



OPEN SCIENCE DALLA A ALLA Z

1-COMUNICAZIONE SCIENTIFICA OGGI

Elena Giglia



Elena Giglia

Perugia, 27 febbraio 2020

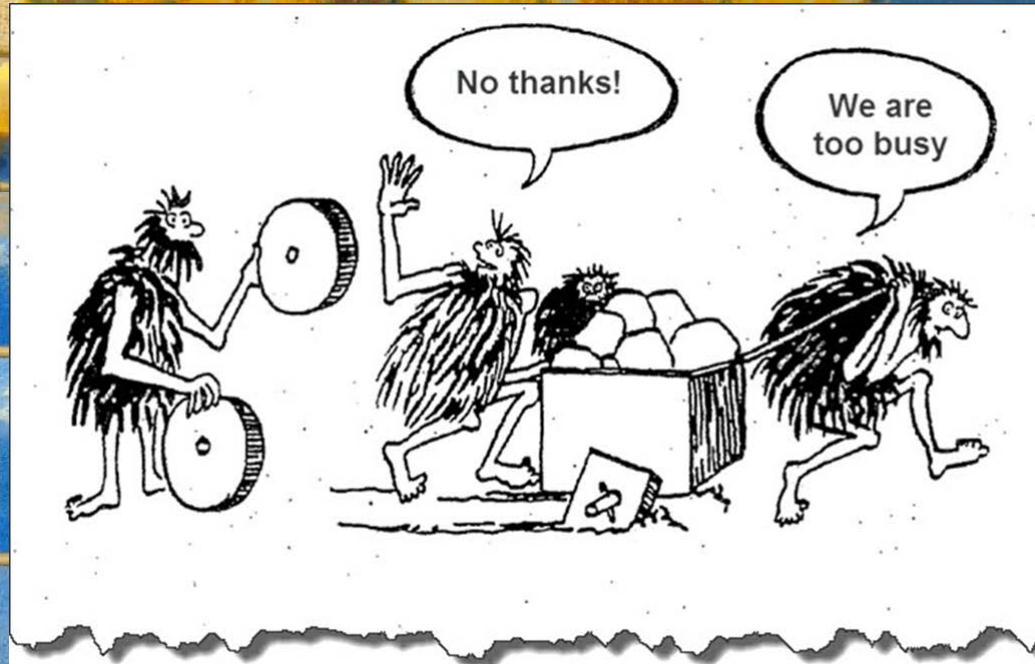
elena.giglia@unito.it



@egiglia



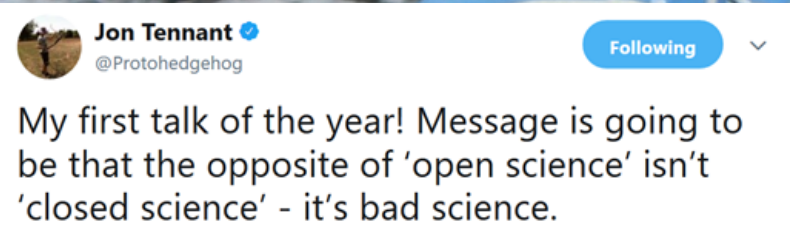
Open Science?



SE NON SI RAGIONA SUL
REALE VALORE E IL POTENZIALE TRASFORMATIVO
DELLA OPEN SCIENCE, LA VEDRETE SOLO COME
L'ENNESIMO FARDELLO AMMINISTRATIVO

Qualcosa da portare via

Open Access/Open Science: opportunità, non minaccia



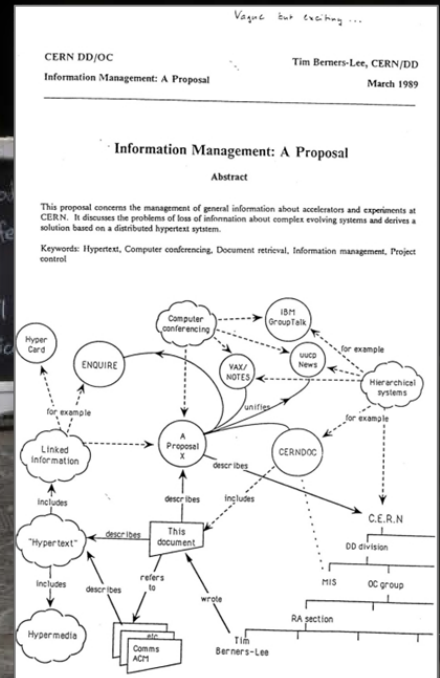
...il contrario di Open Science è «Bad Science», non «Closed Science»

...Open Science è un modo diverso di fare scienza, non una serie di regolette

...si può fare Open Science a piccoli passi, non «tutto e subito»

...le barriere sono culturali/politiche, non tecniche...

Open Science, Open Innovation, EOSC, FAIR data: esserci!



...il migliore esempio di Open Science?



Open Science



Casper Albers

@CaAl

New preprint. Comments welcome

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

03:54 - 21 feb 2018

<https://twitter.com/CaAl/status/9662799360>

471 Retweet 990 Mi piace



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.

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...grazie per l'attenzione!

Impareremo in questo modulo

1. cosa non va nel sistema attuale di comunicazione scientifica
2. quanti soldi e interessi girano intorno a un paper

MESSAGGI CHIAVE

- oggi, pubblicare e leggere non è gratis
- non credete ciecamente nella peer review, Impact Factor, citazioni...
Siate critici e informati!

3 DOMANDE

PERCHÉ FATE
RICERCA?

VI VA BENE IL
SISTEMA ATTUALE?

QUAL È IL VOSTRO
GRADO DI «OPEN»?

**SCRIVETE ORA UNA DOMANDA
CHE VI ASPETTATE TROVERÀ
RISPOSTA OGGI. ALLA FINE
VERIFICHIAMO**

A photograph of three golden retriever puppies sitting on a red brick floor. The puppy on the left is looking directly at the camera. The puppy in the center is looking slightly to the right. The puppy on the right is looking towards the camera. All three puppies have light-colored, fluffy fur and dark eyes.

Occhi nuovi

...proviamo per oggi a vedere la ricerca e la comunicazione scientifica in modo diverso...



Comunicazione scientifica è ...

Accesso

CONSERVAZIONE

GESTIONE DEI
DIRITTI
(autori, lettori,
editori)

Produzione

Economia
(e profitti)

Costi
(reali e di mercato – «anelastico»)

Tecnologia

Nuovi modelli
(e loro sostenibilità)

Canali
(monografie, riviste...)

VALUTAZIONE
DELLA RICERCA

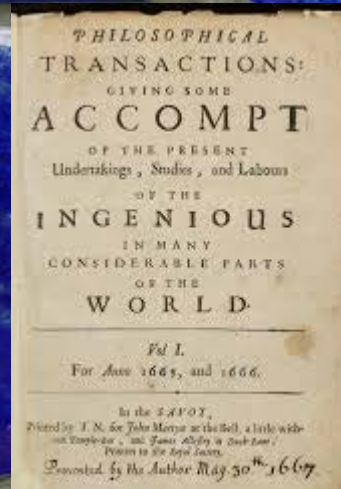
Comunicazione scientifica, le funzioni

REGISTRAZIONE

[Impact Factor]

