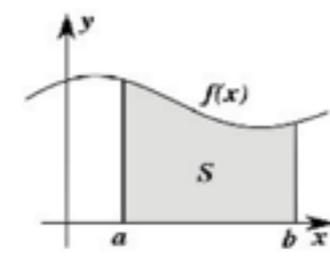


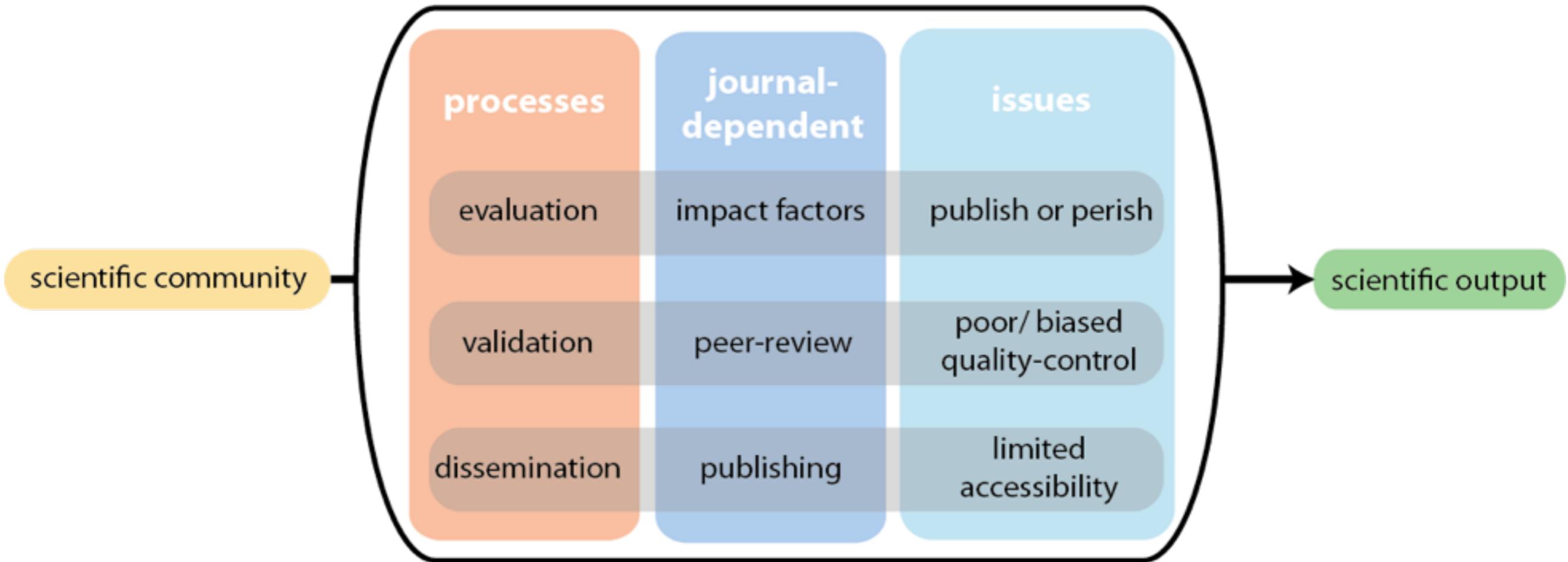
WHY TRUE SCIENCE IS ONLY OPEN SCIENCE

Pandelis Perakakis
University of Granada / Open Scholar
<http://openscholar.org.uk> – @ppandelis / @os_soc

