaking development," says Alberto Martín-Martín, who studies bibliometrics and science communication at the University of Grenada in Spain. "It takes us one step closer to achieving a true open research infrastructure."

After participating in the 2011 hackathon, Piwowar and Priem founded a non-profit organization called Impactstory, in Vancouver, Canada, where they refined Unpaywall. (Parra is now a consultant at the World Bank in Asunción, Paraguay.)

> **"Unpaywall is a groundbreaking development. It takes us one step closer to a true open research infrastructure."**

Research by Priem and Piwowar published as a preprint in August 2017 — using Unpaywall, naturally — suggests that almost half of the recent research papers that people search for online are available for free (H. Piwowar *et al.* Preprint at *PeerJ Preprints* https://doi.org/10.7287/peerj.preprints.3119v1; 2017). But, says Priem, "there is a terrific gap between the availability and discoverability" of these papers, and it is this problem that Unpaywall hopes to solve.

Nature
August 2018

(online was titled "How Unpaywall is transforming open science")

WEB OF SCIENCE

2.1 million

Before Unpaywall integration

12 million

SCOPUS

1.5 million

7 million

After Unpaywall integration

©nature

Europe PMC pages that link to free PDF jumped from 4.6mil to 7.3mil

Let's let all of that sink in for a minute.

Those integrations mean a LOT more users for open repositories.

When you add new content to your repos, it has the potential to help so many more people.

Tom Mueller <tbmueller@gmail.com>   Fri, Apr 7, 2017, 1:22 PM

to team ▾

Dear Unpaywall,

I am a freelance writer, and I live in a remote location. I need access via internet to a wide range of scholarly publications for my research. I am not independently wealthy.

Until yesterday, getting journal articles on the web frequently involved running headlong into a paywall, snuffling around for an author email, emailing that author to beg a copy of their article . . . long pause . . . eventually (usually) receiving the article (though sometimes not, in which case repeat do-loop), but sometimes after I'd forgotten why I needed it in the first place.

Yesterday I found your Chrome add-on, and my life changed. I've already gotten 4 publications by clicking on the Mystical Green Padlock, and can see that nothing will ever be the same again.

Thank you, from the heart, not only for a magnificent piece of code, but for a genuinely kind act of academic humanity.

Cheers,
Tom

Tom Mueller PhD
Via Rovere Inf. 12
17028 Vezzi San Filippo (SV)

That's thanks to you.
That doesn't happen without the work you are doing.

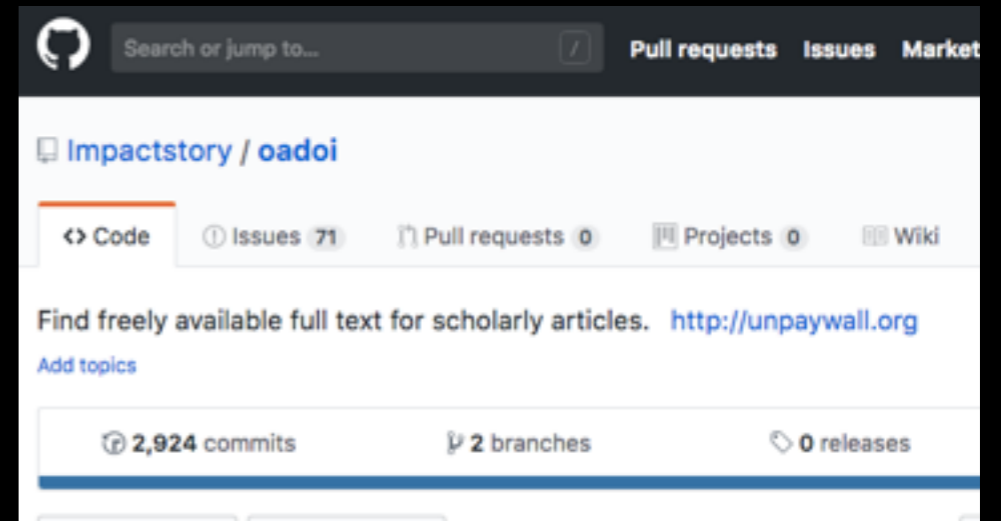NONE of those integrations happen when just Google solution.

we all out-googled google

because we, together built a great, **open** API based on the shoulders of others' open work.