CERTIFICAZIONE

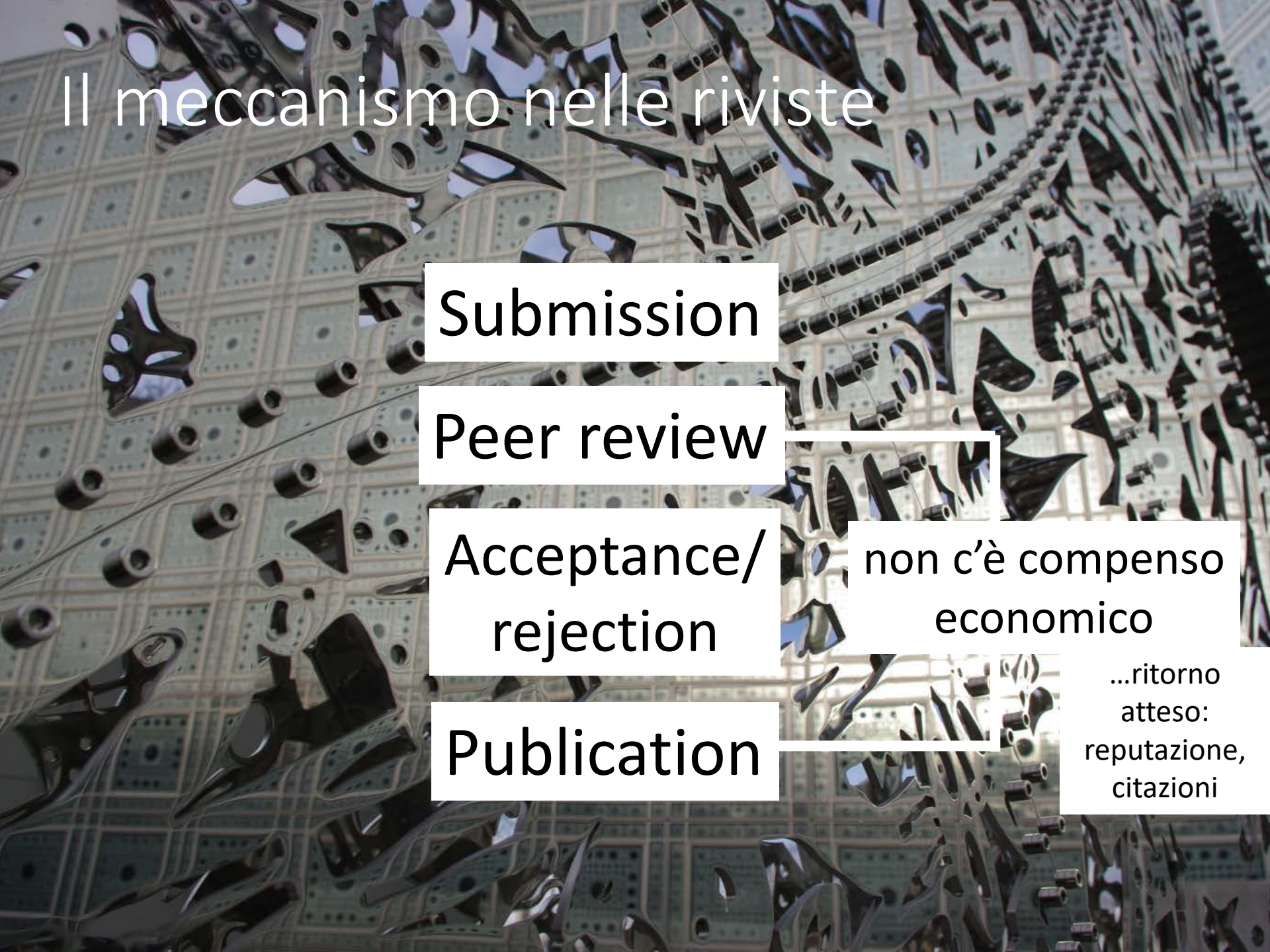
RICOMPENSA



**PUBBLICITÀ
[AWARENESS]**

ARCHIVIAZIONE

Il meccanismo nelle riviste



Submission

Peer review

Acceptance/
rejection

Publication

non c'è compenso
economico

...ritorno
atteso:
reputazione,
citazioni

101 INNOVATIONS IN SCHOLARLY COMMUNICATION



Jeroen Bosman @jeroenbosman
Utrecht University Library

THE CHANGING RESEARCH WORKFLOW



Bianca Kramer @MsPhelps
Utrecht University Library



Science is in transition. This poster phase of a project aiming to chart communication flows from evolution

Most important developments in 6 research workflow phases

	Discovery	Analysis	Writing	Publication	Outreach	Assessment
Trends	social discovery tools	datadriven & crowdsourced science	collaborative online writing	Open Access & data publication	scholarly social media	article level (alt)metrics
Expectations	growing importance of data discovery	more online analysis tools	more integration with publication & assessment tools	more use of "publish first, judge later"	use of altmetrics for monitoring outreach	more open and post-publication peer review
Uncertainties	support for full-text search and text mining	willingness to share in analysis phase	acceptance of collaborative online	effect of journal/publisher status	requirements of funders & institutions	who pays for costly qualitative assessment?
Opportunities					using repositories for institutional visibility	using author-, publication- and affiliation-IDs
Challenges					making outreach a two-way discussion	quality of measuring tools
Most important term developments					more & better connected researcher profiles	importance of societal relevance + non-publication contributions
Potential disruptive developments					public access to research findings, also for agenda setting	moving away from simple quantitative indicators

600 innovative tools and services (< 2010)



<https://101innovations.wordpress.com/>
Survey of scholarly communication tool usage



... comunicazione scientifica,

Key figures on Big Deals costs:

IN EUROPA 726 MILIONI (sottostimato)
GLOBALE 7,6 MILIARDI (2016)

- At least 1.025 billion euros are spent overall, every year in electronic resources (including periodicals and e-books) by 31 consortia surveyed in 30 European countries.
- Periodicals alone account for 726 million euros per year across all consortia. 72% of these costs are borne from university budgets.
- 475 million euros per year are spent in periodical Big Deal contracts with five of the largest publishers (Elsevier, Springer Nature, Taylor & Francis, Wiley, American Chemical Society).
- Contracts with the largest five publishers are subject to an average annual cost increase of 3.6%.

OGGI LA COMUNICAZIONE SCIENTIFICA
NON È GRATIS
...SOLO CHE **PAGHIAMO** PER OGNI
ARTICOLO 3800/5000 \$ AGLI EDITORI **PER**
CHIUDERE IL CONTENUTO

Disrupting the subscription journals' business model for the
necessary large-scale transformation to open access

A Max Planck Digital Library Open Access Policy White Paper

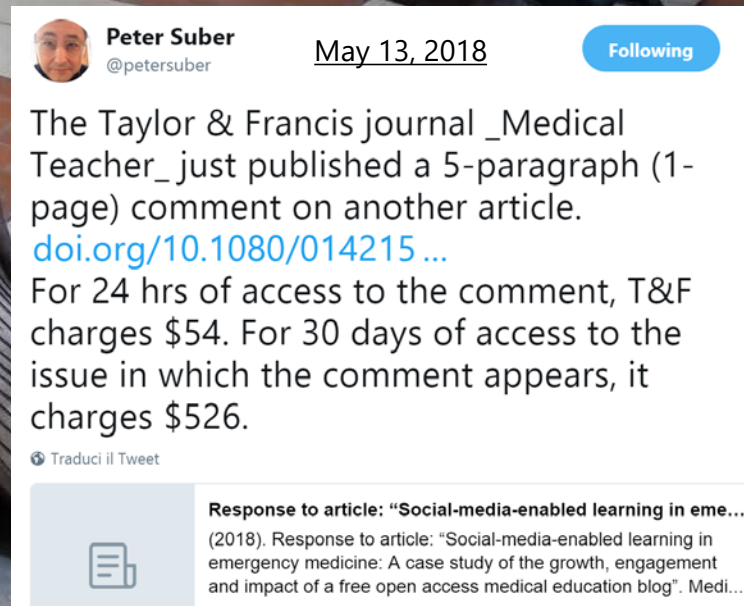
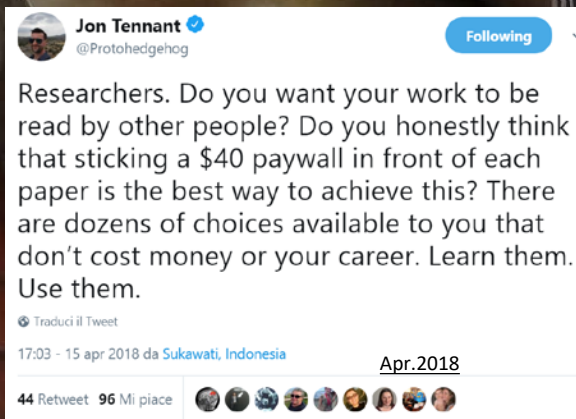
current operating numbers per year

Global view



... paghiamo gli editori commerciali perché
mettano sotto chiave il nostro contenuto...

... comunicazione scientifica oggi...



... paghiamo gli editori commerciali perché mettano sotto chiave il nostro contenuto...



Jon Tennant

@Protohedgehog

Following

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.

<https://twitter.com/Protohedgehog/status/985439318897410048>

Steven Salzberg @StevenSalzberg1

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

For researchers, it's like going to a restaurant, bringing all of your own ingredients, cooking the meal yourself, and then being charged \$40 for a waiter to bring it out on a plate for you.

You are the provider, the product, and the consumer.

Jon Tennant, Open Science: just science done right, Sept.



WHY SHOULD YOU PAY TO READ THEM ?

www.plos.org



... è «comunicazione»

SEP 9, 2017 @ 11:56 AM 1,527

The Future Of Academic Publishing Beyond Sci-Hub



GUEST POST WRITTEN BY

G. Geltner

G. Geltner is a historian at the University of Amsterdam. You can visit his blog at www.guygeltner.net



If you have a pressing need to read an academic paper that's hiding the quickest course of action may well be to use Sci-Hub. Less myopically, perhaps, you should also ask the paper's authors why they continue to cooperate with those for-profit publishers whose high prices have made breaking the law your path of least resistance (ignorance, careerism, apathy, lack of alternatives?). You may also want to inquire with your local government or university how much they spend a year subscribing to journals that contain their own tax-paying citizens' and salaried employees' research (millions), how these terms were negotiated (in secret, sometimes at the publishers' insistence), what impact that has on the free exchange of ideas (devastating), and how that impacts the ability to fund public goods (hardly).

How did we get
and universities
desktop publish
rendered some

...chiudere i risultati della ricerca non solo è anti-accademico ma inasprisce le diseguaglianze. Chiedete ai vostri amministratori

- quanto viene speso in abbonamenti
- come vengono negoziati [in segreto]
- che impatto causano allo scambio di idee
- se è il modo giusto per spendere fondi pubblici

also reinforces social and global inequalities, with devastating consequences to scientists and the public at large. The tiny club benefiting from huge subscription and processing fees has created, sometimes with the willing consent of academics, a situation whereby universities and governments are buying access to their own scholars' work (including in the form of peer review and editorship) at prices even Harvard can't afford.

ditional inertia, they
ademic research.
publishing, including
g increasingly higher

ve shielded and even
mbargoing the results
anti-academic, it



<https://goo.gl/PbYlMM>

Accesso?



12 marzo: Thomson Reuters, Elsevier, Nature mettono a disposizione gratuitamente i dati e le pubblicazioni su contaminazione nucleare

...che fino al 10 marzo erano chiuse dietro abbonamenti a riviste che nemmeno Harvard può più permettersi...



Joanne Kamens ✓
@JKamens

Segui

In risposta a @jasonpriem e @unpaywall

and btw the "everyone who needs it has access" is completely wrong. I have worked in small biotechs for the last 10 years and hit frustrating paywalls EVERY DAY trying to do good science.