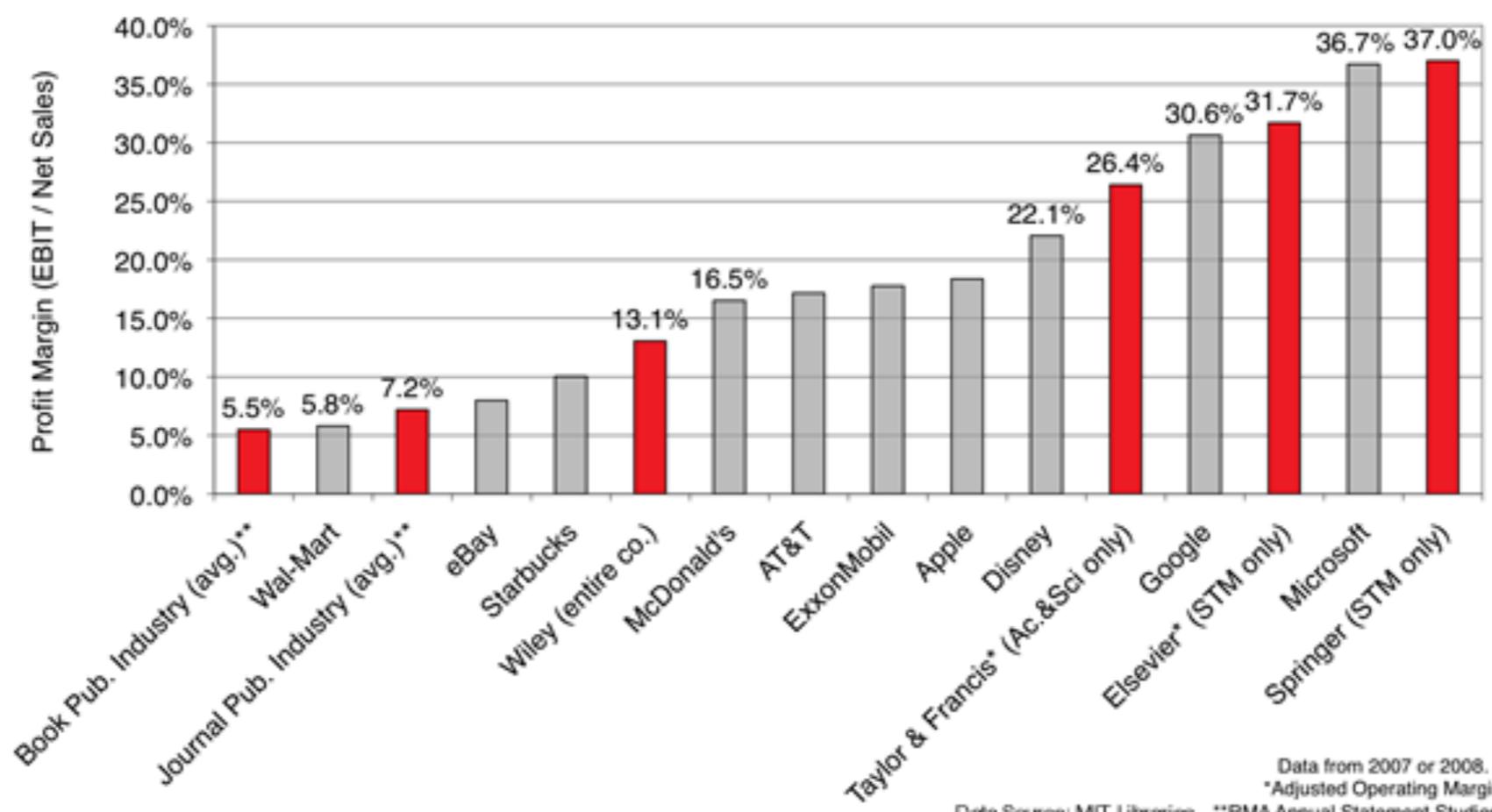
Ghent 19 May 2017



scholarly communication model

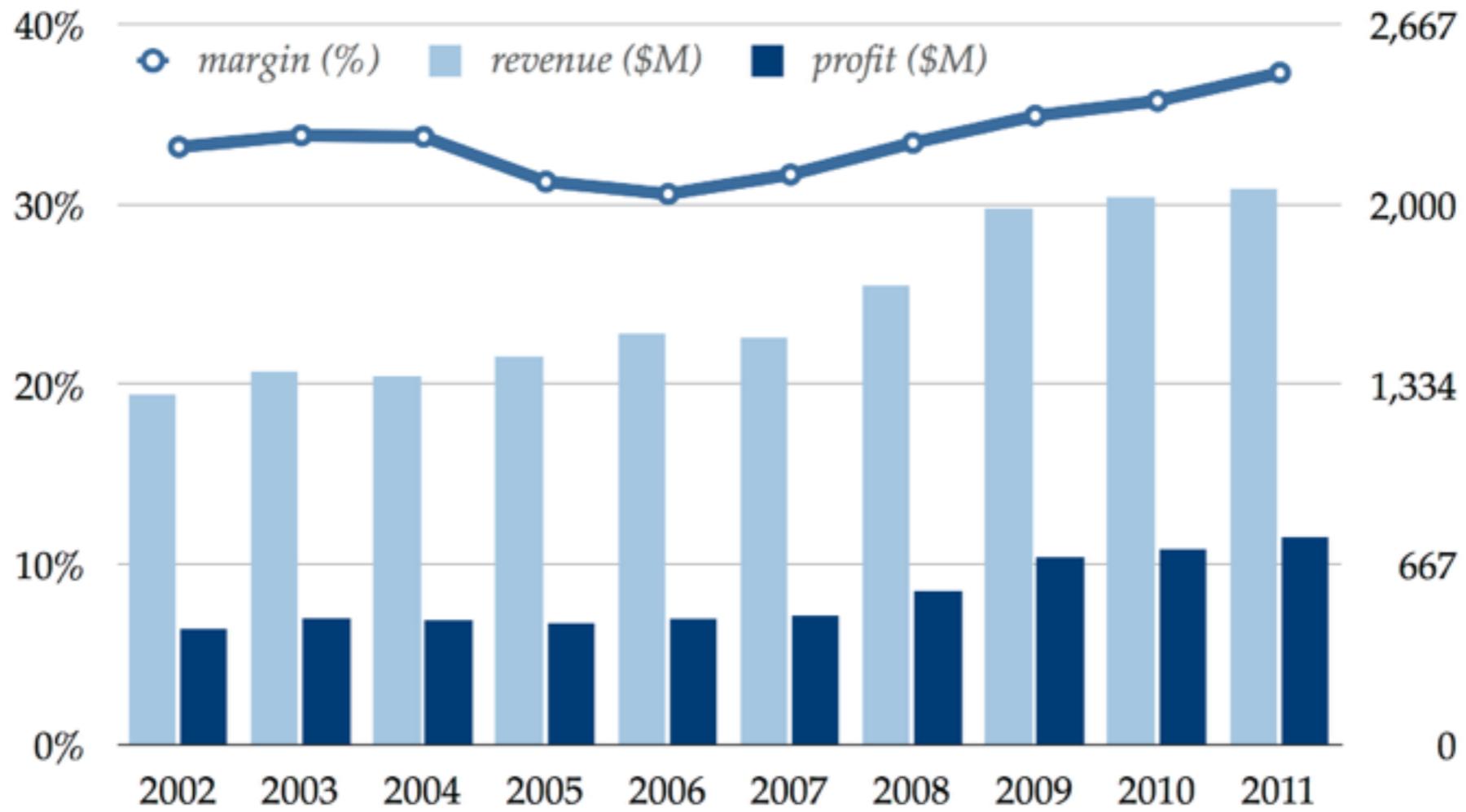


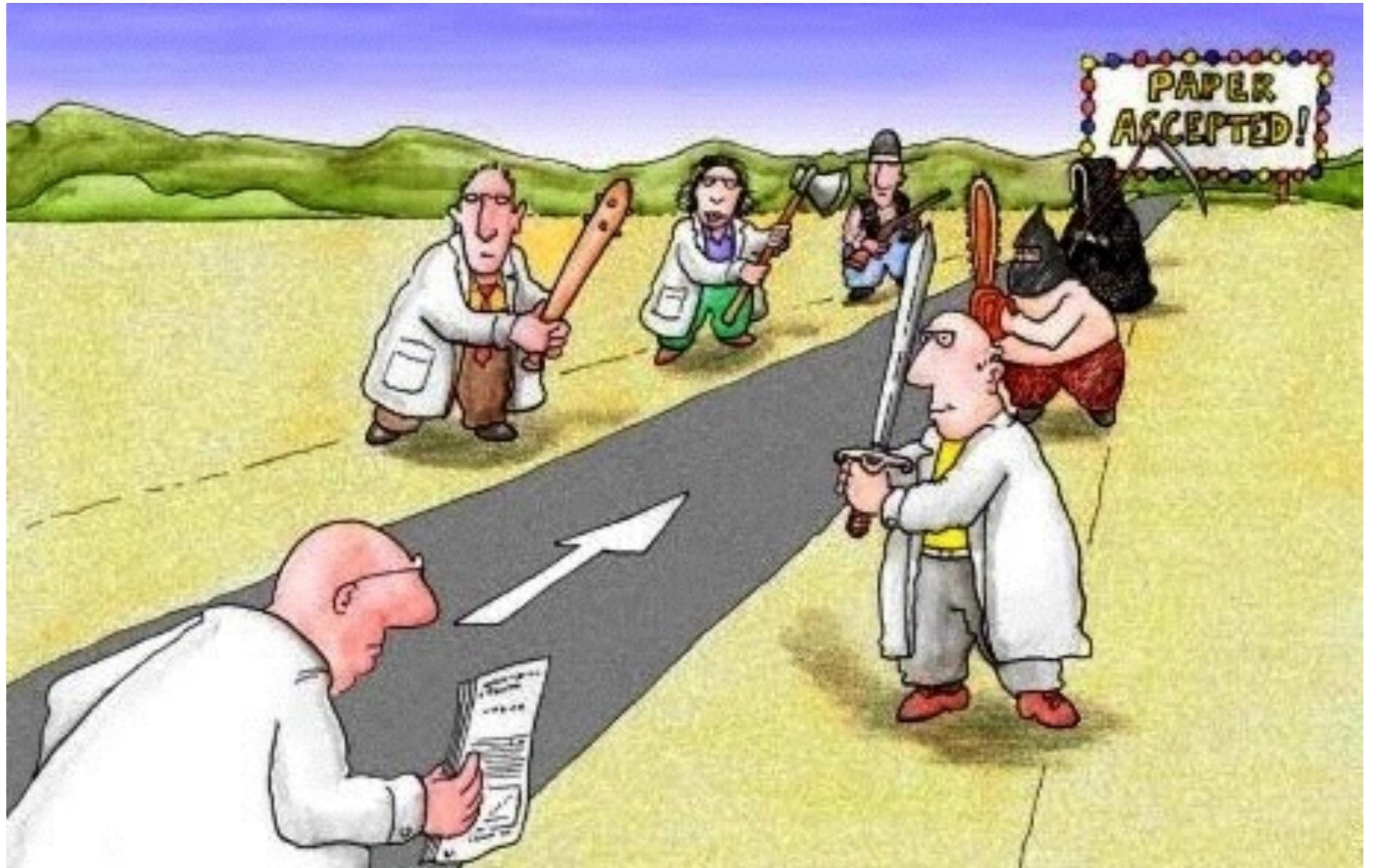
Profit Margins: Journal Publishers v. Other Companies



Data from 2007 or 2008.
 *Adjusted Operating Margin
 Data Source: MIT Libraries **RMA Annual Statement Studies, 2007

Elsevier historical profit margin







New forms of open peer review will allow academics to separate scholarly evaluation from academic journals.



Today's academic publishing system may be problematic, but many argue it is the only one available to provide adequate research evaluation. **Pandelis Perakakis** introduces an open community platform, **LIBRE**, which seeks to challenge the assumption that peer review can only be handled by journal editors. By embracing a new culture of open, transparent and independent research evaluation, the academic community can more productively contribute to global knowledge.

Email Address

Subscribe to the Impact Blog



This work is licensed under a
Creative Commons Attribution

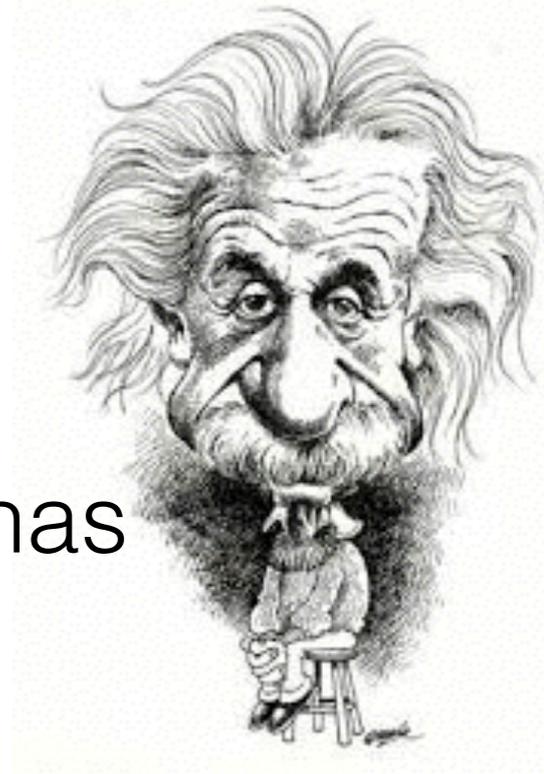
Today's academic publishing model treats knowledge –in the form of the academic article– as a material good. Instead of collaborating to shape new scientific ideas and communicate them to the research community and the public in general, scholars are forced to compete for a limited number of prestigious publication slots. As a result, science advances slower and less efficiently than it should, and young researchers entering their fields with a genuine aspiration to contribute to global knowledge are soon confronted with the ruthless “publish or perish” reality. And this is something humanity cannot accept.

Dear Sir,

We (Mr. Rosen and I) had sent you our manuscript for publication and had not authorized you to show it to specialists before it is printed. I see no reason to address the in any case erroneous comments of your anonymous expert. On the basis of this incident I prefer to publish the paper elsewhere.

Respectfully,

P.S. Mr. Rosen, who has left for the Soviet Union, has authorized me to represent him in this matter.





The peer review drugs don't work

A process at the heart of science is based on faith rather than evidence, says Richard Smith, and vested interests keep it in place

Peer review is supposed to be the quality assurance system for science, weeding out the scientifically unreliable and reassuring readers of journals that they can trust what they are reading. In reality, however, it is ineffective, largely a lottery, anti-innovatory, slow, expensive, wasteful of scientific time, inefficient, easily abused, prone to bias, unable to detect fraud and irrelevant.

Perhaps the biggest argument against the peer review of completed studies is that it simply isn't needed. With the World Wide Web everything can be published, and the world can decide what's important and what isn't. This proposition strikes terror into many hearts, but with so much poor-quality science published what do we have to lose?

Richard Smith, former *British Medical Journal* editor

May 28, 2015

Effects of Editorial Peer Review

A Systematic Review

Tom Jefferson, MD

Philip Alderson, MBChB

Elizabeth Wager, MA

Frank Davidoff, MD

Conclusions Editorial peer review, although widely used, is largely untested and its effects are uncertain.

