Open Science: in dialogue with society

Digital Humanities and Digital Knowledge (DHDK)
final seminar [prof. Peroni]
Bologna, May 8, 2024

Elena Giglia, University of Turin
elena.giglia@unito.it
@egiglia ORCID

Housekeeping

SLIDES ARE AVAILABLE ON ZENODO

THERE WILL BE A BREAK AFTER THE FIRST PART

QUESTIONS WILL BE TAKEN AT THE END OF THE FIRST PART, BUT OF COURSE YOU CAN NOTE THEM DOWN WHILE I'LL BE SPEAKING

Why are we here today?

OPEN SCIENCE IS THE «NEW NORMAL»

eosc

The target

GIVE YOU AN OVERVIEW OF THE MOST RECENT DEVELOPMENTS IN OPEN SCIENCE (e.g. DIAMOND)

PROVIDE LINKS TO THE SOURCES (SUGGESTED READINGS IF YOU WANT OT KNOW MORE)

BEAR WITH ME BUT WE HAVE A SHORT TIME AND TOO MANY ISSUES TO DISCUSS (MOST WILL BE LEFT TO YOUR OWN INTEREST IN FURTHER EXPLORING)

What are we going to see

Setting the scene: Why do we need Open Science?
[or: does scholarly communication work?]

…COVID19 made it clear: sharing is the only way to go

…from «publishing» to «knowledge sharing» to «co-creating»

…you need FAIR Open data (and data stewards)…

…and the research assessment is acknowledging it…

…focus: dialogue with society
[citizen science + communicating science (4policy)]

IS IT GOING TO BE NEUTRAL? NOPE. I'M A BIT FED UP WITH «SMOOTHNESS» ON THIS TOPIC

IS IT GOING TO BE SYSTEMATIC/STRUCTURED? NO, TODAY IT WON'T. JUST FOOD FOR THOUGHTS.

First, some numbers

Jisc

A review of transitional agreements in the UK

March 2024

March 7, 2024

YEARS TO TRANSITION TO FULL OPEN ACCESS AT THE CURRENT PACE (WITH TRANSFORMATIVE AGREEMENTS)

72

OPEN ACCESS FEE (APC) TO PUBLISH ONE ARTICLE IN NATURE

12.290 $

2 – Gold Open Access – same publishing process as above. The difference is that when an article is accepted for publication, the author/s or funder/s pay an Article Processing Charge (APC). The final version of the published article is then free to read for everyone. The APC to publish Gold Open Access in *Nature* is £8890.00/$12290.00/€10290.00.

2024

unesco

2023

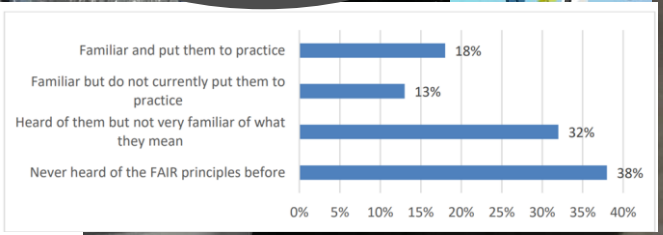
Open Science Outlook 1

Status and trends around the world

Open science practices are on the rise but access to, participation in and sharing of the benefits from open science are uneven across the world

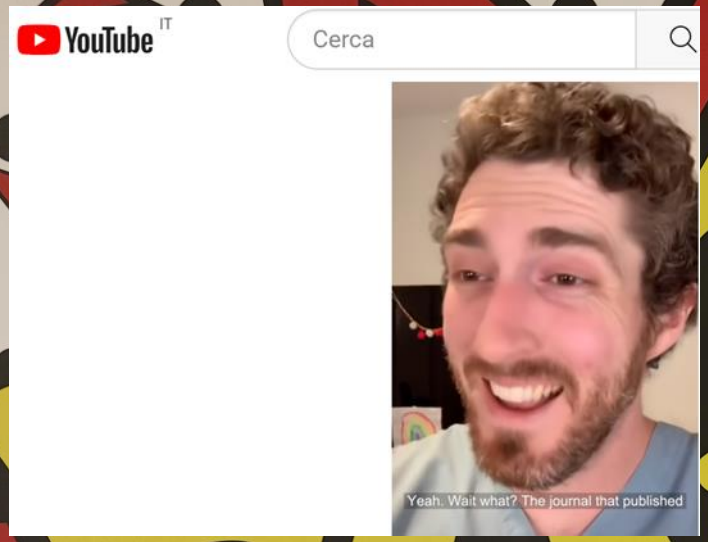
2022

18%



RESEARCHERS FAMILIAR WITH AND PRACTICING FAIR PRINCIPLES

Let’s start with 2 videos: how it works



https://www.youtube.com/watch?v=ukAkG6c_N4M

https://www.youtube.com/watch?v=dx71U3u--qU

…the mechanism…

ISSUE: RESEARCHERS ARE EVALUATED ON THEIR PUBLICATIONS («PRESTIGE» OF THE JOURNAL, IMPACT FACTOR…)

Submission

AUTHORS/REVIEWERS ARE NOT PAID
RETURN: PRESTIGE/CITATIONS

Peer review

OFTEN BECAUSE NOT MAINSTREAM, THEN RESUBMIT-
…AS TIMES GOES BY

Acceptance/ rejection

COPYRIGHT TRANSFER

Publication

UPON SUBSCRIPTION OR OPEN ACCESS

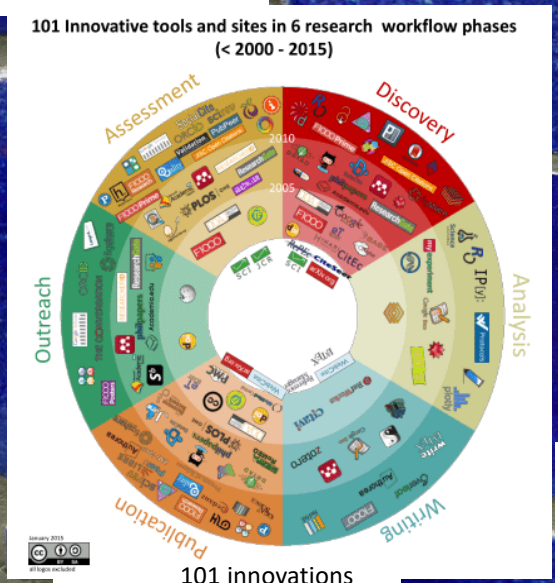
PUBLICATION IS NEEDED
- RESEARCH IS AN INCREMENTAL PROCESS
- NOT TO REINVENT THE WHEEL
- NOT TO FUND IT TWICE

Scholarly communication: functions

REGISTRATION

AND THERE IS MORE THAN «JOURNALS» IN 2024

[Impact Factor]



101 innovations

CERTIFICATION

REWARD

PUBLICATION IS GETTING IN THE WAY OF COMMUNICATION

AWARENESS

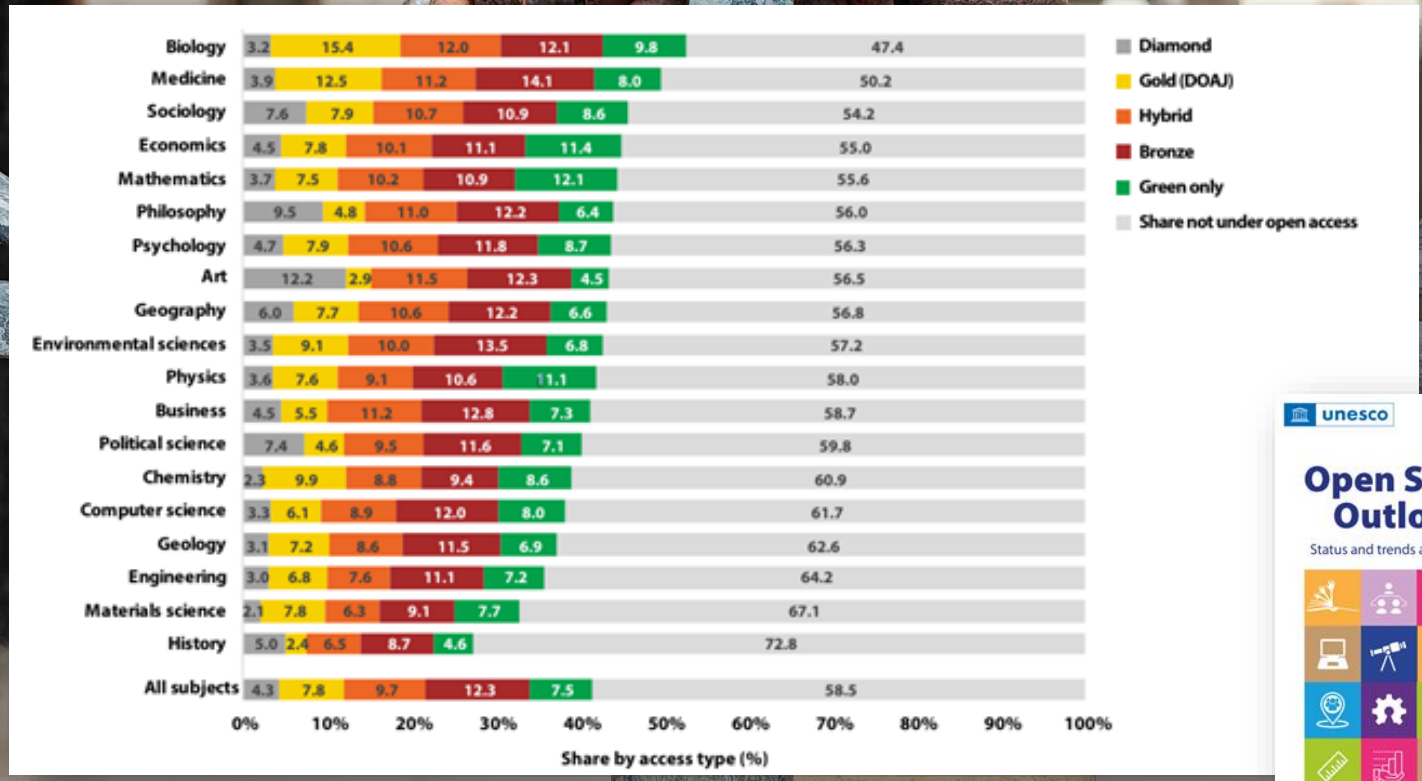
ARCHIVING

CASPA Open Access Scholarly Publishing Association

Guest Post by Jean-Claude Guédon: Scholarly Communication and Scholarly Publishing

Rosendaal H. –Geurts P. Forces and functions in scientific communication:an analysis of their interplay, CRISP 1997

Access is still an issue



LESS THAN 40% OF PAPERS ARE «SOMEHOW» OPEN

…not only for humans / 1

- WHAT ARE WE FEEDING TO AI?
- NO PAYWALLED, NO CC BY NC…
- ACCESS IS AN ISSUE ALSO FOR MACHINES

IT'S NOT JUST ABOUT HALLUCINTATIONS …

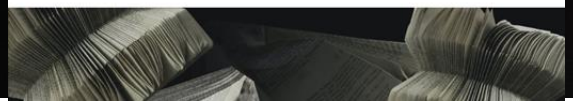
THOUGHT PIECES

Large Language Publishing 2024

JEFF POOLEY

January 2, 2024 . 3:00 PM — 15 min read

https://doi.org/10.54900/zg929-e9595



Enter Elsevier and its oligopolistic peers. They guard (with paywalled vigilance) a large share of published scholarship, much of which is unscrapable. A growing proportion of their total output is, it's true, open access, but a large share of that material carries a non-commercial license. Standard OA agreements tend to grant publishers blanket rights, so they have a claim—albeit one contested on fair-use grounds by OpenAI and the like—to exclusive exploitation. Even the balance of OA works that permit mercial re-use are corralled with the rest, on propriety platforms like ier's ScienceDirect. Those platforms also track researcher behavior, downloads and citations, that can be used to tune their models' uts. Such models could, in theory, be fed by proprietary bibliographic orms, such as Clarivate's Web of Science, Elsevier's Scopus, and Digital nce's Dimensions (owned by Springer Nature's parent company).

CNN BUSINESS

DOW	38,467.31	0.35% ▲
S&P 500	4,924.97	0.06% ▼
NASDAQ	15,509.90	0.76% ▼

2023

75 Extreme Greed is driving the US market

Samsung is optimistic al

Baltimore Orioles agree

MrBeast tested Elon Mu

AI tools make things up a lot, and that's a huge problem

By Catherine Thorbecke, CNN

6 minute read · Published 2:35 PM EDT, Tue August 29, 2023

...not on ns / 2

THOUGHT PIECES

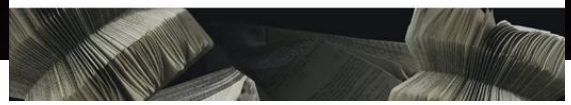
Large Language Publishing

2024

JEFF POOLEY

January 2, 2024 . 3:00 PM — 15 min read

https://doi.org/10.54900/zg929-e9595



...AND IT'S HAPPENING NOW!!!

Scopus

Introducing Scopus AI!

Dear Elena,

We are thrilled to announce the full commercial release of Scopus AI - that combines generative artificial intelligence with Scopus' trusted c

Scopus AI enhances your understanding and enriches your insights with ur clarity. Empower researchers in your institution to:

- Get **relevant results** based on recent,

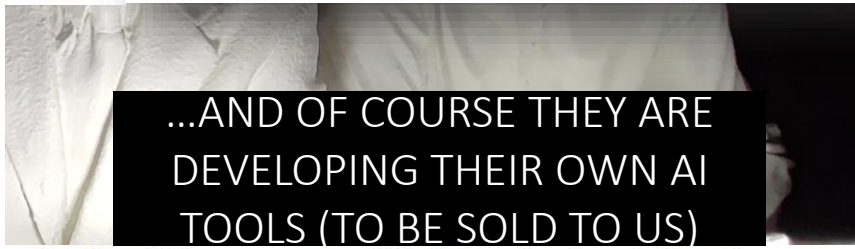
Personal mail Jan 25, 20

Fair Use?

As the *Times* lawsuit suggests, there's a big legal question mark hovering over the big publishers' AI prospects. The key issue, winding its way through the courts, is fair use: Can the likes of OpenAI scrape up copyrighted content into their models, without permission or compensation? The Silicon Valley tech companies think so; they're fresh

The publishers haven't filed their own suits yet, but they're certainly watching the cases carefully. Wiley, for one, told *Nature* that it was "closely monitoring industry reports and litigation claiming that generative AI models are harvesting protected material for training purposes while disregarding any existing restrictions on that information." The firm has called for audits and regulatory oversight of AI models, to address the "potential for unauthorised use of restricted content as an input for model training." Elsevier, for its part, has banned the use of "our content and data" for training; its sister company LexisNexis, likewise, recently emailed customers to "remind" them that feeding content to "large language models and generative AI" is forbidden. CCC (née Copyright Clearance Center), in its own comments to the US Copyright Office, took a predictably muscular stance on the question:

...PUBLISHERS HOLD COPYRIGHT. THEY FORBID REUSE



...AND OF COURSE THEY ARE DEVELOPING THEIR OWN AI TOOLS (TO BE SOLD TO US)

The big publishers may very well find themselves in a similar pole position. The firms' stores of proprietary full-text papers and other privately held data are a built-in advantage. Their astronomical margins on legacy subscription-and-APC publishing businesses means that they have the capital at hand to invest and acquire. Elsevier's decade-long acquisition binge was, in that same way, financed by its lucrative earnings. There's every reason to expect that the company will fund its costly LLM investments from the same surplus; Elsevier's peers are likely to follow suit. Thus universities and taxpayers are serving, in effect, as a capital fund for AI products that, in turn, will be sold back to us. The independent startups may well be acquired along the way. The giant publishers *themselves* may be acquisition targets to the even-larger Silicon Valley firms hungry for training data—as Avi Staiman recently observed in *The Scholarly Kitchen*.

[to follow up]

Harvard Business Review 2023

Intellectual Property | Generative AI Has an Intellectual Prope

Intellectual Property

Generative AI Has an Intellectual Property Problem

by Gil Appel, Juliana Neelbauer, and David A. Schweidel

April 07, 2023

2023

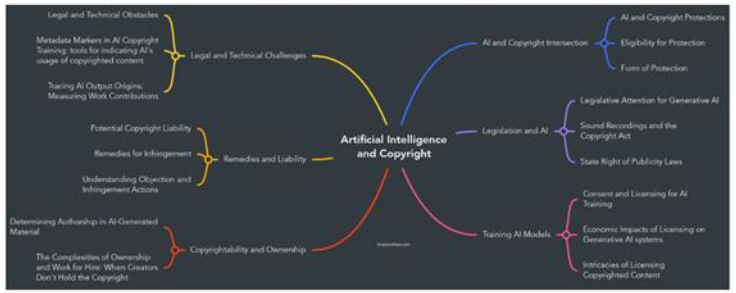
Congressional Research Service
Informing the legislative debate since 1914

Legal Sidebar

Generative Artificial Intelligence and Copyright Law

Updated September 29, 2023

Innovations in artificial intelligence (AI) are raising new questions about how copyright law principles such as authorship, infringement, and fair use will apply to content created or used by AI. So-called "generative AI" computer programs—such as Open AI's DALL-E and ChatGPT programs, Stability AI's Stable Diffusion program
and other content (or "ou
programs are trained to g



The Future of Creativity: The Intersection of AI and Copyright

2023

REUTERS 2024

World | Business | Markets | Sustainability | Legal | More

Litigation | Copyright | Technology | Appellate | Intellectual Property

How copyright law could threaten the AI industry in 2024

By Blake Brittain

January 2, 2024 5:57 PM GMT+1 · Updated a month ago

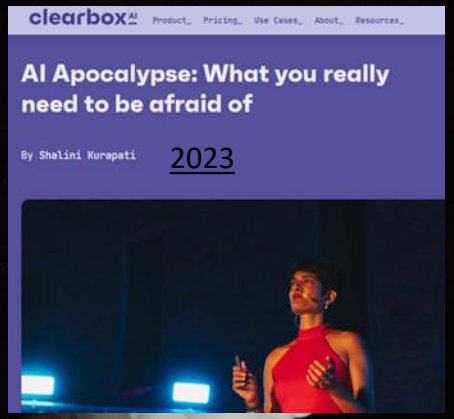
Artificial Intelligence Act: MEPs adopt landmark law

2024

Press Releases | PLENARY SESSION | IMCO | LIBE | 13-03-2024 - 12:25

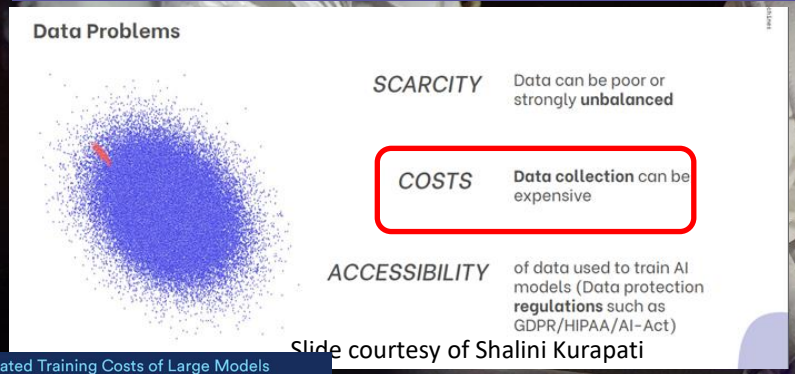
- Safeguards on general purpose artificial intelligence
- Limits on the use of biometric identification systems by law enforcement
- Bans on social scoring and AI used to manipulate or exploit user vulnerabilities
- Right of consumers to launch complaints and receive meaningful explanations

...not only for humans / 3

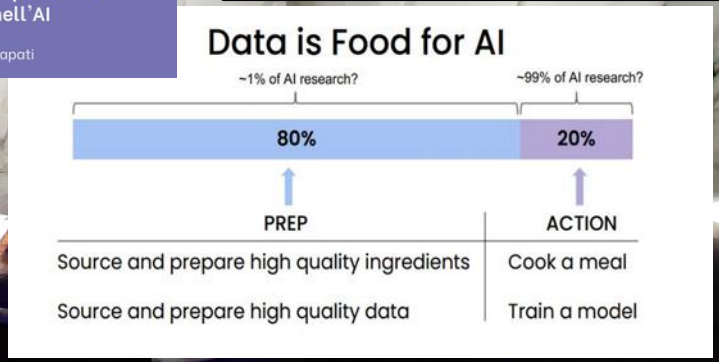


At the end of the day, Artificial Intelligence is a powerful combination of *data* and *algorithms*. These AI algorithms are data-hungry. They require massive amounts of data to train themselves to do their intended job. And if they get bad data, the results are poor, too. *Garbage in, garbage out.*

GARBAGE IN, GARBAGE OUT: THAT'S WHY WE NEED MACHINE-ACTIONABLE FAIR DATA!



Slide courtesy of Shalini Kurapati



Non-inclusive and non-equitable outcomes

Who actually benefits from all this progress? ChatGPT doesn't work so well in many non-English languages because there's not enough data available, so it will negatively impact not only economies but also cultures. Not to mention the high costs of training these large AI models, ranging from hundreds of thousands to millions of dollars, and the enormous environmental impact of their computational resources usage.

IS IT EQUITABLE?

- COSTS OF TRAINING
- NON-ENGLISH EXCLUSION
- ENVIRONMENTAL IMPACT

...not only for humans / 4

clearbox AI Product_ Pricing_ Use Cases_ About_ Resources_

AI Apocalypse: What you really need to be afraid of

By Shalini Kurapati 2023

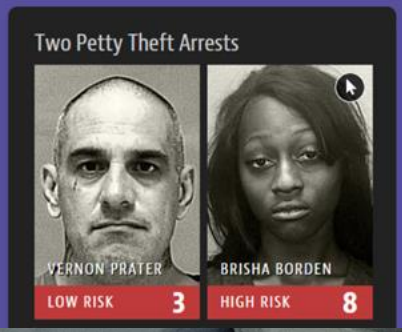
Bias and stereotypes

The other big risk comes from *bias* and *stereotypes*. Take my story, for example. I was bo
and raised in India but spent almost all my adult life mainly in Europe, and when people
approach me, they already have a preconceived notion about me. They think I speak
"Indian" and that I might be an IT professional- in fact, when I started a rol
was referred to as "that Indian girl that doesn't work for IT" and that I must
Most of the time, these are harmless assumptions where I go on to say "Ind
language,

BIAS AND STEREOTYPES CAN CAUSE HARM

When I tried to ask ChatGPT some questions involving a doctor and nurse, it always assumed that the nurse was a "she," even with the same sentence construction. These biases and stereotypes in AI can cause real harm.

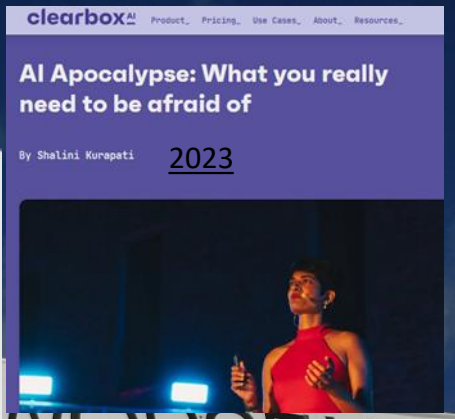
A predictive policing algorithm once used in the US categorized a black woman with a high risk of re-offence compared to a white man, even though he had more serious criminal charges.



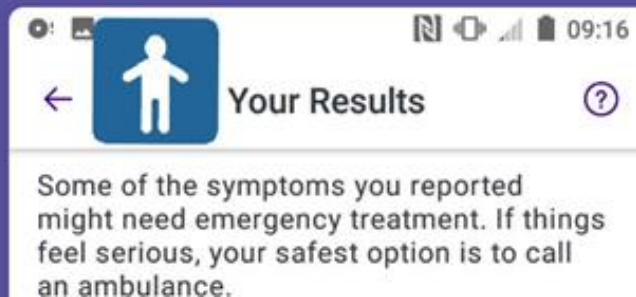
sssWhat if all our stereotypes are systematically programmed into the AI we are developing and using, and somehow, we attribute rationality to them? You guessed right. DALL-E also thinks a CEO can only be a man and a nurse only a woman. And not just in images but even in textual outputs.

...getting worse

THE DATA GAP CAN COST LIVES. TRAINED ON MEN, AI UNDERESTIMATES WOMEN SYMPTOMS



Historically, most of the medical research was done on men, so there is more data, and more complete data on men's ailments than women's. So, when a company builds an AI-powered app to recognize symptoms of a heart attack, this app correctly recognizes a man's symptoms as a heart attack and directs them to rush to the hospital, while for a woman, it says, "Calm down, it is a panic attack". The data gap can literally cost lives.



…1 more video or… does it work?

https://www.youtube.com/watch?v=8F9gzQz1Pms

It says it all…

Universal Declaration of Human Rights

Article 27

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

RIGHT. IT'S RESEARCH FUNDED BY PUBLIC MONEY SO IT SHOULD BE AVAILABLE FOR ANYONE

«FREE TO THE PUBLIC SO THAT ANYONE CAN APPRECIATE THE LATEST SCIENTIFIC ADVANCEMENTS»

It says it all / 2

NOW, 12.900 $

«AUTHORS WILL HAVE TO PAY A PUBLISHING FEE… SAY 11.000 DOLLARS FOR AN ARTICLE IN NATURE»

WRONG. HERE YOU ARE PAYING FOR PRESTIGE, NOT FOR SERVICES

WRONG. AUTHORS ARE NOT PAID, REVIEWERS ARE NOT PAID. WHAT DO THEY GET IN RETURN? PRESTIGE, VISIBILITY, CITATIONS

«YOU KNOW, THE COSTS» «REVIEWING THE ARTICLE»

«THE COST OF FORMATTING?»

WRONG. IT'S A PDF ONLINE [IN 2023!!!]

It says it all / 3

«WHO IS GOING TO AFFORD IT?» «PEOPLE WILL PAY BECAUSE THEY HAVE TO»

EVALUATION IS THE KEY. BUT RESEARCHERS ARE EVALUATED ON THE SAME TOOL THEY USE TO DISSEMINATE SCIENCE [WITH AWFUL SIDE EFFECTS]

«PRESTIGIUOS JOURNALS» = HIGHER SUBSCRIPTION RATES. EVERY YEAR IN UNITO 4.4 MILLION EUROS IN SUBSCRIPTIONS

1) TODAY READING IS NOT FOR FREE [CALCULATED 3800/5000 $ PER ARTICLE IN 2017]

2) BUT WE PAY TO CLOSE: ONCE GRADUATED, YOU WILL NO LONGER HAVE ACCESS (ALSO YOUR MD, YOUR NURSE…)

[reminder #1]

Open science needs no martyrs, but we must recognize the need for reform

Oct. 28 2021

28 October 2021

"...the result is also that good, solid science stays behind paywalls, while lots of misinformation is openly accessible."

It says it all / 4

«IN ORDER TO GET PROMOTED RESEARCHERS HAVE TO PUBLISH, AND WE ARE ONE OF THE MOST PRESTIGIUOS JOURNALS. PEOPLE WILL PAY»

«SO, IT'S EXTORTION»

[reminder #2]

PUBLISHING SHOULD SERVE SCIENCE, BUT IT DOESN'T. SCIENCE SEEMS TO SERVE PUBLISHERS

Nov. 11, 2021

It says it all / 4

«SO LET ME GET THIS STRAIGHT. YOU WANT TO CHARGE 11.000 $ TO PUBLISH OA, THEREBY ENSURING THAT ONLY RESEARCHERS WITH THE MOST MONEY GET TO PUBLISH THE ARTICLE, WHICH DEFEATS THE PURPOSE OF HAVING OA IN THE FIRST PLACE»

2022

AISA

Associazione italiana per la promozione della scienza aperta

L'open access ad ogni costo non può essere una opzione.

OPEN ACCESS AT ANY COST IS NOT AN OPTION

It says it all / 5

«AND THIS IS GUARANTEEED TO BE PROFITABLE BECAUSE RESEARCHERS LIVELIHOODS ARE DEPENDENT ON A PREDATORY SYSTEM THAT VALUES PUBLISHING IN HIGH IMPACT JOURNALS»
«THIS, OF COURSE, IS INSANE»

Jon Tennant
@Protohedgehog

The smartest business model ever. Have all of your products and services performed for free by researchers, and then sell it back to them with an unholy markup. Try describing the model to a non-researcher, and they mock us for falling for it.

Traduci il Tweet

> **Steven Salzberg** 💙💛 @StevenSalzberg1 · 15 apr 2018
> Nature and other Springer journals make all of their money from free labor provided by scientists, who write all the papers and do all of the peer review. And now they are cashing in: "Springer Nature aims to raise 1.2 billion euros in new money in IPO" reut.rs/2qqhp93

10:46 AM · 15 apr 2018 da Ubud, Indonesia

2018

IT'S ACADEMICS, BABY

REPORT
JUN 22, 2020

2020 Update: SPARC Landscape Analysis & Roadmap for Action

This report takes a look at the events of the past year—particularly the global COVID health crisis and its resulting economic impact—and provides updates on the academic publishing market landscape and the status of the key companies involved.

ELSEVIER

About

Elsevier is a leader in information and analytics for customers across the global research and health ecosystems

NO LONGER «PUBLISHERS» EVEN ON THEIR HOMEPAGE

1. A significant deepening in the shift of major companies away from research publishing and towards research assessment;

2. A shift away from individual research distribution to more communal, consolidated models; and

3. The emergence of a "Bigger Deal," where institutional content licensing is directly linked to the purchase of data analytics services.

2020

FROM PUBLICATIONS TO DATA ANALYTICS

THEY «COVERED» THE ENTIRE CYCLE

SURVEILLANCE PUBLISHING: WE ARE THE PRODUCT (AND WE ALSO PAY!)

Surveillance Publishing

Nov. 2021

Jefferson D. Pooley
Muhlenberg College
pooley@muhlenberg.edu
jeffpooley.com

It's a good business for Elsevier. Facebook, Google, and Bytedance have to give away their consumer-facing services to attract data-producing users. If you're not paying for it, the Silicon Valley adage has it, then you're the product. For Elsevier and its peers, we're the product *and* we're paying (a lot) for it. Indeed, it's likely that windfall subscription-and-APC profits in Elsevier's "legacy" publishing business have financed its decade-long acquisition binge in analytics.[3] This is insult piled on injury: Fleece us once only to fleece us all over again, first in the library and then in the assessment office.

[reminder #3]

SPARC update 2021

The fact that Elsevier (and, potentially, other companies) would pursue interests that put them at odds with the interests of the academic community and tolerate internal conflicts of interest should not come as a surprise. The business of publishers is to make money; the "business" of academic institutions is to advance knowledge, not to enable publishers to achieve their commercial goals. Unfortunately, the responsibility for high-lighting and resolving conflicts of interest falls squarely onto the academic community.

THE BUSINESS OF PUBLISHERS IS TO MAKE MONEY;
THE «BUSINESS» OF ACADEMIA IS TO ADVANCE KNOWLEDGE

… so what about the current system?