Traduci dalla lingua originale: inglese

15:14 - 4 gen 2018

<https://twitter.com/JKamens/status/948920680590004224>



HARVARD
UNIVERSITY

login HI, Guest

THE HARVARD LIBRARY

News

News Archive

- » Draft Harvard Library Mission Statement
- » Happy Holidays from the Harvard Library
- » Photos: Pop-Up Innovation Space Showcases Projects Exploring and Celebrating Libraries
- » Photos: Microsoft Surface Tables Installed, Tested in Three Harvard Libraries
- » Photos: Students, Faculty Design Space Envisioning the Library of the Future

Faculty Advisory Council Memorandum on Journal Pricing

Major Periodical Subscriptions Cannot Be Sustained

To: Faculty Members in all Schools, Faculties, and Units
From: The Faculty Advisory Council
Date: April 17, 2012
RE: Periodical Subscriptions

We write to communicate an untenable situation facing the Harvard Library. Many large journal publishers have made the scholarly communication environment fiscally unsustainable and academically restrictive. This situation is exacerbated by efforts of certain publishers (called "providers") to acquire, bundle, and increase the pricing on journals.

Harvard's annual cost for journals from these providers now approaches \$3.75M. In 2010, the comparable amount accounted for more than 20% of all periodical subscription costs and just under 10% of all collection costs for everything the Library acquires. Some journals cost as much as \$40,000 per year, others in the tens of thousands. Prices for online content from two providers have increased by about 145% over the past six years, which far exceeds not only the consumer price index, but also the higher education and the library price indices. These journals therefore

«Access»?



Egon Willigh@gen
@egonwillighagen

Feb. 4, 2020

we must continue asking ourselves why this is illegal (in most countries) in the first place? Why are monetary reasons more important than moral/ethical reasons? These 5000 rely on even more copyrighted knowledge. "Emergency OA" is not a solution. It's a symptom.

#openscience



Jason Koebler @jason_koebler · 17h

Archivists have pirated more than 5,000 studies about coronaviruses and made them open access: "It's a moral imperative," they said. "A copyright on the health

raise qu
science

Vincent
informa
profess
of Mont
way scie
said the
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."

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.



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

Health · Second Opinion

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

Feb.1, 2020

...GLI SCIENZIATI **ADESSO**
STANNO APRENDO DATI E
ARTICOLI SU COVID-19...
SIGNIFICA CHE IL
COMPORTAMENTO
«NORMALE» INVECE È
QUELLO DI METTERE
BARRIERE ALLA
CONOSCENZA

BARRIERE DELLA SERA / OPINIONI

Il coronavirus insegna: la scienza ha sempre bisogno di trasparenza



di Massimo Sideri | 30 gennaio 2020

La grande rivoluzione nata in un piccolo centro veneto specializzato nel passaggio dei virus da animali a umani, allora diretto da Ilaria Capua. E a quel tempo fu osteggiata

Jan. 30, 2020

Access?

Imperial College
London

Open access outside academia

Anisha Ahmed



Anne Baber Wallis
@abwallis

Segui

In risposta a @glynmoody, @edrybicki e @graysouth

I'm an academic and so-called pay walls are irrelevant. We have an excellent library w/access to 1000s of journals via PubMed.

There's nothing wrong w/jnl subscriber fees & it wouldn't change 11,000 deaths or the bat hypothesis. 🦇

Traduci il Tweet

12:54 - 7 mar 2018 da Jeffersontown, KY

Who needs access? You need access!

Public access to scientific research makes all our lives better

Home

About

FAQ

Contribute

Bibliography

Newest Stories

<https://whoneedsaccess.org/>

Home

We have a problem

Our governments spend billions on funding research. But **most people don't have access to it** — in

School
result



Chealsye Bowley
@chealsye

Following

ven

In risposta a @abwallis, @glynmoody e altri 2

You may have excellent access, but many in the US and around the world don't. Your library spends ~7 million on serials, having lost ~2 million in budget for serials in recent years. Just because a problem doesn't personally impact you, doesn't mean it isn't a problem.

Interestingly, there was a false understanding of scholarly publishing, with research participants believing that articles were paywalled so as to allow the author/ researcher to recuperate their costs themselves. (rather than the publisher profiteering!)

<http://wwwf.imperial.ac.uk/blog/openaccess/2018/02/19/open-access-outside-academia/>

Access?

MARTINA [REDACTED]

a openaccess ▾

Buonasera,

Sono una laureanda di Ca' Foscari Venezia. La mia correlatrice mi ha assegnato un capitolo di un libro da leggere dandomi il link alla pagina di iris.unito.it dove posso trovarlo.
Non riesco però in alcun modo a vedere il file, anche solo per la consultazione online.
Come posso fare?

mar 1 ott, 23:21



permesso di accesso ➡ Posta in arrivo x



Niccolò [REDACTED]@gmail.com>

a me ▾

Buongiorno,

sono uno studenti UNIMI e sto preparando la tesi, spesso nelle mie ricerche per il materiale, mi imbatto nel vostro sito IRIS ma non posso accedere all'articolo a cui sono interessato. Come posso

ottenere il permesso?

Pietro Antonio [REDACTED]

a openaccess ▾

Buongiorno,

Sono uno studente della specialistica in scienze Internazionali e mi servirebbe accedere a degli articoli su Iris per la mia ricerca di tesi. Potreste cortesemente spiegarmi come posso effettuare l'accesso?

Vi ringrazio anticipatamente.

Cordiali saluti.

ACCOUNT IRIS PER CONSULTARE ARTICOLO ➡ ⓘ

Eugenia [REDACTED]

a me, openaccess ▾

Buongiorno,

sono una studentessa di Medicina veterinaria.

Sono interessata al seguente articolo:

[Lievitazioni ed alterazioni di yogurt alla frutta](#)
L Vallone, C Cantoni, LS Coccolin, G Comi - 2001 - iris.unito.it.

però non possiedo un account IRIS. Può indicarmi come posso consultare l'articolo?

Grazie

Cordiali saluti

gio 17 ott, 15:47 (2 giorni fa)



... se no, non esisterebbe Sci-Hub

Science Home News



The Scientist » News & Opinion » Daily News

American Chemical Society Wins Lawsuit Against Sci-Hub

A US judge issues a broad injunction that allows the society to demand that technology companies actively associated with the site block access to it.

nature

International weekly journal of science

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | For Authors

News & Comment | News | 2018 | February | Article

NATURE | NEWS

US court grants Elsevier millions in damages from Sci-Hub

Some doubt that the publishing giant will see any money from the pirate site.

Who's downloading pirated papers?

EVERYONE

In rich and poor countries, researchers turn to the Sci-Hub website.

<http://www.sciencemag.org/news/2016/04/who>



Bernard Rentier

@bernardrentier

Following

The single fact that providing free information on universal Science is illegal tells us a lot about how absurd it has become, in the Internet era, to rely on the old research publication model. #FreeOpenAccessNow

Jon Tennant @Protohedgehog

Oh wow. Looks like anyone can now create their own @sci_hub mirror github.com/bsidio/sci-hub You can use this to help accelerate research and society by providing free access to millions of research articles. But it's probably illegal, so don't do it.

Traduci il Tweet

08:37 - 10 mag 2018

March 10, 2018

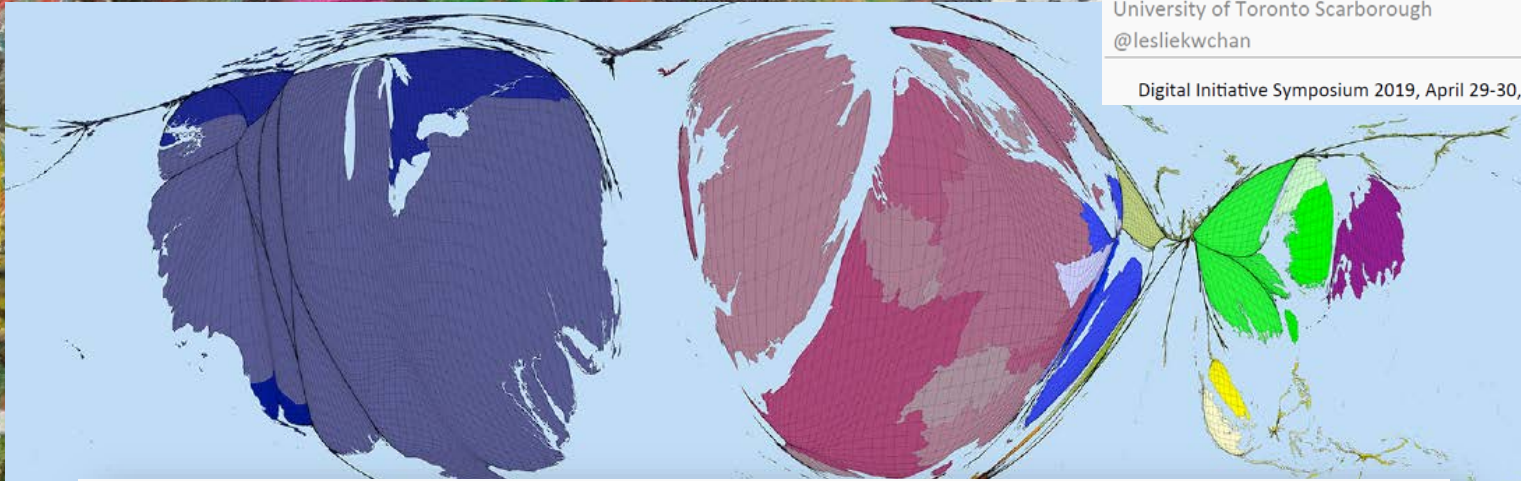
Effetti collaterali

Platform Capitalism and the Governance of Knowledge Infrastructure

April 30, 2019

Leslie Chan, Centre for Critical Development Studies
University of Toronto Scarborough
@lesliekwchan

Digital Initiative Symposium 2019, April 29-30, University of San Diego



Hidden Power

- The ability to set agendas and decisions
- The ability to mobilize and accumulate resources
- The ability to set standards and norms
- The ability to set boundaries of participation
- The ability to control infrastructure – what gets built

[come ottenere il pdf se non avete abbonamento]

HOW TO GET THE PDF?