A moment for tech stack :)

- python
- flask
- sqlalchemy
- sickle
- postgres (including custom queue)

- on heroku
- MIT licensed

- open API
  https://api.unpaywall.org/v2/10.234/abc?email=me

- redirection url for link resolvers
  https://unpaywall.org/10.234/abc

- CSV download (5k DOIs)

- full data dump every 6 months (100million DOIs)

- extension for Chrome and Firefox (200k+ users)

- subscription to weekly update feed + uptime contract

Unpaywall is currently used by:

Web of Science
Scopus
Europe PMC
Dimensions
Lens
OCLC
ProQuest
EBSCO
Kopernio
Open Access Button
CORE
OpenAIRE
BASE
The Internet Archive
The British Library

All in the last 2 years!

and over 1,200 academic libraries worldwide

short on time, but feel free to ask me more in question time:

- history, why did we do this
- tech deets (matching, version detection)
- sustainability as a nonprofit

Want to check if your repository
is indexed?

Find a bug?

We want to hear about it!

https://unpaywall.org/sources

support@unpaywall.org

fyi our next big thing,
based on Unpaywall data...

unpaywall journals BETA

My First Scenario

PRICING   HELP

Edit Configs ✕

Cost   29%
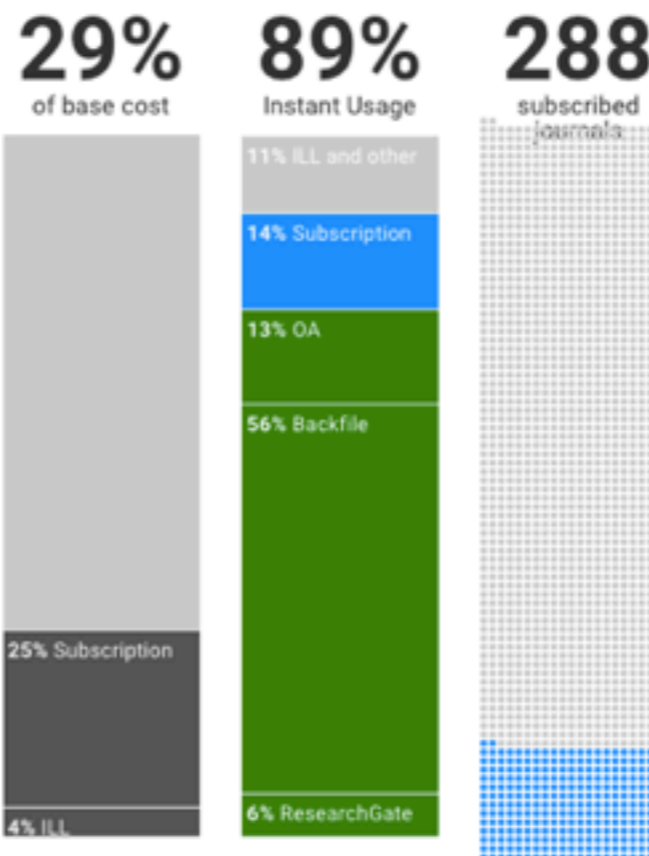Instant access   87%
Subscriptions   288

Overview

Fulfillment

Open Access

Institutional Value

Subscription cost

APC cost

Export

Save as copy

STATS   JOURNALS LIST   HELP

Overview ⓘ

At a projected annual spend of **$684,384**, subscribing to only the **288** most cost-effective journals saves **71%** off your current package subscription cost, while providing instant fulfillment for **89%** of (weighted) usage.
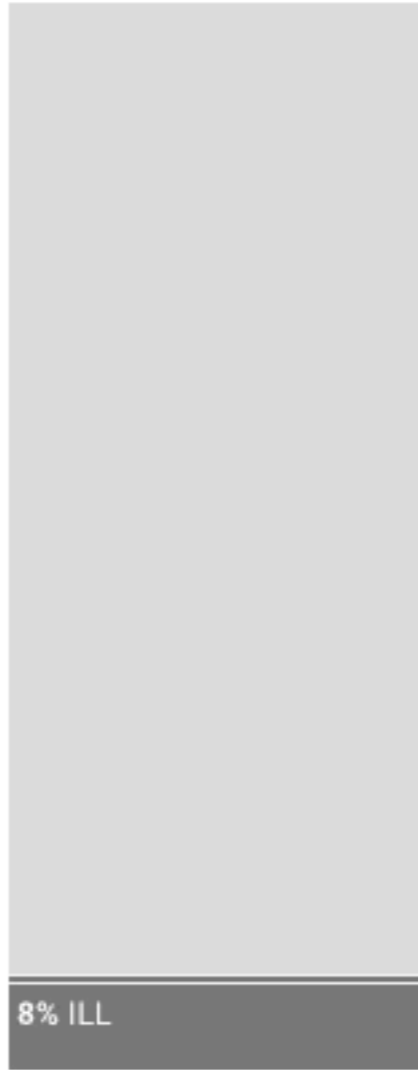
EDIT