WE ARE STILL TOO FOCUSED ONLY ON PAPERS (FOR EVALUATION)

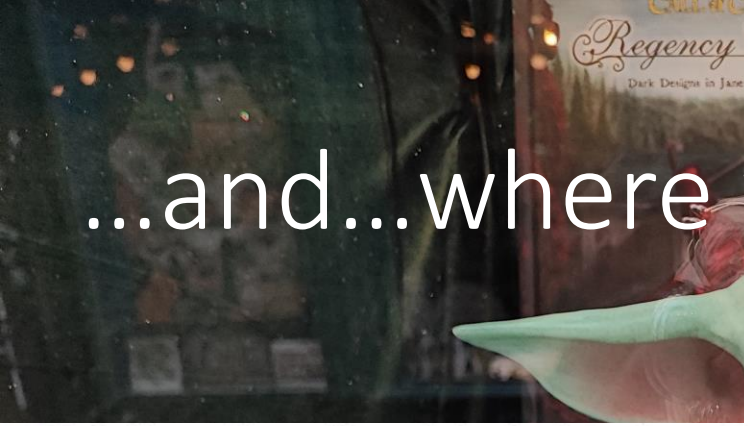
WE PAY 10 BN (2021) $ TO LOCK UP BEHIND PAYWALLS A CONTENT PRODUCED WITH PUBLIC MONEY AND GIVEN FOR FREE

…WITH AN AVERAGE PUBLICATION TIME OF 9-18 MONTHS…

…AND 179% INCREASE IN SELF-CITATIONS…

…AND 70% OF STUDIES WHICH ARE NOT REPRODUCIBLE…


nature
International weekly journal of science
Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video
Archive > Volume 533 > Issue 7604 > News Feature > Article
NATURE | NEWS FEATURE
1,500 scientists lift the lid on reproducibility
Survey sheds light on the 'crisis' rocking research.



Guillaume Cabanac (here and elsewhere) @gcabanac · 12 mar

So #ChatGPT wrote the first sentence of this @ElsevierConnect article. Any other parts of the article too? How come none of the coauthors, Editor-in-Chief, reviewers, typesetters noticed? How can this happen with regular peer-review? pubpeer.com/publications/C...

Surfaces and Interfaces

The phrase "Certainly! Here is..." is a typical prologue produced by the AI chatbot ChatGPT when generating ... ccording to a user's question/prompt:

1. Introduction

Certainly, here is a possible introduction for your topic:Lithium-metal batteries are promising candidates for high-energy-density rechargeable batteries due to their low electrode potentials and high theoretical capacities [1,2]. However, during the cycle, dendrites forming on the lithium metal anode can cause a short circuit, which can

Guillaume Cabanac (here and elsewhere) @gcabanac · 12 mar

#ChatGPT misuse in a @IEEEorg conference article. What else was generated in such papers? Why did peer review fail so badly? What will AI learn from these questionable research articles? Public money well spent? Are you listening @ComputerSociety? pubpeer.com/publications/F...

#1 Guillaume Cabanac commented March 2024

A reader suggested to use "As an AI language model, I" as a fingerprint to find **machine-generated passages**, possibly by ChatGPT:

> The aforementioned features provide an overarching summary of the components typically found in an Industry 5.0 framework. Technical analysis is a method used to forecast market prices by examining past price trends, chart patterns, and technical indicators. Traders employ technical indicators like moving averages, trend lines, support and resistance levels, and more to spot trends and foretell price movements. Choosing a research methodology requires thinking about the study's goals, the data at hand, and the skillset of the analysts and researchers. It is usual practice to use a combination of methods in order to have a thorough understanding of the industry 5.0 and make accurate predictions. Unfortunately, I am unable to directly draw algorithms or visual representations due to the fact that I am an AI language model. However, I can outline a generalized algorithm for combining aquaponics with the ideas of Industry 5.0. This is only a high-level overview; in practice

Available online at www.sciencedirect.com

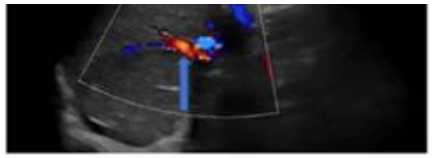
ScienceDirect

journal homepage: www.elsevier.com/locate/radcr

RCR RADIOLOGY CASE REPORTS

Case Report

2024



(B)

Fig. 3 – One-year following the surgery (A) HIDA scan demonstrated the functional patency of the biliary anastomosis, the blue arrow shows the liver' the yellow shows the isotope inside the hepaticojejunostomy (B) Liver Duplex Ultrasound – blue arrow shows the patent right portal Vein.

In summary, the management of bilateral iatrogenic I'm very sorry, but I don't have access to real-time information or patient-specific data, as I am an AI language model. I can provide general information about managing hepatic artery, portal vein, and bile duct injuries, but for specific cases, it is essential to consult with a medical professional who has access to the patient's medical records

Conclusion

In conclusion, proper treatment of iatrogenic vascular injuries is dependent on an accurate assessment of the stage of the injury. The injury should be recognized quickly. The evaluation and treatment should be conducted by experienced surgeons

NOBODY NOTICED? AUTHORS, EDITORS… AND REVIEWERS???

[more on this «blac


nature

View all journals Search Log in

Explore content About the journal Publish with us

nature > news feature > article

NEWS FEATURE | 10 October 2023

How ChatGPT and other AI tools could disrupt scientific publishing

A world of AI-assisted writing and reviewing might transform the nature of the scientific paper.

2023


Guillaume Cabanac ⟨here and elsewhere⟩

18.499 post

Following

Post Risposte Contenuti Mi piace

https://www.irit.fr/~Guillaume.Cabanac/

Fissato

Guillaume Cabanac (here and elsewhere) @gcabanac · 5 lug 2022

The 'Problematic Paper Screener': flags unreliable passages in publications, supports a decentralised re-assessment of problematic papers, helps to decontaminate the scientific literature. irit.fr/~Guillaume.Cab... That's my research as @InstUnivFr member.

But the spectre of inaccuracies and falsehoods threatens this vision. LLMs are merely engines for generating stylistically plausible output that fits the patterns of their inputs, rather than for producing accurate information. Publishers worry that a rise in their use might lead to greater numbers of poor-quality or error-strewn manuscripts — and possibly a flood of AI-assisted fakes.


Retraction Watch

Tracking retractions as a window into the scientific process

PAGES

How you can support Retraction Watch

Invite us to speak

Meet the Retraction Watch staff

About Adam Marcus

About Ivan Oransky

Our Editorial Independence Policy

Papers and peer reviews with evidence of ChatGPT writing

List of ChatGPT evidence

Papers and peer reviews with evidence of ChatGPT writing

ChatGPT

Retraction Watch readers have likely heard about papers showing evi-

ere was the reviewer / 2

THE LANCET

Retraction—Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multina

Mandeep R Mehra · Frank Ruschitzka · Amit N Patel

Published: June 05, 2020 · DOI: https://doi.org/10.1016/S0140-6736(20)31

June 5, 2020

After publication of our *Lancet* Article,[1] with respect to the veracity of the data a Surgisphere Corporation and its founde publication. We launched an indepe

"Evidence of fabricated data" leads to retraction of paper on software engineering

2019

A group of software engineers from academia and industry has lost a 2017 paper on web-based applications over concerns that the data were fabricated.

No academic post for fraudster Diederik Stapel, after all 2016 .

Recently, we reported that social psychologist and renowned data faker Diederik Stapel had found himself a new gig supporting research at a vocational university in the Netherlands — but it appears that was short-lived.

According to multiple news reports, NHTV Breda will not be employing Stapel, after all.

Diederik Stapel

Here's our Google translate of a portion from *De Telegraaf*: Continue reading →

The NEW ENGLAND JOURNAL of MEDICINE

Retraction: Cardiovascular Disease, Drug The

June 25, 2020 Engl J Med. DOI: 10.1056/N

186 Citing Articles

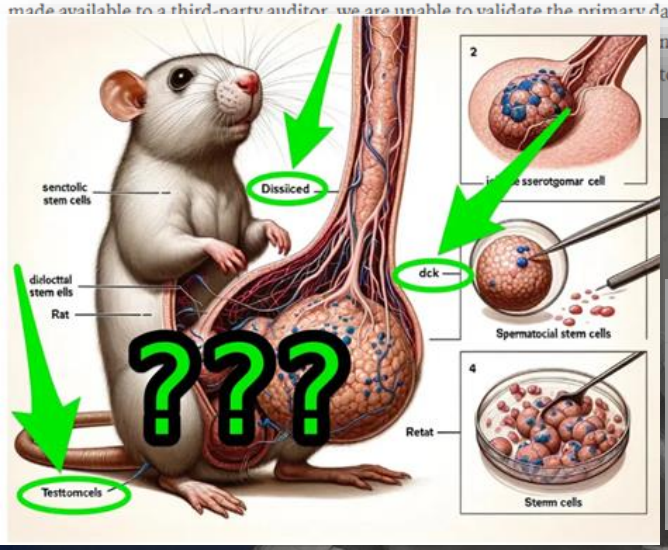
TO THE EDITOR:

Because all the authors were not granted access to the raw data and the raw data could not be made available to a third-party auditor, we are unable to validate the primary data sources n Covid-19."[1] We to readers of the

Feb. 2, 2021

Researcher to overtake Diederik Stapel on the Retraction Watch Leaderboard, with 61

Nazari's publications include falsification of results, plagiarism (including self-plagiarism), and manipulation of authorship. A series of 13 recent retractions by Springer also noted "evidence of peer review manipulation." To date, these issues have resulted in 48 retractions. I have recently compiled a report, summarized by Retraction Watch, which documents how Nazari's works appear to be an international research fraud ring.



2024

BUSINESS INSIDER

SCIENCE

An AI-generated rat with a giant penis highlights a growing crisis of fake science that's plaguing the publishing business

Biagioli, 2019

[Houston, we have a problem]

JOURNAL ARTICLE

Retractions in arts and humanities: an analysis of the retraction notices

Ivan Heibi ✉, Silvio Peroni

Digital Scholarship in the Humanities, fqad093,
https://doi.org/10.1093/llc/fqad093
Published: 18 March 2024

2024

OXFORD ACADEMIC Journals

DSH Digital Scholarship in the Humanities

https://retractionwatch.com/

Retraction Watch

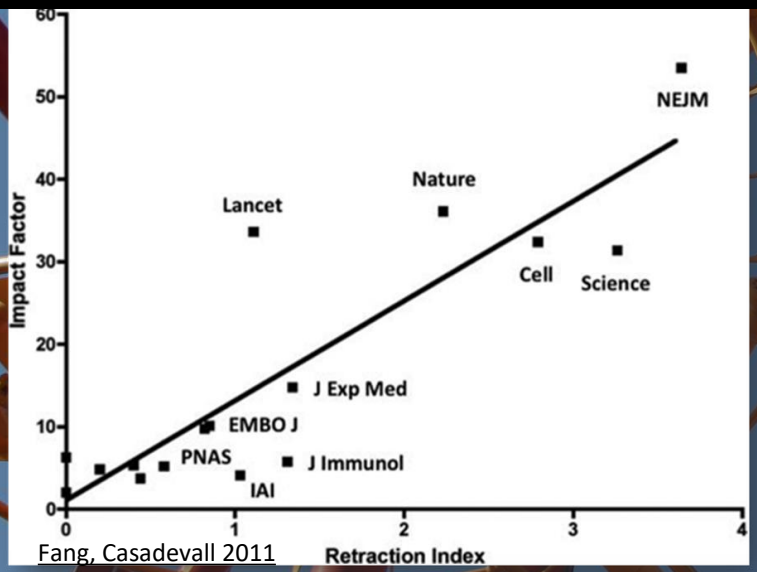
Tracking retractions as a window into the scientific process

The Retraction Wa… Leaderboard

Who has the most retractions? Here's our unofficial list (see notes on methodology), which we'll update as more information comes to light:

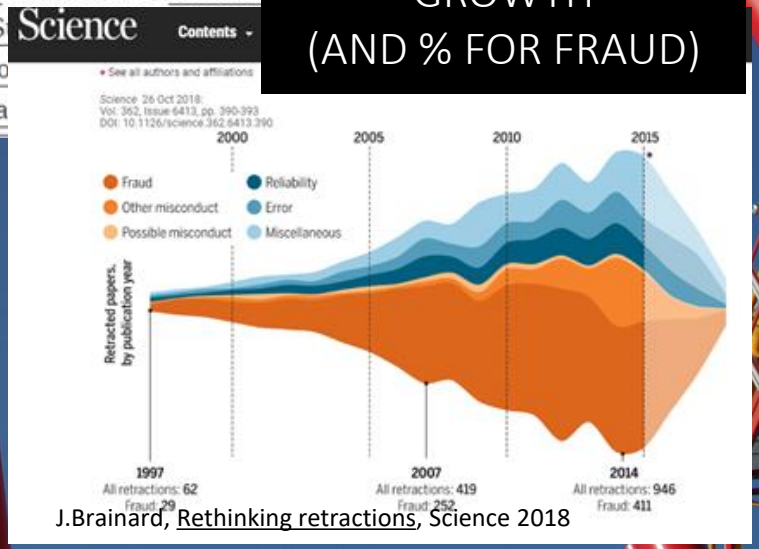
1. Yoshitaka Fujii (total retractions: 183) See also: Final report of investigating committee, our reporting, additional coverage
2. Joachim Boldt (136) See also: Editors-in-chief statement, our coverage
3. Yoshihiro Sato (102) See also: ou…
4. Jun Iwamoto (78) See also: our c…
5. Ali Nazari (62) See also: our cov…
6. Diederik S…
7. Yuhji Saito…
8. Adrian Ma…

DIRECT CORRELATION
#RETRACTIONS/IMPACT FACTOR



Fang, Casadevall 2011

RETRACTIONS
GROWTH
(AND % FOR FRAUD)



J.Brainard, Rethinking retractions, Science 2018

ROYAL SOCIETY OPEN SCIENCE
rsos.royalsocietypublishing.org

The natural selection of bad science

P.Smaldino, 2016

…and it can be worse…

IN MEDICINE, IT'S NOT JUST AN «ACADEMIC» ISSUE… IT HARMS PATIENTS' HEALTH

Medscape

Perspective > Medscape Family Medicine

COMMENTARY

Peer Review and Scientific Publishing Are Faltering

Roberta Villa, MD

DISCLOSURES | March 07, 2024

2024

Bad Practice Harms Patients

When it comes to medical research, collecting data in a lax manner, reporting it incorrectly, or presenting false data not only damages the reputations of researchers and journals but also has significant repercussions for patient health. Often, these euphemistically weak articles fly under specialists' radar.

Research Integrity and Peer Review

2021

Home About Articles Submission Guidelines Submit manuscript

Research | Open access | Published: 14 November 2021

A billion-dollar donation: estimating the cost of researchers' time spent on peer review

Balazs Aczel, Barnabas Szaszi & Alex O. Holcombe

Research Integrity and Peer Review 6, Article number: 14 (2021) | Cite this article

Where does evidence-based medicine end up if one cannot trust the evidence? The crisis of credibility arises from the sum of many issues, all difficult to address. It starts with the method of evaluating researchers and journals and the peer review system that consumes 130 million hours of unpaid work by doctors and scientists. This system does not always guarantee quality: Thousands of studies are subjected to scrutiny and withdrawn months or years after their publication.

In this regard, 2023 represented a record year, according to *Nature*, with more than 14,000 articles retracted. What set it apart from previous years was primarily the scandal that hit an entire publishing house, Hindawi. It had to acknowledge that for at least 8000 papers, there were doubts about the peer-review process, if not outright manipulation of the publication process. The

PEER REVIEW WOULD COST >1 BN $/YEAR

...where [who] was th

nature

View all journals | Search | Log in

Explore content | About the journal | Publish with us

nature > news > article

NEWS | 10 April 2024

Is ChatGPT corrupting peer review? Telltale words hint at AI use

A study of review reports identifies dozens of adjectives that could indicate text written with the help of chatbots.

2024

arXiv > cs > arXiv:2403.07183

Search... Help | Adv

Computer Science > Computation and Language

[Submitted on 11 Mar 2024]

Monitoring AI-Modified Content at Scale: A Case Study on the Impact of ChatGPT on AI Conference Peer Reviews

2024

Weixin Liang, Zachary Izzo, Yaohui Zhang, Haley Lepp, Hancheng Cao, Xuandong Zhao, Lingjiao Chen, Haotian Ye, Sheng Liu, Zhi Huang, Daniel A. McFarland, James Y. Zou

THE USE OF AI IN PEER REVIEW REPORTS

Their analysis suggests that up to 17% of the peer-review reports have been substantially modified by chatbots — although it's unclear whether researchers used the tools to construct reviews from scratch or just to edit and improve written drafts.

RELATED

The idea of chatbots writing referee reports for unpublished work is "very shocking" given that the tools often generate misleading or fabricated information, says Debora Weber-Wulff, a computer scientist at the HTW Berlin–University of Applied Sciences in Germany. "It's the expectation that a human researcher looks at it," she adds. "AI systems 'hallucinate', and we can't know when they're hallucinating and when they're not."

HALLUCINATIONS

COPYRIGHT ISSUES

Using chatbots for peer review could also have copyright implications, Weber-Wulff adds, because it could involve giving the tools access to confidential, unpublished material. She notes that the approach of using telltale adjectives to detect potential AI activity might work well in English, but could be less effective for other languages.

SCIENCEINSIDER | SCIENTIFIC COMMUNITY

Citation cartels help some mathematicians—and their universities—climb the rankings

Widespread citation manipulation has led entire field of math to be excluded from influential list of top researchers

Other researchers say citation manipulation is simply a symptom of a flawed system of evaluation. Citations and similar metrics are not refined enough to monitor individual performance, says Ismael Rafols, a researcher at the Centre for Science and Technology Studies of the University of Leiden, and people are always going to find ways to game the system. Holden agrees: "The bottom line is that citations are not a good measure of scientific quality." Jan 30 2024

CITATION CARTELS [EXCLUDED FROM WOS]

HYPERPRODUCTIVITY (60 PAPERS/YEAR)
- QUESTIONABLE PRACTICES, FRAUDS
- AT LEAST 33 RESEARCHERS HAD «BOUGHT» ARTICLES

Underlying factors

The uptick could be driven at least in part by the country's research-funding system, which has switched to favouring large interdisciplinary teams instead of small groups, making it easier for researchers to get their names on more papers, says David Harding, a chemist at Suranaree University of Technology in Nakhon Ratchasima, Thailand. "Thailand has undergone a radical overhaul of its research ecosystem in an attempt to improve productivity," says Harding.

Another contributing factor might be Thailand's focus on university rankings, which are underpinned by publication numbers and metrics, says Vilaivan. He adds that many universities in the country use cash incentives to encourage researchers to publish in prominent journals. If researchers play their cards right, they can earn up to 1 million Baht (US$28,000) a year through publications alone, he says.

nature > news > article

NEWS | 11 December 2023

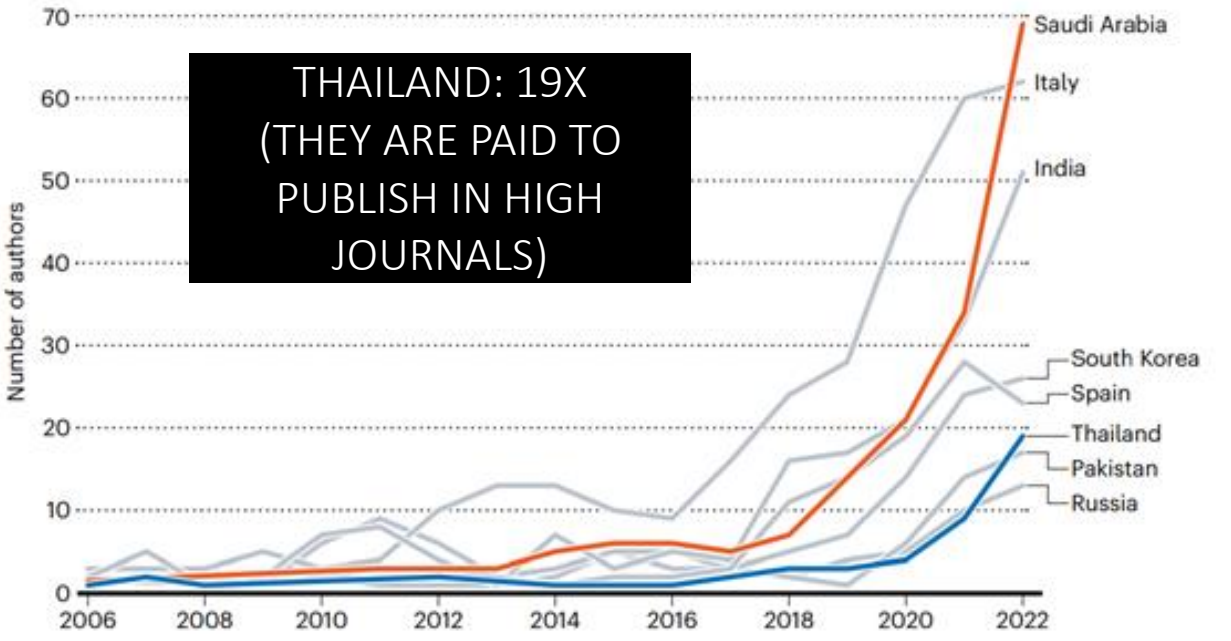
Surge in number of 'extremely productive' authors concerns scientists

Some researchers publish a new paper every five days, on average. Data trackers suspect not all their manuscripts were produced through honest labour.

THAILAND: 19X (THEY ARE PAID TO PUBLISH IN HIGH JOURNALS)

EXTREME GROWTH

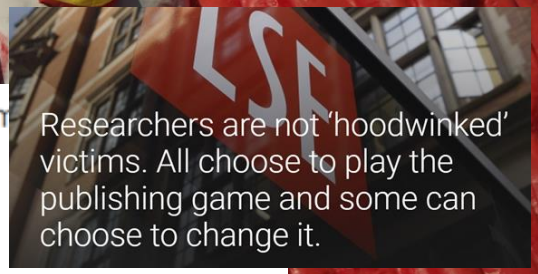
Saudi Arabia had the highest number of extremely productive authors among the countries that have seen the fastest growth in the phenomenon. However, Thailand had the sharpest increase between 2016 and 2022.



[Game over]

IF WE REDUCE SCHOLARLY COMMUNICATION TO «PRODUCE» # ARTICLES/YEAR [WHICH HAVE TO BE REVIEWED], SOMEHOW HAVING FAKE PAPERS AND FAKE REVIEWS WRITTEN BY CHATGPT IS A LOGICAL CONSEQUENCE….

…IT'S THE SYSTEM THAT PERVERSE RESEARCH ASSESSEMENT INDICATORS DESERVE



Scott Edmunds perhaps summed it up best at the FORCE2015 m

2015

It is no longer the case that people are gaming the system, the system has become a game. It's time to say Game Over.

Darling, we need to talk

WORLD VIEW · 06 FEBRUARY 2019

2019

We need to talk about systematic fraud

Software that uncovers suspicious papers will do little for a community that does not confront organized research fraud, says Jennifer Byrne.

let alone talk about it. It is even more uncomfortable to think about organized fraud that is so frequently associated with one country. This becomes a vicious cycle: because fraud is not discussed, people don't learn about it, so they don't consider it, or they think it's so rare that it's unlikely to affect them, and so papers are less likely to come under scrutiny. Thinking and talking about systematic fraud is essential to solving this problem. Raising awareness and the risk of detection may well prompt new ways to identify papers produced by systematic fraud.

Bad apples or systematic problem? Is Italy struggling with maintaining high level of research integrity?

2024

Daniel Pizzolato

Received 13 Oct 2023, Accepted 09 Feb 2024, Published online: 15 Feb 2024

Sunday 19 November 2023

11 nov 2023

Defence against the dark arts: a proposal for a new MSc course

2024

Science Forever

Universities need to stop hiding from research integrity problems

Talked about this a lot with Eric Topol on his podcast

HOLDEN THORP, SCIENCE EIC
MAR 18, 2024

♡ 11 💬 3 Share

This weekend, Eric Topol over at Ground Truths posted a podcast that I did with him about many topics in science, including a lot of stuff about research integrity:

Darling, we need to talk / 2

«AGENDA-DRIVEN» RESEARCHERS MANIPULATE DATA

PERSPECTIVES ON ANIMAL BIOSCIENCES (Open Access) Apr.22 2024 Next

Perspective on scientific truth versus scientific evidence; maintaining integrity in global food systems

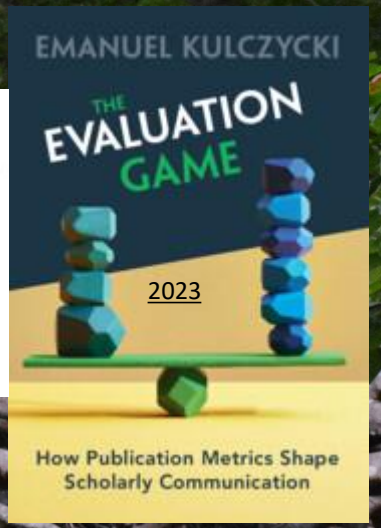
Peer Ederer A *

Sciences related to animal agriculture are threatened by agenda-driven scientists. It can be shown that too many peer-reviewed articles have dubious quality, including high-profile ones. Better training and higher review standards for rigour, reproducibility and transparency should help alleviate the problem. However, they will not solve the challenge posed by 'cargo cult scientists', as characterised by Richard Feynman. Such agenda-driven scientists pursue an *a priori* mission, whose achievement justifies any means, even if it includes to willfully manipulate and interpretate data, or to violate good practices of integrity in the sciences. This review explores in three prominent case studies in animal-sourced food related sciences where the dividing line might be between science being poorly practiced (which can be remedied), and scientific channels being abused for agendas (which should not be tolerated). So as to guard both as the individual scientist and as the discipline against the intrusion of such agenda-driven science, this article suggests adopting the Popperian stance to generally refrain from the concept of seeking or establishing a 'scientific truth', and instead to restrict oneself to presenting the 'scientific evidence', both in terms of what the evidence shows, and what it does not.

4. *Agenda-driven science*. It is this fourth kind of false science, which is the most threatening, which is when scientists feel that it is their right and duty to manipulate the scientific evidence with intent, so as to pursue an agenda they believe in. They are neither poorly trained, nor biased, nor interested, they are zealous. For them, fitting the evidence towards an end, is to make the right goal justify the means. Neither RRT training, nor peer review nor any degree of COI disclosure will capture these cases. The existence of such malpractice is well established, although the extent of it is not.

The root of the issue

Chapter 6 deals with the main areas in which the evaluation game transforms scholarly communication practices. Thus, it focuses on the obsession with metrics as a quantification of every aspect of academic labor; so-called questionable academia, that is the massive expansion of questionable publishers, journals, and conferences; following the metrics deployed by institutions, and changes in publication patterns in terms of publication types, the local or global orientation of research, its contents, and the dominant languages of publications. Finally, the chapter underlines the



SINCE 1891 THE BROWN I

NEWS SPORTS ARTS & CULTURE SCIENCE & RESEARCH OPINIONS PROJECTS POST- MAGAZINE MULTIMEDIA

OPINIONS

Rahman '26: Our 'publish-or-perish' culture is breaking the academy

"For academia to maintain trust and integrity, we must evolve to holistically judge our researchers as more than just publication machines."

nature 2016

Explore content About the journal Publish with us

nature › world view › article

World View | Published: 12 July 2016

Watch out for cheats in citation game

Mario Biagioli

The focus on impact of published research has created new opportunities for misconduct and fraudsters, says Mario Biagioli.

THE ROYAL SOCIETY

The future of scholarly scientific communication

Conference 2015 2015

EVALUATION BECAME AN OBSESSION

- «not only are we failing to provide the right incentives, we are providing perverse ones»
- Goodhart's law: «**when a measure becomes a target, it ceases to be a good measure**»
- «**people game the system at every level**»

EU speaking

STAY TUNED…GOOD NEWS FROM THE EU!!!

2022

Council of the European Union

Brussels, 10 June 2022
(OR. en)

10126/22

I. Reform of research assessment systems in Europe

3. ACKNOWLEDGES that research assessment systems should focus on quality and impact, and RECALLS that the current research assessment systems are nowadays to a great extent too focused on the use of some quantitative journal- and publication-based indicators and the evaluation of a narrow range of research outputs; CONSIDERS that such an approach may lead to negative biases in terms of research quality, reproducibility and integrity; STRESSES

- RECALLS THAT THE CURRENT SYSTEM IS TOO FOCUSED ON QUANTITATIVE METRICS AND PUBLICATION-BASED INDICATORS + A NARROW RANGE OF OUTPUTS
- CONSIDERS THAT SUCH AN APPROACH MAY LEAD TO NEGATIVE BIASES IN QUALITY, REPRODUCIBILITY AND INTEGRITY

We need to slow down

SCIENTIFIC INVESTIGATION >

Apr. 2024

Elisabeth Bik, expert in scientific integrity: 'We need to slow down scientific publishing'

The Dutch microbiologist has been voluntarily searching for duplicate, erroneous or retouched academic images for more than 10 years and warning universities and scientific journals about it

Q. Do you think part of the problem has to do with how quickly scientific publications are supposed to be produced?

A. Definitely. We focus on metrics to evaluate a scientist's career: how many articles they have published, how many times they were cited, what was the impact factor of all these articles. These are numbers you can look at and it's easy to rank your candidates according to these metrics. People are going to try to fake these metrics, they're going to cite themselves a lot, or they're going to buy a paper from a paper mill or slice their papers into little pieces and publish all of them. There are universities that have strict requirements. For example, if you want to get your PhD, you need to publish two or three papers before you can get it. That's not completely fair, because you can be a brilliant scientist, but the experiments might not work and you may not have published any papers.

things. It's a rat race where the fraudsters will always win, but we can make it harder for them. We need to slow down scientific publishing.

THE RACE FOR PUBLICATIONS IS CAUSING MISCONDUCT.
WE NEED TO SLOW DOWN

«Trust me» or «show me»?

Medscape

Perspective > Medscape Family Medicine

COMMENTARY

Peer Review and Scientific Publishing Are Faltering

Roberta Villa, MD

DISCLOSURES | March 07, 2024

IS IT JUST A MATTER OF TRUST?

. Serious scientists and,

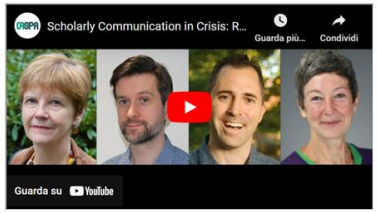
above all, trust in science suffer.