Alternatives to the publisher version of full-text journal articles

updated: February 20, 2018

1 UNPAYWALL

Get full-text of research papers as you browse, using Unpaywall's index of 10 million legal, open access articles. For CHROME | Firefox
<http://unpaywall.org/>



2 GOOGLE SCHOLAR BUTTON

Easy access to Google Scholar from any web page. Find full-text on the web or in your university library. Select the title of the paper on the page you're reading, and click the Scholar button to find it. for CHROME | Firefox
<https://addons.mozilla.org/en-US/firefox/addon/google-scholar-button/>



3 KOPERNIO

Get instant notifications of available versions from your library or otherwise. Promising features like a personal Locker, saved articles and more.
<https://kopernio.com/>



4 OPEN ACCESS BUTTON

Free, legal research articles and data delivered instantly or automatically requested from authors. You can do this from the website, or install a browser extension/API.
<https://openaccessbutton.org/>



5 HASHTAG #ICANHAZPDF

Use the hashtag #icanhazpdf together with a link to the requested publication; if somebody has access, they can send you the PDF.
<https://twitter.com/search?q=%23icanhazpdf>



HOW TO GET THE PDF?

Alternatives to the publisher version of full-text journal articles

8 NARCIS

NARCIS provides access to scientific information, including open access publications from the repositories of all the Dutch universities, KNAW, NWO and a number of research institutes, datasets from some data archives as well as descriptions of research projects, researchers and research institutes.
<http://www.narcis.nl/>

9 OSF PREPRINTS

OSF offers access to over 2 million open access preprints.
<https://osf.io/preprints/>

10 DIRECTORY OF OPEN ACCESS JOURNALS

DOAJ offers access to over 10,000 open access journals.
<https://doaj.org/>

11 SCIENCE OPEN

Science Open contains over 37 million articles, a large part in open access.
<http://www.scienceopen.com/>



12 SCI-HUB

If all else fails, you may be tempted to use Sci-Hub. Do realize, however, that in many countries, including The Netherlands, the use of Sci-Hub is considered as an illegal act, as it involves content protected by copyright laws and licensing contracts.

open access.nl

News and events

What is open access?

In the Netherlands

You

Alternative ways to access journal articles

Feb. 27, 2018

unpaywall

Unpaywall ovviamente funziona SOLO se l'autore ha depositato

An open database of 17.025.907 free scholarly articles.

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

LEARN MORE

GET THE EXTENSION



...funziona?



Paola Masuzzo
@pcmasuzzo

Today I witnessed the celebration of a research article published in a (famous & glam) journal after 2 and a half years of revisions. I do feel happy for the authors, of course, but I cannot help wondering what's there to celebrate in such a slow scientific dissemination process.

P.Masuzzo, Sept. 2019

Traduci il Tweet
6:58 PM · 9 mag 2019 · Twitter for Android

...dopo 2,5 anni
serve alla carriera,
non alla scienza

...tempi medi di pubblicazione: 9-18 mesi



The Retraction Watch Leaderboard

...crescente numero di ritrattazioni
per dati falsificati/fabbricati

1. Yoshitaka Fujii (total retractions: 183) See also: [Final report of investigating committee, our reporting, additional coverage](#)
2. Joachim Boldt (96) See also: [Editors-in-chief statement, our coverage](#)
3. Diederik Stapel (58) See also: [our coverage](#)
4. Adrian Ma...
5. Che...
6. Hua...
7. Shig...
8. Yuh...

nature

International weekly journal of science

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Au

NATURE | NEWS FEATURE

1,500 scientists lift the lid on reproducibility

Survey sheds light

Monya Baker

25 May 2016 | Cor

...crisi della
riproducibilità

March 2018

Gaming the system: When in 2010 Italian universities incorporated citations in promotion decisions, self-citation rates among social scientists went up by 81-179%
[sciencedirect.com/science/articl...](#)

...auto-citazioni
+179%

PLOS ONE

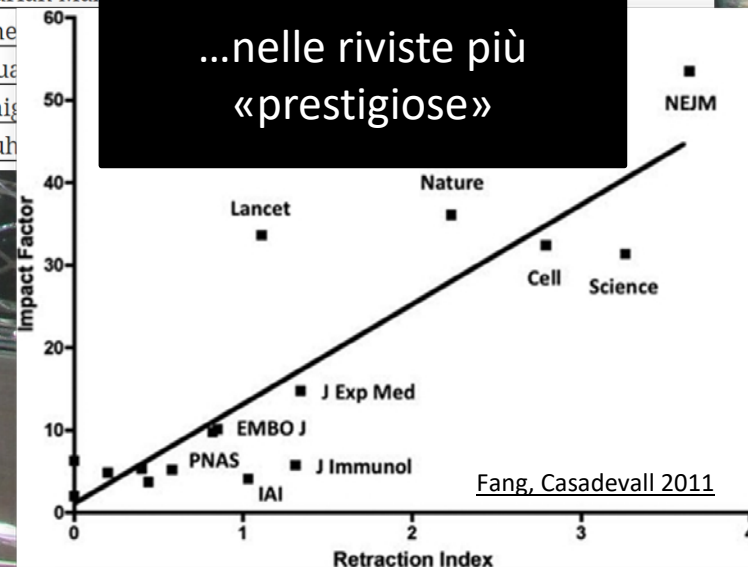
Citation gaming induced by bibliometric evaluation: A country-level comparative analysis

Alberto Bacconi, Giuseppe De Nicolao, Eugenio Petrovich

Sept. 11, 2019



...nelle riviste più
«prestigiose»



Il sistema è rotto

IL SISTEMA RICERCA È ROTTO...
IN CHE MODO OPEN SCIENCE
PUÒ CONTRIBUIRE A RIPARARLO?



nowadays Research is like..



A serious issue we need to think about.

Author unknown. Cited in a Twitter thread. Attribution will be assured after claim

[ritrattazioni]

No academic post for fraudster Diederik Stapel, after all

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 translation of the article from *De Telegraaf*. Continue reading...

Scoperto da un PhD che ha chiesto i dati originali

Does scientific misconduct cause patient harm? The case of Joachim Boldt

If you wanted to know the impact of misconduct on patient harm, retractions were a good starting point. In a new analysis and

97 retractions. Se le eliminate dalla systematic review si riscontra un aumento nel rischio di mortalità e disfunzioni renali



<https://retractionwatch.com/>

Retraction Watch

Tracking retractions as a window into the scientific process

Harvard chiede il ritiro di 31 pubblicazioni del noto cardiologo Piero Anversa

Oct. 16, 2018

Contengono dati falsificati e/o inventati, come riferiscono la Harvard Medical School e il Brigham and Women's Hospital di Boston. Gli studi sotto accusa utilizzavano le staminali per rigenerare il cuore



Foto: Brigham and Women's Hospital. Piero Anversa, M.D.

March 14, 2018

Stem cell researchers investigated for misconduct recommended for roles at Italy's NIH

Two stem cell scientists who left Harvard University in the aftermath of a major



Piero Anversa

The document says the board unanimously recommended the appointments of Anversa and Leri on January 31 as winning candidates with **a rating of 'excellent.'**

After exclusion of studies with "a rating of 'excellent.'"

al found that hydroxyethyl starch was associated with a significantly increased risk of mortality (risk ratio [RR], 1.09; 95% CI, 1.02-1.17) and renal failure (RR, 1.27; 95% CI 1.09-1.47).

In other words, there was an increased risk of death and kidney failure among those given HES:

The report by Zarychanski et al highlights the potentially important and adverse effect of scientific misconduct.

[un gigante con i piedi di sabbia?]

Cut-throat academia leads to 'natural selection of bad science', claims study

Scientists incentivised to publish surprising results frequently in major journals, despite risk that such findings are likely to be wrong, suggests research



The study's authors say that while academics are rewarded for publishing novel work often and in high-profile journals, bad scientific practice will 'run rampant'. Photograph: Ben Broomfield for the Guardian
<https://goo.gl/IUb5WZ>

In which jo
underlying

most prestigious journals. However, data from several lines of scientific experiments does not increase with increasing range of evidence suggests the inverse: methodological quality works in several fields may be decreasing with increasing impact to circumvent confounding factors such as increased readership. Quantifiable indicators of methodological soundness in the automated data extraction from often thousands of publications over the last decade grew the realization that the very existence of bad science constitutes one of the major threats to publicly funded science. publish unreliable science eventually erodes public trust in science.

QUALITÀ DIMINUISCE SE IL
«PRESTIGIO» AUMENTA

the guardian

Jeroen Bosman ha ritwittato



Rebecca Willén @rmwillen · 13 set

Senior professor after my keynote today: "That slide is awful, you make people lose trust in science. They are practitioners, you can't do this to them!"
Early career researchers / practitioners after same keynote: "Such a great & important presentation! I feel very inspired!"