JAMA. 2002;287:2784-2786

www.jama.com



Trusted evidence.
Informed decisions.
Better health.

Editorial peer review for improving the quality of reports of biomedical studies

Published:

18 April 2007

Authors:

Jefferson T, Rudin M, Brodney

Folse S, Davidoff F

Authors' conclusions:

At present, little empirical evidence is available to support the use of editorial peer review as a mechanism to ensure quality of biomedical research.

News Feature

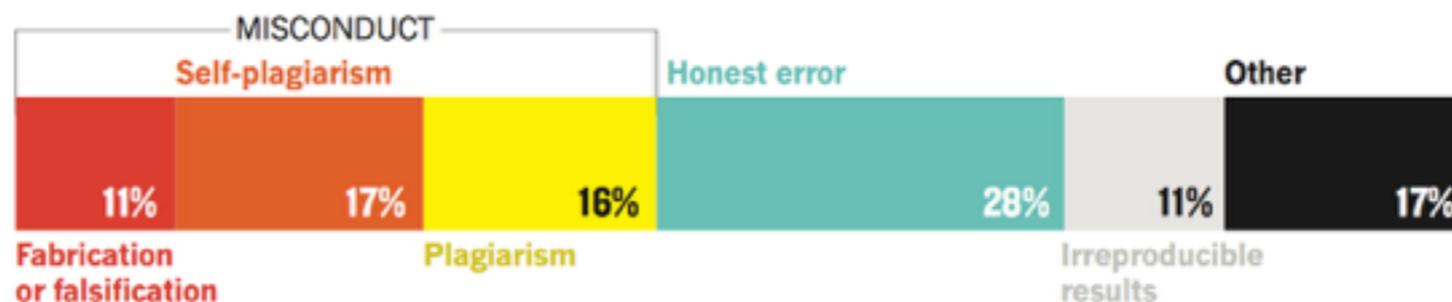
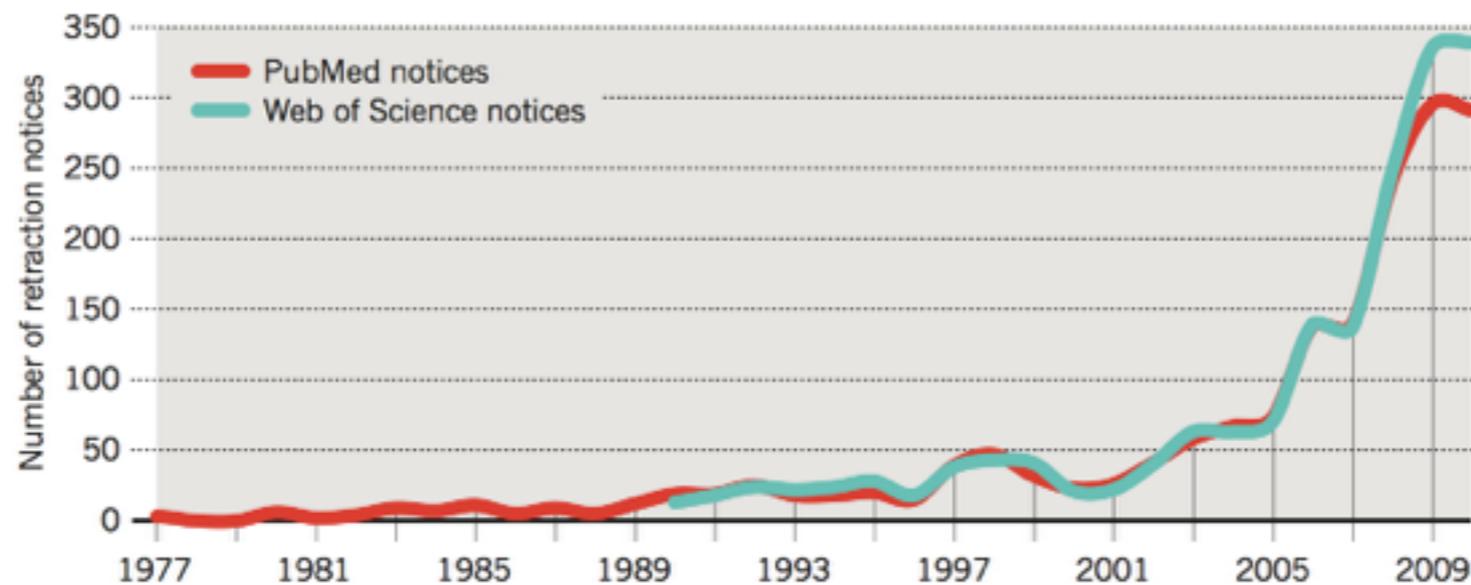
Science publishing: The trouble with retractions

A surge in withdrawn papers is highlighting weaknesses in the system for handling them.

Richard Van Noorden

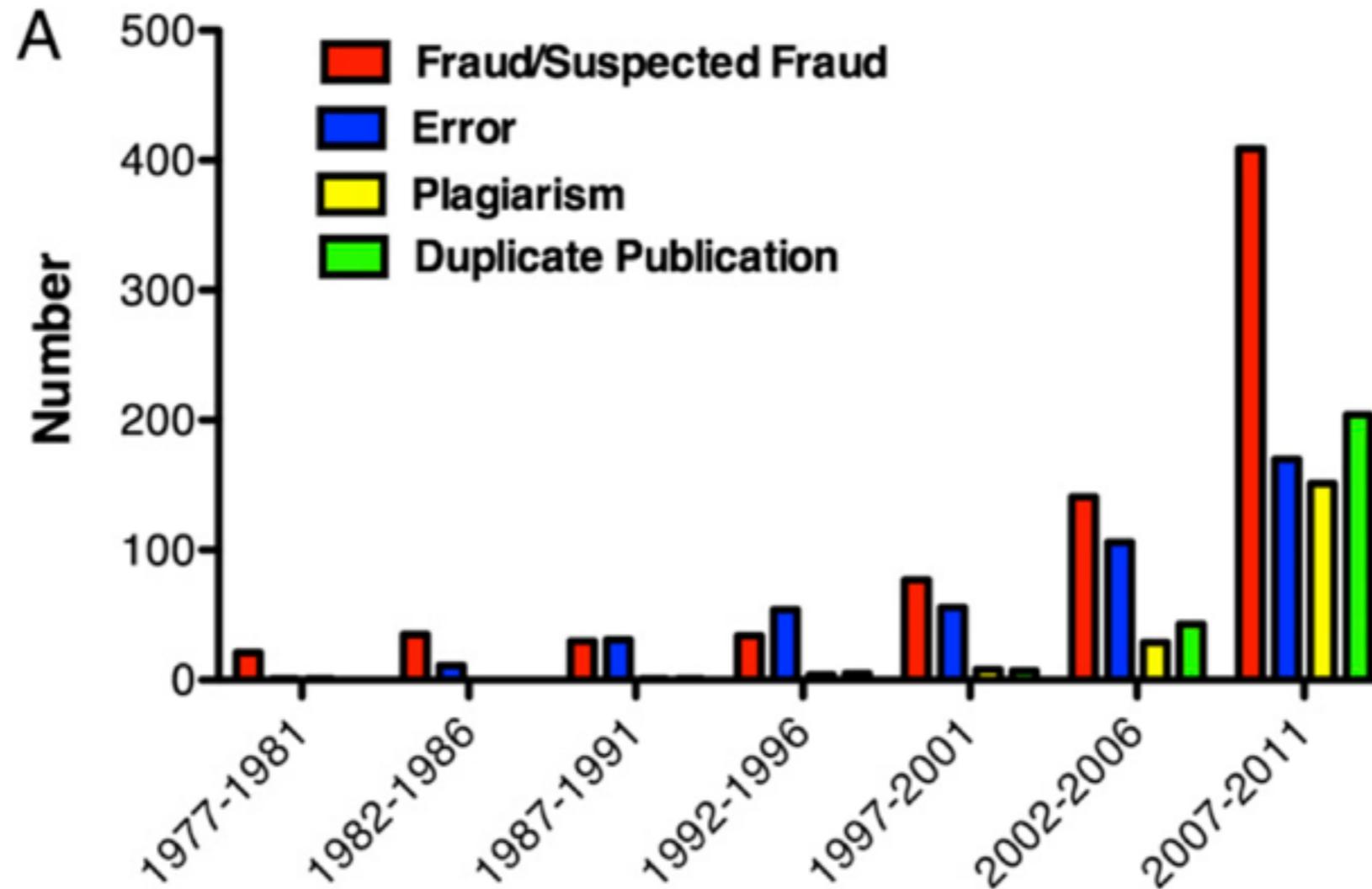
RISE OF THE RETRACTIONS

In the past decade, the number of retraction notices has shot up 10-fold (**top**), even as the literature has expanded by only 44%. It is likely that only about half of all retractions are for researcher misconduct (**middle**). Higher-impact journals have logged more retraction notices over the past decade, but much of the increase during 2006–10 came from lower-impact journals (**bottom**).