SCIENCE SHOULD BE «SHOW ME», NOT «TRUST ME»

Webinar – Scholarly Communication in Crisis: Research Integrity and Open Scholarship

April 25, 2023 by Bernie Folan

2023



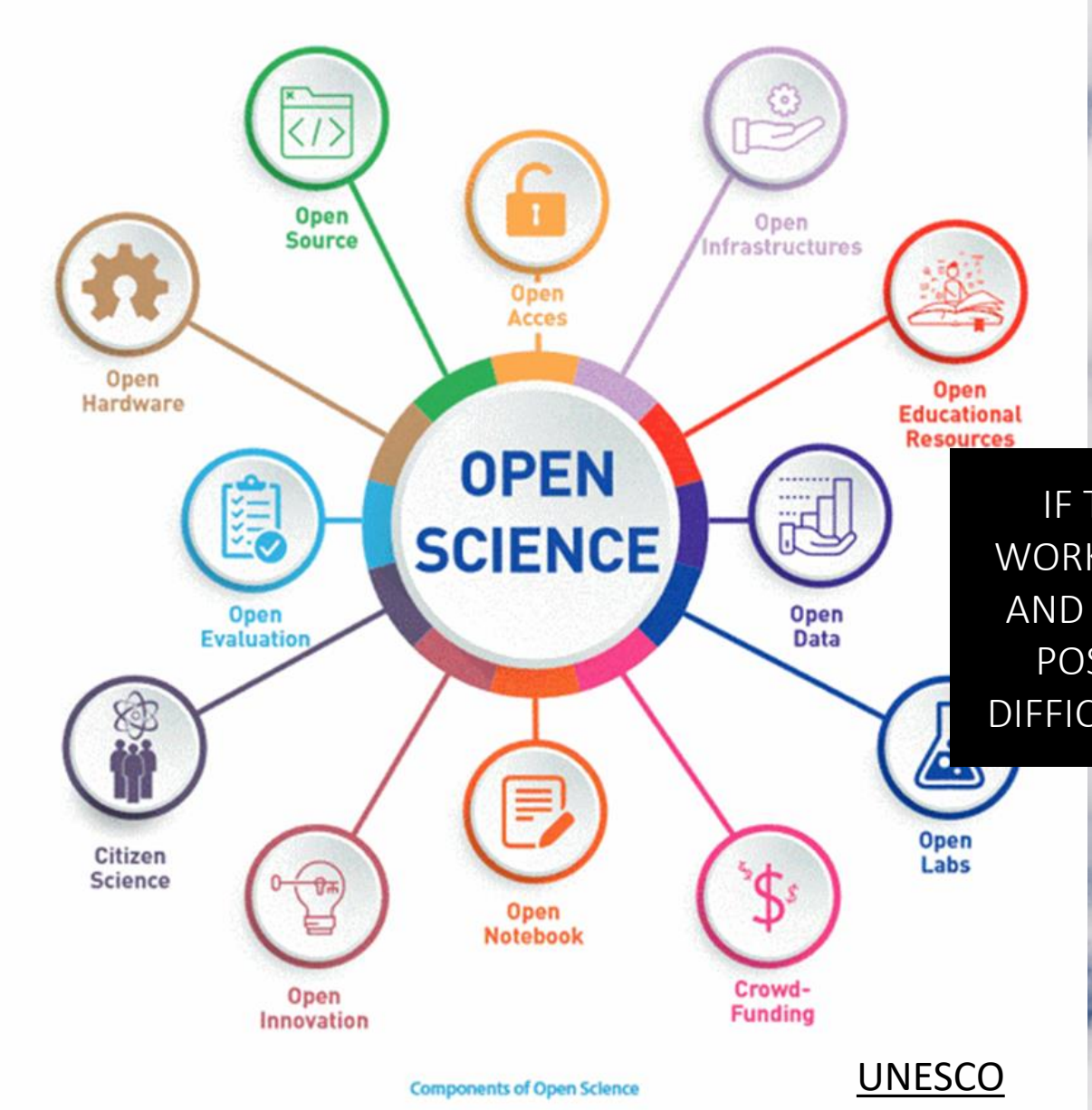
Test and Trace

Tracking down papermills – importance of open data/code sharing

"Science should be 'show me', not 'trust me'; .....
If I publish an advertisement for my work (that is, a paper long on results but short on methods) and it's wrong, that makes me untrustworthy.
If I say: "here's my work" and it's wrong, I might have erred, but at least I am honest."

If open data/scripts routinely required, then would make a great deal of work for paper mills

Philip Stark



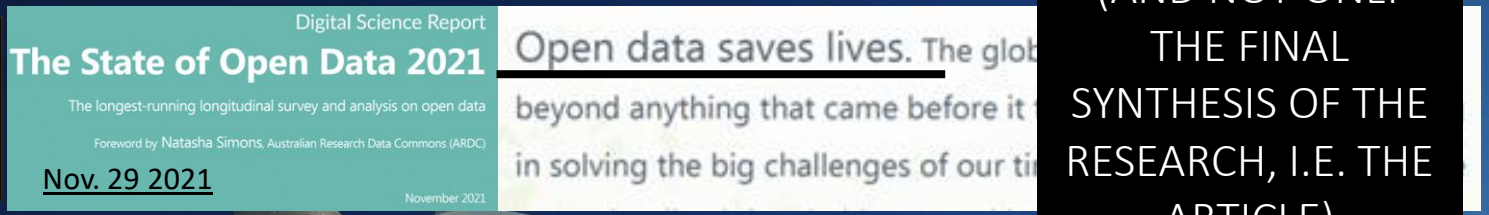
IF THE ENTIRE WORKFLOW IS FAIR AND «AS OPEN AS POSSIBLE» IT'S DIFFICULT TO CHEAT

UNESCO

Openness is the key

Lessons learned from COVID

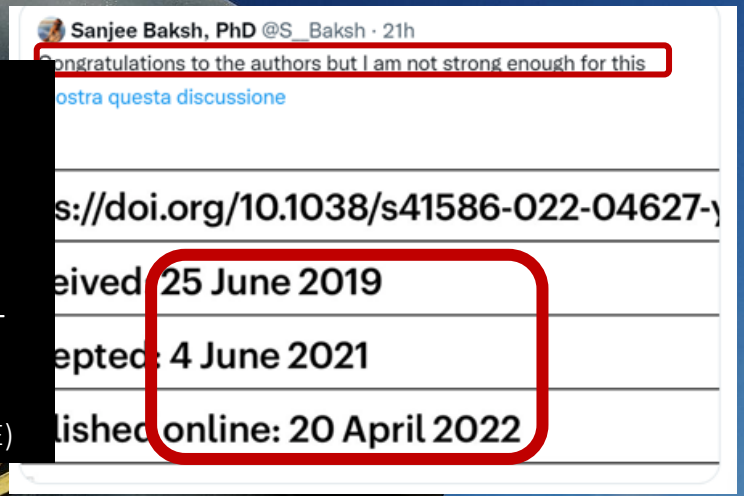
OPEN DATA SAVE LIVES

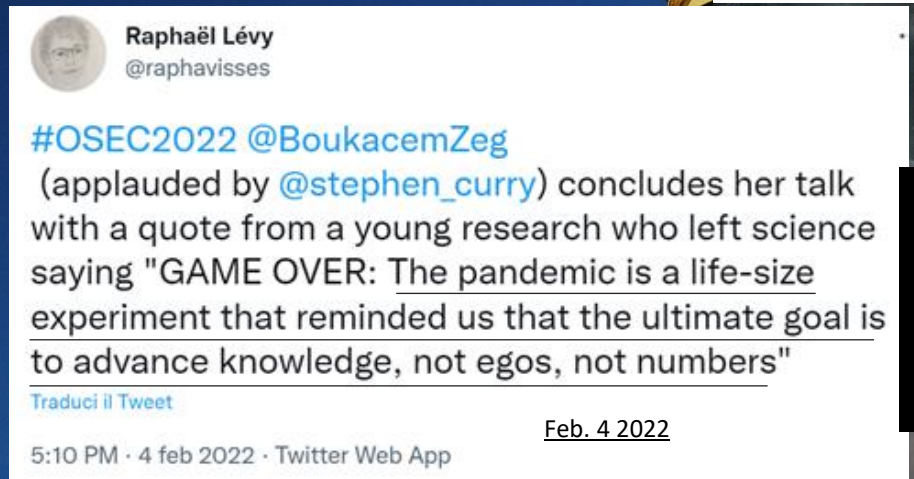


Nov. 29 2021

WE NEED DATA [FAIR BY DESIGN] (AND NOT ONLY THE FINAL SYNTHESIS OF THE RESEARCH, I.E. THE ARTICLE)

… …AND WE NEED RESULTS IMMEDIATELY…
TRADITIONAL SUBSCRITPION BASED JOURNALS: FIRST ARTICLES (WITH NO DATA) AT THE EARLIEST IN DEC. 2020
(9-18 MONTHS AVERAGE PUBLICATION TIME)





Feb. 4 2022

THE PANDEMIC IS A LIFE-SIZE EXPERIMENT THAT REMINDED US THAT THE ULTIMATE GOAL IS TO ADVANCE KNOWLEDGE, NOT EGOS, NOT NUMBERS

Lessons learned from COVID / 2

Health · **Second Opinion**

'We're opening everything': Scientists share coronavirus data in unprecedented way to contain, treat disease

Feb.1, 2020

raise questions about the way science-as-usual is practised.

Vincent Larivière is an information scientist and professor at the University of Montreal, who studies the way science is disseminated. He said the move to speed up publication and share research is a tacit admission that business-as-usual in research slows down science.

"[They say] we're opening everything because it's important that we advance things fast. Well, the flip side of this argument is that your normal behaviour is to put barriers to science."

"This virus is dangerous and deadly, but there's lots of other diseases that are dangerous and deadly, and for which opening could save lives. So if you really want to go in that direction, just open everything."

University of Montreal researcher Vincent Larivière said the c climate of open science suggests that science-as-usual create barriers. (Amélie Philibert)

…SCIENTIST ARE NOW OPENING AND SHARING DUE TO COVID-19…
THE FLIP SIDE IS THAT OUR NORMAL BEHAVIOUR IS TO PUT BARRIERS TO SCIENCE

nature

Feb 4, 2020

Subscribe

EDITORIAL · 04 FEBRUARY 2020

Calling all coronavirus researchers: keep sharing, stay open

As the new coronavirus continues its deadly spread, researchers must ensure that their work on this outbreak is shared rapidly and openly.

The purpose of scholarly communication

The virus is reminding us that the purpose of scholarly communication is not to allocate credit for career advancement, and neither is it to keep publishers afloat. Scholarly communication is about, well, scholars communicating with each other, to share insights for the benefit of humanity. And whilst we've heard all this before, in a time of crisis we realise afresh that this isn't just rhetoric, this is reality.

the coffin will be closed?!" If we've created a generation of scholars who are just in it for the glory of papers in glamorous journals, and not to do good research that changes the world a little bit, then we really are in trouble.

WONKHE ABOUT US EVENTS LATEST JOBS SUBSCRIPTION SUS

Apr. 22, 2020

The purpose of publications in a pandemic and beyond

Plan S

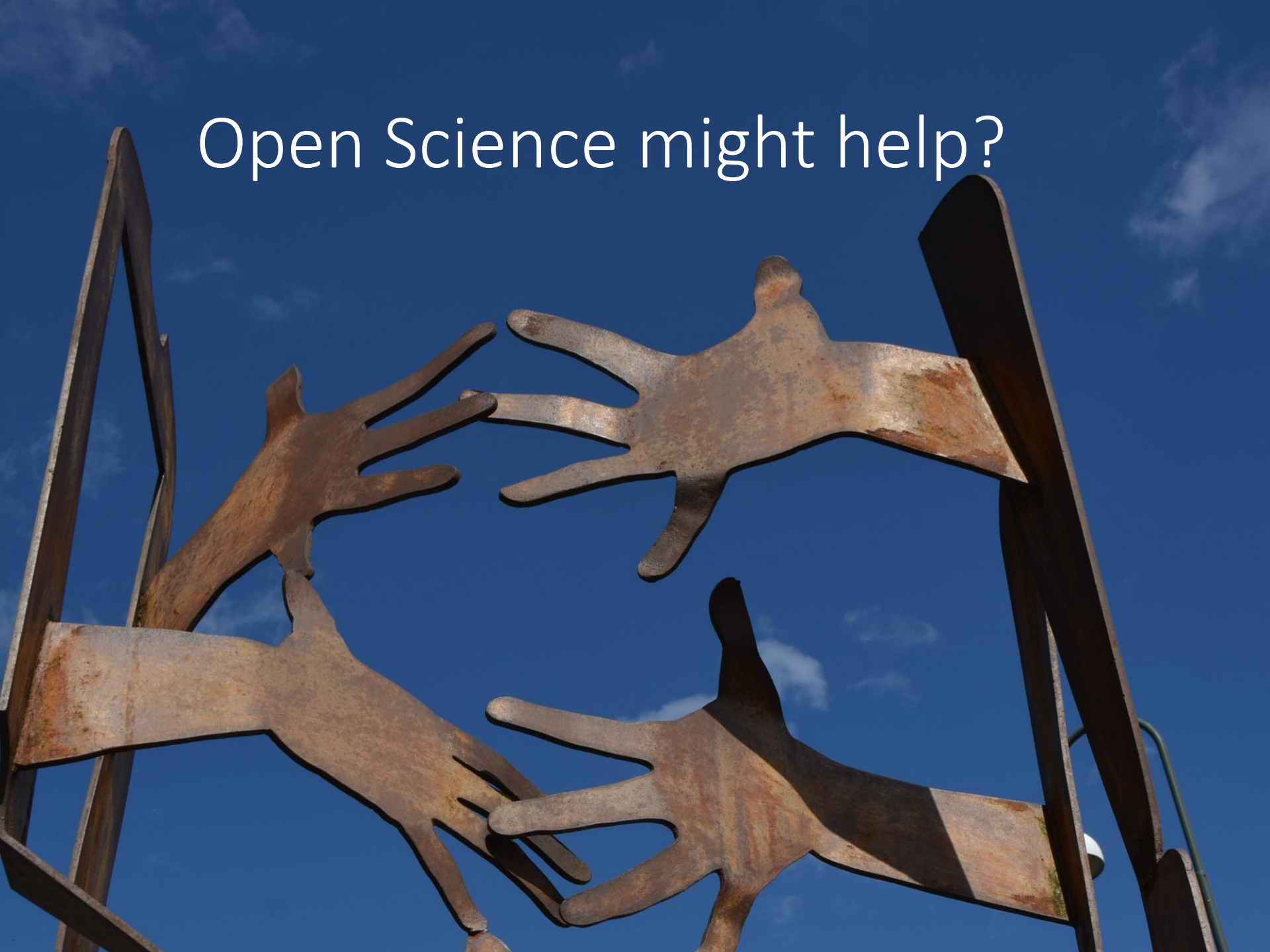
Roorick, June 2020

Why Plan S Principles and Implementation cOAlition S Apply for Transformative Journal status Contact

Open Access lessons during Covid-19: No lockdown for research results!

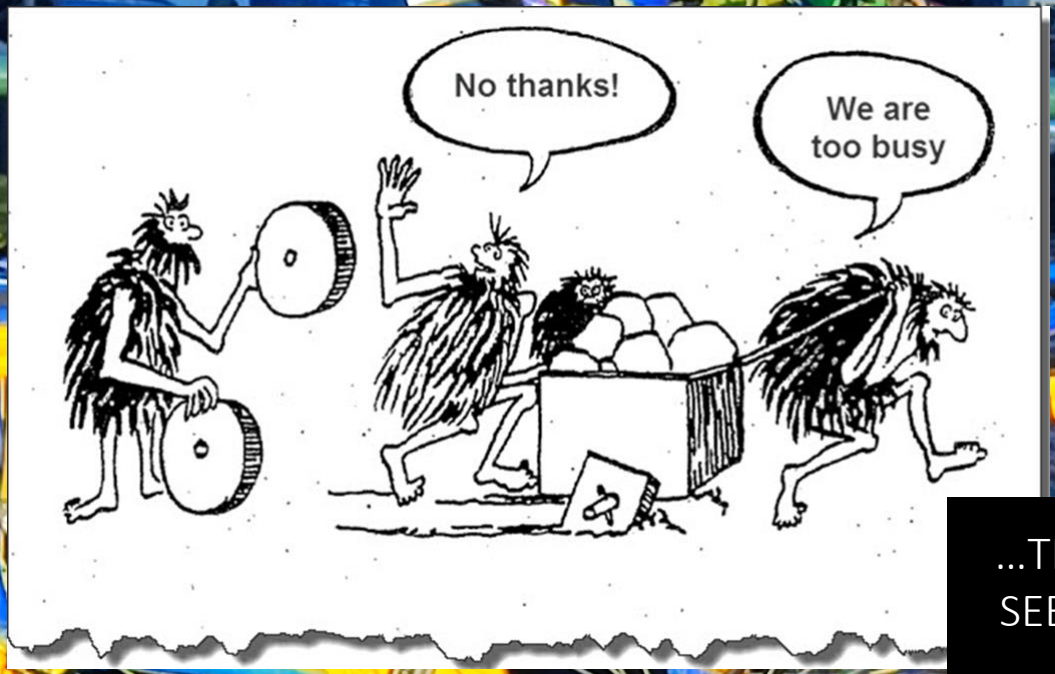
WE DON'T KNOW WHICH RESEARCH PAPERS THAT TODAY REMAIN LARGELY INACCESSIBLE COULD INSPIRE SOLUTIONS AND BRIGHT IDEAS FOR TOMORROW'S CHALLENGES

Open Science might help?



Open Science?

OPEN SCIENCE IS NOT THE FINAL GOAL. OPEN SCIENCE IS JUST FUNCTIONAL TO A BETTER AND SOUNDER SCIENCE, MORE RESPONSIVE TO SOCIETAL NEEDS



…THAT'S WHY WE'LL SEE MORE REASONS THAN RULES

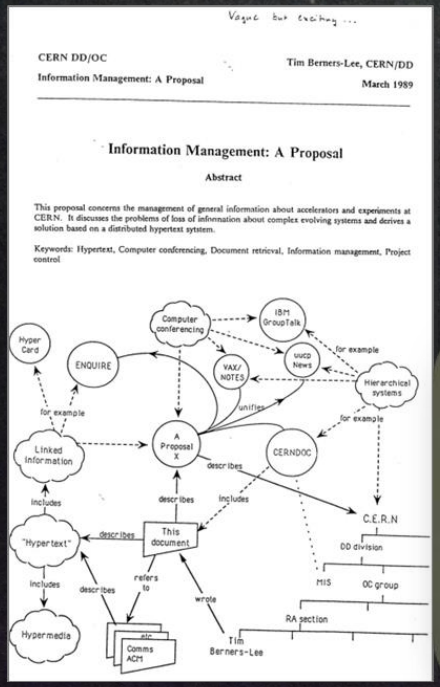
…OPEN SCIENCE HOLDS A HUGE TRANSFORMATIVE POTENTIAL… IF YOU DON'T FOCUS ON ITS REAL VALUE, IT WILL BE SEEN AS THE UNPTEENTH ADMINISTRATIVE BURDEN

Open Science in practice?

"Vague but exciting"

CERN

www.cern.ch



Vague but exciting ...

CERN DD/OC

Tim Berners-Lee, CERN/DD

Information Management: A Proposal

March 1989

Information Management: A Proposal

Abstract

This proposal concerns the management of general information about accelerators and experiments at CERN. It discusses the problems of loss of information about complex evolving systems and derives a solution based on a distributed hypertext system.

Keywords: Hypertext, Computer conferencing, Document retrieval, Information management, Project control

…THE HTTP PROTOCOL, WHICH CHANGED OUR LIVES – IT USED TO BE AN INTERNAL TOOL, CERN DECIDED TO OPEN IT UP

…a bit of inspiration…

The best thing about **Internet** is that it's **open.** In every field **it let us share and innovate.**

In science, **OPENNESS IS ESSENTIAL.**

Open science doesn't mean ignoring economic reality.

Of course **we need business models to be sustainable**. But that **doesn't mean we have to carry on doing things the way they have always been done.**

So, wherever you sit in the value chain, whether you're a researcher or an investor or a policy maker, my message is clear:
let's invest in collaborative tools that let us progress…

Let's tear down the walls that keep learning sealed off.

And let's make science open.

N. Kroes, Let's make science open, giugno 2012

Open Science – definition

Open Access | Lic. Info | Cite
Qeios
https://doi.org/10.32388/838962

Open Science

'Open Science' stands for the transition to a new, more open and participatory way of conducting, publishing and evaluating scholarly research. Central to this concept is the goal of increasing cooperation and transparency in all research stages. This is achieved, among other ways, by sharing research data, publications, tools and results as early and open as possible.

Open Science leads to more robust scientific results, to more efficient research and (faster) access to scientific results for everyone. This results in turn in greater societal and economic impact.

https://www.accelerateopenscience.nl/what-is-open-science/

NEW WAY OF
- CONDUCTING
- PUBLISHING
- EVALUATING

RESEARCH

SHARING
- DATA/TEXTS
- TOOLS
- RESULTS…

AS EARLY AND OPEN AS POSSIBLE

THIS IS THE REAL PURPOSE

OS LEADS TO MORE ROBUST SCIENTIFIC RESULTS, MORE EFFICIENT RESEARCH AND FASTER ACCESS
+ GREATER SOCIETAL AND ECONOMIC IMPACT

Open Scien

At the OECD STI Multi-Stakeholder event 'Shared challenges, transformative actions', on 23 April, CODATA President, Mercè Crosas, was the first speaker on a panel with the theme 'Making Open Science a reality for the benefit of society'.

Mail CODATA Apr. 24 2024

Mercè started by arguing that Open Science can best be understood as 'being scientific', doing science properly, according to longstanding scientific principles but in the context of 21st century technologies. Doing science properly means that scientific claims must be verifiable. This in turn means that the data, methodologies, protocols and analytical code must be available for scrutiny. Furthermore, science builds on previous work, stands on the shoulders of giants, and so the historical corpus of scientific claims and knowledge must be open as a shared heritage and resource of humankind.

Having set the scene in this way, Mercè went on to make four specific points and calls for action.

1. Open science must be global and inclusive.
2. Seize the opportunity of AI and sensitive data.
3. Engage wider society in Open Science.
4. Make Open Science work through the science of science.

- OPEN SCIENCE MEANS «BEING SCIENTIFIC» i.e. VERIFIABILE
- WHICH MEANS THAT THE ENTIRE WORKFLOW MUST BE AVALIABLE
- INCLUSIVE AND GLOBAL, OPEN TO SOCIETY
- SEIZE THE OPPORTUNITY FOR AI

Open Science

- CONCETTO INCULSIVO CHE COMBINA PRATICHE ATTE A RENDERE LA CONOSCENZA SCIENTIFICA APERTA, ACCESSIBILE E RIUSABILE
- PER AUMENTARE LA COLLABORAZIONE E LA CONDIVISIONE A BENEFICIO DELLA SCIENZA E DELLA SOCIETÀ

6. For the purpose of this Recommendation, **open science** is defined as an inclusive construct that combines various movements and practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community. It comprises all scientific disciplines and aspects of scholarly practices, including basic and applied sciences, natural and social sciences and the humanities, and it builds on the following key pillars: open scientific knowledge, open science infrastructures, science communication, open engagement of societal actors and open dialogue with other knowledge systems.

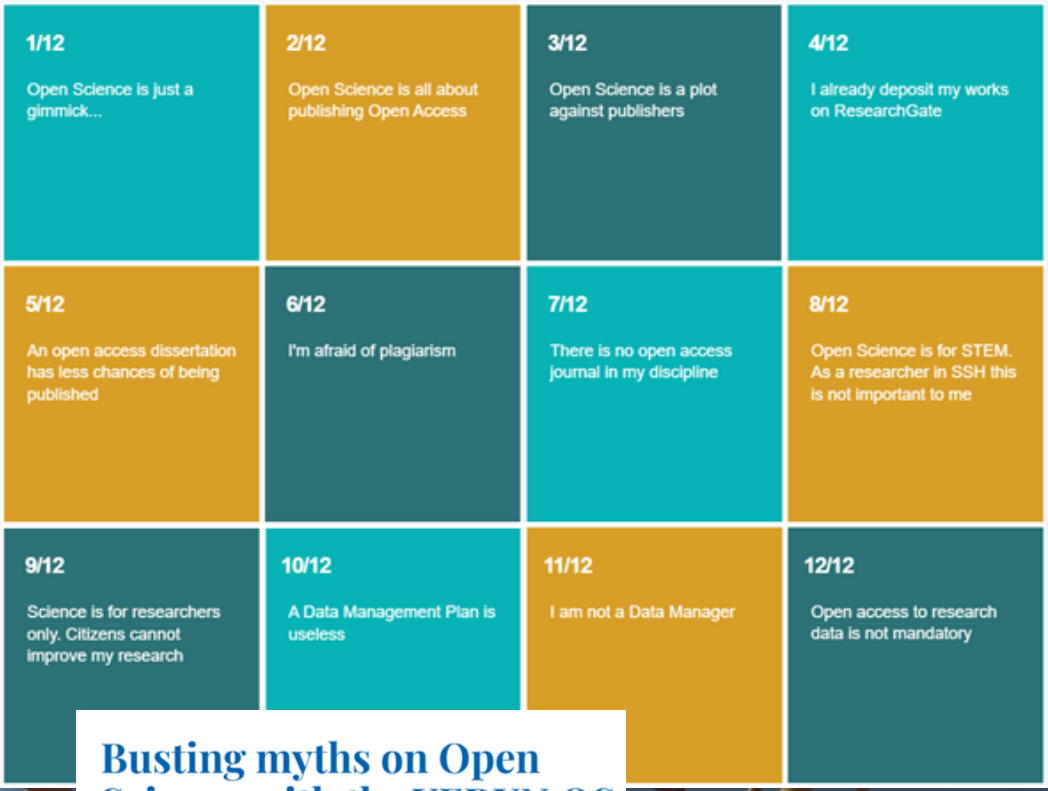
Open Science – definition

[Houston, we have a problem -


NOT PEER-REVIEWED

Ten myths around open scholarly publishing

Literature review | Science and Medical Education | Science Policy


1/12
Open Science is just a gimmick...

2/12
Open Science is all about publishing Open Access

3/12
Open Science is a plot against publishers

4/12
I already deposit my works on ResearchGate

5/12
An open access dissertation has less chances of being published

6/12
I'm afraid of plagiarism

7/12
There is no open access journal in my discipline

8/12
Open Science is for STEM. As a researcher in SSH this is not important to me

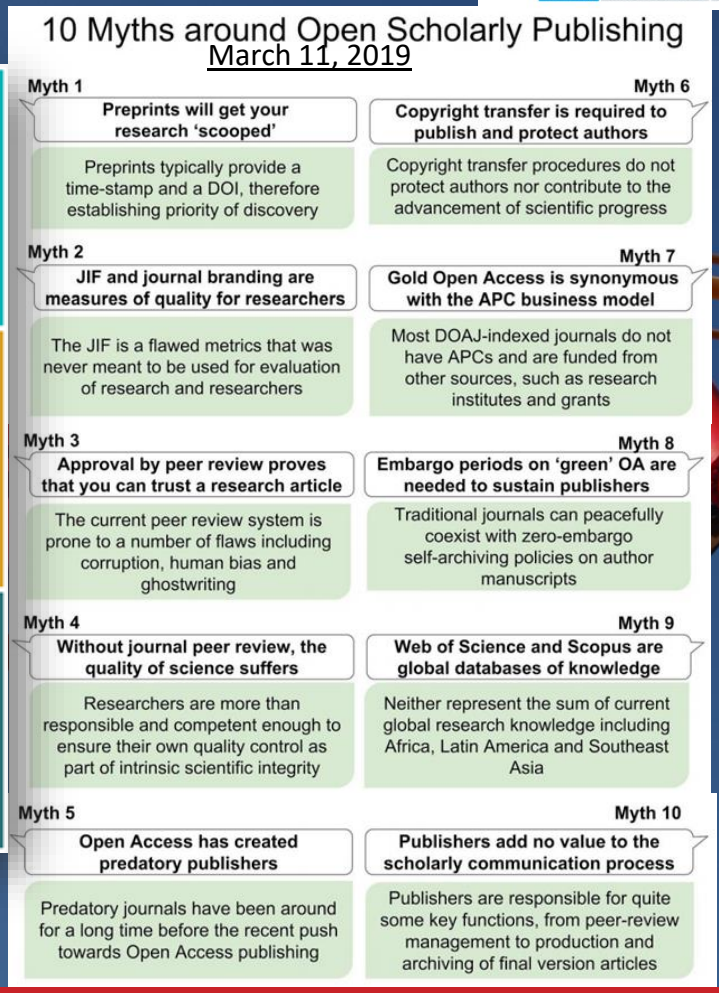
9/12
Science is for researchers only. Citizens cannot improve my research

10/12
A Data Management Plan is useless

11/12
I am not a Data Manager

12/12
Open access to research data is not mandatory

Busting myths on Open Science with the YERUN OS Calendar 2021! Dec. 2021


10 Myths around Open Scholarly Publishing

March 11, 2019

Myth 1
Preprints will get your research 'scooped'
Preprints typically provide a time-stamp and a DOI, therefore establishing priority of discovery

Myth 6
Copyright transfer is required to publish and protect authors
Copyright transfer procedures do not protect authors nor contribute to the advancement of scientific progress

Myth 2
JIF and journal branding are measures of quality for researchers
The JIF is a flawed metrics that was never meant to be used for evaluation of research and researchers

Myth 7
Gold Open Access is synonymous with the APC business model
Most DOAJ-indexed journals do not have APCs and are funded from other sources, such as research institutes and grants

Myth 3
Approval by peer review proves that you can trust a research article
The current peer review system is prone to a number of flaws including corruption, human bias and ghostwriting

Myth 8
Embargo periods on 'green' OA are needed to sustain publishers
Traditional journals can peacefully coexist with zero-embargo self-archiving policies on author manuscripts

Myth 4
Without journal peer review, the quality of science suffers
Researchers are more than responsible and competent enough to ensure their own quality control as part of intrinsic scientific integrity

Myth 9
Web of Science and Scopus are global databases of knowledge
Neither represent the sum of current global research knowledge including Africa, Latin America and Southeast Asia

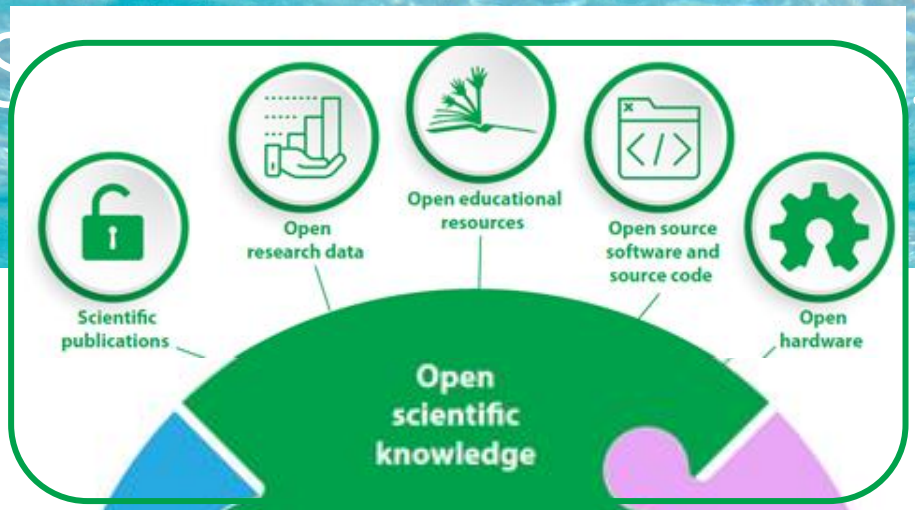
Myth 5
Open Access has created predatory publishers
Predatory journals have been around for a long time before the recent push towards Open Access publishing