Traduci il Tweet

BAD RESEARCH PRACTICES

John, L. K., Loewenstein, G., & Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling. *Psychological science*, 23(3), 524-532.



Sept. 13, 2018



frontiers

in Human Neuroscience

REVIEW ARTICLE

Front. Hum. Neurosci., 20 February 2018 |

Prestigious Science Journals Struggle to Reach Even Average Reliability

Björn Brembs*

Institute of Zoology—Neurogenetics, Universität Regensburg, Regensburg, Germany

Feb. 20 2018

...e l' Impact Factor? / 1

jadranka stojanovski
@jaca99

Everyone using impact factor is statistically illiterate, @Protohedgehog at #osfair2017

00:59 - 7 set 2017

10 Retweet 16 Mi piace

1 10 16

@Gr@h@m Steel @McDawg · 7 set
In risposta a @jaca99



occamstypewriter.org/scurry/2012/08/13/sick-of-impact-factors/

Journal: CURRENT BIOLOGY

Mark	Journal Title	ISSN	Total Cites	Impact Factor	Immediacy Index	Citable Items	Cited Half-life	Citing Half-life
☐	CURR BIOL	0960-9822	22589	11.910	2.683	331	3.8	4.0

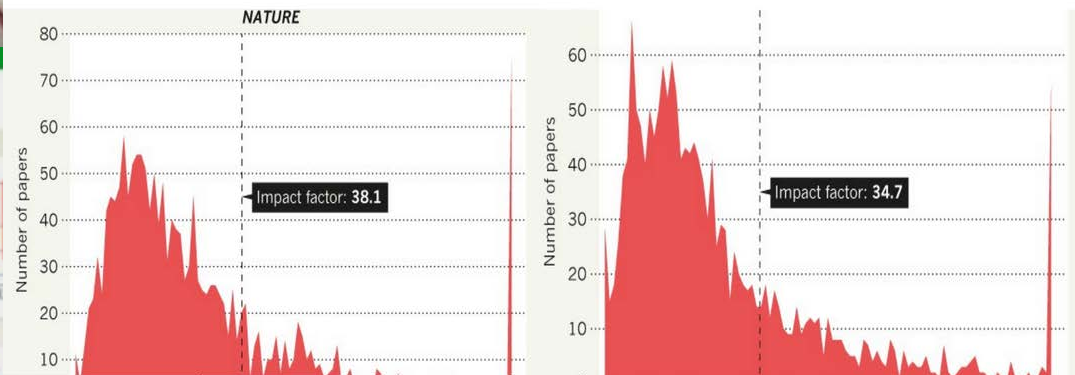
Journal Impact Factor

Cites in 2003 to items published in: 2002 = 3628
2001 = 3923
Sum: 7551
Calculation: Cites to recent items 7551 = 11.910
Number of recent items 634

Number of items published in: 2002 = 334
2001 = 300
Sum: 634

The Impact Factor is a bullshit statistic

J.Tennant Barriers for young researchers, 7 Sept 2017



is imposed by a very small number of highly cited papers

2003 CR Science Edition

itions in year X
published in X-1 X-2

citable» articles
published in X-1 X-2

... e l' Impact Factor? / 2



Times Higher Education, 5 Nov 2015

PROFESSIONAL JOBS RANKINGS STUDENT

Journal impact factors 'no longer credible'

The measure of scholarly impact is now being manipulated so much that it has ceased to be editorial claims

November 5, 2015

By David Matthews Twitter: @DavidMatthews



click for updates

Causes for the Persistence of Impact Factor Mania

Arturo Casadevall^a, Ferric C. Fang^b

+ Author Affiliations

Address correspondence to Arturo Casadevall, arturo.casadevall@einstein.yu.edu.

ABSTRACT

Numerous essays have addressed the misuse of the journal impact factor for

Impact Factor ▶

How can academia kick its addiction to the impact factor?

April 27, 2016 Author: Jon Tennant 37 comments

The impact factor is academia's worst nightmare. So much has been written about its flaws, both in calculation and application, that there is little point in reiterating the same tired points here (see [here](#) by Stephen Curry for a good starting point).

The problem is cyclical if you think about it: publishers use the impact factor to appeal to researchers, researchers use the impact factor to justify their publishing decisions, and funders sit at the top of the triangle facilitating the whole thing. One 'chef' of the Kitchen piped in by saying that publishers recognise the problems, but still have to

<http://blog.scienceopen.com/2016/04/how-can-academia-kick-its-addiction-to-the-impact-factor/>

Catriona MacCallum and 1 other Retweeted



Max Planck Society @maxplanckpress · Nov 15

"How much has your research changed the world -- that's **impact**! And **Impact** Factors have nothing to do with that." @DavidSweeneyNPR #OpenCon



81



48



OAI9 and 22 others follow



John Velterop @Villavelius · Nov 14

@barendmons: "The usefulness of an article at the bench, in the field, is inversely related to the **impact** factor of the journal." #opencon



... e la valutazione? «Osessione»

“Why do we do science? It’s not to create careers for scientists. It’s to increase knowledge for the benefit of mankind. If the need to sustain the careers of young scientists is getting in the way of the primary objective of science there is something wrong in the way in which we organise and motivate those careers.”

Goodhart’s Law: “when a measure becomes a target, it ceases to be a good measure.”

Metrics are subject to manipulation, so we should look carefully not only at the number, but what it is that number purports to measure.

“Not only are we failing to provide the right incentives, we are actually providing perverse ones.”

As long as journal impact factors retain some role in the career development, journals should publish the distribution of their citations. The participants strongly supported the adoption of the San Francisco Declaration on Research Assessment (DORA) by publishers, funders and universities. There was a call for open citation data (rather than having to

“Getting away from this obsession with measurement and going back to judgement might be a way forward.”

“People game the system at every level and this risks the loss of valuable research in favour of fashionable research.”

... e la valutazione? «Osessione»

PHYS ORG

FEBRUARY 17, 2020

Scientists call for reform on rankings and indices of science journals

by University of Oslo



"Our message is quite clear: Academics should stop worrying too much about indices. Instead, we should work more on the scholarship and the quality of research," says Professor Colin Chapman from the Department of Anthropology at the George Washington University in Washington.

"The exaggerated reliance on indices is taking attention away from the quality of the science. The system works just fine for experienced researchers like Colin Chapman and myself, but younger researchers and their careers are suffering

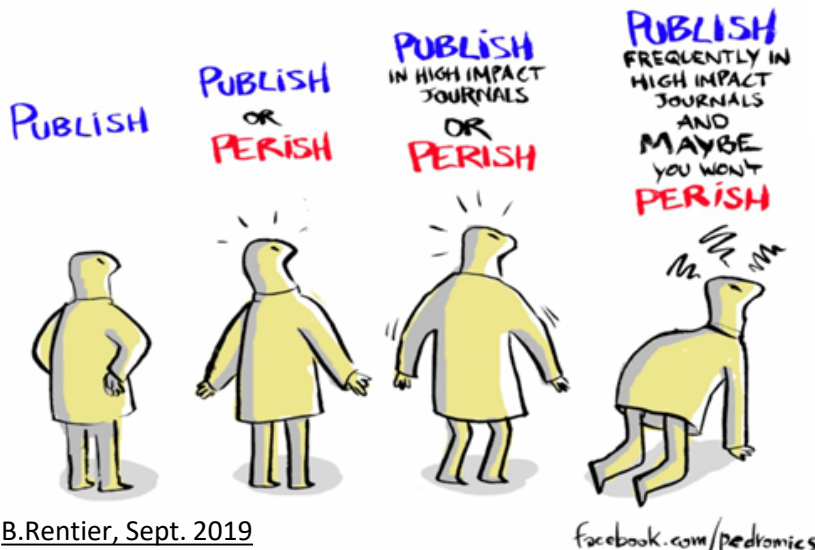
because of the way indices are used today," adds Professor Nils Chr. Stenseth at the University of Oslo.

Indices don't measure quality

Feb. 17, 2020

Chapman and Stenseth are two of the authors behind an attention-grabbing paper in the

THE EVOLUTION OF ACADEMIA



B.Rentier, Sept. 2019

Why should we change ?

Current evaluation methods
shape researchers in the same mould.

They kill diversity.

...e le citazioni? Cosa misurano?

So what now? We think this work clearly highlights a major issue with metrics – they aren't measuring what everyone commonly assumes we are measuring, or at least, are not accurately representing the more abstract perceptions of impact and importance that we measured in our survey.

As hinted earlier, we think our research shows that impact goes beyond citation count, and beyond scholarly impact. Recent articles, such as that in *PLoS Biology* and *Nature*, also call out current evaluation models for researchers. But what can we do to change current practice?



Home About Latest Our books Series

The academic papers researchers regard that are highly cited



For many years, academia has measure the impact or importance of research using the Impact Factor and the h-index. But do these metrics align with researchers' subjective perceptions of impact and importance?

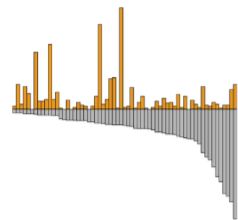
Rachel Borchardt and Matthew

compares researchers' perceptions of significance, importance, and impact with citation data. The results reveal a strikingly large discrepancy between the metric we currently use to measure it.