Misconduct accounts for the majority of retracted scientific publications

Ferric C. Fang^{a,b,1}, R. Grant Steen^{c,1}, and Arturo Casadevall^{d,1,2}



RESEARCH ARTICLE

Estimating the reproducibility of psychological science

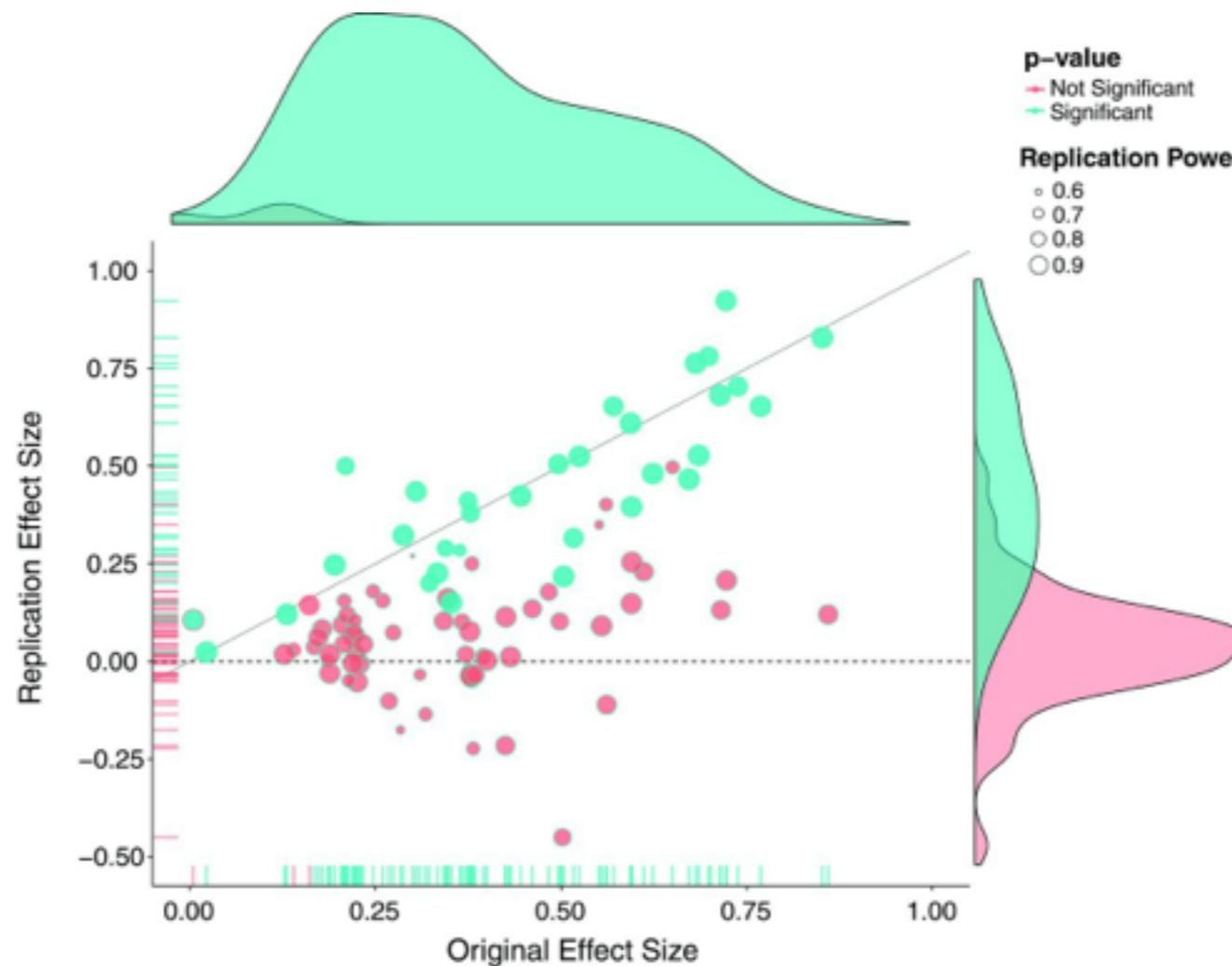


Open Science Collaboration^{*,†}

**All authors with their affiliations appear at the end of this paper.*

*†*Corresponding author. E-mail: nosek@virginia.edu

Science 28 Aug 2015:
Vol. 349, Issue 6251,
DOI: 10.1126/science.aac4716



Drug development: Raise standards for preclinical cancer research

C. Glenn Begley & Lee M. Ellis

85 per cent of preclinical studies could not be replicated

Building a stronger system

What reasons underlie the publication of erroneous, selective or irreproducible data? The academic system and peer-review process tolerates and perhaps even inadvertently encourages such conduct⁵. To obtain funding, a job, promotion or tenure, researchers need a strong publication record, often including a first-authored high-impact publication. Journal editors, reviewers and grant-review committees often look for a scientific finding that is simple, clear and complete — a 'perfect' story. It is therefore tempting for investigators to submit selected data sets for publication, or even to massage data to fit the underlying hypothesis.

Nature **483**, 531–533 (29 March 2012) | doi:10.1038/483531a

Published online 28 March 2012

*Jointly published by Akadémiai Kiadó, Budapest
and Springer, Dordrecht*

Scientometrics, Vol. 81, No. 2 (2009) 549–565

DOI: 10.1007/s11192-008-2141-5

Rejecting and resisting Nobel class discoveries: accounts by Nobel Laureates

JUAN MIGUEL CAMPANARIO

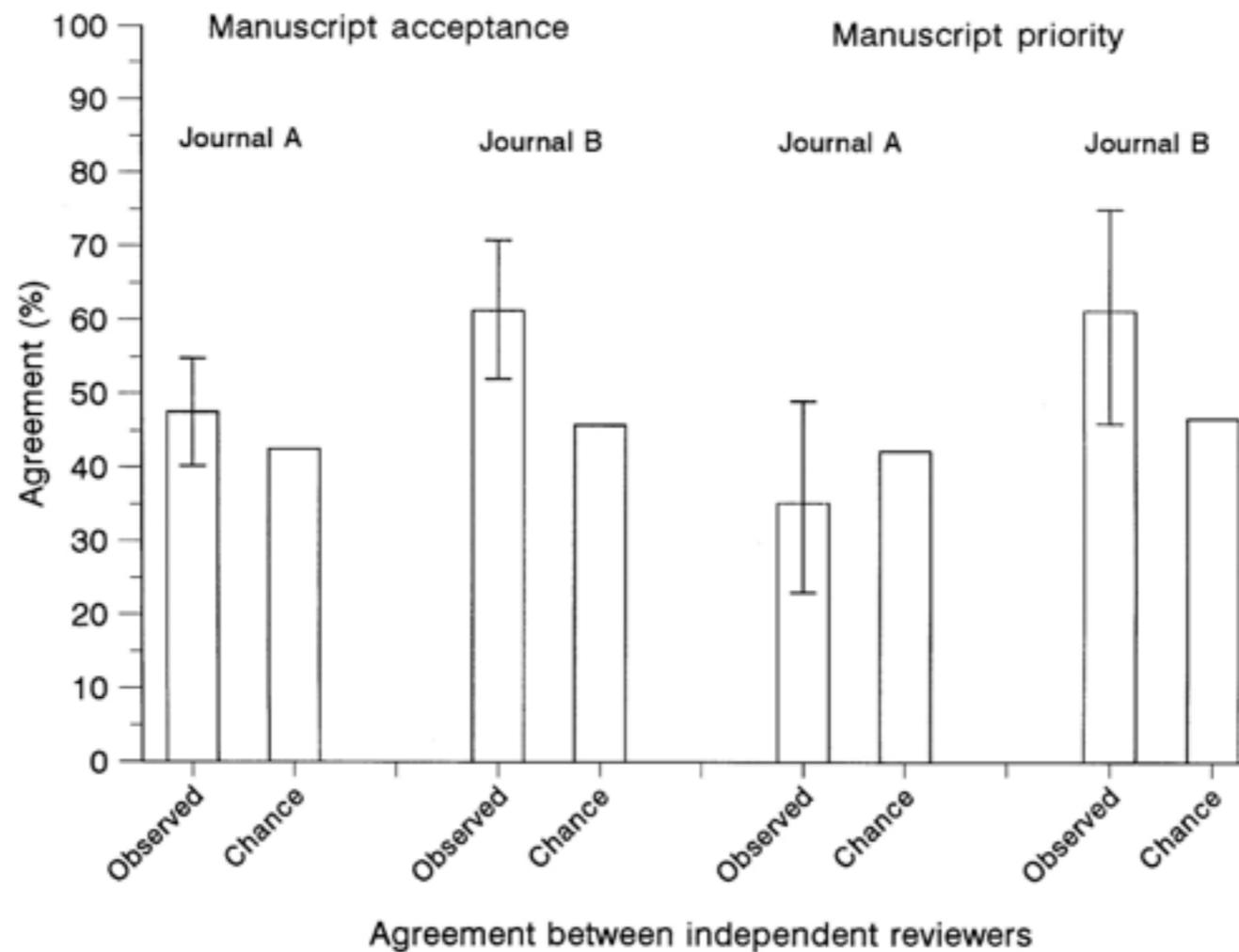
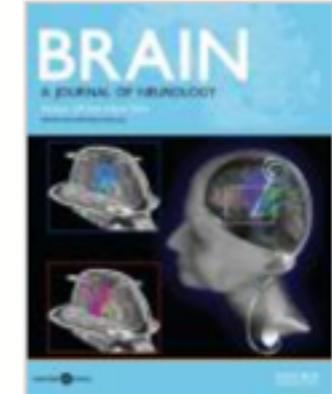
Departamento de Física, Universidad de Alcalá, 28871 Alcalá de Henares, Madrid, Spain