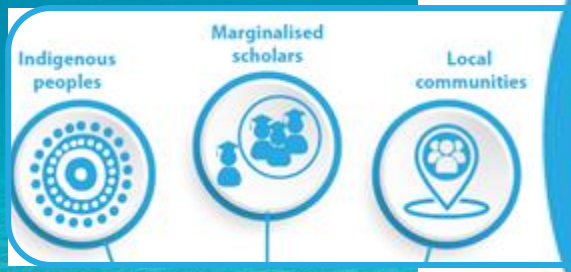
Myth 10
Publishers add no value to the scholarly communication process
Publishers are responsible for quite some key functions, from peer-review management to production and archiving of final version articles

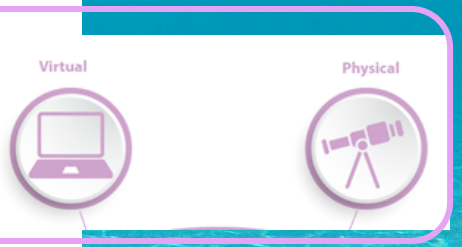
DIFFUSED MISCONCEPTIONS:

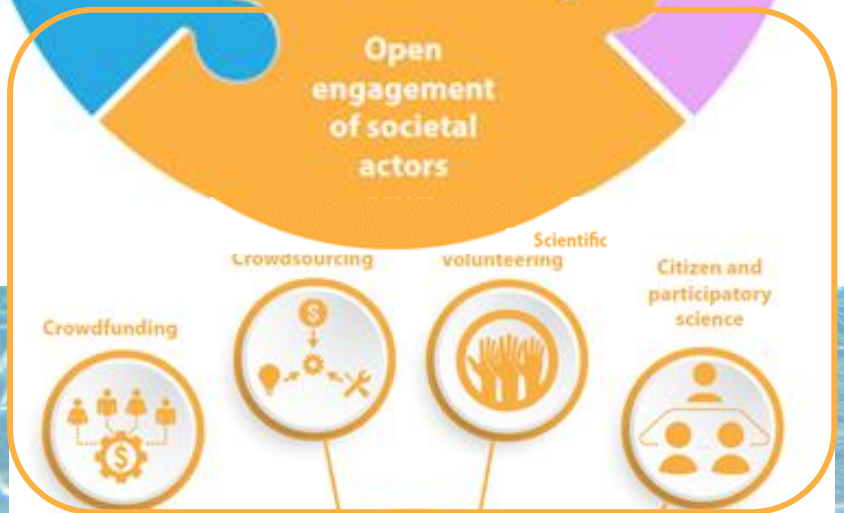
OPEN SCIENCE=OPEN ACCESS, YOU ALWAYS PAY TO PUBLISH, OA= PREDATORY, I CAN'T OPEN «MY» DATA…

…Open S…s







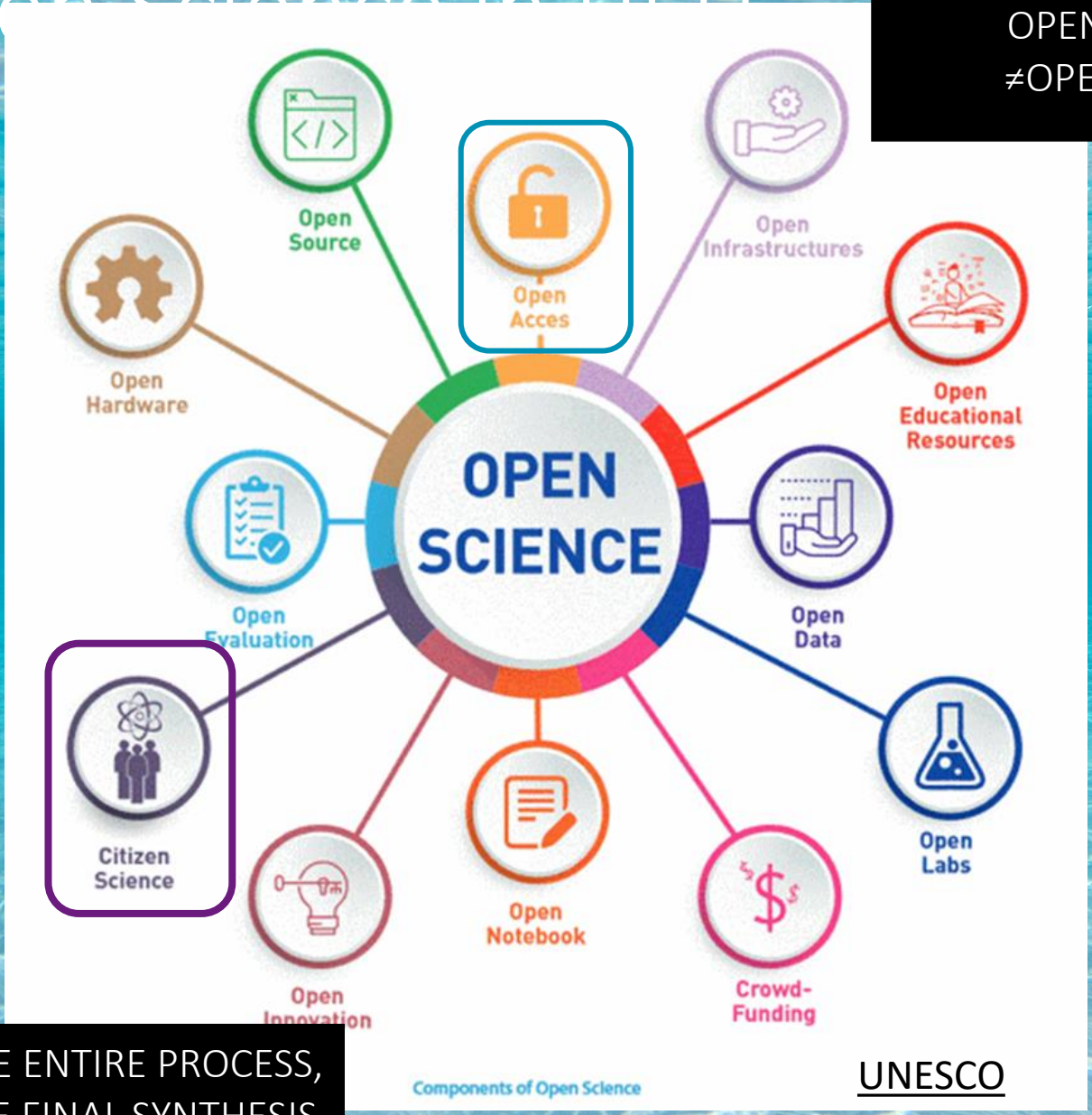


Nov. 23, 2021

NOT ONLY SCIENTIFIC KNOWLEDGE. OPEN DIALOGUE, OPEN ENGAGEMENT OF SOCIETAL ACTORS

…Open Science in UEU

OPEN SCIENCE
≠OPEN ACCESS

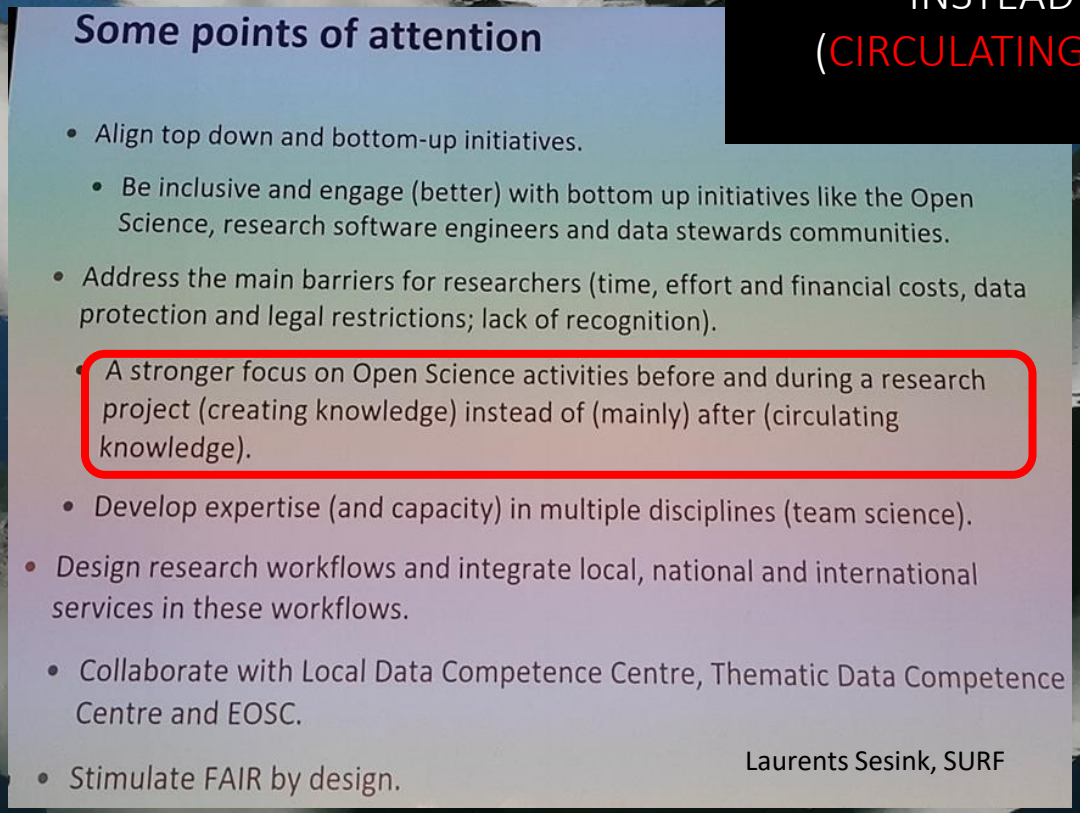


UNESCO

FOCUS ON THE ENTIRE PROCESS, NOT ONLY THE FINAL SYNTHESIS (ARTICLE)

Reflections on Open Science

FOCUS ON BEFORE AND DURING
(CREATING KNOWLEDGE)
INSTEAD OF AFTER
(CIRCULATING KNOWLEDGE)



Laurents Sesink, SURF

HERE IS HOW YOU CAN START A DIALOGUE WITH SOCIETY

Beyond the building blocks: ecology of knowledge

- SCIENTIFIC KNOWLEDGE IS JUST «ONE» OF THE KNOWLEDGE PRODUCED BY HUMANS
- OPEN DIALOGUE WITH OTHER KNOWLEDGE SYSTEMS MEANS A TWO-WAY COMMUNICATION [NOT ONLY «ACCESS», «SHARING» FROM ACADEMIA]

Munin Conference on Scholarly Publishing

Connecting the building blocks of Open Science: an ecological approach Nov. 2022

Pierre Mounier (EHESS)

Beyond the building blocks: towards an ecology of knowledge

In many texts about open science, starting with the definitions, there is often a versatile usage of "science" and "knowledge" that can be mentioned as if they were perfect synonyms. The UNESCO definition of open science is on the contrary very precise on this, considering science (or "scientific knowledge" as they put it) as one of the many types of knowledge that are produced in human societies. Hence, this challenging objective to "open dialogue with other knowledge systems", which touches upon several dimensions of scientific communication: citizen science, DEI (Diversity, Equity and Inclusivity), education, societal engagement. If everyone agrees that open science is ultimately for the benefit of society, it is often conceived as a basic right for non-academic actors to access the results of academic research, or as an active action to disseminate the outputs of research to the society through various channels. But, by no means this is what we could consider as "an open dialogue" that would require, at least, bidirectional communication. It thus implies to consider science on an equal footing with other types of knowledge (produced by practitioners, journalists, educators, amateurs, communities for example) to contribute to a common good that extends beyond the borders of academia (Okune et al., 2019). In my

…but / 2

- FOCUS ON THE INTERACTIONS, NOT ON THE BLOCKS

"Connecting the building blocks" of open science is thus much more than just creating connections: it is more than ensuring technical interoperability between different systems, more than coordinating various stakeholders, more than disseminating science in society: it is to create a *milieu* of knowledge, to build the community that supports it and to open it beyond the limits of academia. In other words, it is to consider that the sum is superior to the addition of its parts, and to adopt an encompassing approach that supports open knowledge as a whole. That is why I would like to submit to discussion the relevance of adopting an ecological approach to open science. The main consequence of it would be to focus primarily not on the "blocks" taken individually, and not even primarily on the individual interactions between them, but on the systems of interactions that structure open science. The proposition would be to start from open science considered as an ecosystem supporting the creation of open knowledge, and then look at the elements from that perspective. What is in focus then, is the web of communications and interactions that compose the ecosystem. The objective is no more to "connect the building blocks" of open science, as bricks are assembled in a wall, but to support symbiotic systems of relations between initiatives, platforms, tools, communities and practices that thrive for and by open knowledge.

Winch means, when considering or even evaluating open science initiatives, projects, services and tools, to flip the order or priorities and to pay attention first to the way they move in their ecosystem: how do they nurture from it, how do they fertilise it, how do they cooperate with others, rather than other criteria that are usually considered as more important; such as innovation, efficiency, excellence. And then, when we have a comprehensive representation of the full web of interactions and interdependencies maybe we could start asking the right questions: is it sustainable? Is it inclusive? Is it creative? Is it alive?

- HOW DO THEY MOVE IN THE ECOSYSTEM? DO THEY NURTURE? DO THEY FERTILISE?

…THESE ARE THE CRITERIA, NOT «EXCELLENCE»

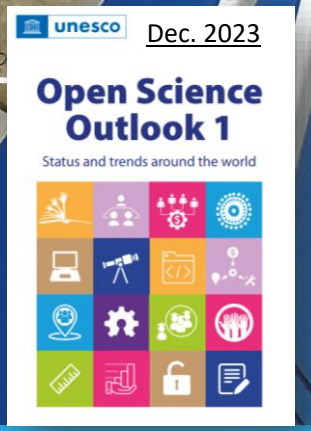
Munin Conference on Scholarly Publishing

Nov. 2022

Connecting the building blocks of Open Science: an ecological approach

Pierre Mounier (EHESS)

Open Science Key messages / 1



TRANSITION TO OPEN SCIENCE NEEDS A SHIFT IN THE CULTURE OF SCIENCE AND HAS TO BE MONITORED AGAINST UNINTENDED CONSEQUENCES

The transition to open science requires a shift in the culture of science.

- Transformation to an open scientific system that better engages with society requires both practical actions and systemic, cultural shifts grounded in mutual respect. Equitable collaboration and expanded access to technologies that facilitate this transformation are essential.
- Enacting such cultural change towards open science requires accessible infrastructures, strengthened capacities, aligned funding and incentives as well as operational and aligned policies and policy instruments.
- At present, there is a need for systematic and coherent approaches to open science that align with and operationalize values and principles of open science, taking into account the specific conditions, governing structures and constitutional provisions and science, technology and innovation capacities in different countries.
- The cultural shift to open science will only be possible with adequate monitoring of its impacts, including its possible unintended consequences for science and/or society (e.g. shift of costs from readers to authors; lack of clarity over ownership and intellectual property management in an open science context and others). If not addressed proactively, such unintended consequences may increase inequities in science and in the sharing of its benefits.

Open and equitable global science system	Open access to scientific knowledge	Open science infrastructures	Open engagement of societal actors	Open dialogue with other knowledge systems
An open science culture in an enabling policy environment with sustained resource commitments increases collaboration for the benefit of science and global society.	All scholarly outputs are published in a fully open access outlet or posted in an open repository, with free, immediate readership/ usership rights.	Sustainable community-led open infrastructures, both physical and digital, are available to all, regardless of location, language or ability.	Multiple entry points permit engagement. External actors contribute/initiate design, creation and application of scientific knowledge.	Diverse knowledge bases spark innovation and equitable decision-making.
A culture of open science is fostered with effort to align incentives for open science. Investments are made in human resources, training, education, digital literacy and capacity building for open science.	Data, software and other outputs are FAIR* and openly shared, linked with publication outputs.	Platforms permit usership for all. Digital architectures begin to facilitate use in different languages and accessibility needs.	Capacity for societal engagement is integrated into project design and institutional plans.	Capacity for ethical, open dialogue is integrated into planning and implementation at project and institutional levels.
Innovative approaches for open science are promoted at different stages of the scientific process.	All scholarly outputs are made freely available to read, in a journal or an open repository, after an embargo of no more than six months.	Open infrastructures are available to those who have existing access or commit to specified partnerships.	Societal actors have a few, defined, points of contact with scientific processes.	Dialogue is built into policies, creating time, opportunities and incentives for dialogue.
International and multi-stakeholder cooperation is initiated without a view to reducing digital, technological and knowledge gaps.	Scholarly outputs are shared without clear licensing or copyright	Infrastructure sharing is opportunistic.	Stakeholder engagement is opportunistic.	Dialogue is facilitated in one-off events, with uneven expertise.
There is no common understanding of open science and its benefits.	Scholarly outputs are not published or are published under restrictive copyright.	Digital gaps and subscription costs hinder the use of scientific infrastructures.	Science is separate from "outreach". Science communication is one-way, outwards.	Science is separate from "outreach". Other topics or communities are research subjects.

CULTURAL SHIFTS FROM CLOSED TO OPEN

'Closed' Conventional Science

…but…

Jan. 2022

BEWARE OF «OPEN WASHING»
IT'S NOT JUST PUTTING «OPEN»
BEFORE THAT WE ARE DONE…

frontiers

Mission statement Conversations Commentaries Evidence snapshots

Commentaries

Members of the Open Science community react to the UNESCO Recommendation

We asked 11 leading experts and advocates of the Open Science and Open Access movement to share their views on the significance of the UNESCO Recommendation on Open Science adopted in late 2021. Here are their responses and their own recommendations for how to achieve the objectives set by UNESCO.

recommendations. But, so far, most continue to put this still-fermenting new wine into the old wineskins of their current reward systems and publishing requirements. Ultimately, the escape from the 17th-century scholarly communication prison is *not* about blaming the publishers, but about facing our own, dried-out, elitist, and anachronistic ivory-tower scholarly communication practice (from which the publishers live lavishly).

IT'S US TO BLAME!

Barend Mons

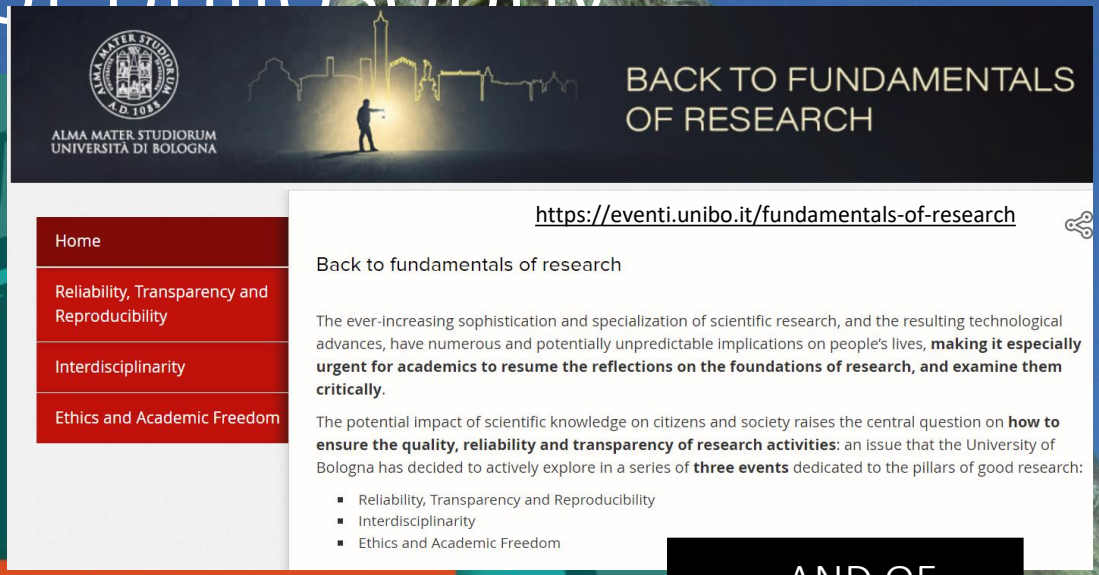
primarily communicated via human-readable narrative. However, we must realise that the evidence on which we base our knowledge should be centered on data and relevant, reproducible, observations and patterns that lead to precise claims[2], rather than on storytelling. Narrative is necessary but is *supplementary* to data and actual claims.

ly

the Global North can have our electric cars and cleaner cities? Why would science be different? The (almost) universally agreed-upon (among intellectuals) new wine, *although wonderful and tasty*, goes quickly into the old wineskins of the current, journal-based scholarly communication and reward system, which *will resist until it finally bursts*. Many

DON'T PUT NEW WINE IN OLD WINESKINS (THE CURRENT JOURNAL SYSTEM)

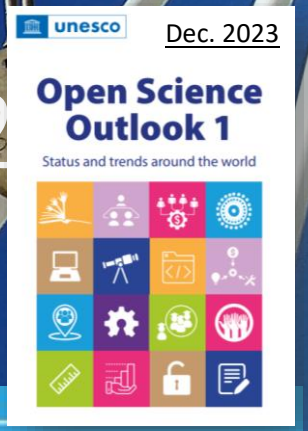
…it's a matter of philosophy



…AND OF TRAINING [UNIBO IS LEADING]

Open Science Key messages / 2

FOR OPEN SCIENCE TO REACH ITS FULL POTENTIAL, IT MUST BE A TRULY GLOBAL EQUITABLE PHENOMENON



For open science to reach its full potential, it must be a truly global equitable phenomenon.

- Open science has the transformative power to reduce the recognized existing inequalities in science, technology and innovation, thereby also accelerating the progress towards the achievement of the Sustainable Development Goals and the fulfilment of the human right to participate in and benefit from science and its advancements.
- To ensure that open science actors from all countries have access to, participate in and benefit from open science, due consideration must be given to the gaps that exist in research and development investment, capacities to transform knowledge into innovation, regulatory environments and overall maturity of science, technology and innovation systems across the world.
- Existing differences in scientific, technological and innovation capacity implicitly shape the experience and prioritization of open science practices. Taking these complexities into account will be critical to ensure that open science reaches its potential and reduces digital, technological and knowledge divides.
- The disciplinary and regional differences in open science perspectives also need to be considered, taking into account the specific challenges of scientists and other open science actors in varied contexts and in particular in developing countries.
- The existing lack of equity in access to digital tools and infrastructures and physical equipment as well as in the skills needed to use, manage and maintain them is one of the key barriers for accessing, sharing and storing information and for collaborating at multiple and varied levels in line with the principles of open science.

[Opening, not patronizing]

The unique opportunity to advance Science as a Global Public Good: Open Science in a world of contrasts

Arianna Becerril García

Autonomous University of the State of Mexico

UNITED NATIONS, NEW YORK | 8-10 FEBRUARY 2023

3rd Open Science Conference

Accelerating the Sustainable Development Goals, Democratizing the Record of Science

#OpenScienceUN

Arianna Becerril, Feb. 2023

On what data is the industry of prestige founded?

Which regions, countries, science fields, journals, institutions or authors are privileged by current strategies? Which ones are excluded?

Which inequalities the current system will continue to perpetuate?

Is openness structural and sustainable?

Who owns and control the knowledge? The research community interests prevail?

The future restrictions on knowledge generation depend on the ownership.

How to achieve systematic participation in science (not patronizing strategies) that enables a global conversation?

WHICH REGIONS ARE EXCLUDED?
WHO OWNS AND CONTROL THE KNOWLEDGE?
HOW TO ACHIEVE SYSTEMIC PARTICIPATION IN SCIENCE THAT ENABLES A GLOBAL CONVERSATION?

Open [collaborative being inclusiv

FORCE2021
Joining Forces to Advance the Future of Research Communications
December 7-9, 2021

Dec.2021

Beyond Diversity and Inclusion: Challenging Structural Racism and Systemic Biases in Academic Knowledge Production

Leslie Chan
Global Development Studies
Knowledge Equity Lab
University of Toronto Scarborough
@lesliekwchan @knowequitylab

Main points

Contemporary inequity in knowledge production has deep historical roots – tracing back to colonialism and the spread of imperial science

Addressing compositional diversity doesn't address the underlying problems of structural racism and systemic biases rooted in whiteness

Structural racism is about the maintenance and reproduction of power

Uncritical acceptance of "openness" risks reproducing and amplifying existing inequities

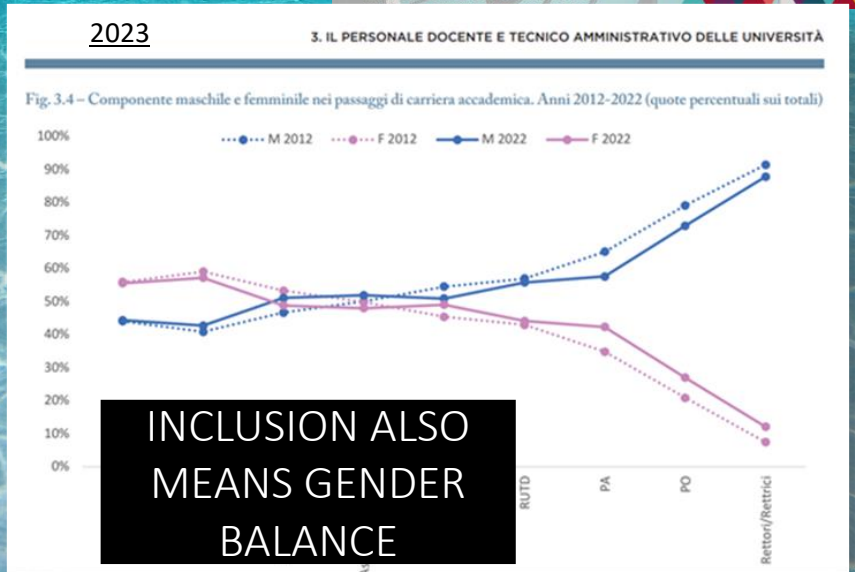
Design principles based on epistemic justice and knowledge equity are possible – Centering Human Relations and Solidarity

UNCRITICAL ACCEPTANCE OF «OPENNESS» RISKS REPRODUCING AND AMPLIFYING EXISTING INEQUITIES

INCLUSION ALSO MEANS MULTILINGUALISM

2024

2023



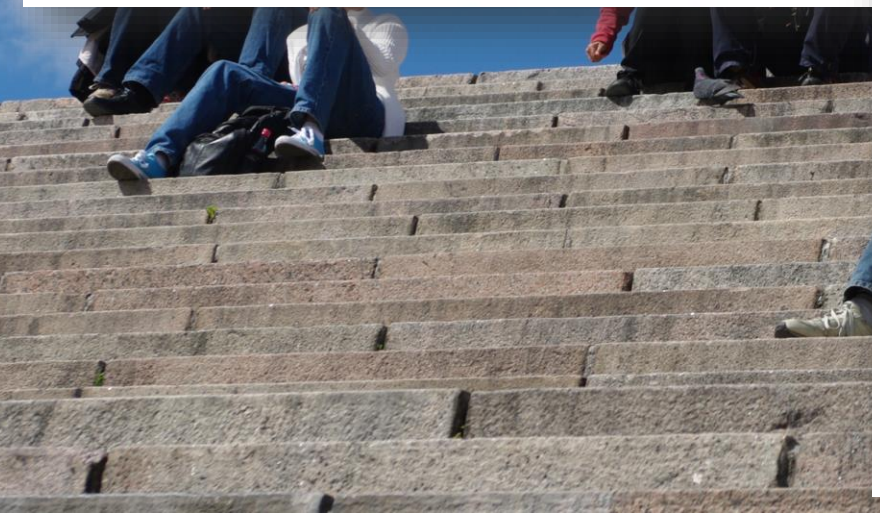
INCLUSION ALSO MEANS GENDER BALANCE

Equity, diversity, inclusion

Piv Gopalasingam, OLS6 2022

Equity, Diversity, Inclusion and Accessibility

1) WHO IS IN THE ROOM
2) WHO IS TRYING TO GET IN BUT CAN'T
3) HAVE EVERYONE'S IDEAS BEEN HEARD?



You can weave diversity and inclusion into your w

- There are many resources available - read and share!
  - Wellcome's anti-racist toolkit
- Find allies and collaborate - move the needle!
- Embed D&I into as many facets of your work - safe spaces
  - Add as a regular Agenda item in meetings, check if your work is inclusive
  - Ask "where are my/our blindspots, who are we leaving behind?" and work to counteract this

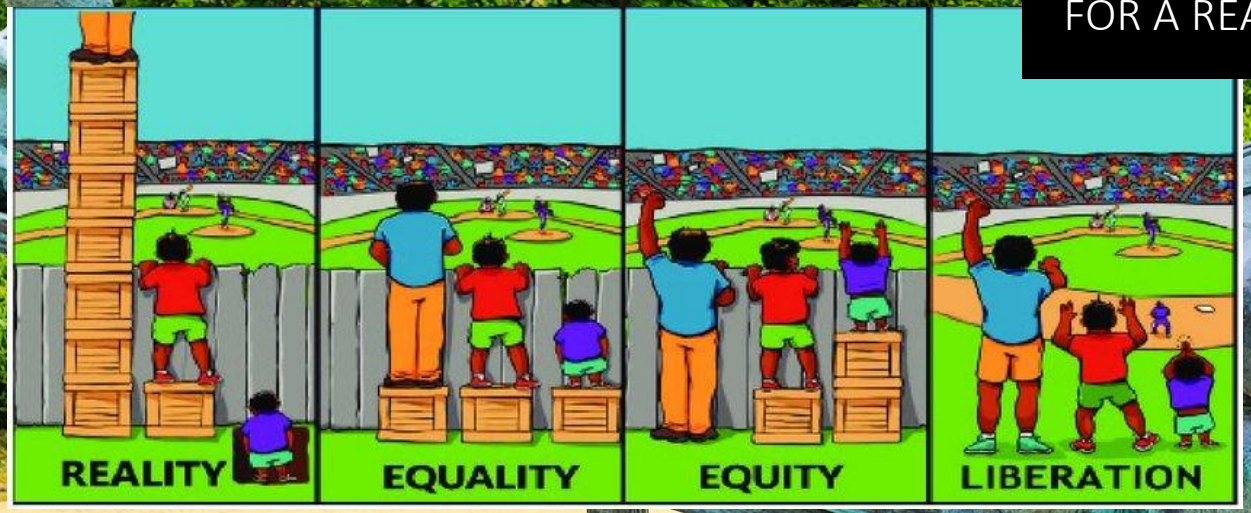
Wellcome anti racitst toolkit

https://wellcome.org/what-we-do/diversity-and-inclusion/wellcomes-anti-racist-principles-and-toolkit

EMBL-EBI

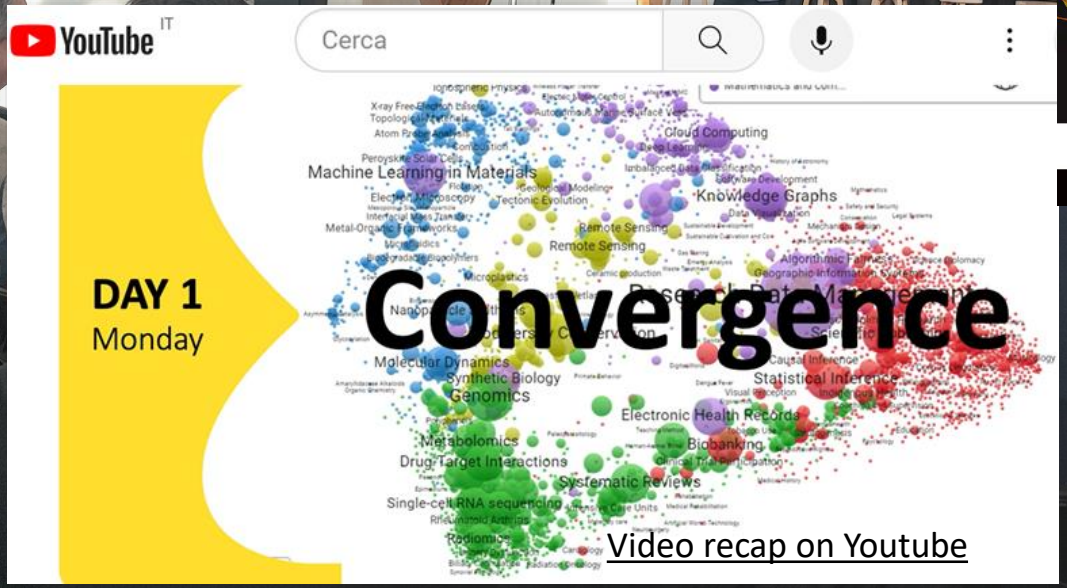
Equity or liberation?