Academia, we have a problem. What began as an attempt to measure research from us and taken on a life of its own. This problem isn't just created by scholars and researchers and, as a result, is being talked

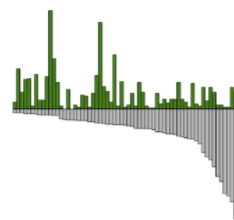
May 14, 2018

Times Chosen in Survey
Shared Widely



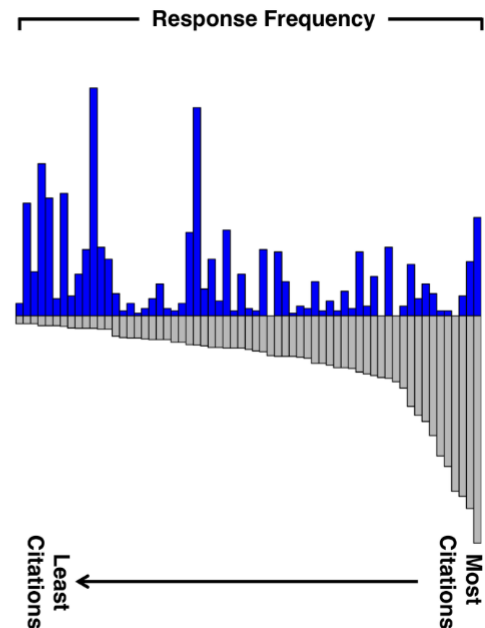
Citations (2013)

Times Chosen in Survey
Most Significant



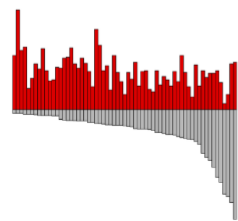
Citations (2013)

Times Chosen in Survey
Most Cited



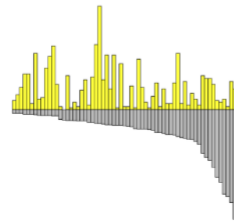
Citations (2013)

Times Chosen in Survey
h-index



Citations (2013)

Times Chosen in Survey
Shared: Chemists



Citations (2013)

[effetto Cobra]

For any killed cobra, Indians were paid.
So, they started breeding cobras

There is a well-known anecdote about British rule in India. In Delhi, officials were concerned that there were too many cobras. To reduce their population, people were paid for each cobra killed. When the administrators found out that some people had started to breed cobras to kill them and collect the reward, they stopped the scheme. The farmed cobras were set free, causing the population to explode.

This is the so-called cobra effect, which describes how incentives in complex systems can have unintended consequences which exacerbate the problem they were trying to solve.

I worry that the KPI-driven impact culture increasingly means that careful, meticulous and incremental science is anathema in the academy, especially for those at the early stages of their careers. There are many who are so attracted by the prospect of success that they are willing to obfuscate, mystify and perhaps falsify research to game the system and reap the plentiful rewards.

Most of all, I worry that instead of working towards an enlightened future, many are simply selling farmed cobras and calling it progress.

I was told impact metrics could make or break careers. Instead, they broke my faith in scientific research



Performance-driven culture is ruining scientific research

The Guardian Opinions

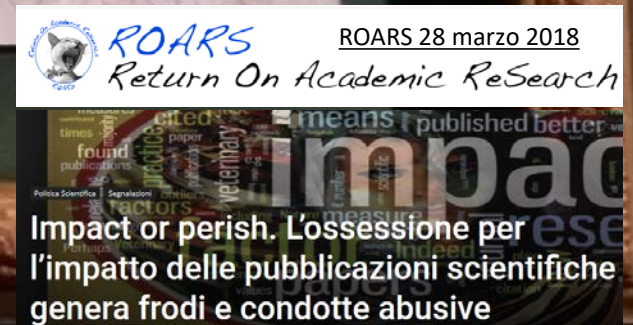
The Guardian, 16 Feb 201

INCENTIVES MIGHT HAVE
«UNINTEDED
CONSEQUENCES»... ARE
WE SELLING BREEDDED
COBRAS?

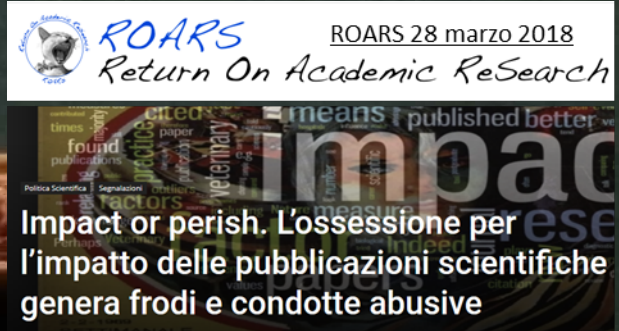
Falsi?



Abbiamo deciso di riproporre in lingua italiana un prezioso intervento di Mario Biagioli apparso su Nature qualche tempo fa. Così l'Autore – che ringraziamo per aver acconsentito alla pubblicazione della traduzione – ne presenta i contenuti: **“La cultura del ‘publish or perish’ è spesso chiamata sul banco degli imputati quando gli scienziati si macchiano di condotte illecite. Alcuni ricercatori non rispettano le regole, aggiustano dati e immagini o s’inventano risultati per guadagnare la pubblicazione dei propri articoli scientifici e i premi conseguenti. Tutto ciò è appropriatamente definito una condotta illecita. Ma si registra una inedita tipologia di cattivi comportamenti, determinata da un fattore diverso, ma collegato a quello ricordato, che si potrebbe definire “impact or perish”.**



Falsi?



Agli scienziati non basta più pubblicare i propri lavori. E' imperativo che il lavoro pubblicato sia collocato in uno scaffale editoriale che gli conferisca prestigio e influenza. Questa tensione per l'impatto di quanto si pubblica colloca gli articoli scientifici al centro di una rete di metriche che guardano tipicamente a dove si pubblica e a quante volte il lavoro viene citato. Ottenere un buon punteggio attraverso l'applicazione di queste metriche diventa un obiettivo che gli scienziati e gli editori sono disposti a raggiungere barando.

Sul piano collettivo o aggregato, queste nuove pratiche non sono più fondate, come un tempo, sulla produzione di articoli contenenti prove e conclusioni fraudolente. Piuttosto, sono impiegati strumenti fraudolenti per ottenere che l'articolo sia pubblicato, aumentarne l'impatto e gonfiare l'importanza di quanti scrivono con l'autore della pubblicazione incriminata. Sono pratiche assai diffuse. Gli scienziati non devono affannarsi a cercarle, perché di esse esiste un'evidenza quotidiana. La sezione notizie ospitata dalle riviste scientifiche ospita ormai regolarmente liste di autori che indicano quali candidati suggeriti per la peer review del proprio articolo nominativi cui corrispondono falsi indirizzi mail. Lo fanno per poter poi utilizzare quegli indirizzi per fornire revisioni che siano in grado di garantire che l'articolo ottenga la pubblicazione. Il circolo delle revisioni e citazioni si spinge anche oltre, arrivando a scambiare false review in cambio di citazioni da parte dell'autore del pezzo oggetto della falsa review. Altri manipolano le banche dati degli editori in modo da ottenere più inviti a effettuare review di articoli, e in tal modo inserire più citazioni dei propri articoli.

Tutte le metriche della valutazione scientifica sono destinate a essere oggetto di abuso. La legge di Goodhart (che prende nome dall'economista inglese che

...l'efficacia?

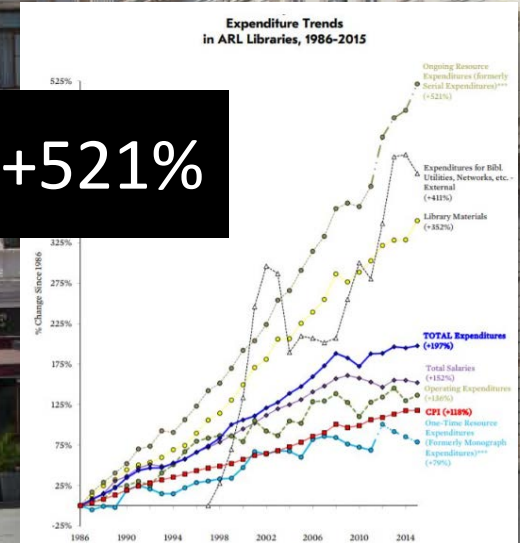
2.100.000

Il paradosso

1. stipendio

Profit	Company	Industry
10%	BMW	automobiles
23%	Rio Tinto	mining
25%	Google	search
29%	Apple	premium computing
35%	Springer	scholarly publishing
37%	Elsevier	scholarly publishing

+521%



Alexis Verger @Alexis_Verger · 5 nov
Elsevier 2018 profit margin: a whopping 37%

"In other words, every time we pay a \$3000 article processing charge, only \$1800 supports the publishing process, while the remaining \$1200 goes directly to Elsevier shareholders." @MullinsLab



From symbiont to parasite: the evolution of for-profit science publishing | Molecular Biology of...
molbiolcell.org

Nov.5, 2019

12

435

467



tagli ai budget=
minore possibilità
di leggere
di essere letti

... nell'era del web in cui
tutto è disponibile...