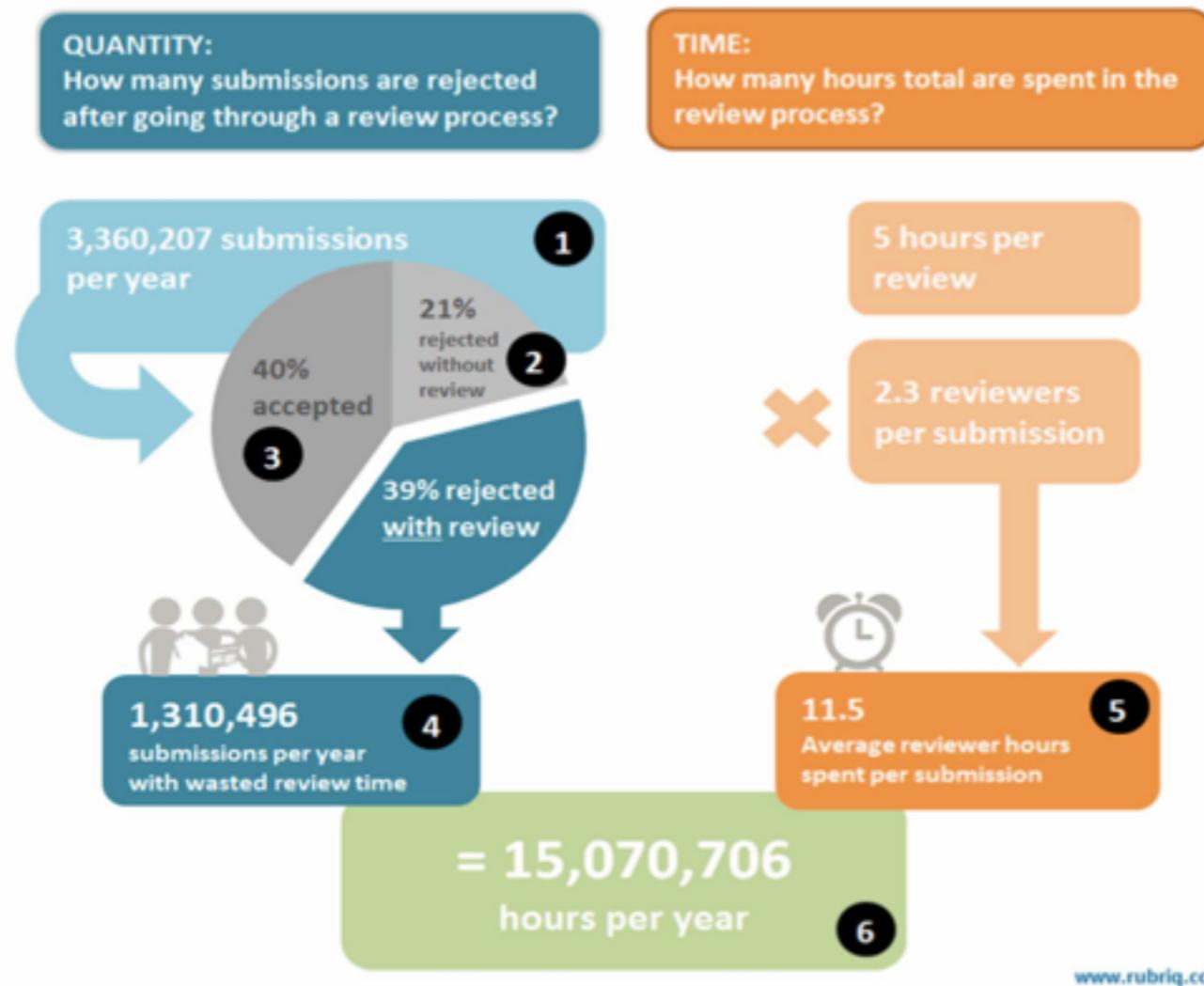
I review and discuss instances in which 19 future Nobel Laureates encountered resistance on the part of the scientific community towards their discoveries, and instances in which 24 future Nobel Laureates encountered resistance on the part of scientific journal editors or referees to manuscripts that dealt with discoveries that later would earn them the Nobel Prize.

Reproducibility of peer review in clinical neuroscience: Is agreement between reviewers any greater than would be expected by chance alone? 🚫

Peter M. Rothwell, Christopher N. Martyn

DOI: <http://dx.doi.org/10.1093/brain/123.9.1964> 1964-1969 First published online: 1 September 2000





Unpaid peer review is worth £1.9bn



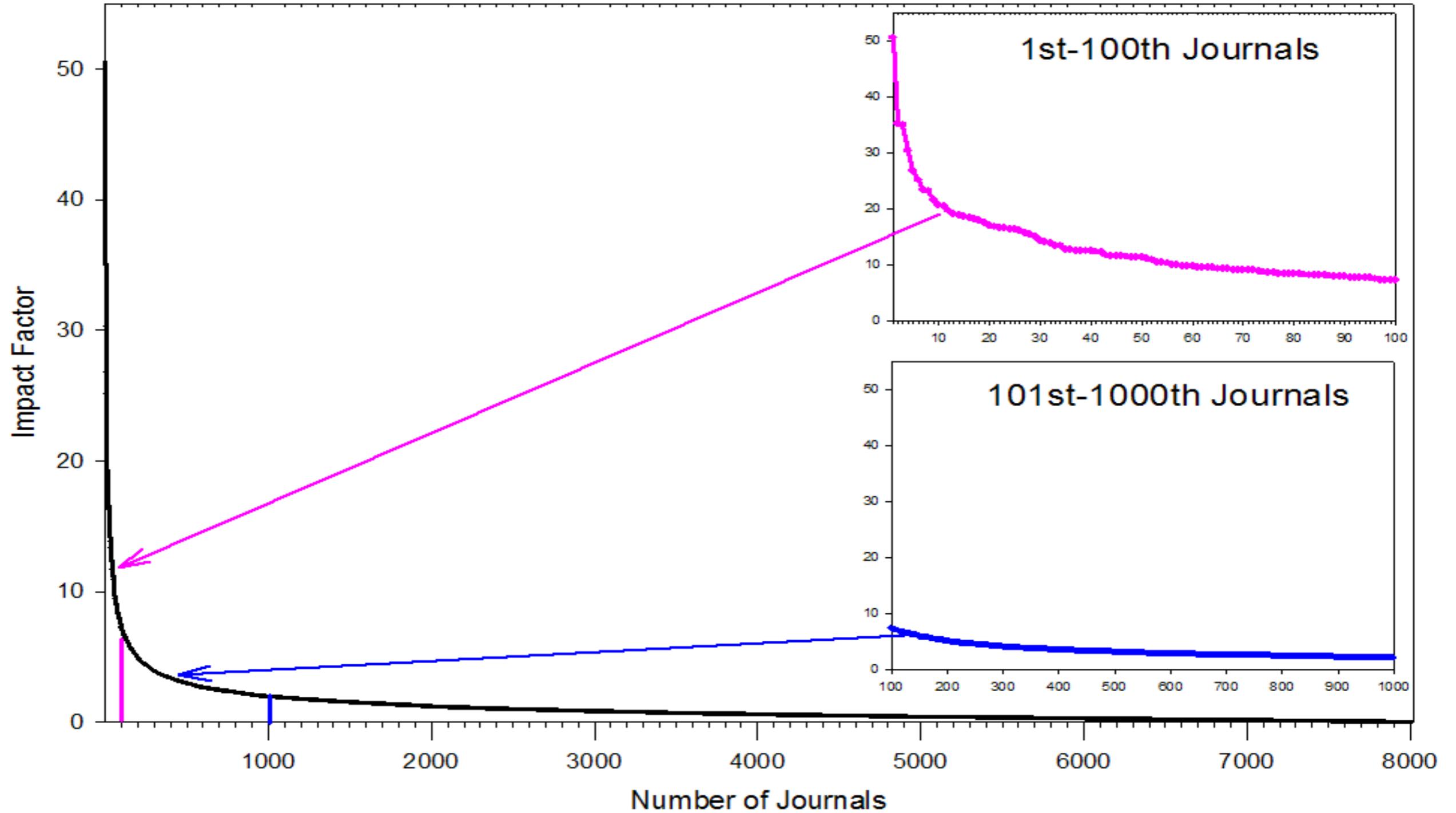
Study tallies 'hidden subsidy' of global scholarly communications system. Zoe Corbyn reports

Activities, costs and funding flows in the scholarly communications system in the UK
Report commissioned by the Research Information Network (RIN)