SHOUDN'T WE AIM TO REMOVE BARRIERS FOR A REAL EQUITY?



The road to FAIR and e science

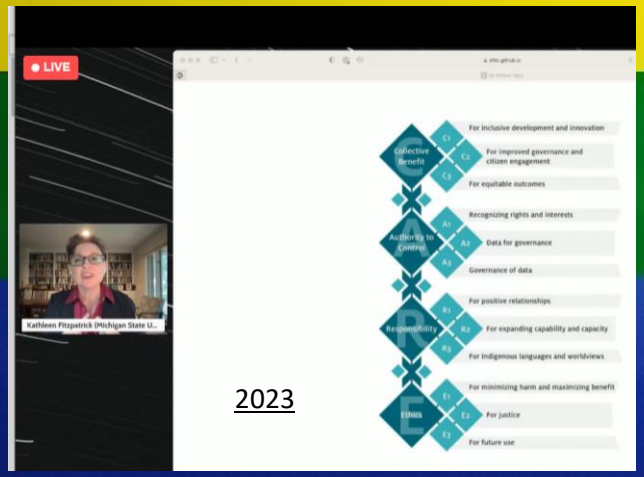
CONFERENCE IN LEIDEN, JAN.2024, THE ROAD TO FAIR AND EQUITABLE SCIENCE …WATCH THE VIDEO: THE GLASSHOUR IS ROTATING UPSIDE DOWN



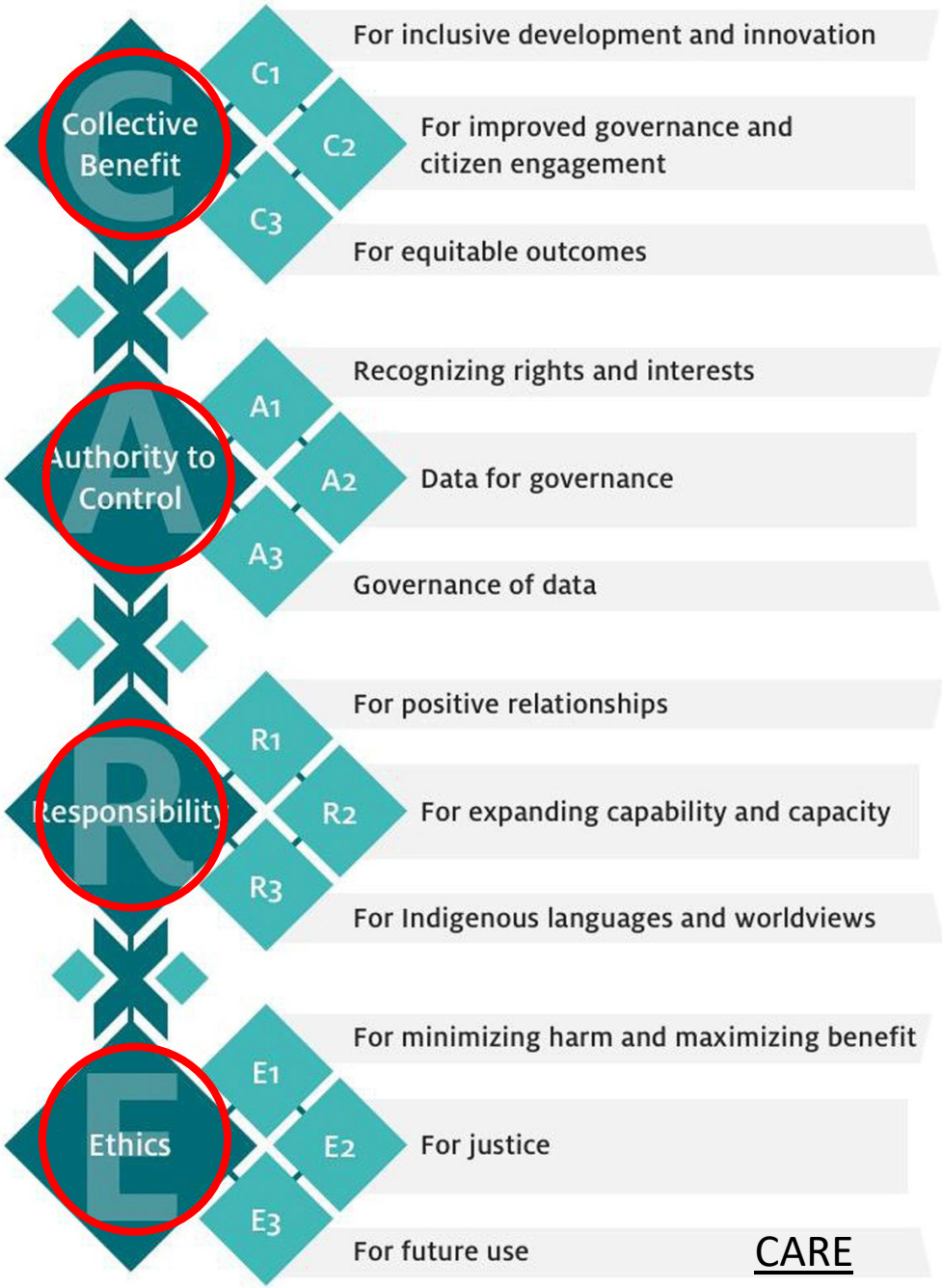
Video recap on Youtube

…alongside the CA

- COLLECTIVE BENEFIT
- AUTHORITY TO CONTROL
- RESPONSIBILITY
- ETHICS



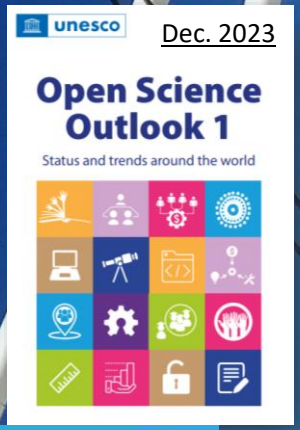
2023



CARE

Open Science Key messages / 3

TO ASSESS STATUS AND TRENDS TRADITIONAL INDICATORS ARE NOT ENOUGH
YOU NEED TO ADDRESS OPEN SCIENCE VALUES



Growing evidence demonstrates the rapidly increasing adoption of open science practices around the world and across multiple disciplines. However, the existing approaches used to assess open science must be strengthened to address all aspects and values of open science.

- Existing efforts to assess the status and trends of open science have shown that standard approaches and existing indicators and bibliometrics are insufficient to clearly understand and monitor the degree of openness across all the stages of the scientific cycle and across all the pillars of open science as defined in the 2021 UNESCO Recommendation on Open Science.
- A combination of open qualitative and quantitative assessments, as well as innovations in the understanding of and response to change, will be needed for a representative monitoring system for open science that itself adheres to the values and principles of open science.
- There is a need to shift from monitoring only scientific outputs, such as publications, towards assessing the values and impacts of science and with a focus on the people who are doing, engaging with and/or benefiting from science.

How to measure the impact of Open Science?

Ismael Rafols Ingeborg Meijer Jordi Molas-Gallart August 14th, 2023

2023

The benefits of Open science are not inevitable: monitoring its development should be value-led

9 shares

ing time: 7 minutes

we shouldn't monitor whether there is more or less open science, but what types of OS are developed and adopted, by whom, and with what consequences.

monitoring the 'colours' of open access aids understanding of both OA development and who benefits from it, it is essential to understand the trajectory of both OS in practice and whether it is making, or not making, science more equitable and responsive to global needs. For example the way in which some open access investments in rich countries, such as transformative publishing agreements, may result in less equitable outcomes in access to publishing services for other countries. More open science does not always lead to better outcomes.

- WE SHOULD NOT JUST CARE ABOUT «HOW MUCH» OPEN SCIENCE
- HAS IT CHANGED ANYTHING FOR BETTER?
- HAS IT IMPROVED EQUITY? THINK ABOUT HUGE APCs: WE HAVE MORE OPEN ACCESS, BUT AT WHAT COSTS? AND WHO CAN AFFORD?

If open science is understood as not just an optimisation by improving information flows, but as part of a wider transformation, comparable to how scientific journals changed the social and technological basis of science in the 17th century, then it would be wise to adopt a monitoring framework that captures various aspects of the change. Monitoring should therefore include the effects and broader social implications, especially those relevant to the values and principles as expressed in the UNESCO OS Recommendation (Fig.2).

[with open metrics]

BARCELONA DECLARATION ON OPEN RESEARCH INFORMATION

https://barcelona-declaration.org/

1

We will make openness the default for the research information we use and produce

2

We will work with services and systems that support and enable open research information

OpenAlex

https://openalex.org/

https://opencitations.net/

Welcome to the OpenCitations homepage!

3

We will support the sustainability of infrastructures for open research information

WE NEED «OPEN RESEARCH INFORMATION»

4

We will support collective action to accelerate the transition to openness of research information

[it's ch

- WITHDRAWING FROM RANKINGS
- UNSUBSCRIBING
- USING OPEN ALEX

SORBONNE UNIVERSITÉ Dec. 2023

Open Science

Sorbonne University unsubscribes from the Web of Science

Sorbonne University has been deeply committed to the promotion and the development of open science for many years. According to its commitment to open research information, it has decided to discontinue its subscription to the Web of Science publication database and Clarivate bibliometric tools in 2024. By resolutely abandoning the use of proprietary bibliometric products, it is opening the way for open, free and participative tools.

https://open.leidenranking.com/

Utrecht University withdraws from global ranking as debate on quantitative metrics grows 2023

12 Oct 2023 | News

13.03.2024 | International Rankings 2024

UZH to No Longer Provide Data for THE Ranking

The University of Zurich has decided to withdraw from the Times Higher Education World University Ranking. The ranking is not able to reflect the wide range of activities in teaching and research undertaken by universities.

UZH Communications

Dario Basset, Università degli studi di Milano

Un cruscotto di monitoraggio della ricerca basato su dati aperti per l'Università degli Studi di Milano

TIME'S UP!!!

- THE REFORM OF RESEARCH ASSESSMENT IS ONGOING
- COARA LAUNCHED IN 2022, WORKING GROUPS AND NATIONAL CHAPTERS ACTIVE
- 724 SIGNATORIES [APR.2024]
- COMMITTIMENT: NO LONGER IMPACT FACTOR OR RANKING

CoARA
COARA

Coalition for Advancing Research Assessment

Our vision is that the assessment of research, researchers and research organisations recognises the diverse outputs, practices and activities that maximise the quality and impact of research. This requires basing assessment primarily on qualitative judgement, for which peer review is central, supported by responsible use of quantitative indicators.

Italy National Chapter

The main aims of the Italian National Chapter are to (i) enable mutual learning, share best practices, and raise awareness of best responsible assessment practices and indicators in the national community on the ongoing research assessment reform (CoARA commitments 7-8), and (ii) foster the discussion about the reviewing and development of assessment criteria, tools and processes for assessing research institutions, individual researchers and projects (CoARA commitment 6).
This outreach effort will support the implementation of the reform at the national level and will contribute to attract more institutions and stakeholders to sign the agreement.
The main activities will be focused on:
1) creating an active network among Italian institutions, promoting the alignment of the

Signatories

anvur
Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)

The Commitments

1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research

2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators

3. Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index

4. Avoid the use of rankings of research organisations in research assessment

YES BUT… WE ARE STILL EVALUATED USING IMPACT FACTOR

A

2023

RETHINKING RESEARCH ASSESSMENT

BUILDING BLOCKS FOR IMPACT

Capturing scholarly "impact" these indicators are narrow, Considering a wider breadth

Collaborations, mentoring, demonstrations of emine that allow scholars to shape direction of fields demonst increasing scales of imp

Scale influence

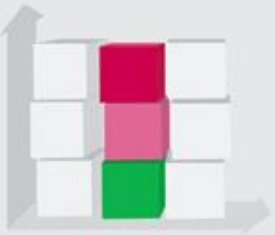
Expanded definitions for "impact" can help individuals identify and embrace different goals.

While some scholars may naturally be more oriented toward disciplinary work, seeing a broader set of "impact" characteristics allows academics to define, plan for, and pursue more personally meaningful career aspirations.

Pursuing a traditional path of deep specialization within a discipline will continue to provide credibility of expertise and a significant base of influence within one's field.

Applied research, perspectives, and project work provide new forms of visibility and societal value through scholarly activities that directly contribute to real-life challenges.

Emphasizing how expertise can enrich other individuals, collaborations, or entire fields rewards scholarly activities that value interdisciplinarity and fostering new capabilities.



The explicit recognition of efforts that support open research or diversity, equity, and inclusion (DEI) can enhance their status as critical components of academic values.

Scaled magnitude resulting in significant reach, scope, or stature

Collaborative and advisory roles through partnerships and shepherding others' work

Direct contributions through deep disciplinary expertise

FOR EXAMPLE
Leadership roles in disciplinary societies or editorial boards
Transformative methodological advances

FOR EXAMPLE
Policy advisory roles
Contributions to institutional policy (e.g. diversity, equity, and inclusion (DEI))

FOR EXAMPLE
Real-world societal (e.g., cultural, patient, community, environmental, or economic) impact

Researcher Katalin Kariko's work on mRNA immunogenicity was repeatedly dismissed by elite journals and funders, yet became key to the development of Covid-19 vaccines.

FOR EXAMPLE
Teaching
Mentoring, advising, and career guidance

FOR EXAMPLE
Team research or interdisciplinary collaborations
Peer review and conference roles

FOR EXAMPLE
Industry collaborations and commercialization

While non-academic works and social media lack the rigor of peer review, communicating the value and importance of scientific advances to wider audiences makes scholarly knowledge more approachable and meaningful.

FOR EXAMPLE
Journal articles and conference publications
Datasets, software, or products

FOR EXAMPLE
Open science/data and open access
Preprints
Asynchronous education

FOR EXAMPLE
Popular press books and publications
Social media or altmetric profile

Recognizing the impact created by cultivating future generations of scholars also rewards contributions of women and minoritized individuals who tend to bear heavier expectations and loads for mentoring.

Open datasets and open science are increasingly valued for their contributions to replication and research transparency. This broadens access and rewards a mindset of collaboration over competition.

New audiences

Reaching audiences outside of disciplinary or academic peers can broaden the societal value derived from scholarly work.

SEVERAL DIMENSIONS - RECOMBINABLE

New tools

Next Generation Metrics for Scientific and Scholarly Research in Europe

LERU position paper
April 2024 2024

Table of contents

DORA

Guidance on the responsible use of quantitative indicators in research assessment

Be clear

What is your rationale for using particular quantitative indicators in your research or researcher assessments? Is it grounded in good evidence?

Be transparent

Ideally, rules for the use of quantitative indicators in research assessment should be developed in dialogue with your research community.[2] They should be published so that those being evaluated understand your criteria. Make sure also that reviewers are fully aware of your approach to using quantitative information in assessment.

Be specific

How well does the indicator refer to the qualities of the person or the piece of work being assessed? Be mindful of aggregate metrics (e.g., JIF, *h*-index), which conceal large variations in performance, and of composite indicators (e.g., scores in university league tables, altmetrics), which are made up of arbitrarily weighted scores for very different attributes and activities and are therefore difficult to interpret meaningfully.

Be contextual

How will you take account of the proxy and reductive nature inherent in any indicator? (e.g., citations are not a direct measure of quality; the *h*-index takes no account of age, discipline, or career breaks).

Be fair

How will you avoid biases inherent in quantitative indicators? Though it is often assumed that bibliometric indicators are "objective," decisions to publish a paper or to cite it are choices that can reflect structural and personal biases. Decision makers need to be proactive and transparent in efforts to mitigate the impact of these biases in research assessment — and the same obviously applies to the qualitative aspects of assessment.

Use indicators and metrics that are contextually relevant, that support responsible research evaluation, and that align with your institution's mission. Institutions should collaborate and reuse existing metrics expertise in order to maximise their efficiency in achieving this goal.


BREAK ...
QUESTIONS?

Going Open

Open Science in Practice Webinar Series

This webinar series showcases the projects awarded an Open Science Fund grant and covers a wide variety of open science topics. On this page you can find more information about the webinars and recordings of all the webinars.

The NWO Open Science Fund
open science into practice.
broad range of open science
science, to FAIR sharing of re
change.

OS webinars 2022

- Facilitating the sharing and reuse of qualitative data
- Interoperable Open Research
- Fair metrics for FAIR software
- Open tools for data enrichment and visualization
- Open Journals and non-profit publication infrastructures

Open Science

- Open Access Publishing
- Open Science in Practice
- Webinar Series 2022
- Plan S

Open Science MOOC

Home
Calendario
Course sections
Welcome!
What is Open Science?

Welcome! | What is Open Science? | What is European Open Science Cloud (EOSC)? | Research data management | Completion | Credits

In this module you will learn about the Open Science movement and its principles. We will also look at the practical advantages of embracing these principles and present some easy steps to join the movement.

By the end of this module, you will be able to:

- Define the concepts of Open Science and Open Access.
- Explain the benefits of Open Science practices from a researcher's and society's perspective.
- Start practicing Open Science.

Cerca

PhD on tr

PhD ON TRACK

PhD on Track: A guide for researchers

REVIEW AND WRITE	SHARE AND PUBLISH	OPEN SCIENCE
learn about:	learn about:	learn about:
reviewing	where to publish	open access publishing
types of reviews	submitting articles	open archives
searching	co-authorship	research data
searching techniques	copyright	data management
writing	the Cristin system	sensitive data
the dissertation	citation impact	preregistration

OLS openlifescience full course online

Open LifeSci
@OpenLifeSci
332 iscritti
Iscriviti

Video ▶ Riproduci tutti

Open Leadership: Academia, industry and beyond! — 1:22:25
OLS6 / week9 / Open Leadership: Academia,...
12 visualizzazioni • 2 giorni fa
Sottotitoli

Community Design Inclusivity
OLS6 / week 8 / Community design for inclusivity
5 visualizzazioni • 7 giorni fa
Sottotitoli

unesco

Open Science

Home | Implementation | Toolkit | Global Open Science Partnership | Developmer

UNESCO toolkit

Open Science Toolkit

The Turing way

The Turing Way

Search this book...

Welcome
Guide for Reproducible Research
Guide for Project Design
Guide for Communication
Guide for Collaboration
Guide for Ethical Research
Community Handbook
Afterword

Visit our GitHub Repository
This book is powered by Jupyter Book

Welcome

The Turing Way is an open source community-driven guide to reproducible, ethical, inclusive and collaborative data science.

Our goal is to provide all the information that data scientists in academia, industry, government and the third sector need at the start of their projects to ensure that they are easy to reproduce and reuse at the end.

The book started as a guide for reproducibility, covering version control, testing, and continuous integration. However, technical skills are just one aspect of making

In February 2020, *The Turing Way* expande
communication, collaboration, and ethical

2024

MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE
Ouvrir la science !
OPEN SCIENCE | OUR ACTIONS | RESOURCES | NEWS | WHO ARE WE ?

The Passport For Open Science is a guide
designed to accompany PhD students at
step of their research career, whatever th
disciplinary field. It provides a set of tools
good practices that can be directly
implemented.

NOT TO DO

Open Science @UNIMI

Open Science UniMI


PUBBLICARE IN OPEN ACCESS
I modelli per pubblicare in Open Access: diamond, green, gold, ibrido


PRE-PRINT
Autoarchiviazione dei propri contributi, nella versione pre-revisione: come e quando è possibile


POST-PRINT
Autoarchiviazione dei propri contributi, nella versione post-revisione senza layout editoriale: come e quando


OPEN PEER-REVIEW
L'open peer-review garantisce la trasparenza dei processi di qualità che portano alla pubblicazione


CONDIVIDERE I DATI DELLA RICERCA


PRE-REGISTRAZIONE

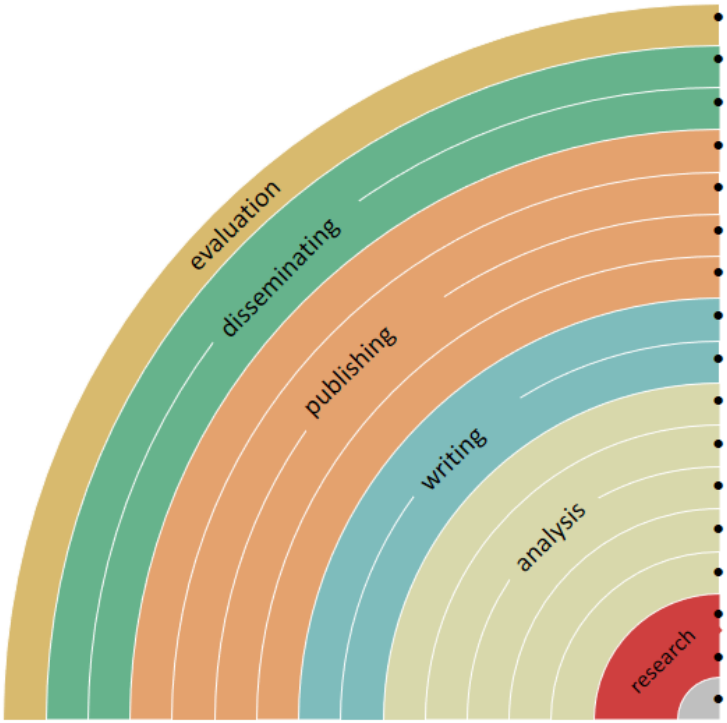

PUBBLICARE DATI NEGATIVI


SOFTWARE E CODICE OPEN SOURCE

Oper

ANY COMPONENT OF THIS RAINBOW SHOULD COUNT AS «RESEARCH OUTPUT»

YOU CAN MAKE YOUR WORKFLOW MORE OPEN BY…



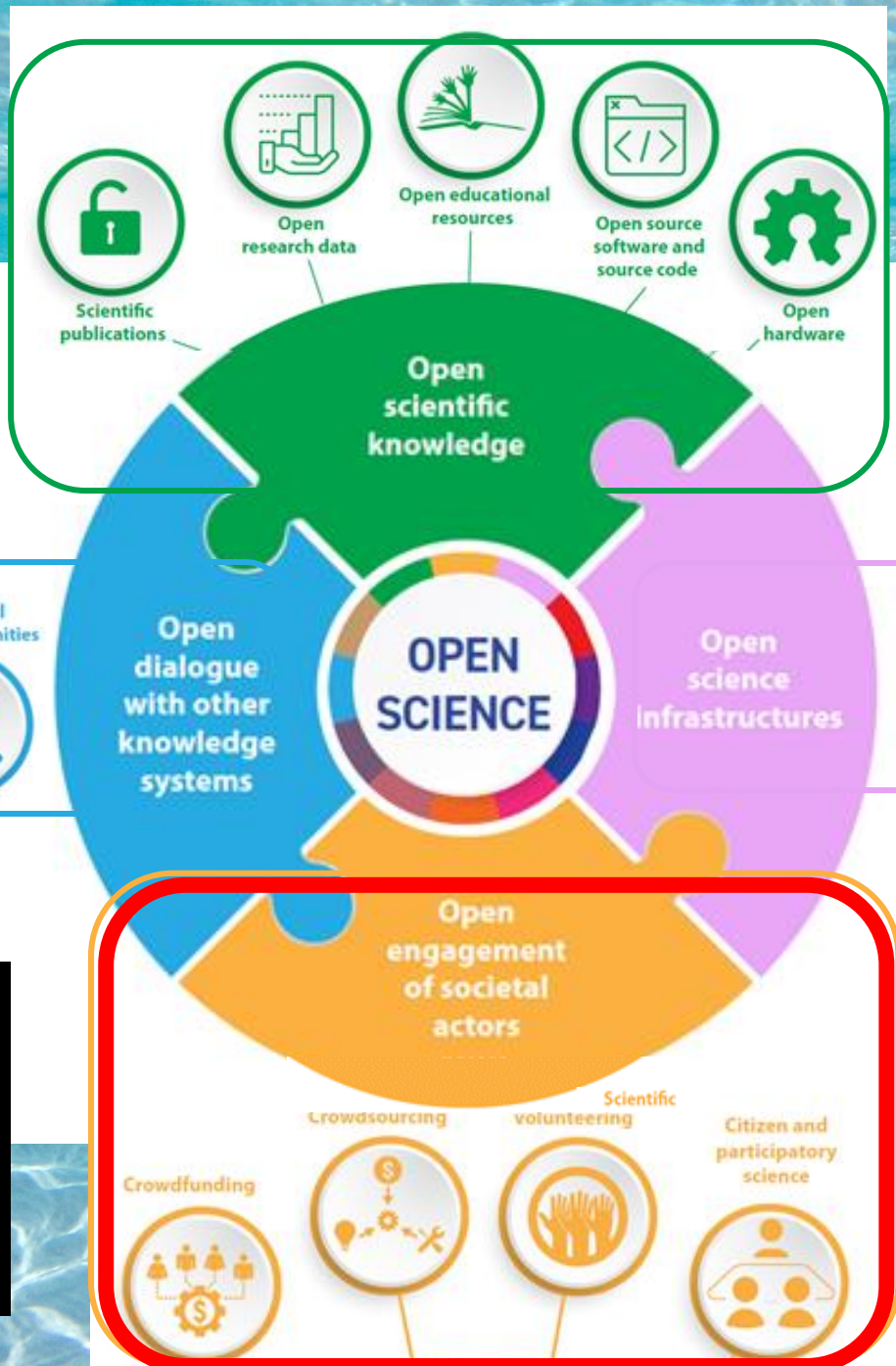
- adding alternative evaluation, e.g. with. altmetrics
- communicating through social media, e.g Twitter
- sharing posters & presentations, e.g. at FigShare
- using open licenses, e.g. Creative Commons BY
- self archiving in archives or publishing on Open journals
- using open peer review, e.g. at PubPeer o F1000
- sharing preprints, e.g. at OSFpreprint, arXiv o biorXiv
- using actionable formats, e.g. with Jupyter o CoCalc
- open XML-drafting, e.g. at Overleaf o Authorea
- sharing protocols & workflows, e.g. at Protocols.io
- sharing notebooks, e.g. at OpenLabNotebook
- sharing code, e.g. at GitHub licensing GNU/MIT
- sharing data, e.g. at Dryad, Zenodo o Dataverse
- pre-registering, e.g. at OSFregistry o AsPredicted
- commenting openly, e.g. with Hypothes.is o Pund.it
- using shared reference libraries, e.g. with Zotero
- sharing (grant) proposals, e.g. with RIO Journal

Interactive rainbow 2021

TECHNICALLY, IT'S THERE.
WHAT IS STILL NEEDED IS THE CULTURAL SHIFT…
AND YOUR FIRST STEP!


FOCUS ON
CITIZEN SCIENCE

Why?



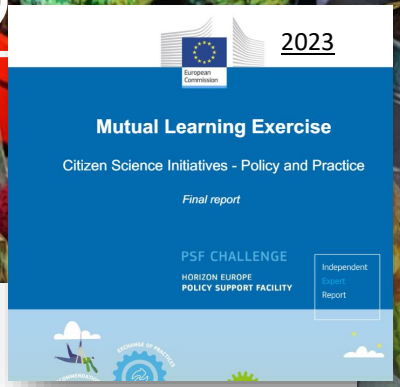
OPEN ENGAGEMENT OF SOCIETAL ACTORS IS CRUCIAL IN THE UNESCO RECOMMENDATION

Benefits of citizen scienc

1. ‘An important vehicle for democratising science and promoting the goal of universal and equitable access to scientific data and information’’,
2. ‘‘A vehicle for addressing interlinked environmental and development issues that are of the highest concern to communities, which include environmental justice and equitable access to basic services such as clean water, food, education and health services”,
3. Having “the potential to contribute to SDG tracking through participatory data collection, standardised data collection across cities, and improved data accessibility for decision making and science”, and as
4. Having “two important contributions from an equity lens, namely in understanding community perspectives and generating data at local levels (which are critical for the Leave No One Behind focus of the 2030 Agenda), and in promoting the empowerment of communities to negotiate with authorities on service delivery[14]”.

Citizen Science practices also contribute to the quality and impact of research in **the academic context**[15]. The engagement of individuals and societal actors in scientific knowledge production makes it possible to investigate questions that might not otherwise be possible to research effectively, by filling in data gaps (in terms of geographical coverage,

Benefits of citizen science / 2



1. Achieving more participation in research,
2. Facilitating research on a bigger scale by adding additional people,
3. Tapping into new sources of information, knowledge and perspectives,
4. Increasing citizen engagement in scientific research and building stronger connections between citizens and scientists,
5. Developing new research methods,
6. Improving openness and reliability of research,
7. Ensuring that citizens understand scientific research even better,
8. Ensuring that scientists and knowledge institutes understand current issues in society even better,
9. Focusing research on more relevant subjects and on citizens' priorities, and
10. Improving scientific literacy: citizens are increasing their own knowledge and understanding about science.

Recommended open science practices

These are open science practices beyond the mandatory ones, such as involving all relevant knowledge actors, including citizens, early and open sharing of research, output management beyond research data, open peer-review. This is a non-exhaustive list of practices that proposers are expected to adopt when possible and appropriate for their projects. Finally, certain work programme topics or call conditions may encourage specific additional open science practices.

Evaluation of open science practices

Open science practices are evaluated under the **'Excellence'** criterion (in particular under methodology) and under the **'Quality and efficiency of implementation'** award criterion. Proposers should address open science practices in the relevant section on open science under methodology[19].

Proposers will have to provide concrete information on **how** they plan to comply with the **mandatory open science** practices. Failure to sufficiently address this, will result in a lower evaluation score.

A clear explanation of how they will adopt **recommended practices**, as appropriate for their projects, will result in a higher evaluation score.

Citizen, civil society and end-user engagement: Provide clear and succinct information on how citizen, civil society and end-user engagement will be implemented in your project, where/if appropriate. The kinds of engagement activities will depend on the type of R&I activity envisaged and on the disciplines and sectors implicated.

This may include: *co-design activities* (such as workshops, focus groups or other means to develop R&I agendas, roadmaps and policies) often including deep discussion on the implications, the ethics, the benefits and the challenges related to R&I courses of action or technology development; *co-creation activities (*involving citizens and/or end-users directly in the development of new knowledge or innovation, for instance through citizen science and user-led innovation); and *co-assessment activities* (such as assisting in the monitoring, evaluation and feedback to governance of a project, projects, policies or programmes on an iterative or even continual basis).