1/3 800=288 milioni di
soldi pubblici
(2.100.000 euro UniTO)

The
Economist

It has, current, subm... good bash. The... other people's work, ... thing by third parties in a process called peer review, has been immensely profitable. Elsevier, a Dutch firm that is the world's biggest journal publisher, had a margin last year of 38% on revenues of \$3.2 billion. Springer, a German firm that is the second biggest journal publisher, made 36% on sales of \$1.1 billion in 2011 (the most recent year for which data is available). Such firms are free for all, 4 may 2013 or

Elsevier: +38%

[License to print money]

The Guardian view on academic publishing: disastrous capitalism
Editorial
March 8, 2019

The giants of the scientific publishing industry have made huge profits for decades. Now they are under threat



Scientific publishing has long been a licence to print money. Scientists need journals in which to publish their research, so they will supply the articles without monetary reward. Other scientists perform the skilled and specialised work of peer review **also for free**, because it is a central element in the acquisition of status and the production of scientific knowledge.

With the content of papers secured for free, the publisher needs only find a market for its journal. Until this century, university libraries were not very price sensitive. Since academic careers depend on publication, the demand for scientific publications is unbounded except by the price that scholarly libraries can be forced to pay. Scientific publishers routinely report profit margins approaching 40% on their operations, at a time when the rest of the publishing industry is in an existential crisis.



...Elsevier ha uno spiccato senso dell'umorismo



ELSEVIER

Open Science

Elsevier partners with the research community to empower open science.

Open access

Research data

Science and Society

Position statements

UK Partnership

Working together, we can achieve a more inclusive, collaborative and transparent world of research. We believe open science can benefit research and society and drive research performance.

Open Science

Empowering Knowledge™

Elsevier partners with the research community to empower open science. Working together, we can achieve a more inclusive, collaborative and transparent world of research. We believe open science can benefit research and society and drive research performance. Here are some of the ways in which we are supporting open science.



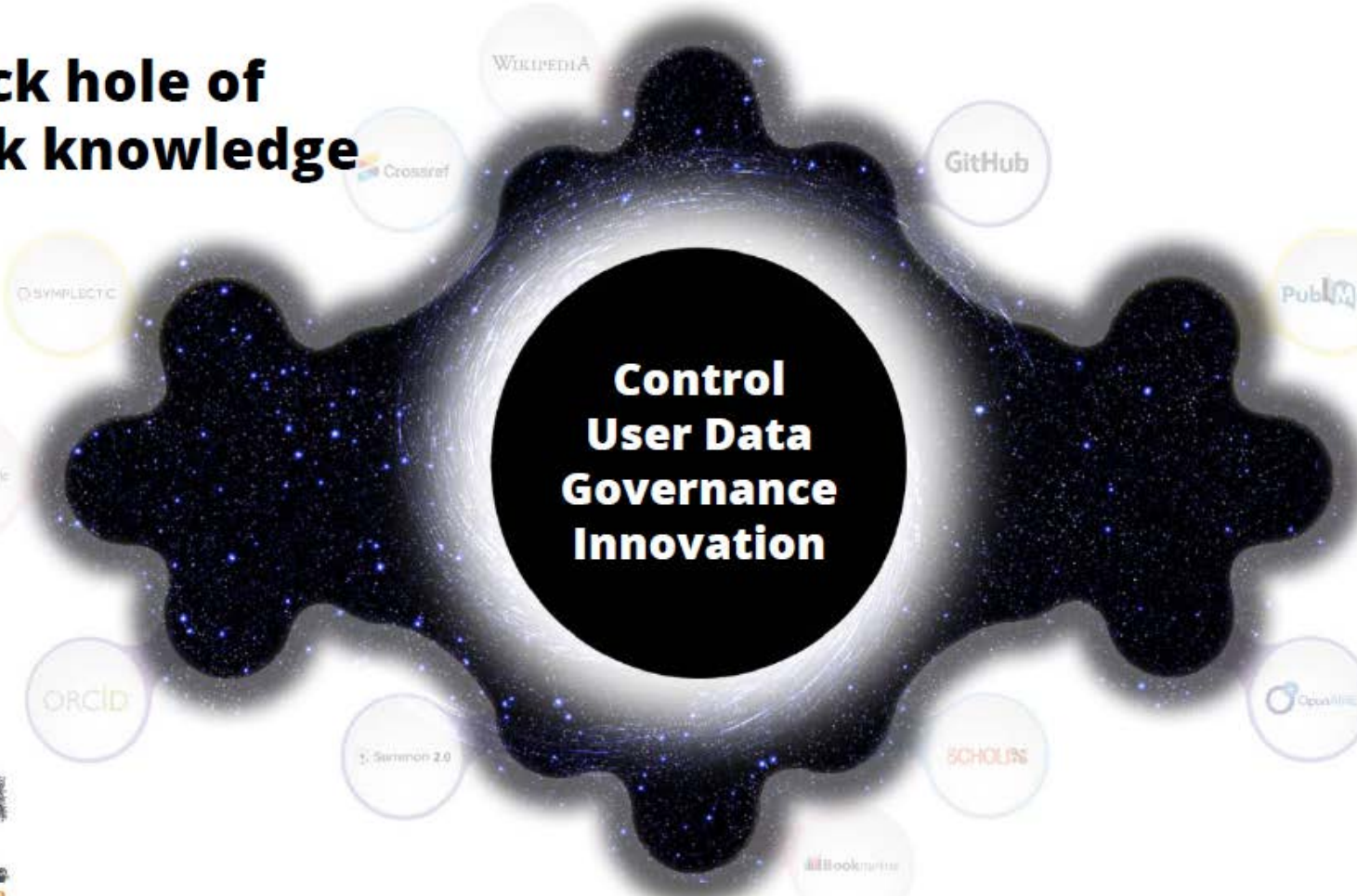
There are more options for researchers to share more kinds of research outputs than ever before. We support a more open and inclusive research experience through our journals, tools and platforms.

We are helping raise the bar on reproducibility, enabling researchers to share their methods and data and to gain more complete insights into research performance.



[ma la rete si allarga]

Black hole of dark knowledge



**Control
User Data
Governance
Innovation**



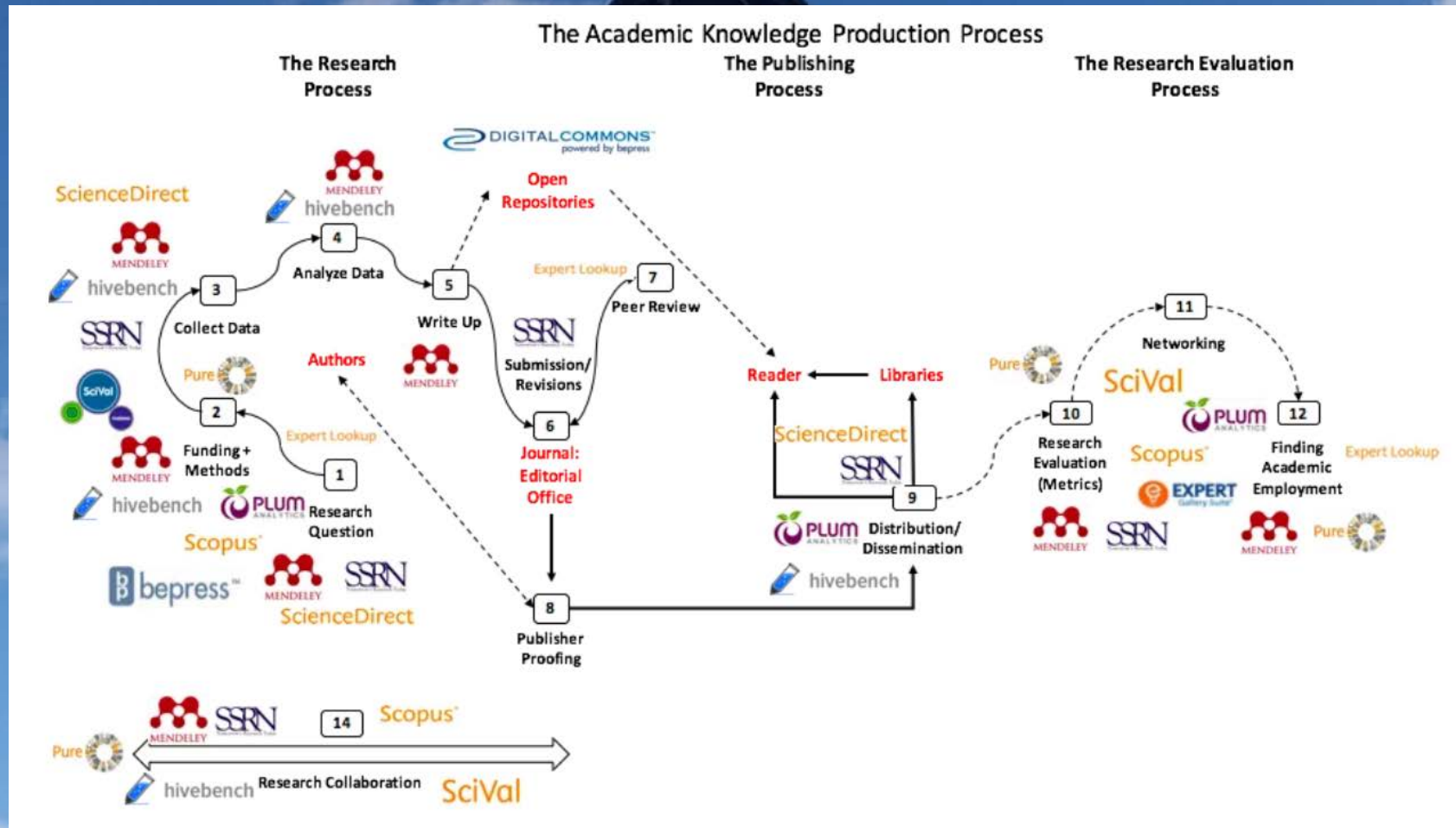
...arriva ovunque...