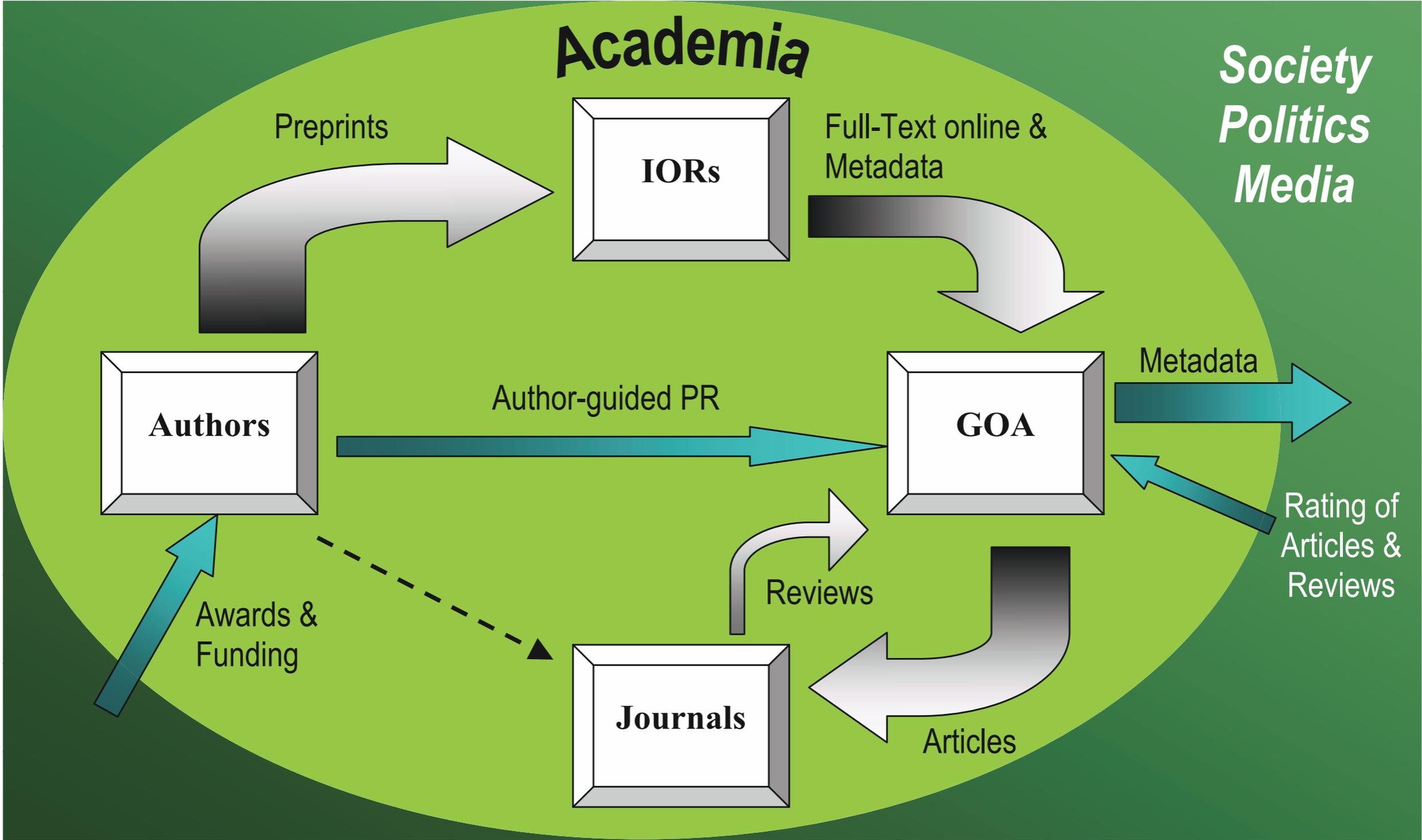
May 29, 2008

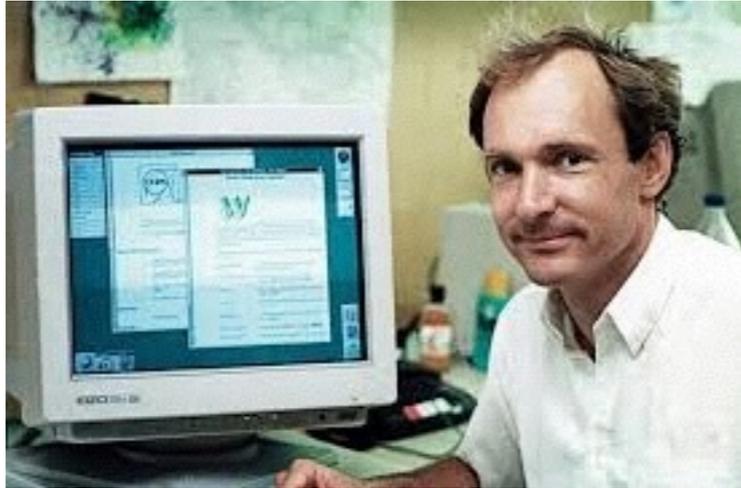
The Journal Monopoly

Journal Impact Factors (1974-2001): 8011 ISI Journals



Natural Selection of Academic Papers





Tim Berners Lee



Paul Ginsparg



arXiv.org

WorldWideWeb: Proposal for a HyperText Project

To: P.G. Inverso/ECP, G. Keller/ECP, D.O. Williams/CN
Cc: R. Brun/CN, K. Gieslmann/ECP, R. Jones/ECP, T. Osborne/CN, P. Palazzi/ECP, N. Pellow/CN, B. Pollermann/CN, E.M. Rimmer/ECP
From: T. Berners-Lee/CN, R. Callizo/ECP
Date: 12 November 1990

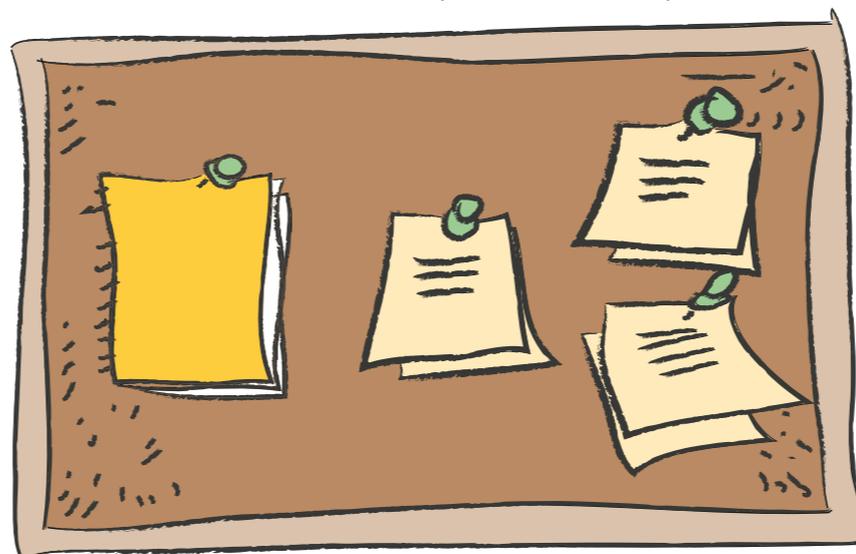
The attached document describes in more detail a Hypertext project.

HyperText is a way to link and access information of various kinds as a web of nodes in which the user can browse at will. It provides a single user interface to large classes of information (reports, notes, data-bases, computer documentation and on-line help). We propose a simple scheme incorporating servers already available at CERN.

The project has two phases: firstly we make use of existing software and hardware as well as implementing simple browsers for the user's workstations, based on an analysis of the requirements for information access needs by experiments. Secondly, we extend the application area by also allowing the users to add new material.

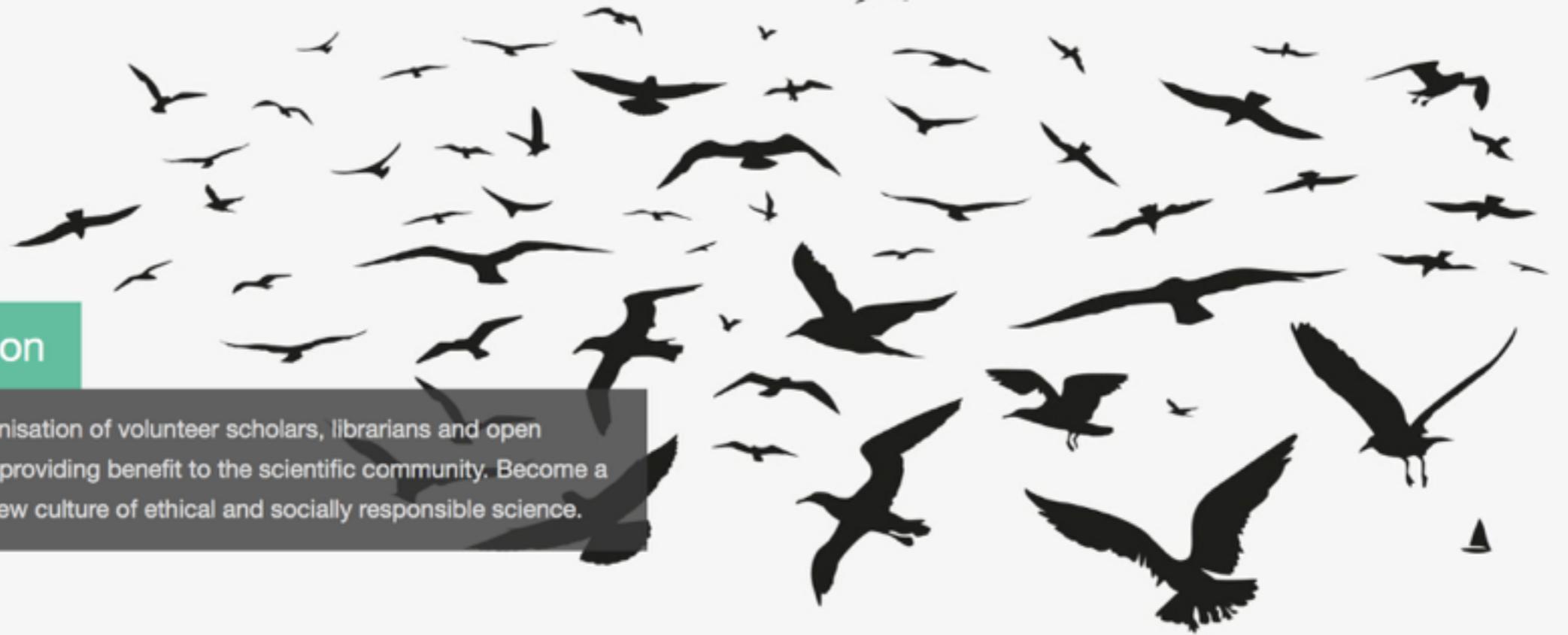


FREE MULTIDISCIPLINARY OPEN ACCESS



 **LIBRE** | liberating research

<https://www.youtube.com/watch?v=25ji9-52k7c>



An Open Organisation

We are a not-for-profit, open organisation of volunteer scholars, librarians and open science enthusiasts dedicated to providing benefit to the scientific community. Become a member and help us promote a new culture of ethical and socially responsible science.