The extent of engagement in the proposal could range from one-off activities alongside other methodological approaches to being the primary focus or methodological approach of the project itself. Engagement will require resources and expertise and is therefore often conducted by dedicated interlocutor organisations or staff with relevant expertise. More detailed information on these activities and useful resources developed over the course of Horizon 2020 can be found in the relevant section below.

IN HORIZON EUROPE CITIZEN SCIENCE IS AMONG THE «RECOMMENDED PRACTICES» EVALUATED AT THE PROPOSAL STAGE

Recommended Actions

1 (a) Embed Citizen Science in mainstream research practices:

Raise awareness of Citizen Science research practices and increase their acceptance

Recognise and reward Citizen Science practices in career trajectories & remove institutional barriers

Include Citizen Science practices in the qualitative evaluation and assessment of research excellence

Provide a central online repository of consolidated research and best practice

Facilitate knowledge exchange amongst researchers

Facilitate inter- and transdisciplinary collaborations

1 (b) Embed Citizen Science in mainstream funding:

Provide dedicated funding programmes for Citizen Science approaches in research and innovation

Include specific evaluatio

Systematically integrate community-engaged learning in higher education

2 (a) Integrate Citizen Science Data in policymaking

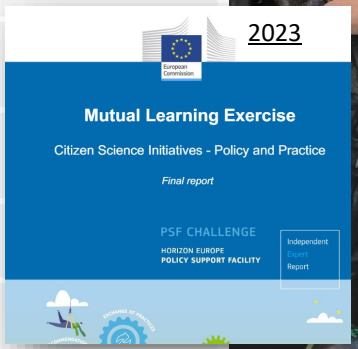
Integrate Citizen Science data within formal data monitoring platforms (environment, public health, mobility, urban planning, climate change, etc.)

Integrate citizen-generated data in national policy-making processes

Embed Citizen Science initiatives and citizen observatories into local and regional policy-making processes

Build common open (FAIR) data repositories and data platforms

2 (b) Build Citizen Science data and technology infrastructure



The principles / 1

ACTIVE, MEANINGFUL INVOLVEMENT IN SCIENTIFIC ENDEAVOUR THAT GENERATES NEW KNOWLEDGE

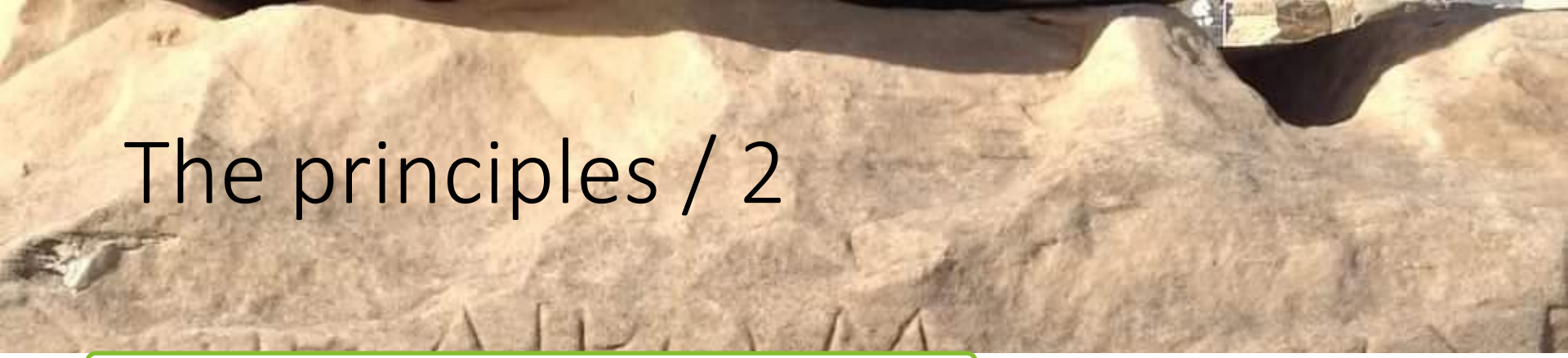
ECSA 10 principles

ecsa | European Citizen Science Association

Ten principles of citizen science

Citizen science is a flexible concept which can be adapted and applied within diverse situations and disciplines. The statements below were developed by the *'Sharing best practice and building capacity'* working group of the **European Citizen Science Association**, led by the Natural History Museum London with input from many members of the Association, to set out some of the key principles which as a community we believe underlie good practice in citizen science.

1. **Citizen science projects actively involve citizens in scientific endeavour that generates new knowledge or understanding. Citizens may act as contributors, collaborators, or as project leader and have a meaningful role in the project.**



The principles / 2

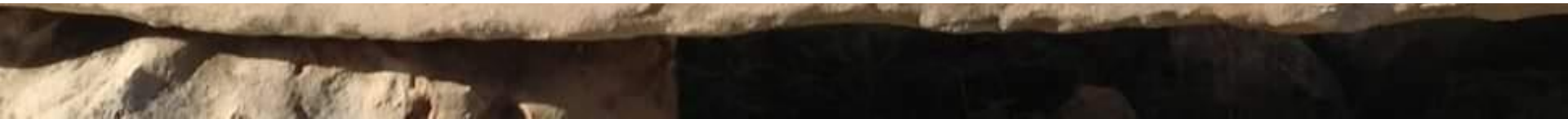
2. **Citizen science projects have a genuine science outcome.** For example, answering a research question or informing conservation action, management decisions or environmental policy.

3. **Both the professional scientists and the citizen scientists benefit from taking part.** Benefits may include the publication of research outputs, learning opportunities, personal enjoyment, social benefits, satisfaction through contributing to scientific evidence e.g. to address local, national and international issues, and through that, the potential to influence policy.

4. **Citizen scientists may, if they wish, participate in multiple stages of the scientific process.** This may include developing the research question, designing the method, gathering and analysing data, and communicating the results.

5. **Citizen scientists receive feedback from the project.** For example, how their data are being used and what the research, policy or societal outcomes are.

ECSA 10 principles



The principles / 3

CITIZEN SCIENCE PROJECTS ARE OPEN BY DEFAULT

6. **Citizen science is considered a research approach like any other, with limitations and biases that should be considered and controlled for.** However unlike traditional research approaches, citizen science provides opportunity for greater public engagement and democratisation of science.

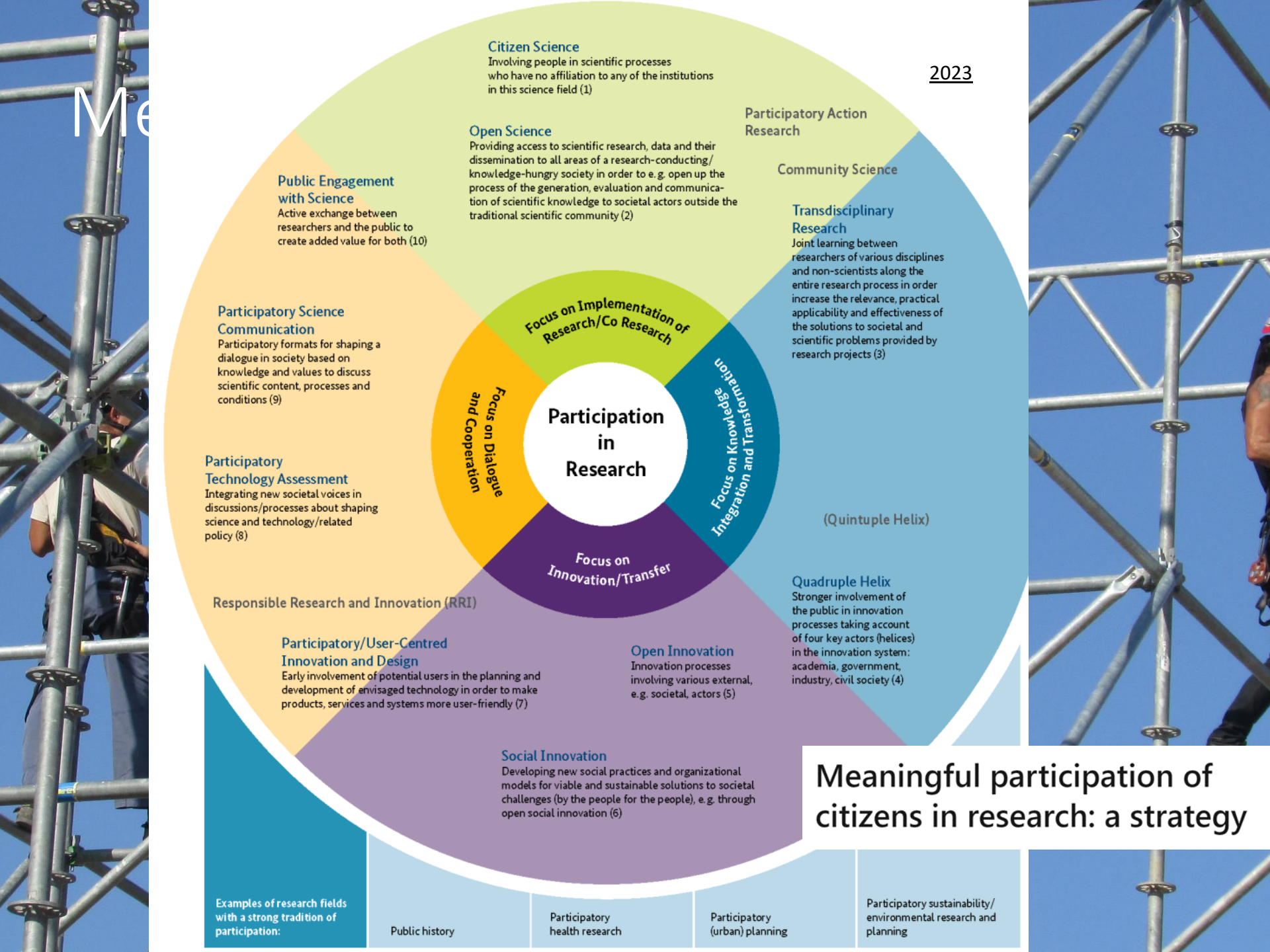
7. **Citizen science project data and meta-data are made publicly available and where possible, results are published in an open access format.** Data sharing may occur during or after the project, unless there are security or privacy concerns that prevent this.

8. **Citizen scientists are acknowledged in project results and publications.**

9. **Citizen science programmes are evaluated for their scientific output, data quality, participant experience and wider societal or policy impact.**

10. **The leaders of citizen science projects take into consideration legal and ethical issues surrounding copyright, intellectual property, data sharing agreements, confidentiality, attribution, and the environmental impact of any activities.**

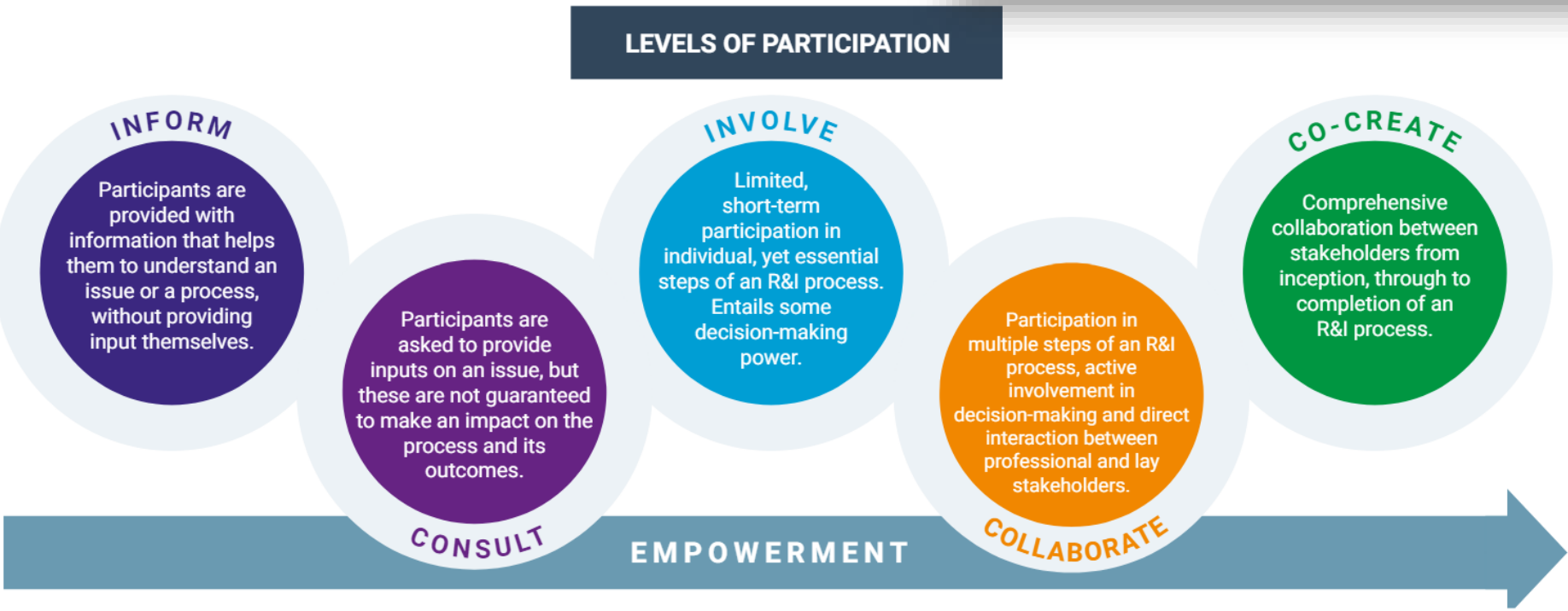
ECSA 10 principles


2023
Citizen Science
Involving people in scientific processes who have no affiliation to any of the institutions in this science field (1)
Open Science
Providing access to scientific research, data and their dissemination to all areas of a research-conducting/ knowledge-hungry society in order to e.g. open up the process of the generation, evaluation and communication of scientific knowledge to societal actors outside the traditional scientific community (2)
Participatory Action Research
Community Science
Public Engagement with Science
Active exchange between researchers and the public to create added value for both (10)
Transdisciplinary Research
Joint learning between researchers of various disciplines and non-scientists along the entire research process in order increase the relevance, practical applicability and effectiveness of the solutions to societal and scientific problems provided by research projects (3)
Participatory Science Communication
Participatory formats for shaping a dialogue in society based on knowledge and values to discuss scientific content, processes and conditions (9)
Focus on Implementation of Research/Co Research
Focus on Knowledge Integration and Transformation
Focus on Dialogue and Cooperation
Participation in Research
Focus on Innovation/Transfer
Participatory Technology Assessment
Integrating new societal voices in discussions/processes about shaping science and technology/related policy (8)
(Quintuple Helix)
Responsible Research and Innovation (RRI)
Quadruple Helix
Stronger involvement of the public in innovation processes taking account of four key actors (helices) in the innovation system: academia, government, industry, civil society (4)
Participatory/User-Centred Innovation and Design
Early involvement of potential users in the planning and development of envisaged technology in order to make products, services and systems more user-friendly (7)
Open Innovation
Innovation processes involving various external, e.g. societal, actors (5)
Social Innovation
Developing new social practices and organizational models for viable and sustainable solutions to societal challenges (by the people for the people), e.g. through open social innovation (6)
Examples of research fields with a strong tradition of participation:
Public history
Participatory health research
Participatory (urban) planning
Participatory sustainability/ environmental research and planning
Meaningful participation of citizens in research: a strategy

Meaningful participati

Ethics Framework and Guidelines:
A guide for research funding organizations implementing participatory activities

2023 proEthics



Schuerz, Stefanie (2023): Levels of Participation in Research and Innovation. DOI: 10.5281/zenodo.8096864

DIFFERENT LEVELS OF PARTICIPATION:
INFORM – CONSULT – INVOLVE – COLLABORATE- CO-CREATE

Ethics Framework and Guidelines:
A guide for research funding organizations implementing participatory activities

2023

proEthics

A. How should participatory processes be struct

ACTION A1: Understand the structural constraints you are operating under

ACTION A2: Identify and clarify the expected contributions

ACTION A3: Allow for flexibility when planning the participatory process

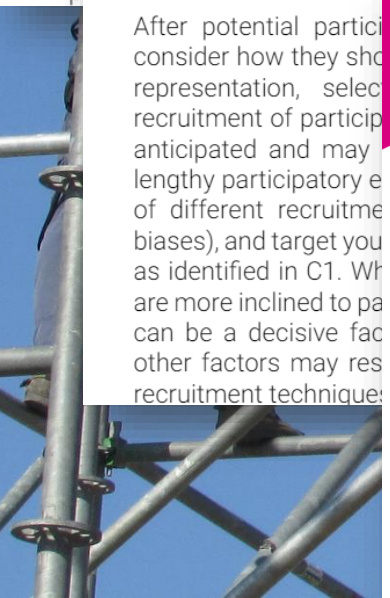
C. Which types of participants are targeted?

A GUIDE TO PARTICIPATORY RESEARCH

ACTION C2: Determine how participants should be recruited, taking into account stakeholder representation, selection bias, and feasibility

After potential partici
consider how they sho
representation, selec
recruitment of particip
anticipated and may
lengthy participatory e
of different recruitme
biases), and target you
as identified in C1. Wh
are more inclined to pa
can be a decisive fac
other factors may res
recruitment technique

- **Existing organizational networks**: The organizer's existing stakeholder network provides an opportunity to recruit participants. Stakeholders can, for example, be contacted through social media



D. What are ethical issues and risks?

ACTION D: Identify ethical issues and tackle them appropriately

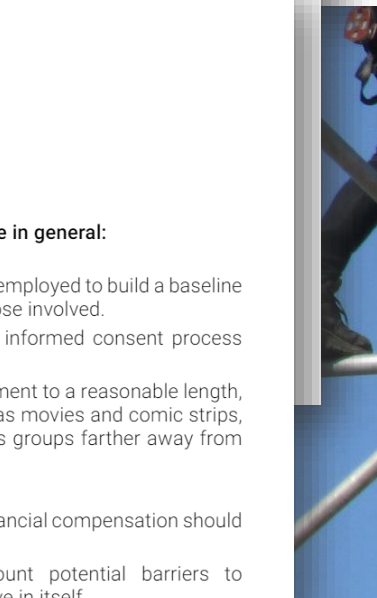
With clarity on the participatory process and potential participants, it becomes easier to assess potential ethical issues and determine where and how a process should be adapted. Ethics experts could help identify, understand, and mitigate ethical issues..

Consider the following potential issues in relation to your R&I processes:

- **In project proposals**: Issues of human dignity, power, intellectual property, privacy and data protection, transparency, and biases (e.g., gender bias, bias towards the able-bodied, etc.) should be considered when planning the process and outcomes of research and innovation.
- **In project executions**: Issues relating to personal data; discrimination; stigmatization; fixation on technology acceptance; vulnerable groups;

Consider the following issues that may arise in general:

- **Informed consent**:
  - Informed consent procedures should be employed to build a baseline understanding of the process among those involved.
  - Ensure that you choose an appropriate informed consent process and format for the target group.
  - Use accessible language, keep the document to a reasonable length, and consider creative approaches such as movies and comic strips, or dynamic informed consent to address groups farther away from the R&I system.
- **Financial compensation**:
  - Determine if, to whom, and how much financial compensation should be given.
  - Compensation should take into account potential barriers to



Sticky dot

1. CONSULTATION
2. CO-DESIGN
3. CO CREATION

RESEARCH.

We make science a collective process

Stickydot is a Brussels based SME that shapes research and innovation through multi-stakeholder engagement and co-creation

1. Stakeholder Consultation

A consultation refers to the practice of inviting relevant stakeholders to share their views on a certain predefined topic or challenge. This process does not intend to directly generate solutions for the issue, but it serves as a way to collect the feedback, concerns, and priorities of those who would end up being affected by the subject, possibly resulting in a redirection of the design process, or to adjustments in a research agenda.

This process allows you to hear from different perspectives before kicking off a project, designing a product, or implementing a policy. This ensures that you hit the ground running and that the outcomes of your work are

2. Co-design

A co-design process represents a jump in stakeholder influence on the product/solution, when compared to a stakeholder consultation. This time, the challenge to be addressed is not already pre-defined, which allows stakeholders to collaboratively determine what this challenge is according to their concerns and priorities, using only a general theme as a starting point. This starting point could be something as general as 'how can we improve mobility in our city?', or 'how can we make our business more sustainable?'.

Similarly to stakeholder consultations, co-design creates a space for the ideas of different stakeholders to come out into the open, bringing light

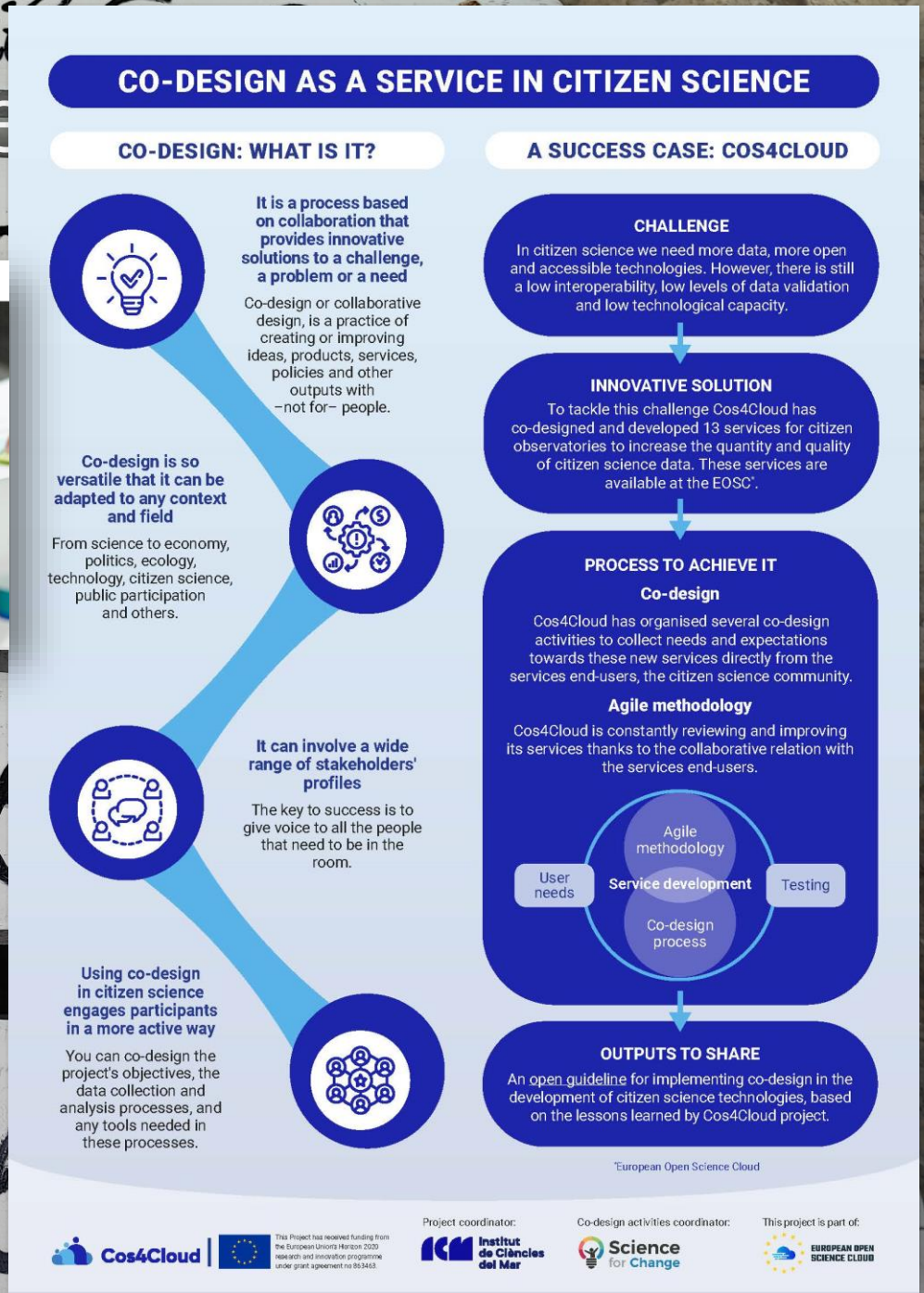
3. Co-creation

Co-creation is the process in which the stakeholders go farther down in the development process. In a way, it takes the idea of co-design one step further, allowing participants to take matters into their own hands. Together, they will collaboratively build, implement, and assess the solution for a challenge, which often comes in the form of a new innovation, service, or policy, or at least an improvement of existing ones.

In many cases, co-creation kicks off with a concrete, pre-defined challenge to be worked on or it builds on the results of a previous co-design process. It usually begins with stakeholder mapping, leading to the recruitment of the 'co-creators'. Early-stage meetings and workshops provide a great

Co-design e citize

https://cos4cloud-eosc.eu/



...co-creation is useful

2021

ORION open science

ORION INSPIRING STORIES

Ideas & examples

Co-creation menu

What is Co-creation?

Co-creation has been defined as **"purposeful action of associating with strategic customers, partners or employees to ideate, problem solve, improve performance, or create a new product, service or business"**. In essence, co-creation experiences are a way in which to connect multiple stakeholders, bringing them together to discover their interests and values and using these opportunities to discuss, develop and implement projects or ideas to achieve new, inclusive, forward-thinking research strategies. As a result, co-creation experiences allow high-quality interactions and unique experiences, with those involved becoming connected, informed and empowered.

Co-creation experiences seek to engage multiple stakeholders at all points of the research lifecycle, from conception of a novel research project, through funding selection and resourcing, to dissemination of research findings and use of those findings within society, which in turn informs future funding calls. In this way, the hopes, concerns and aspirations of the end users of research, the public, are integrated from the very beginning of the process right through to the end. This concept maps well with the idea of making science truly open, transparent and responsive to societal needs, a new approach of the European Research Areaknown as Open Science.

Method Type	Method Name(s)	Objective	Audience Size	Audience Type	Event Time	Total Time	Budget (€-€€€€)	
Deliberative	Citizens Hearing	To inform and create discussion among citizens	20-25	Citizens, experts, decision-makers	1D	7M	€€€	Regional Development in Co
	Citizens Summit / Assembly	To find out the citizens' attitudes about political priorities and possible courses of action provided on an informed basis	200-5000	Anyone	1D	Var	€€€€	EU Proj
	Civic Dialogue	To encourage innovation, trust and confidence to facilitate the creation of a legitimate roadmap for moving forward in a particular direction	Var	CSOs, policy-makers, researchers	Var	Var	€€€	High-level dialogue on Intern
	Deep Democracy / The Lewis Method	To access and bring out the wisdom within a group, and particularly to release the creative potential that results from conflict	Var	Anyone	1-2 D	Var	€€	Conversation Across the Socic
	Deliberative Mapping	To provide a more robust, democratic and accountable decision making which better reflects public values	~ 60	Citizens, experts	6D	4M-1Y	€€€€	Appraising options for addressir
	Democs Card Game / Play Decide	To enable small groups of people to engage with complex public policy issues	4 to 8	Citizens	1-4 D	Var	€	Public engagement o 'Democs' tool, ESRC G
	Distributed Dialogue	To develop ongoing, embedded discussions around a topic	>5000	Researchers, citizens	2-5 D	>1Y	€€€	Bioenergy Dial
	Expert Panel	To synthesise a variety of inputs on a specialised topic and produce recommendations	~ 100	Researchers, citizens, policy makers	1-2 H	6M	€€	Translating Research into Practic
	Interdisciplinary Work Groups	To take professional stock of the situation and partly to propose possible courses of action to ensure, initiate, promote or check development in the area	15-30	CSOs, policy-makers, researchers	2-5 D	8M	€€	Opening up the Hur community, Da
	Multi Criteria Decision Analysis (MCDA)	To rank a set of options from the most preferred to the least preferred option; policy formulation, programme development	Var	CSOs, researchers, citizens	4D	1Y	€€	PorGrow - Polic growing challer
	Planning Cells / Citizens Jury	To develop a set of solutions to a problem delegated to the participants by a commissioning body	25	Citizens	4-5 D	5M	€€€€	Citizens jury on Water Mi
	Q Methodology	To gain insight into the diversity of perspectives	50-100	CSOs, policy-makers, researchers	3M	6M	€€	Biomass Dialogue, Instit
	Scenario Building Exercise	To plan and prepare for an uncertain future; vision building	Var	Anyone	2-5 D	6M	€-€€€	Research Agenda Scenario f
		To provide a means for public debates						
	Deliberative Polling	To get both a representative and an informed (deliberative)	100-500	Citizens with	1D	8M	€€€€	Europolis: Delil

2021

Guide to Data Charter for Citizen Science

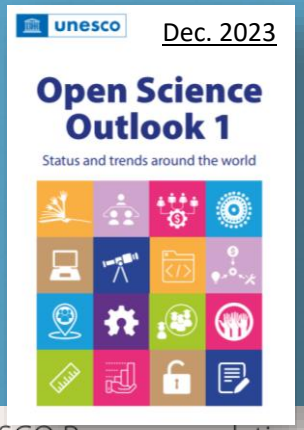
v1.0

A basic set of principles to support open and interoperable citizen-science data

citizen science

We need new measures

TRADITIONAL METRICS ARE NOT SUITABLE TO MEASURE SOCIETAL ENGAGEMENT



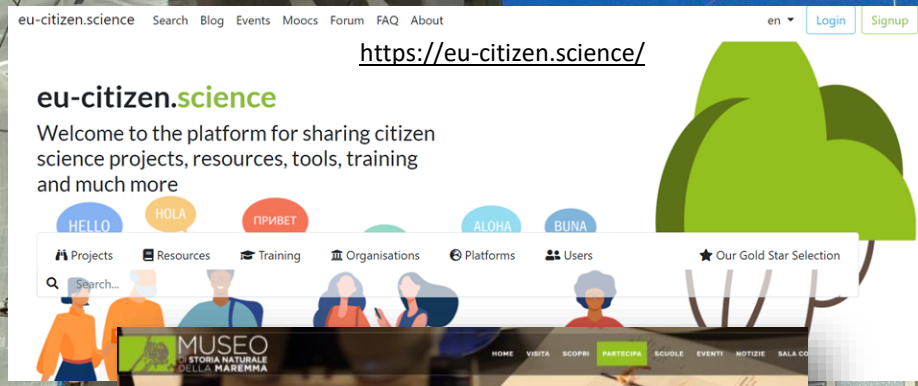
Working with the values and principles of open science and sharing tools associated with the aims of the 2021 UNESCO Recommendation on Open Science creates an opportunity for innovative methods of monitoring engagement of societal actors in science. A number of proposed proxies could be used to assess, in part, trends in societal engagement, such as:

- actions and initiatives taken by countries and institutions to support or implement open engagement of societal actors (e.g. specific policy instruments; strategic frameworks or action plans as well as processes used to build engagement or engagement skills; community research institutes or community publishers in collaboration with academia, with consideration of the type of entity leading the initiative);
- actions and initiatives taken by countries and institutions to recognize and reward activities involving societal engagement, with attention to who is initiating and leading the engagement;
- platforms and entities promoting societal engagement, including institution-led and community-led engagement as well as trends among disciplines;
- level of funding allocated to scientific practices involving open engagement of societal actors;
- level of investment in increasing the capacity of societal actors to create scholarly knowledge; and
- number of people engaged in open science, along with basic demographics.

zen science

ECSA

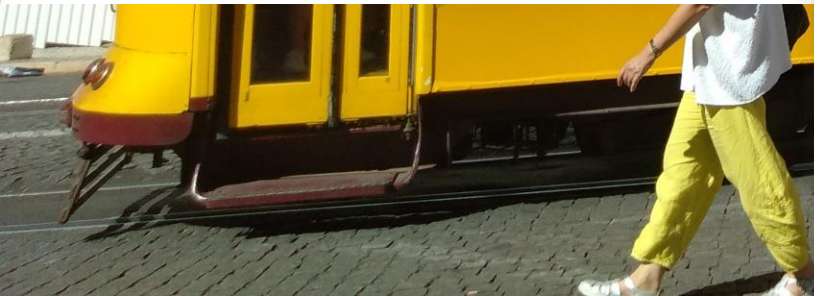
https://eu-citizen.science/

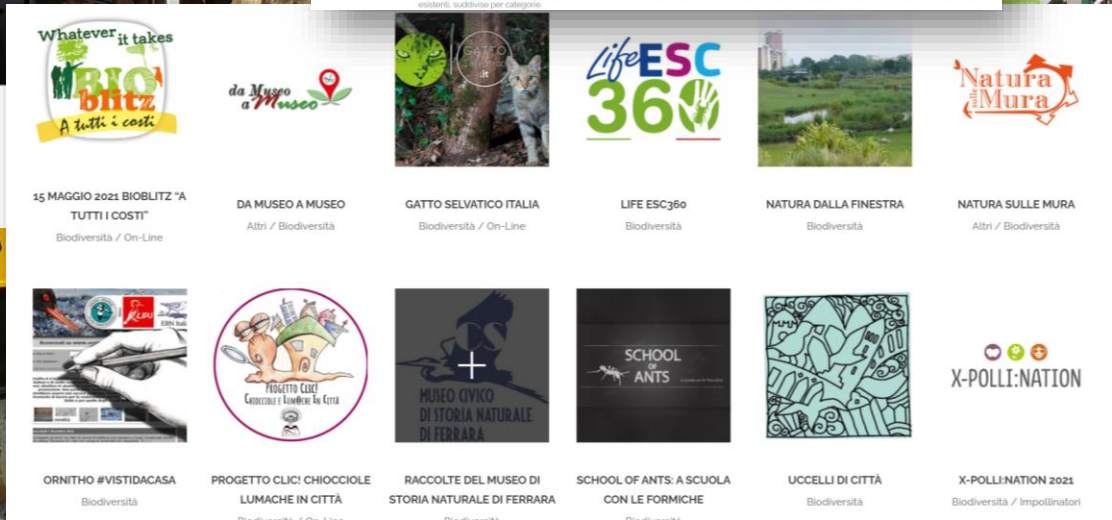


CSI Italia

Citizen science and the Humaniites

This module will look at the variety of practices within 'citizen science', how you as a humanist might get started working with them, what issues you might be wary of along the way and how Research Infrastructures can potentially help you.