Publishers are increasingly in control of scholarly infrastructure and why we should care

A Case Study of Elsevier

Written by: *Alejandro Posada* and George Chen, University of Toronto Scarborough

Published on September 20th 2017



... e non dice i prezzi...

Article

Opening the Black Box of Scholarly Communication Funding: A Public Data Infrastructure for Financial Flows in Academic Publishing

Authors: Stuart Lawson [✉](#), Jonathan Gray, Michele Mauri

Without non-disclosure clauses we can't segment the market

fair competition between different countries <https://www.youtube.com/watch?v=4JsNT1gKe7I>

Elsevier's David Tempest explains subscription-contract confidentiality clauses

Dec 3, 2016



Martin Paul Eve

Professor of Literature, Technology and Publishing at Birkbeck, University of London

- [Email](#)
- [Books](#)

Referring Elsevier/RELX to the Competition and Markets Authority

Today, along with Stuart Lawson and Jon Tennant, I have submitted the below as a complaint to the Competition and Markets Authority, making good on the advice of Ann McKechin, MP at the Inquiry into Open Access in 2013. The document is also [available as a PDF](#).

Re: RELX Group in Industry 58.14/1

Dear Sir/Madam,

We write to complain about what we believe to be the anti-competitive practices of RELX Group in industry 58.14/1 ("Publishing of learned journals") on the following grounds:

- Abuse of a dominant market position
- Problems in a market sector

	2010	2011	2012	2013	2014
Elsevier	£34,177,020	£36,781,827	£39,079,332	£39,476,813	£39,812,145
Wiley	£13,460,226	£14,662,250	£15,616,311	£16,369,917	£16,875,190
Springer	£7,311,046	£7,309,094	£7,906,177	£7,940,116	£8,542,997
Taylor & Francis	£8,319,095	£9,140,572	£9,710,528	£10,084,350	£10,828,334
Sage	£4,495,313	£5,085,196	£5,608,296	£5,869,791	£5,990,818
Oxford University Press	£1,996,163	£2,163,242	£2,395,136	£2,669,757	£2,925,607
Cambridge University Press	£1,447,978	£1,462,214	£1,690,078	£1,832,177	£1,885,485
Nature Publishing Group	£2,998,040	£3,593,308	£4,066,962	£4,273,822	£4,430,900
Royal Society of Chemistry	£806,129	£867,752	£1,062,237	£1,062,948	£1,101,860
Institute of Physics Publishing	£1,091,517	£1,119,070	£1,197,958	£1,279,691	£1,373,533
Total for these 10	£76,102,528	£82,184,527	£88,333,015	£90,859,384	£93,766,870

Prospectus dated April 25, 2018

SPRINGER NATURE

Prospectus

for the public offering

12.2.2 Strong Leadership: Strategic Focus on Research, with a High-Quality Brand Portfolio, Global Scale and Favorable Positioning to Benefit from Strong Growth in the Open Access Publishing Market.

Brand strength is becoming increasingly important, as market participants increasingly differentiate in the open access market with regard to APCs according to a journal's impact factor. Our open access portfolio includes a large number of leading brands, such as such as Nature Communications, Scientific Reports and Springer Open, and high impact factor publications, positioning us well to command premium APCs from authors.



Jean-Sebastien Caux

@jscaux

Following

The prospectus for the IPO of Springer Nature [proxy.dbagproject.de/mediacenter/re ...](https://proxy.dbagproject.de/mediacenter/re...) should be compulsory reading for any funder/university/agency representative negotiating with publishers. You can then question whether you should support #SciPost and similar initiatives, or can afford not to.

Traduci il Tweet

13:38 - 5 mag 2018

22 Retweet 28 Mi piace

<https://twitter.com/jscaux/status/992730326828011520>



May 18, 2018

PROFESSIONAL JOBS SUMMITS RANKINGS ST

Springer Nature is committed to being a part of the open-access movement

Institutions, research funding bodies and publishers must all work together to change the system in the interest of advancing research, says Steven Inchcombe

May 18, 2018



document aimed at potential investors, not a marketing tool for authors or librarians). In fact, for more than 10 years, long before DORA, Nature editorials have expressed concerns about the overuse



...la riprova che i prezzi non sono reali (non dipendono dai costi)

Prospectus dated April 25, 2018

SPRINGER NATURE

Prospectus

for the public offering

Compared to traditional publishers, open access publishers face lower barriers to entry. For example, pure open access market participants do not require a sizeable sales force. Furthermore, the technical equipment required for open access publishing, such as hardware and software, is becoming less expensive. While the offerings of new and smaller competitors may be of lower quality, an increase in these offerings may nevertheless lead to a reduction in demand for our subscription-based offerings. New competitors in the open access market may also gain market share, resulting in a weakening of our market position. Furthermore, increased competition in the open access market could put downward pressure on the APCs, thereby adversely affecting margins we earn in the open access business. If any of these risks were to materialize, our investments in the open access business model would not yield the expected returns, and our results could be materially adversely affected.

Springer Prospectus Apr. 25

... quindi, anche la crescita delle APC non fa altro che perpetuare la logica perversa degli abbonamenti...

Apr
13

WHY OPEN ACCESS BIG DEALS ARE WORSE THAN SUBSCRIPTIONS

In: Science Politics • Tags: [open access](#), publishers

Apr.13, 2018

Notwithstanding the barrage of criticisms and warnings from every corner of the scholarly community, various initiatives, mainly in the





<https://paywallthemovie.com/>

... MA... la comunicazione scientifica è un mercato?

"They take our free labour, package it, and sell it back to us for windfall profits. The result is that one of our core activities - sharing research - is largely governed by the drive to deliver shareholder value. It doesn't have to be that way."

Jefferson Pooley, Muhlenberg College



Principles of the Self Journal of Science: bringing ethics and freedom to scientific publishing

VERSION 1 Released on 24 January 2015 under Creative Commons Attribution 4.0 International License

Michaël Bon¹

<http://www.sjscience.org/article?id=46>

Inappropriateness

The dissemination of Science is organized as a free market, where publishers compete for reputation and scientists compete for limited number of slots in journals. The rationale of the free market economy is to have efficient exchanges of rare and substitutable goods (apples, mobile phones, money...) between those who own them and those who want them. Yet **scientific knowledge, unlike money, is something its owners want to share** It is not a substitutable good. Scientists do want to be paid, but in a different currency – one that involves recognition and credit – whose amount on Earth is not limited. Therefore, the current system **is deeply inappropriate to disseminate Science: it creates an artificial rarity that overrides the exchanges naturally underlying Science.**

A low-angle shot of two women performing a handstand on a horizontal bar. They are both wearing athletic wear and sneakers. The woman on the left is wearing a black sports bra and black shorts, while the woman on the right is wearing a purple sports bra and black shorts. They are both holding onto the bar with their hands and have their legs extended upwards. The background is a clear blue sky with some light clouds. The text is overlaid on the right side of the image.

...non occorrerebbe
forse
**maggiore equilibrio
di interessi**
nella comunicazione
scientifica?

...un abbraccio mortale



Bernard Rentier

@bernardrentier

Following

The accomplices are you and me, the researchers who pay to publish, the researchers who evaluate them, the researchers who review their articles graciously for the benefit of the publishers, the researchers who pay to read. All being afflicted with prestige-dependency syndrome.

Traduci dalla lingua originale: inglese

10:13 - 18 feb 2018



But let's not ignore the facts: the science system is in landslide transition from data-sparse to data-saturated. Meanwhile, scholarly communication, data management methodologies, reward systems and training curricula do not adapt quickly enough if at all to this revolution. **Researchers, funders and publishers (I always thought that meant making things public) keep each other hostage in a deadly embrace by continuing to conduct, publish, fund and judge science in the same way as in the past century.**

So far, no-one seems to be able to break this deadlock. Open Access articles are solve only a fraction of the problem. Neither 'open research data' alone will do. W



[siamo sulla strada sbagliata]

cord injury. First, there is increasing methodology. These range from neurological diseases, the lack of contamination of neural cell lines, poor reliability of published research (participant numbers are low). published research findings are commonly low in the biomedical literature. Surprisingly then, the rate of publication is slow and problematic [3]. Second, the number of papers retracted from the peer-reviewed literature is also increasing [4]. Third, there is an over-reliance on a scientist's publication metrics (numbers, journal impact factors, citation numbers) for progression, prizes, and research grants. Indeed, gaming the metrics of science is an occupational requirement for scientists, journal staff and university administrators. Publications now contain more spin (reliance on findings which are not justified by the statistics) and a more liberal use of words such as 'novel' [5]. These trends are driven by an unhealthy culture in which it can be more important to publish a result than publish a correct result [6, 7]. The trends also expose deep flaws in the current systems of peer review.

This research culture can lead to cost- and corner-cutting, with hasty publication of irreproducible results and poor-quality work—it's an era in which scientists can fall prey to the temptation to do whatever they can get away with in order to publish. This leads to scientific misconduct, commonly defined as 'fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results'. A well-known recent case is Professor

- metodologia non solida
- risultati falsi, peer review debole
- enfasi sulla pretesa «novità»
- metriche onnipotenti, per cui truffare per gonfiarle è obbligo
- «PUBBLICARE UN RISULTATO»
INVECE DI UN «RISULTATO
CORRETTO»



*"Yes, the planet got destroyed. But for a beautiful moment
in time we created a lot of value for shareholders."*

CN
COLLECTION

©Tom Toro, <http://tomtoro.com/cartoons/#jp-carousel-135>



... cambiare panorama?