<http://openscholar.org.uk/>

Working team: 7 members
145 members from 21 countries
Two large projects

Sign the Independent Peer Review Manifesto

Support the Independent Peer Review initiative to end the journal monopoly over research evaluation

[Add My Name](#)

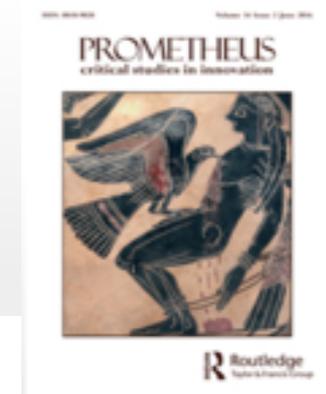
<http://www.openscholar.org.uk/independent-peer-review-manifesto/>

Academic self-publishing: a not-so-distant future

Pandelis Perakakis  & Michael Taylor

Pages 257-263 | Published online: 21 May 2014

 Download citation  <http://dx.doi.org/10.1080/08109028.2014.891712>



Prometheus

Critical Studies in Innovation

Priority
3 Who?
Prioritize

This article has reached scientific standards 6 /8 Who? Vote
This article still needs revisions 2 /8 Who? Vote

Add to my self-journal
 Follow this article

Critiques 50 + 55
 Comments 13 + 13
 Views 4991
 Curators 0

Download the pdf
 Supplemental files

[All critiques & comments](#)
[Cite as](#) [Share](#)
[Article outline](#)

Abstract

Essay and Opinion

Novel processes and metrics for a scientific evaluation rooted in the principles of science

VERSION 1 Released on 26 January 2017 under Creative Commons Attribution 4.0 International License

Michaël Bon¹, Michael Taylor², Gary S McDowell^{3,4}

Authors' affiliations

1. SJS - The Self-Journals of Science
2. Department of Physics - Aristotle University of Thessaloniki
3. The Future of Research, Inc.
4. ManyLabs (www.manylabs.org)



open scholar



OpenAIRE

Open Access Infrastructure for Research in Europe



DIGITAL.CSIC

OPEN SCIENCE



ARVO CONSULTORES
digital repositories



 Statistics

Cited 201 times in **WEB OF KNOWLEDGE®**  See citations in PubMed Central

 See citations in Google Scholar

 See citations in Microsoft Academic Search

Title:  Towards a unified paradigm for sequence-based identification of fungi

Authors: Kõljalg, Urmas; Dueñas, Margarita; Martín, María P. ; Tellería, M.^a Teresa; Larsson, Karl-Henrik

Keywords: Bioinformatics
DNA barcoding
Ecological genomics
Fungi
Microbial diversity

Review this work

Issue Date: 2013

Publisher: Wiley-Blackwell

Citation: Molecular Ecology 22(21): 5271-5277 (2013)

Researcher page at DIGITAL.CSIC

Reputation as author: 90



Reputation as reviewer: 75



Profile

Foto:



Firma en Digital.CSIC (*):

Apellido, Nombre

Otras firmas:

Apellido, N.

Apellido Apellido, Nombre

Apellido Apellido, N.

Centro o Instituto:

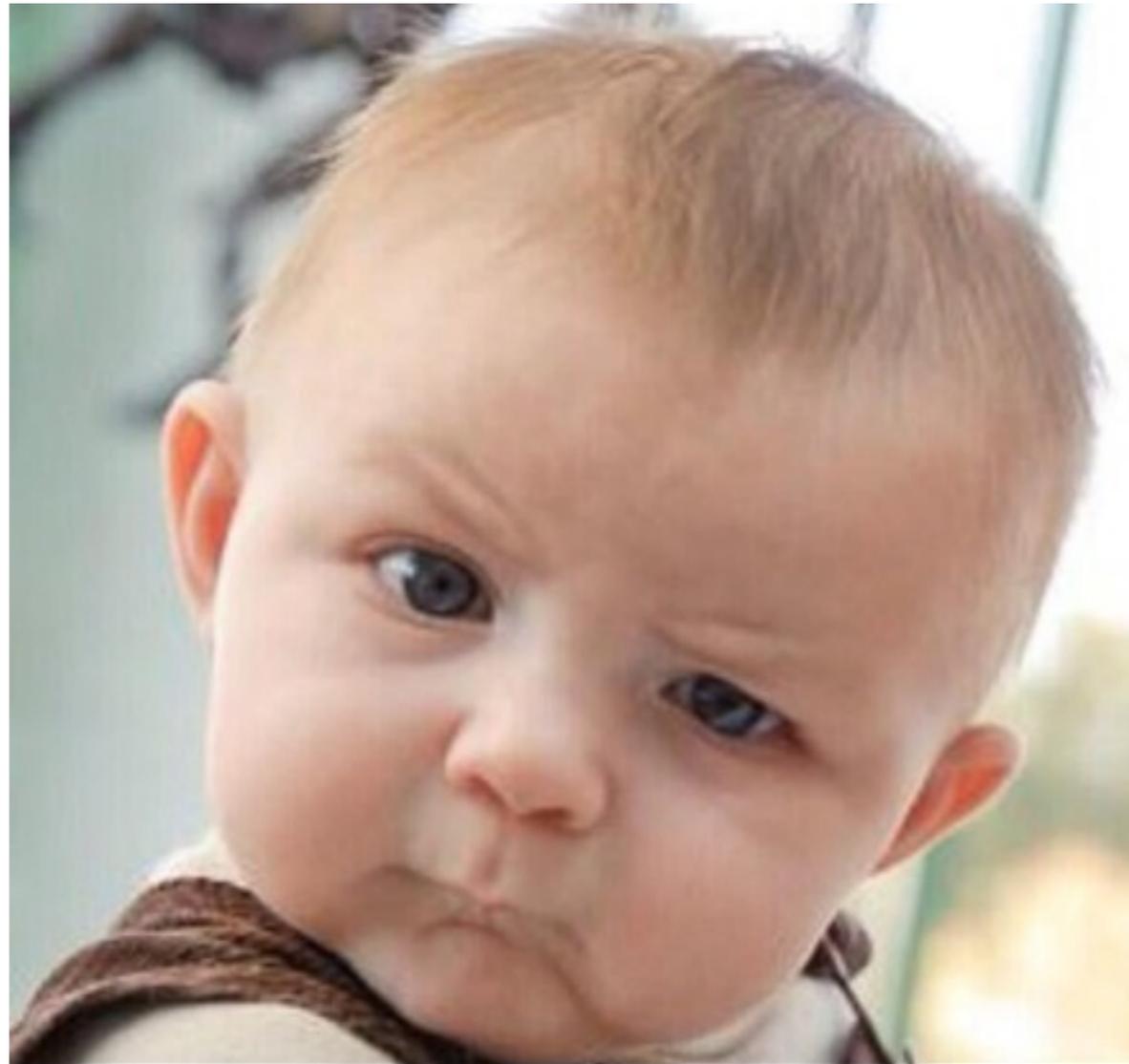
Centro / Instituto CSIC

Next Generation Repositories Working Group



In April 2016, COAR launched a working group to help identify functionalities and technologies for repositories and develop a roadmap for their adoption. The group will share preliminary results with repository and scholarly communities in order to validate recommendations and ensure community input. The aim is to have a final report published in early 2017.

<http://comment.coar-repositories.org>



So, why should I care?



1110110

1101101

The brain is a scientist!