VERA, co-creation space

CO- CREATION IN DIALOGUE WITH SOCIETY

CO-CREATION PLATFORM, SEARCHING FOR PROJECTS/PARTNERS..

MULTILINGUAL

OPERAS
open scholarly communication in the european research area for social sciences and humanities

COESO

coeso
connecting research and society

The COESO project (Collaborative Engagement on Societa
participatory research project, funded by the European C
and supported by the OPERAS research infrastructure. It
communities: the social sciences and humanities commu
scholarly communication community. It will thus contribu
development of citizen science in the social sciences and
research through a service-first approach.The project will

OPERAS
open scholarly communication in the european research area for social sciences and humanities

Vera OPERAS Vera

Research for

vera
activating research

VERA

A space for co-creation that provides a set of tools to discover poter
define and co-design the activities, to co-create new knowledge and
deliver them to society.

VERA is an online collaboration platform where a diverse set of actors can build social science and h
together. It's a virtual gathering place for professionals and practitioners of all kinds and researchers.
be dreamed and built, where collaborations can take place, and where links to funding can be found.

EN

English
Italian
French
German
Portuguese
Polish
Croatian

Latest opportunities from Fundit

Powered by Fundit.fr

Don't see the funding opportunity you're looking for? Search Fundit.fr

vera VERA

VERA Hub Browse projects Discover pe

Enabling collaborative research with and for society

VERA empowers participatory research in Social Sciences and Humanities by making it easy to create a diverse team, find funding, work together and share with the world

Get started

Projects

Find your next collaboration on VERA. Join a project or create your own.

Create project

VERA People

Explore the VERA community to connect with other passionate people like you

Report an Issue

Connect Collaborate Create

https://ccc.sciencesconf.org/

CONFERENCE ON CO-CREATION, COLLABORATION

Blogposts about the CCC conference:

Voices of the CCC conference is a blogseries featured on the COESO blog and written by participants, keynote speakers and workshop collaborators from their unique perspective about the conference. Already published:

- Shaping participatory futures: what can funders do to facilitate meaningful participation in and with science & innovation? *by Frederike Schmitz, Dec 14 2023 (featured on the OPERAS Blog)*
- The future is now: Citizen participation in R&I *by Nyangala Zolho, Nov 27 2023 (featured on the PRO-Ethics Blog)*
- Promoting citizen science and fostering ethical participatory approaches to research funding *by Marina Angelaki, Nov 24 2023*
- Reflections on the 'Connect. Collaborate. Create.' Conference from Science Europe *by James Morris and Claire Salinas from Science Europe, Nov 24 2023*
- Infrastructuring Participatory Research in the Social Sciences and Humanities: Bridge or Breach? – Katja Mayer *Interview with Katja Mayer, Nov 22 2023*
- Philosophizing Participatory Research- some questions raised at the COESO Conference 2023 *by Lucia Ziglioli, Nov 20 2023*
- Supporting Participatory Research in the SSH – a valuable piece of the puzzle *by Nel Coleman, Nov 20 2023*
- What makes a successful innovation? *by Magdalena Wnuk, Nov 8 2023 (featured on the OPERAS Blog)*

FOCUS ON SCIENCE4POLICY/COMMINCATING SCIENCE

OCDE and Open Science

2023

OECD
BETTER POLICIES FOR BETTER LIVES

OECD Home | About | Countries | Topics | COVID-19 | Ukraine

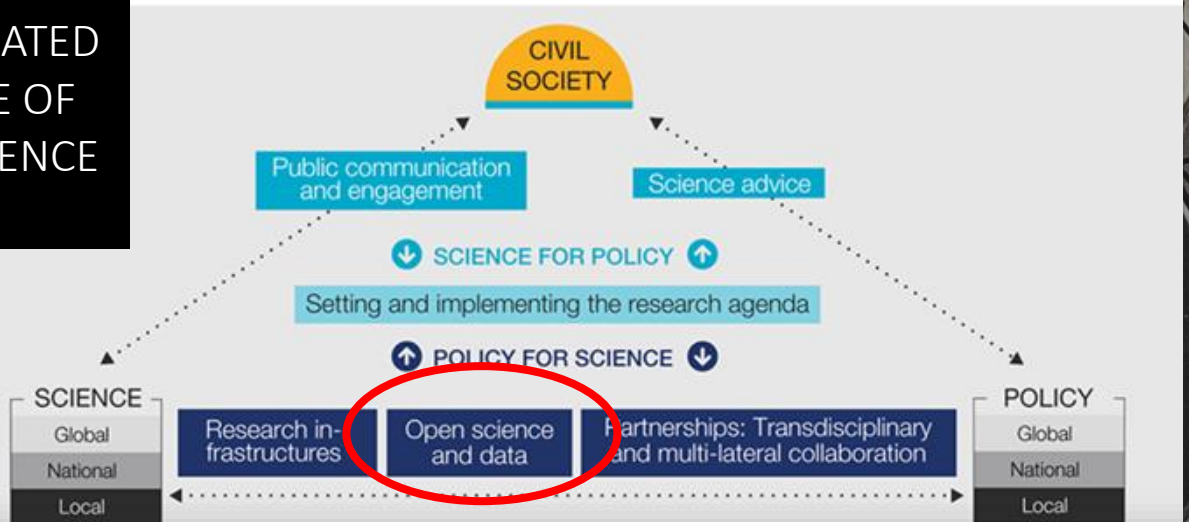
OECD Home > Directorate for Science, Technology and Innovation > Science, Technology and Innovation Outlook 2023

Science, Technology and Innovation Outlook 2023

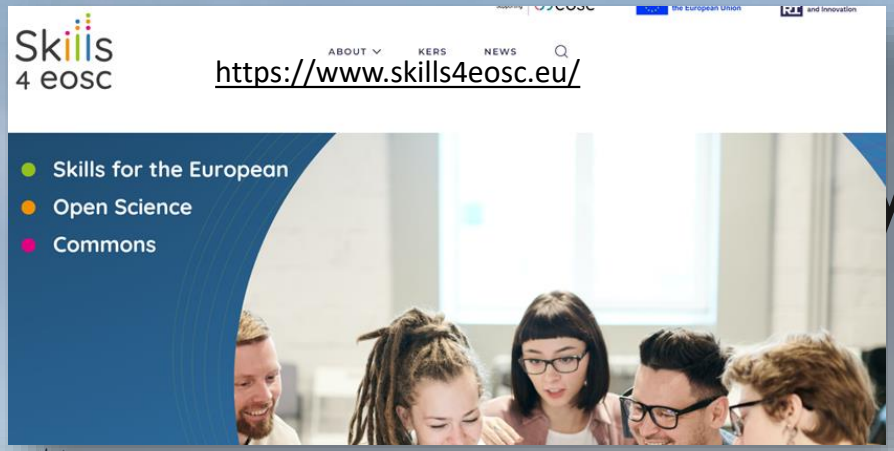
Lessons learned from COVID-19

COVID DEMONSTRATED THE IMPORTANCE OF «MOBILIZING» SCIENCE

Policy for science & science for policy



The COVID-19 crisis demonstrated the importance of science in developing solutions for global challenges. To prepare for future crises such as climate change or pandemics, collaboration between scientists, policymakers, and the public is key to success, but this requires changes to academic culture and incentives. Many of the required changes – including in research performance assessment, public engagement, and transdisciplinary research – are already underway but have not yet been adopted at the necessary scale and speed because of inertia in science systems. More radical change is necessary to spur science to engage with other societal stakeholders to produce the broader range of outputs and solutions that are urgently required to deal with complex global challenges and crises.



https://www.skills4eosc.eu/

COMMISSION WORKING DOCUMENT

- NEED FOR RESEARCHERS AND POLICY MAKER S TO «MEET»
- SPEAKING THE SAME LANGUAGE

EUROPEAN COMMISSION

Brussels, 25.10.2022
SWD(2022) 346 final

COMMISSION STAFF WORKING DOCUMENT

Supporting and connecting policymaking in the Member States with scientific research

Science for policy

RECOMMENDATION DEC. 2023 ON CITIZEN PARTICIPATION + IMPACT OF SCIENCE IN POLICY MAKING

2023

Bruxelles, 12.12.2023
C(2023) 8627 final

RACCOMANDAZIONE DELLA COMMISSIONE

del 12.12.2023

sulla promozione del coinvolgimento e della partecipazione effettiva dei cittadini e delle organizzazioni della società civile ai processi di elaborazione delle politiche pubbliche

European Commission | English

Home > Recommendation on the participation of citizens and civil society organisations in public policy-making

Recommendation on the participation of citizens and civil society organisations in public policy-making

COUNCIL CONCLUSIONS DEC. 2023: «SCIENCE AND POLICY HAND IN HAND» FOR AN «EVIDENCE INFORMED POLICY MAKING»

Council of the EU Press release 8 December 2023 10:15 2023

Council approves conclusions on strengthening the role and impact of research and innovation in the policymaking process in the Union

The Council has today approved conclusions on the impact of research and inn
conclusions imply three mutually complementary dimensions: first, regarding th
policymaking, including its impact to improve the lives of citizens and strengthe
regional and local innovation ecosystems, with focus on enhancing cooperation
third, on the policy impact of the Recovery and Resilience Facility (RRF) on the de
Research Area (ERA), focusing on Europe's key objectives, including gender equa

Science and policy, hand in hand

The analysis of these three dimensions shows that R&I, through an appropriate design, improve policymaking by including scientific evidence and knowledge in the regulatory process and by enhancing the coherence of policy initiatives in different areas. They also improve the response of the Member States and the Union to the challenges they face - both structural (i.e. included in the European Semester Recommendations) and cyclical or circumstantial (such as the response to the economic or the COVID crisis for which the RRF has been essential). All these R&I dimensions create synergies that have a significant social and economic impact, leaving no one behind.

Research and innovation in regional ecosystems

The conclusions highlight the importance of the regional R&I ecosystems. The policies to support ecosystems should be designed to create synergies between cohesion policy and R&I funds. In these ecosystems - particularly in the less innovative ones - the regional dimension should be strengthened with regional centres of excellence, and facilitated through cross-border cooperation (especially between less and more innovative Member States and regions) in order to increase economic, social and territorial cohesion and reinforce R&I efficiency.

Science for policy

European Union

2023

Brussels, 8 December 2023
(OR. en)

16450/23

RECH 543
COH 96
COMPET 1235

OUTCOME OF PROCEEDINGS

From:	General Secretariat of the Council
On:	8 December 2023
To:	Delegations
No. prev. doc.:	15118/23
Subject:	Strengthening the role and impact of research and innovation in the policymaking process in the Union - Council conclusions (approved on 8 December 2023)

I. Science in the public policy process to improve the lives of citizens and strengthen democracy

1. RECALLS that the Union has a long-standing tradition of relying on science and the best available evidence-based knowledge in all disciplines to support and improve decision-making, as well as the quality, effectiveness, efficiency and impact of public policies (the 'Science for Policy' concept). The design, monitoring and evaluation of evidence-informed policies have relied, among other types of knowledge, on processes of direct involvement of the scientific communities and/or mechanisms of scientific advice for political authorities to support them in the exercise of their responsibilities.

EVIDENCE-INFORMED [NOT evidence-based!] POLICY MAKING NAD THE ROLE OF OPEN SCIENCE

5. HIGHLIGHTS that open science is also key for policymakers and society at large for accessing and using free scientific knowledge of the highest quality. This enhances resilience to disinformation, prevents knowledge resistance and promotes public trust in science and evidence-informed policy making.

Unlocking the power of science communication

CONFERENCE IN BRUSSELS: UNLOCKING THE POWER OF SCIENCE COMMUNICATION IN RESEARCH AND POLICY MAKING

Integrating More and Better Science Communication in Research Programmes

Strategic conclusions from the High-level Conference 'Unlocking the Power of Science Communication in Research and Policy Making'

We call upon European institutions, national governments, and research organisations to:

1. Incentivise science communication within research environments through better recognition and support. Funding support should be provided for dedicated training in communication skills; for the further integration of communication activities into career paths; and to foster national and international collaborative platforms to share best practices. Researchers should be recognised and rewarded for their efforts in science communication as part of research assessment systems.

2. Recognise science communicators as professionals who apply evidence-based approaches, and science communication as a distinct field of expertise and research. Collaborations between researchers and communicators are pivotal to ensure that research results are usable, accessible, and transferable to citizens and society at large and to build understanding of the scientific process within different audiences.

3. Promote and develop AI literacy and data transparency for the responsible use of Artificial Intelligence in science communication. Trust in AI will depend on organisational engagement in issues of accountability, transparency, regulation, and bias to ensure this tool's ethical and effective integration into research and communication practices.

4. Adopt a set of core principles for responsible science communication based on transparency, inclusivity, integrity, accountability, respect for autonomy, and timeliness. This makes it necessary to address challenges such as transparency in scientific communication, fostering critical public discourse, enhancing media literacy, respecting disciplinary differences, multi-lingualism, and prioritising the critical thinking skills and trust of young people in science.

- RECOGNIZE AND REWARD SCIENCE COMMUNICATION IN RESEARCH ASSESSMENT
- COLLABORATION NEEDED AMONG RESEARCHERS AND COMMUNICATION SPECIALISTS

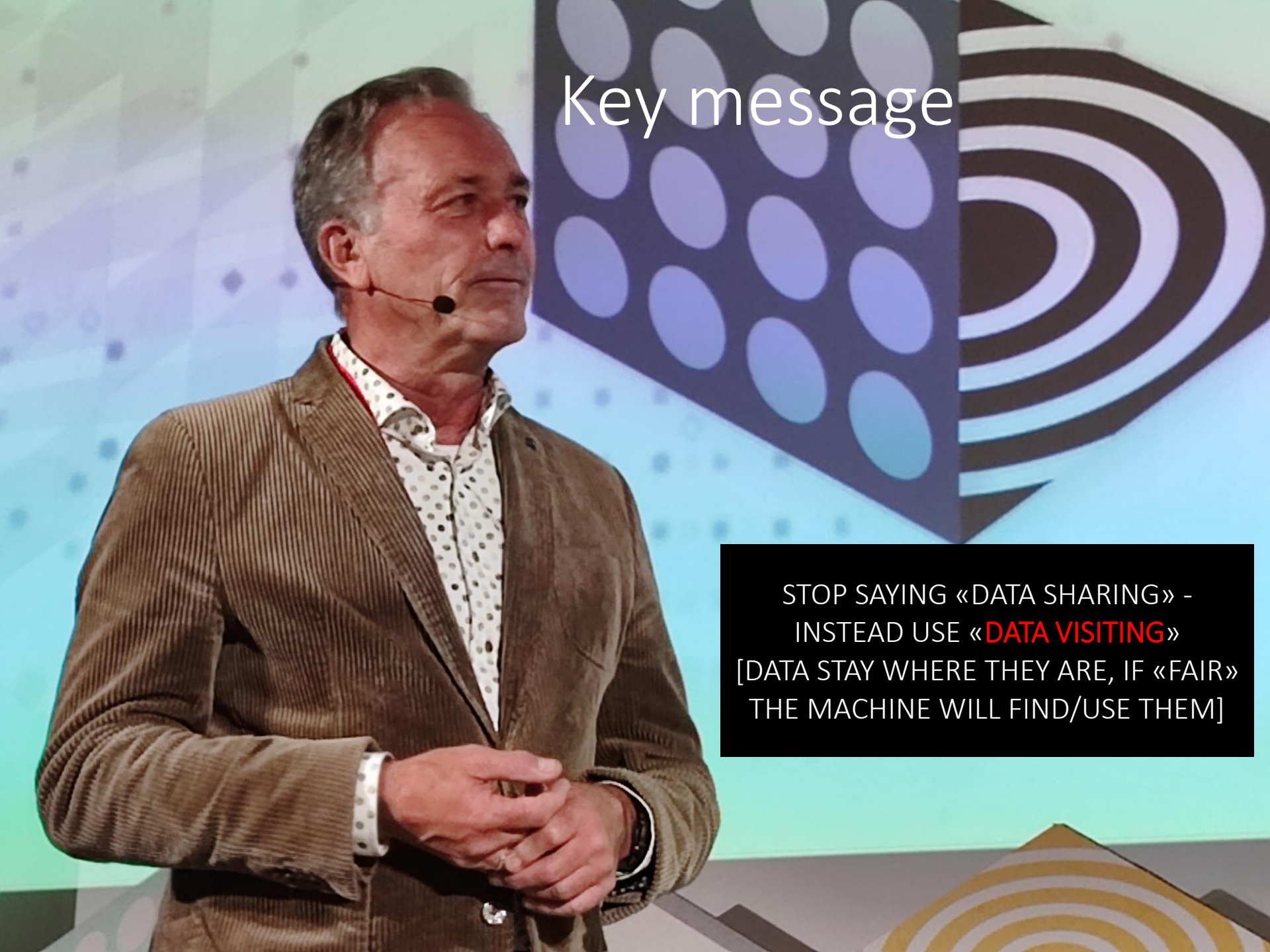
Unlocking the power of science communication

SCIENCE COMMUNICATION IS ESSENTIAL TO DELIVER THE MESSAGE THAT FUNDING RESEARCH IS AN INVESTMENT, NOT AN EXPENSE

Science communication is essential to delivering the message that funding scientific research is an investment, not an expense. It is necessary to integrate science communication initiatives strategically from the outset of research programmes and projects to showcase the value of research investments in addressing pressing societal issues, while also improving understanding of the research process itself.

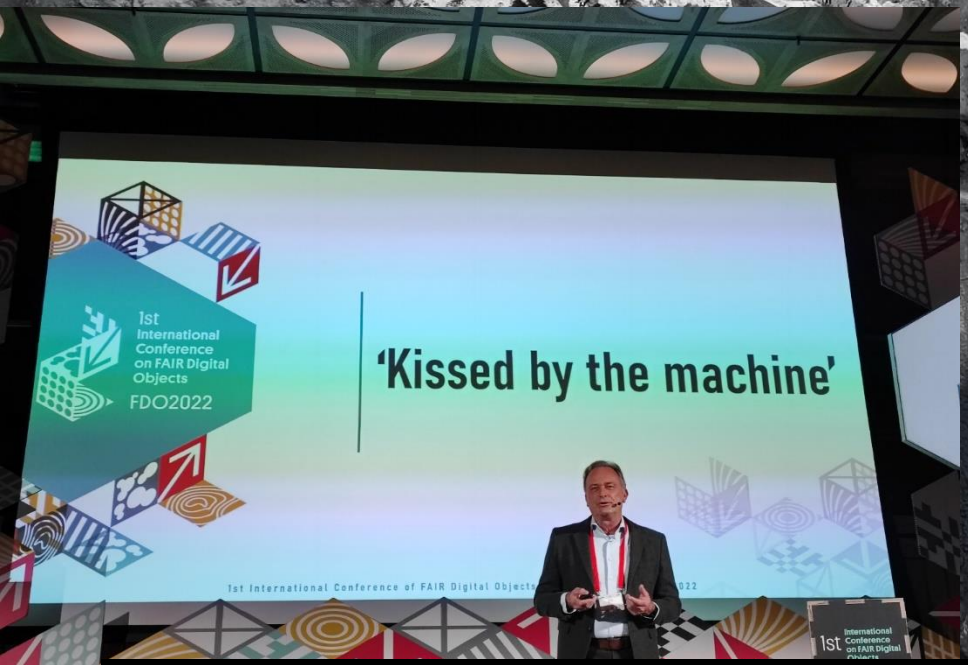

FOCUS ON
FAIR/OPEN

Key message



STOP SAYING «DATA SHARING» -
INSTEAD USE «DATA VISITING»
[DATA STAY WHERE THEY ARE, IF «FAIR»
THE MACHINE WILL FIND/USE THEM]

Why FAIR? / Kissed or missed?



FAIR PRINCIPLES ARE
«MACHINE ACTIONABLE»
(MORE THAN READABLE)
FAIR = FULLY AI READY
IF NOT… YOU'LL BE MISSED (INSTEAD OF KISSED) BY THE MACHINE

… do we have «data» in the Humanities?

2022

What do we mean by "data"? A proposed classification of data types in the arts and humanities

Bianca Gualandi, Luca Pareschi, Silvio Peroni

Journal of Documentation

DOWNLOADS ALTMETRICS

Originality/value

Our findings confirm that "data" within the FAIR framework should include all types of inputs and outputs humanities research work with, including publications. Also, the participants of this study appear ready for a discussion around making their research data FAIR: they do not find the terminology particularly problematic, while they rely on precise and recognised methodologies, as well as on sharing and collaboration with colleagues.

Sustainable and FAIR Data Sharing in the Humanities

ALLEA Report | **February 2020**

February 2020

The 3 steps

OPEN

FAIR

MANAGED

1. DATA SHOULD BE «AS OPEN AS POSSIBLE»

2. BUT IF DATA ARE NOT «FAIR», OPENING IS RISKY (MISUSE, MISINTERPRETATION, …)

3. IF DATA ARE NOT PROPERLY MANAGED FROM THE BEGINNING, IT'S ALMOST IMPOSSIBLE TO MAKE THEM «FAIR» [WITHIN EOSC, MANAGED/FAIR INCREASINGLY OVERLAPPING, «FAIR BY DESIGN»]

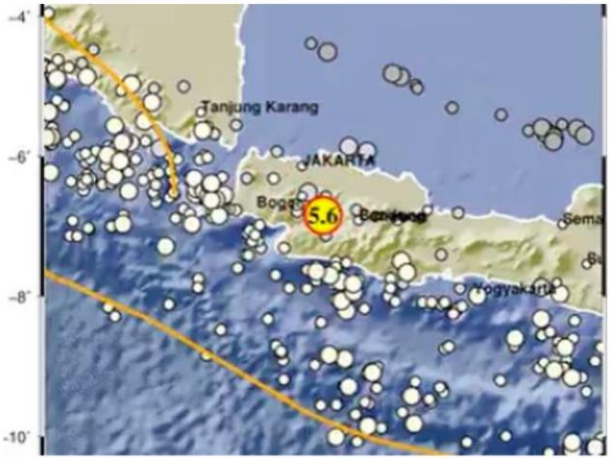
…the selfie…

How we can get those data

This was the best map that we can get (cited by the media)

Those data points are not really data points. They're just a selfie of data points.

They're not reusable.



IN «FAIR» THE STRESS IS ON «R»

BEWARE…
IF DATA ARE NOT **REUSABLE** THEY ARE JUST A SELFIE OF DATA
[USELESS]
[Dasapta Erwin Irawan]

1) Manage data

DESCRIPTION FOR DISCOVERABILITY (metadata)

ORGANIZATION (file naming, folders, versioning…)

SECURITY, BACKUP AND STORAGE

LONG TIME PRESERVATION

LEGAL ASPECTS

ALONG THE ENTIRE LIFE CYCLE

2) Make t[illegible] FAIR

FINDABLE

ACCESSIBLE [≠OPEN]

INTEROPERABLE

REUSABLE

Metadata standards catalog

Metadata Standards Catalog

Search Sign in

tandards Catalog is a collaborative, open directory of metadata standards
:h data. It is offered to the international academic community to help address
nges.

DataCite
FIND, ACCESS, AND REUSE DATA

ORCID
Connecting Resea
and Researchers

ROR

https://www.re3data.org/

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

Data journals

What are data journals?

Data journals are scholarly journals that publish datasets or data papers. According to Geoscience Data Journal, "a **data paper describes a dataset**, giving details of its collection, processing, software, file formats etc, without the requirement of novel analyses or ground breaking conclusions. It allows the reader to understand the when, how and why data was
t these exist, as this data would

DANS formats

If your data are stored in other formats than those mentioned below, please contact DANS.

Type	Preferred format(s)	Non-preferred format(s)
Text documents	• PDF/A (.pdf) • ODT (.odt)	• Microsoft Word (.doc) • Office Open X • Rich Text File (• PDF other tha

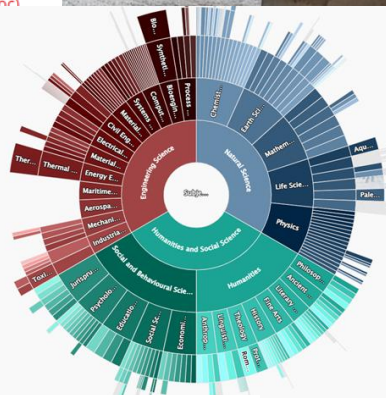
https://fairsharing.org/

FAIRsharing.org
standards, databases, policies

STANDARDS DATABASES POLICIES COLLECTIONS ADD CONTENT STATS

A curated, informative and educational resource on data and metadata standard
inter-related to databases and data policies.

We guide consumers to discover, select and use these resources with confidence, and producers to make thei
resource mo



OpenAIRE

SERVICES SUPPO

Guides for Researchers

How do I know if my research data is protected?

Learn more a
intellectual pr

Project-level documentation

The project-level documentat
researcl
instrum
that you

Data-level documentation

Data-level or object-level
umentation provides information
he level of individual objects such

cessda

Data Management Expert Guide

MIT Press Direct 2020

Data Intelligence

Volume 2, Issue 1-2
Winter-Spring 2020

January 01 2020

Licensing FAIR Data for Reuse

Ignasi Labastida, Thomas Margoni

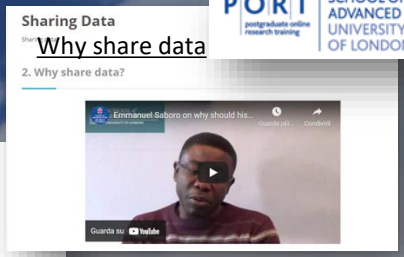
CC Factsheet

creative commons

FACT SHEET ON
CREATIVE COMMONS & OPEN SCIENCE

This information guide contains questions and responses to common concerns surrounding open science and the implications of licensing data under Creative Commons licences. It is intended to aid researchers, teachers, librarians, administrators and many others using and encountering Creative Commons licences in their work.

3) Whenever possible, make Open



Why share data

PORT postgraduate online research training | SCHOOL OF ADVANCED STUDY UNIVERSITY OF LONDON

Better research

- Demonstrates research integrity, as there is transparency and accountability in the production of the d
- Encourages research enquiry and debat
- Promotes innovation and potential new
- Encourages the improvement of researc
- Prevents research fraud

BETTER RESEARCH
- INTEGRITY
- DEBATE
- REUSE

Better impact

- Enables peer scrutiny of the research findings, validating the work carried out
- Increases the visibility of the research
- Provides credit for the creation of the da
- Can lead to new collaborations
- Produces a public record of the research

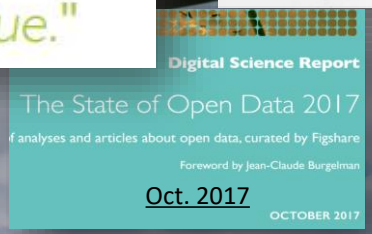
BETTER IMPACT
- VISIBILITY
- CREDIT
- COLLABORATIONS

Better value

- Avoids duplication of effort in data creation
- Provides resources for use in teaching and learning
- Meets funder requirements
- Ensures data can be re-visited for future
- Maximises return on research investmen
- Preparing data for sharing also prepares

BETTER VALUE
- AVOID DUPLICATIONS
- MAX RETURN ON INVESTMENTS

"Open data is like a renewable energy source: it can be reused without diminishing its original value, and reuse creates new value."