29% of base cost

25% Subscription
4% ILL

89% Instant Usage

11% ILL and other
14% Subscription
13% OA
56% Backfile
6% ResearchGate

288 subscribed journals

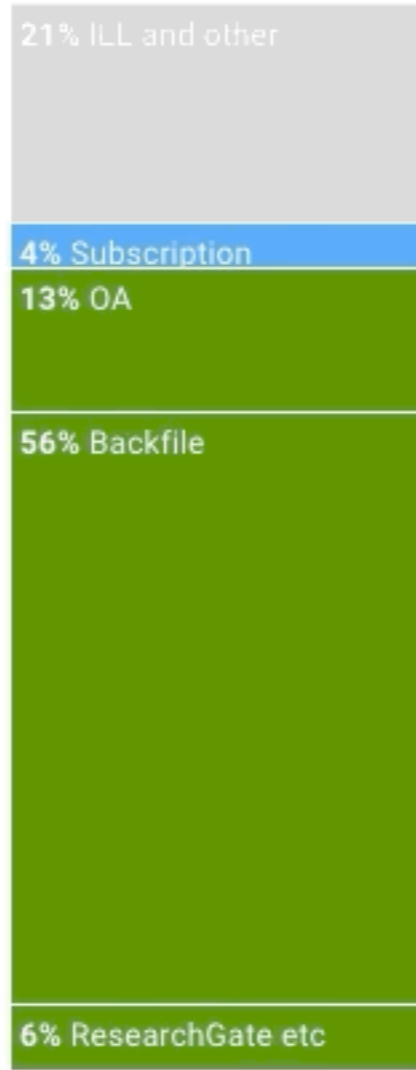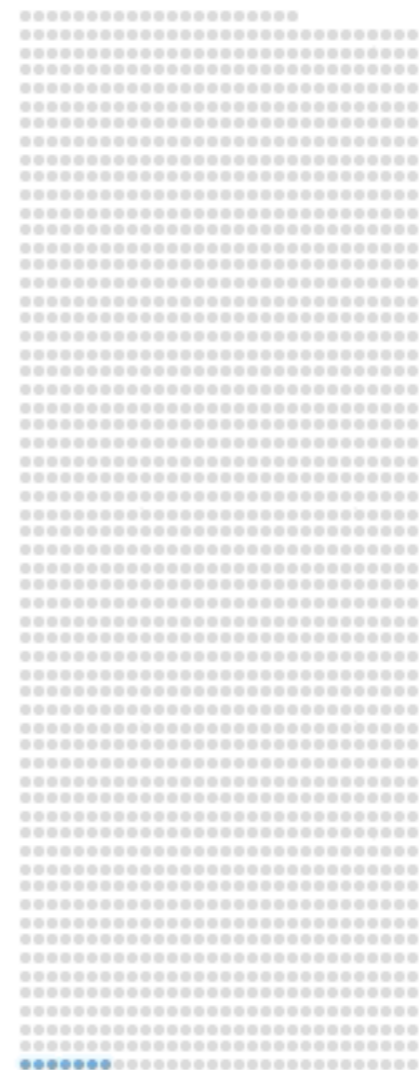| A la carte subscription cost growth | 8% |
Base cost	$2,100,000
Base cost growth	5%
A la carte 'content fee'	5.7%
ILL transaction cost	$17
ILL frequency, as percent of delayed access	5%
Include Bronze OA	true
Permit non-peer-reviewed versions	true
Include ASN-hosted content	true
Include perpetual-access backfile content	true
Institutional authorship weight	100
Institutional citation weight	10

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heather@ourresearch.org

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