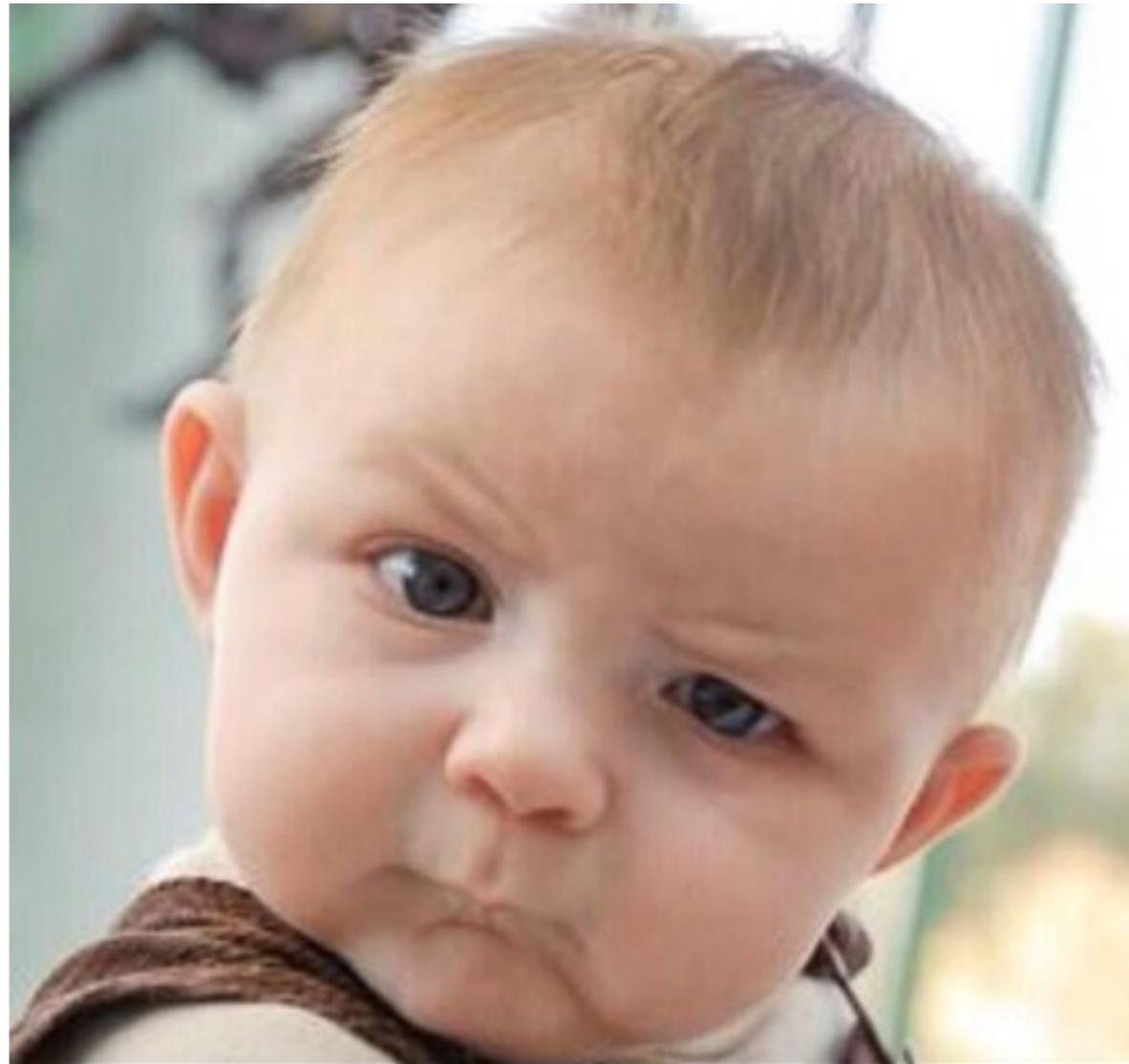
The scientific method is a fundamental process that evolved as the optimal strategy for the survival of the individual

**Humanity's collective effort to minimise
uncertainty**

Open-minded scepticism

**A scientist has no investment in the outcome
of the experiment**

<u>Scientist</u>	<u>Academic</u>
Open-minded	Content journal editors
Sceptical	No replications or negative results
Consider all data	Inaccessible articles, data, software code
Collaborate	Compete for scarce resources
No investment in the outcome	p-hacking



Let's say I do care, what should I do?



Open Science Workflows - putting the pieces together

de Bianca Kramer



Open Science Workflows
putting the pieces together

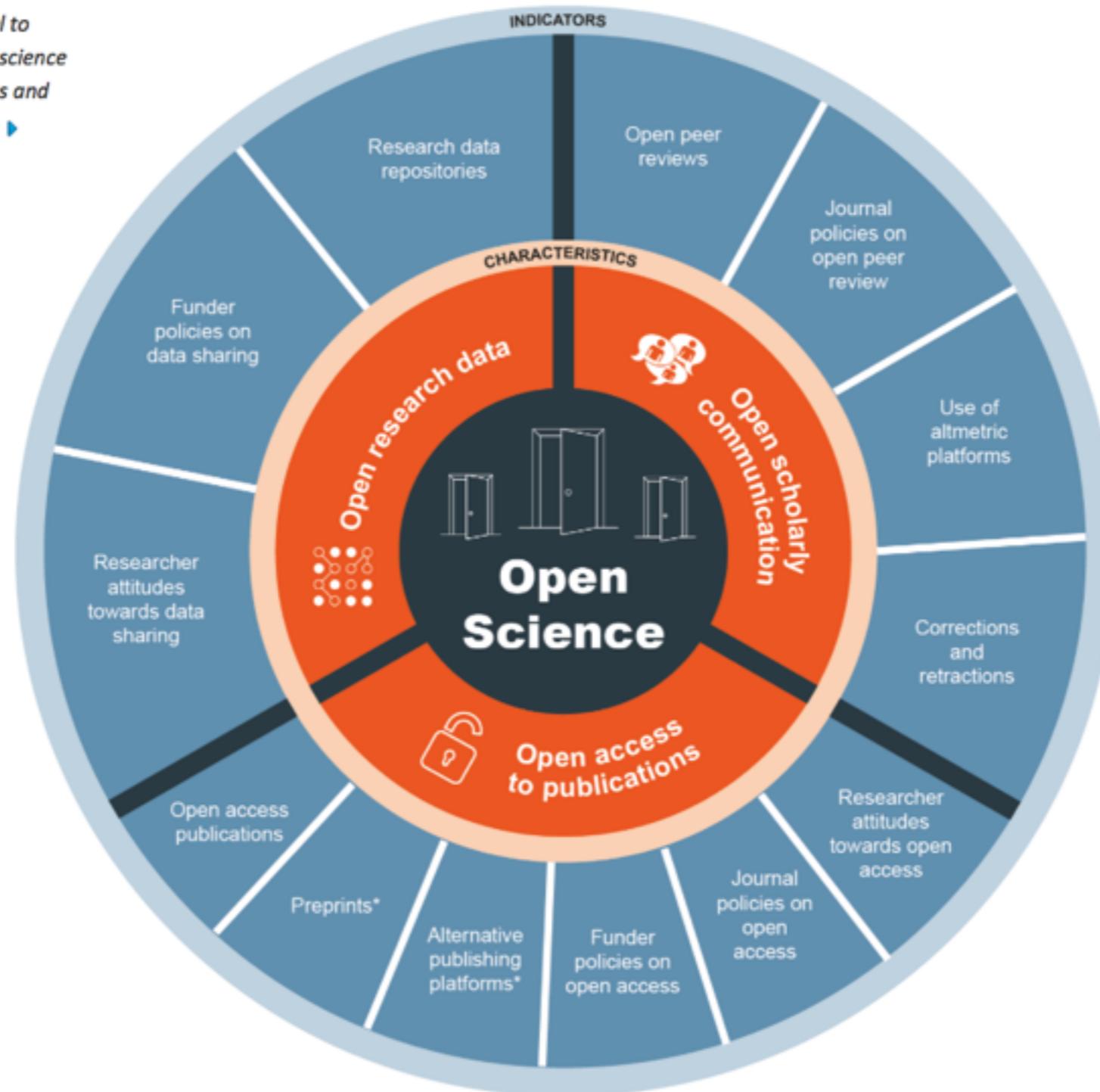


03:14

HD :: vimeo

<https://vimeo.com/189880043>

Use the wheel to explore open science characteristics and indicators. ▶▶



* These indicators are for both open access to publications and open scholarly communication.

[http://ec.europa.eu/research/openscience/index.cfm?
pg=home§ion=monitor](http://ec.europa.eu/research/openscience/index.cfm?pg=home§ion=monitor)

Open Access Button



Avoid Paywalls, Request Data.

Free, legal research articles and data delivered instantly or automatically requested from authors.

[Get the extension](#)

[Examples](#)

[How it works](#)

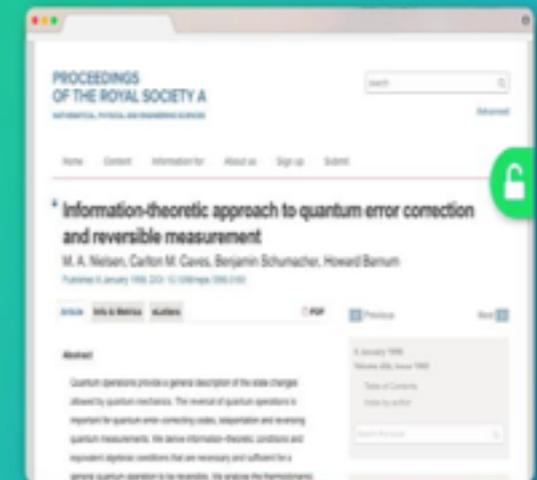
 unpaywall

Read paywalled research papers for free.

Click the green tab and skip the paywall. It's fast, free, and legal, powered by our database of millions of author-uploaded PDFs.

Free for Chrome and Firefox

[+ Add Unpaywall to Chrome](#)



Open Science Framework

A scholarly commons to connect the entire research cycle



<https://osf.io>

- https://docs.google.com/spreadsheets/d/1KUMSeq_Pz_p4KveZ7pb5rddcssk1XBTiLHniD0d3nDqo/edit#gid=1519702055
- <https://www.dataone.org/investigator-toolkit>
- <http://www.taverna.org.uk/>
- <http://contentmine.org/#software>
- <http://tabula.technology/>
- <http://openscience.org/software/>
- <https://www.openscienceprize.org/>
- <http://commons.pelagios.org/> <http://www.viseyes.org/shiva/>



openscholar.org.uk

peraka@ugr.es