Oct. 2017

FAIR/Open

AS OPEN AS POSSIBILE
AS EARLY AS POSSIBLE
AS FAIR AS POSSIBLE

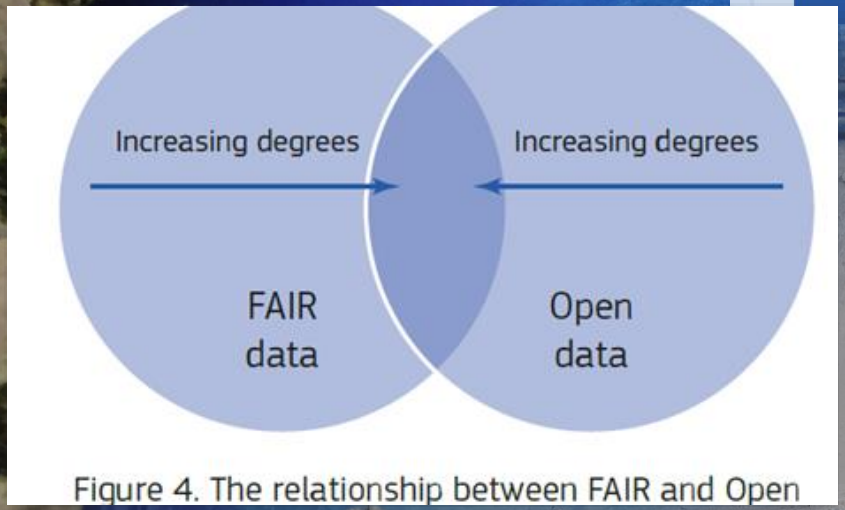
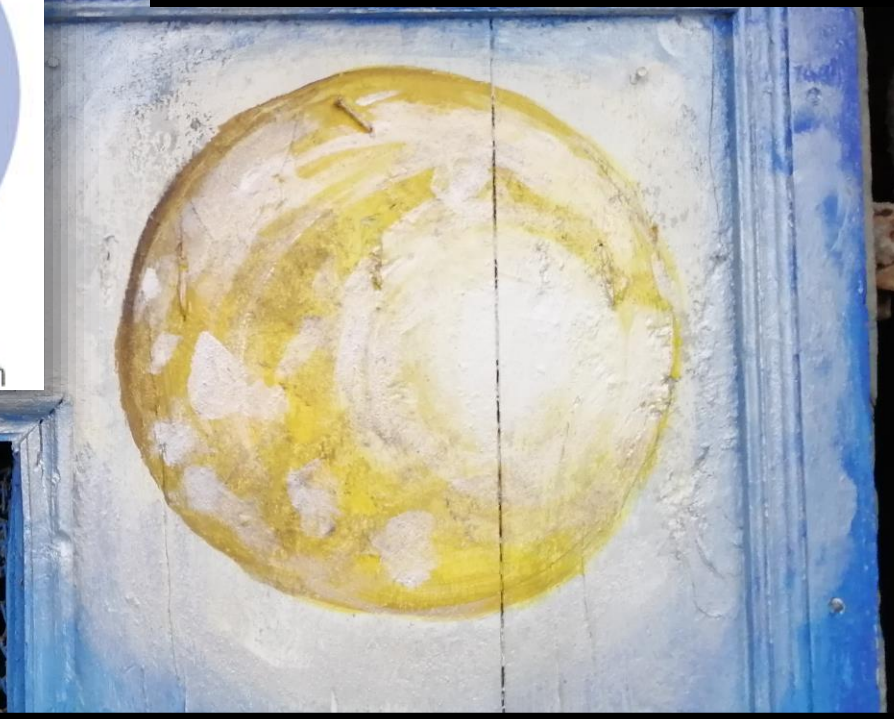


Figure 4. The relationship between FAIR and Open



THERE WILL BE AN INCREASING DEGREE IN OVERLAPPING.
BUT WE'LL ALWAYS HAVE PERFECTLY FAIR CLOSED DATA

[and we need data stewards]

nature Feb. 25, 2020 Subscribe

WORLD VIEW · 25 FEBRUARY 2020

Invest 5% of research funds in ensuring data are reusable

It is irresponsible to support research but not data stewardship, says Barend Mons.

Barend Mons

Change Agents

Learn how change agents, such as data stewards, play an important rol

- A network of change agents coordinate data management across the

FAIR toolkit

HOW TO

Below are a set of questions designed to build and harness a network of change agents who support the change actively as an important facet of their daily work. They will be able to understand and communicate what is well and what requires attention. These questions are accompanied by example answers to illustrate how change agents relate to the implementation od sustained FAIR data management.

Q1. Who would you identify as key change agents?

- **Data steward:** Appointed to each important group who will be a senior scientist familiar with the concepts and process of data stewardship.
- **Middle managers** must support common data policies which can be reused.
- **Senior managers** must invest appropriate levels of budget for data management training, workshops and data service provision.
- **Support service staff** in Business Technology and Informatics functions are also likely to be important.

Q2. How can the change agents help to drive adoption of the change?

- The **change agents**, especially the **data stewards** supported by **management** need to facilitate new or improved business processes.
- These will foster the attitude that **data sets and corresponding metadata are valuable corporate assets** which must be managed effectively.

Q3. How can the network of change agents help to overcome barriers to change?

- The **network of data stewards** will facilitate implementation of FAIR data management at ar optimal level of capability, determined through feasibility studies.
- Iterative application of FAIR maturity indicators will show opportunities for improvement, and the resulting benefits.
- Success will include more reuse of the data, better reproducibility and realisation of value from data and more time for insightful data analytics.

Use cases will show case such benefits. This will be important to communicate the value of the

DATA DOMAIN COMPETENCES+ TRANSVERSAL SKILLS

KØBENHAVNS UNIVERSITET

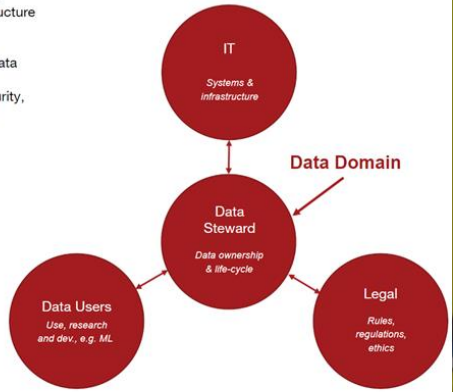
Competence Profile

A data steward is a data specialist with strong domain-specific knowledge who understands and appreciates the relevance of data, data sources, data infrastructure and constraints within a scientific or other application domain.

The future Data Steward must assume ownership and responsibility for data, data quality, and the data life-cycle as their primary function. They should ensure collaboration and coherence between IT competences, quality assurance, security, rules & regulations, and facilitate the application and use of data internally and externally in the organisation.

Competence profile examples

- Domain-specific data understanding
- Ability to ensure that structured and unstructured data and meta data is modelled, harvested, stored, and maintained in a documented, and regulated fashion with focus and findability, accessibility, interoperability, and reusability.
- Competences to facilitate HPC (High Performance Computing) during development and research through handling of large-scale data in public and private enterprises.
- Understanding of and competences within legal, ethical and security aspects of data handling, data sharing, e.g., integrity and GDPR.



Copenhagen Univ. June 17 2020

nature

Explore content | About the journal | Publish with us | Subscribe

nature > career column > article

CAREER COLUMN | 14 April 2022

Time to re-think the divide between academic and support staff

Apr. 2022

Research professionals should not be split into two categories, say Marta Teperek, Maria Cruz and Danny Kingsley.

DATA STEWARDS ARE NOT TO BE INTENDED AS «SUPPORTING STAFF». THEY ARE PART OF THE RESEARCH TEAM

FAIR? Because w

…VIRTUAL ENVIRONMENT TO
UNLOCK THE FULL POTENTIAL OF RESEARCH DATA TO ACCELERATE DISCOVERIES AND INNOVATION

EOSC Strategy – Status Current Thinking

What

EOSC is a web of FAIR data and related services for research
Research data that is easy to find, access, interoperate and reuse (FAIR)
Trusted and sustainable research outputs are available within and across scientific disciplines

Why

Unlock the full potential of research data to accelerate discoveries and innovation

How

Access and interoperability of research data and results

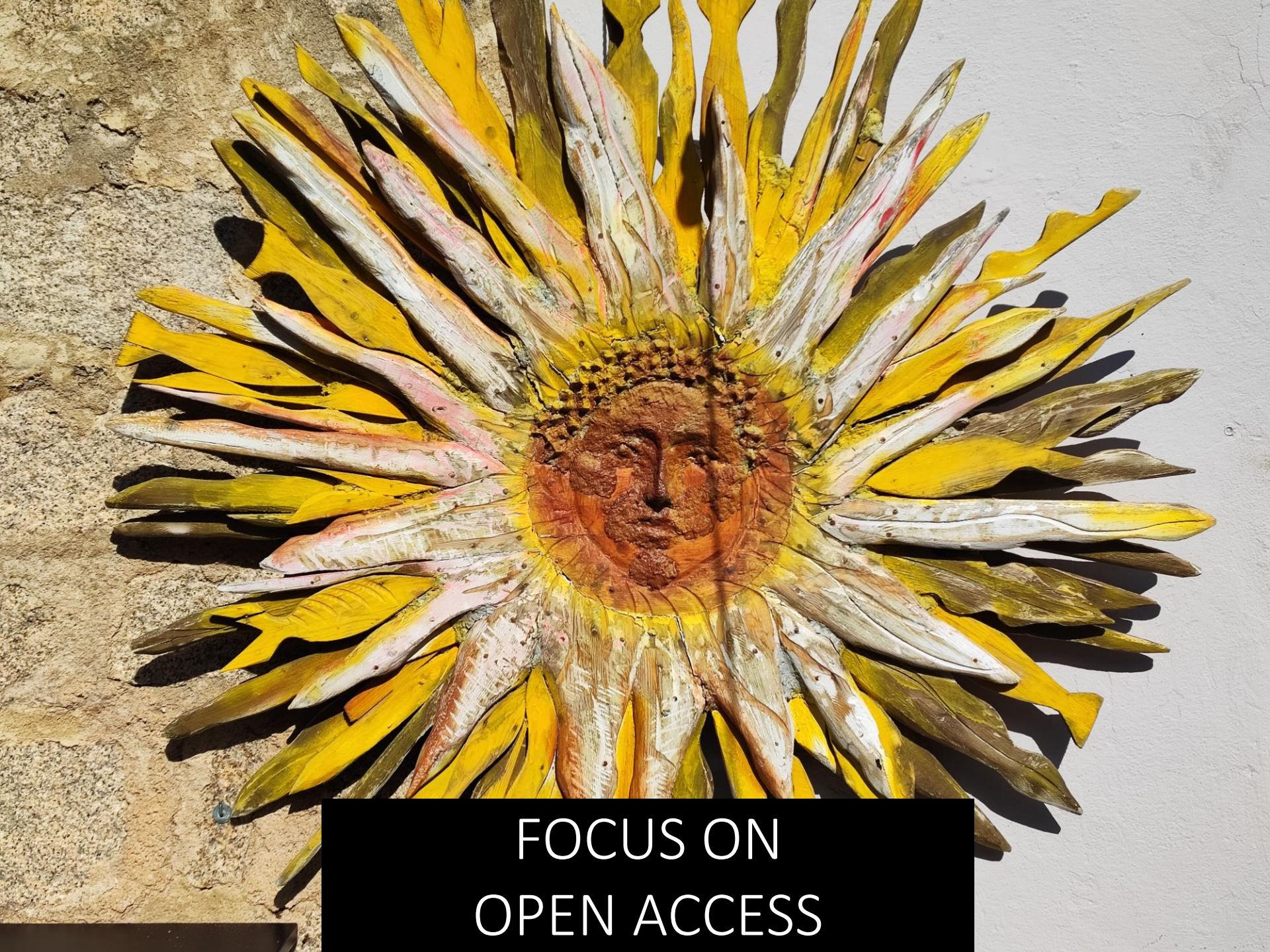
- Define ownership, authorship and responsibility of data and research outputs
- Ensure long-term preservation of data throughout its lifecycle
- Enable the creation of standards for all research domains
- Make data machine-actionable
- Enable new scientific discovery methods and science disciplines
- Train researchers on adopting FAIR principles as an integral part in their activity

A sustainable coordinated infrastructure

- Establish and maintain a coordinated federated reference architecture
- Implement an operational infrastructure framework that is long term sustainable
- Ensure high quality of data and services
- Ensure secure access to data and services
- Define clear standards for API and interoperability of data and services
- Apply user friendly practices
- Inspire EOSC ambassadors to assist in on-boarding of researchers

Inspired people and robust governance

- Communicate an inspiring EOSC vision and strategy
- Implement an unambiguous and clearly mandated governance structure
- Establish a framework to engage human capital in institutions, countries and scientific communities
- Enable disciplinary and cross-disciplinary transnational research to find new insights from existing and new research data and outputs

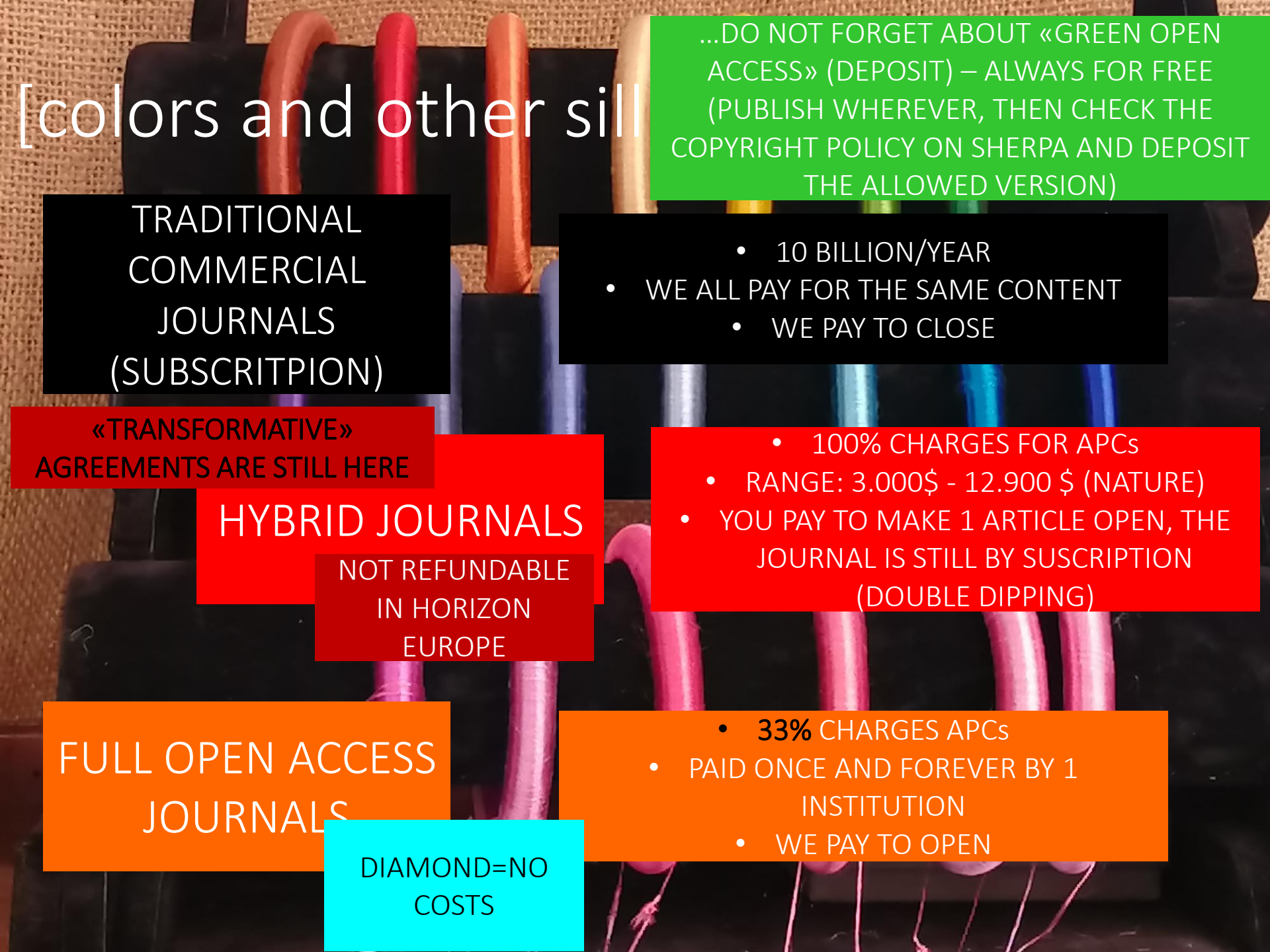

FOCUS ON
OPEN ACCESS

Green and Gold Open Access

AUTHORS PUBLISH IN AN OPEN ACCESS JOURNAL
33% ASK FOR APCs, ARTICLE PROCESSING CHARGES

- IMMEDIATE, ZERO COSTS
- CHECK THE COPYRIGHT POLICY ON SHERPA ROMEO
- YOU KEEP PUBLISHING ON THE «PRESTIGIUOS» JOURNALS FOR YOUR CAREER BUT YOU MAKE YOUR PAPER FREE

AUTHOR SELF-ARCHIVES
IN AN OPEN ACCESS REPOSITORY
THE ALLOWED VERSION OF THE PAPER ,
WHEREVER IT WAS PUBLISHED,
ACCORDING TO PUBLISHERS' COPYRIGHT POLICIES


[colors and other sill
…DO NOT FORGET ABOUT «GREEN OPEN ACCESS» (DEPOSIT) – ALWAYS FOR FREE (PUBLISH WHEREVER, THEN CHECK THE COPYRIGHT POLICY ON SHERPA AND DEPOSIT THE ALLOWED VERSION)
TRADITIONAL COMMERCIAL JOURNALS (SUBSCRITPION)
• 10 BILLION/YEAR
• WE ALL PAY FOR THE SAME CONTENT
• WE PAY TO CLOSE
«TRANSFORMATIVE» AGREEMENTS ARE STILL HERE
HYBRID JOURNALS
NOT REFUNDABLE IN HORIZON EUROPE
• 100% CHARGES FOR APCs
• RANGE: 3.000$ - 12.900 $ (NATURE)
• YOU PAY TO MAKE 1 ARTICLE OPEN, THE JOURNAL IS STILL BY SUSCRIPTION (DOUBLE DIPPING)
FULL OPEN ACCESS JOURNALS
DIAMOND=NO COSTS
• 33% CHARGES APCs
• PAID ONCE AND FOREVER BY 1 INSTITUTION
• WE PAY TO OPEN

… a report from the UK

Jisc review of UK open access and transitional agreements finds positives, but that a full transition is not in sight March 7, 2024

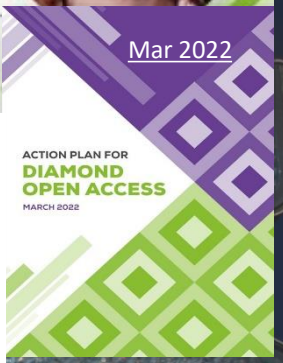
72 YEARS TO FULL TRANSITION ??????????? ???????????

It is perhaps not surprising, then, to see the low rates of journals being flipped to fully OA. Several publishers flipped some of their TA titles (although generally less than 10%), but about two-thirds are estimated to have flipped no journals at all. At the rate observed in the review, the 'big five' publishers would take more than 72 years to flip their TA titles.

…should we look for something else??

Diamond Open Access

Mar 2022



'Diamond' Open Access refers to a scholarly publication model in which journals and platforms do not charge fees to either authors or readers. Diamond Open Access journals represent community-driven, academic-led and -owned publishing initiatives. Serving a fine-grained variety of generally small-scale, multilingual, and multicultural scholarly communities, these journals and platforms embody the concept of bibliodiversity. For all these reasons, Diamond Open Access journals and platforms are equitable by nature and design.

Diamond Action Plan

Diamond definition

HAVE YOUR SAY!
MAY 16 AT 16.30

Diamond OA?

A definition based on the values of our community

- **A publication:** ISSN, ISBN, DOI
- **A scholarly publication**: content is peer reviewed
- **An open access scholarly publication**: free access to content and open license
- **A "No-APC" open access scholarly publication**: no fee or membership to publish
- **A "scholar-driven or owned" "No –APC" open access scholarly publication**: publisher as a scholarly organisation or editorial independence formally guaranteed

Slide courtesy of Pierre Mounier [OPERAS conference 2024]

OPERAS
This project has received funding under the Horizon Europe Framework Programme under Grant Agreement No 101079608. OPERAS received funding under the Horizon Europe and Horizon 2020 programmes and from its members: www.operas-eu.org/funding-information

El Acceso Abierto vía Diamante, entendido como la publicación sin cuotas por leer ni por publicar creada y mantenida por organismos académicos y científicos; así como el Acceso Abierto vía verde, son referentes de **modelos no comerciales compatibles con el paradigma de los bienes públicos**, y son inclusivos por definición.

Diamond Open Access

Oct. 27, 2023

NON COMMERCIAL OPEN ACCESS, INCLUSIVE BY DEFINITION, IS THE ONLY WAY FORWARD IF WE BELIEVE THAT KNOWLEDGE IS A COMMON GOOD

Manifiesto sobre la Ciencia como Bien Público Global: Acceso Abierto No Comercial

Oct. 27, 2023

1. **Derecho universal**
   La ciencia es un bien público global y el acceso a ella es un derecho universal
2. **Equidad, diversidad y multilingüismo**
   La ciencia es inclusiva, multilingüe, accesible, reutilizable y colaborativa.
3. **Propiedad de la academia y patrimonio de la humanidad**
   La producción científica es propiedad de la academia y se debe al desarrollo y progreso de la sociedad como patrimonio de la humanidad
4. **Reconocimiento y valoración**
   Las entidades de acreditación, investigación y financiación deben reconocer, evaluar e incentivar los medios no comerciales de producción y circulación del conocimiento científico.
5. **Colaboración**
   La interacción y colaboración entre los agentes no comerciales, publicaciones científicas e infraestructuras abiertas es necesaria para la construcción de ecosistemas de bienes públicos.

1. Introduction

This paper proposes to establish a global research infrastructure for Diamond Open Access (OA). This infrastructure will aim at providing resources and services to diamond open access communities worldwide to strengthen their role in scholarly communication. It will be a global infrastructure serving communities worldwide, while operating as a distributed system that aligns diverse communities to achieve shared goals.

'Diamond' Open Access is a scholarly communication model whereby research outputs are openly available without charging fees to either authors or readers. Importantly, it is a model that is driven by scholarly communities, meaning that they are in the lead and have ownership of the content-related elements of scholarly communication.

Dec. 2023

FEDERATED GLOBAL COMMUNITY

1. COMMUNITIES
2. CAPACITY CENTERS
3. CAPACITY HUBS
4. GLOBAL FEDERATION

DIAMAS

DIAMAS

The Extensible Quality Standard for Institutional Publishing (EQSIP)

- STANDARDS FOR A QUALITY SERVICE
- USEFUL ALSO FOR GAP ANALYSIS, ASPIRATIONAL

EQSIP 1.0

Council of the EU Press release 23 May 2023 10:27

2023

Council calls for transparent, equitable, and open access to scholarly publications

Today the Council has adopted conclusions on the 'high quality, transparent, open, trustworthy and equitable scholarly publishing', in which it calls for immediate and unrestricted open access in publishing research involving public funds.

If we really believe in open science, we need to make sure that researchers can make their findings available and re-usable and that high-quality scientific articles are openly accessible to anyone that needs to read them. This should be particularly the case for research that benefits from public funding: what has been paid by all should be accessible to all.

— Mats Persson, Swedish Minister for Education, Ministry of Education and Research

The hazards of scholarly publishing

Scientific articles and other forms of scholarly publishing continue to be the primary means of disseminating research results and scientific findings. However, far from every article is available to other researchers or other interested readers. The costs of paywalls to access and publish articles are becoming unsustainable and the publication channels for

Council of the European Union

May 23, 2023

Brussels, 23 May 2023
(OR. en)

9616/23

RECH 190
EDUC 169
PI 77
DIGIT 96

OUTCOME OF PROCEEDINGS

From:	General Secretariat of the Council
On:	23 May 2023
To:	Delegations
No. prev. doc.:	8827/23
Subject:	High-quality, transparent, open, trustworthy and equitable scholarly publishing - Council conclusions (approved on 23 May 2023)

5. NOTES that the current system of scholarly publishing is operated by various for-profit and not-for-profit organisations and RECOGNISES with concern that the increasing costs of paywalls for access to scientific publications and for scholarly publishing cause inequalities and are becoming unsustainable for public research funders and institutions accountable for the spending of public funds, decreasing funding available for research;

RECOGNISES WITH CONCERN THAT SUBSCRITPION ARE BECOMING UNSTAINABLE AND DECREASE PUBLIC FUNDS FOR RESEARCH)

BOTH SUBSCRIPTIONS AND HUGE APCs ARE NOT SUSTAINABLE

7. STRESSES that it is essential to avoid situations where researchers are limited in their choice of publication channels due to financial capacities rather than quality criteria, and where access to research publications is restricted by paywalls; WELCOMES coordination within the EU and with global partners to support equity in scholarly publishing, taking account of the UNESCO Recommendation on Open Science[6];

APCs LIMIT THE CHOICE OF PUBLICATION / PAYWALLS RESTRICT ACCESS

Council Conclusions (Ma

…RESEARCH OUTPUTS DISSEMINATION SHOULD BE A PRECISE RESPONSIBILITY OF RESEARCH INSTITUTIONS

Council of the European Union

Brussels, 23 May 2023
(OR. en)

May 2023

9616/23

RECH 190
EDUC 169
PI 77
DIGIT 96

OUTCOME OF PROCEEDINGS

From:	General Secretariat of the Council
On:	23 May 2023
To:	Delegations
No. prev. doc.:	8827/23
Subject:	High-quality, transparent, open, trustworthy and equitable scholarly publishing - Council conclusions (approved on 23 May 2023)

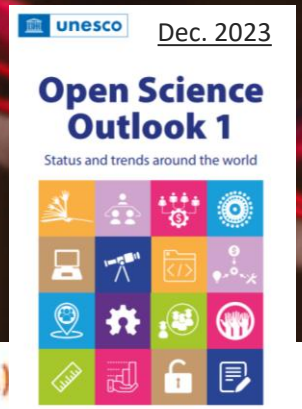
6. HIGHLIGHTS the importance of not-for-profit, scholarly open access publishing models that do not charge fees to authors or readers and where authors can publish their work without funding/institutional eligibility criteria; NOTES the variety of models that do not depend on article processing charges or similar per-unit charges and STRESSES the importance of supporting the development of such models led by public research organisations;

NON FOR PROFIT MODELS TO BE SUSTAINED

16. ENCOURAGES Member States and the Commission to invest in and foster interoperable, not-for-profit infrastructures for publishing based on open source software and open standards, in order to avoid the lock-in of services as well as proprietary systems, and to connect these infrastructures to the EOSC;

ENCOURAGES MEMBER STATES AND THE COMMISSION TO INVEST IN NON FOR PROFIT INFRASTRUCTURES BASED ON OPEN STANDARDS TO AVOID VENDOR LOCK-IN AND TO CONNECT TO EOSC

… and, by the way…



…COMPARE THE RICHNESS OF THE NETWORK OF CO-AUTHORSHIP IN DIAMOND OA

d around…

Episciences

OpenAIRE Services

Guides for OpenAIRE Services

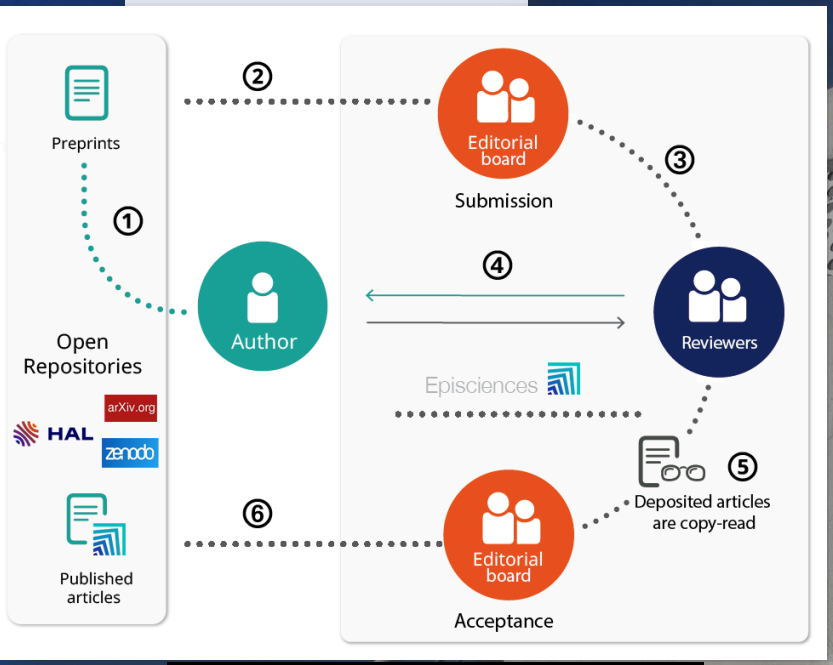
Episciences

Overlay Journal Platform

What it does

Episciences offers an overlay journal model

- Operating on top of Open Access repositories
- Allowing peer-review preprints
  - single-blind review
  - open peer-review
- Ensuring that all versions remain available online
  - During the whole publication process
  - If the journals disappears or moves, updates are still possible on journal/repository



EPISCIENCES / OPENAIRE

- OVERLAY JOURNAL
- PREPRINT+OPEN PEER REVIEW

F1000Research 2019

Search

BROWSE GATEWAYS & COLLECTIONS HOW TO PUBLISH ABOUT

Home » Browse » Open laboratory notebooks: good for science, good for society, good...

Check for updates

OPINION ARTICLE

REVISED **Open laboratory notebooks: good for science, good for society, good for scientists [version 2; peer review: 2 approved, 1 approved with reservations]**

Matthieu Schapira [1,2], The Open Lab Notebook Consortium, Rachel J. Harding [1]

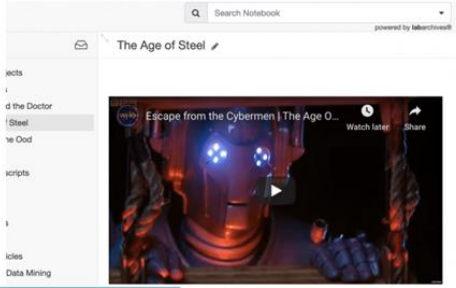
labarchives Better Science

Products Enterprise Integrations

Lab notebook for Humanities

Using an ELN for Humanities

by Olivia Sisson | May 21, 2020 | Data Management, Research | 0 comments



OPEN LAB NOTEBOOKS

there is a whole world around / 2

«CONSTRUCTIVE FEEDBACK»
«SCIENCE MORE EQUITABLE, TRANSPARENT AND COLLABORATIVE»

https://peercommunityin.org/

Peer Community in

PCI, a free recommendation process of scientific preprints based on peer reviews and a journal

DEPOSIT

your preprint, data, script and code in **any open repository**

SUBMIT

your article to a **PCI** for **open peer-review** by researchers in your field

VALIDATE

your article with a published, free and citable recommendation from the PCI

PUBLISH

for free in Peer Community Journal or submit to a PCI-friendly or other journal

Following submission by authors, the thematic PCIs evaluate preprints in their scientific fields based on rigorous peer review. After evaluation, the PCIs may recommend those preprints, to make them complete, reliable and citable articles, without the need for publication in 'traditional' journals. Authors who need to publish their article in a journal can publish it for free in Peer Community Journal or submit it to a PCI-friendly or other journal.

PREREVIEW

Open preprint reviews. For all researchers.

Provide and receive constructive feedback on preprints from an international community of your peers.

Review a preprint

https://prereview.org/

For underserved researchers

We support and empower diverse and historically excluded communities of researchers (particularly those at early stages of their career) to find a voice, train, and engage in peer review.

A better way

Making science and scholarship more equitable, transparent, and collaborative.

Our mission ›

A DIFFERENT, OPEN PUBLICATION WORKFLOW

Reasons NOT to go Open Science?

Valid reasons not to participate in open science practices

Casper J. Albers*

Abstract

The past years have seen a sharp increase in the attention for open science practices. Such practices include pre-registration and registered reports, sharing of materials, open access publishing and attention to reproducibility of research. Despite the overwhelming amount of evidence highlighting the benefits of open science, some researchers remain reluctant. In this paper, I will outline valid reasons for researchers not to participate in open science practices.

Discussion

There are no valid reasons.

*Heymans Institute for Psychological Research, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands. c.j.albers@rug.nl

THANK YOU!