



Alternative Models for Open Access Scientific Publication

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In collaboration with Antonin Delpuch, ENS Paris

May 3rd 2016

International Conference on Science 2.0

Cologne, Germany

Who has access to scientific articles ?

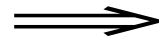
Only researchers working in institutions and countries rich enough to afford very costly subscriptions to journals.

Researchers working in companies or in poor institutions, teachers, students, retired researchers, and all citizens who finance public research do not have access to most scientific articles.

Principle of Knowledge as a Commons :

When you give an idea, you do not lose it.

An article which is not read is lost.



Knowledge is not a product to be traded,
but a Commons to be shared.

Charlotte Hess and Elinor Ostrom
Understanding knowledge as a Commons
MIT Press, 2006

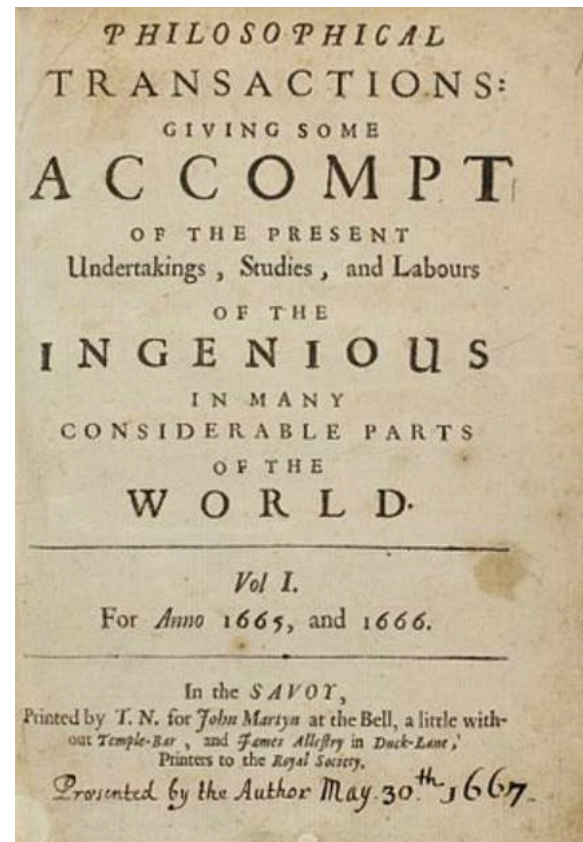
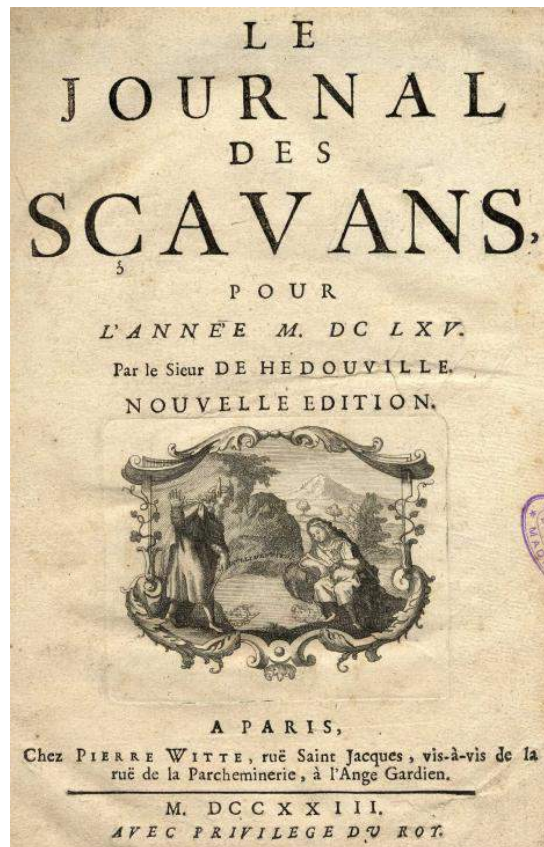
Elinor Ostrom, Nobel Prize in economic
sciences for 'her analysis of economic
governance, especially the Commons, 2009

Peer-reviewed scientific journals

Scientific publication in peer-reviewed journals is the backbone of the present research system.

It was founded in 1665 for sharing ideas and results.

It is also used today for evaluating researchers and projects.



How are peer-reviewed articles produced ?

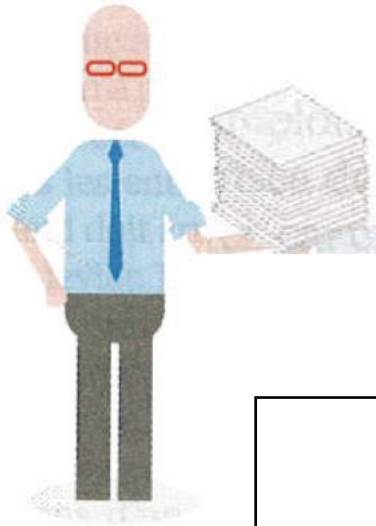


Scientists **write papers**,
prepare them in final format,
review papers of their peers,
are **editors of scientific journals**.



After papers are accepted
by reviewers and editors,
publishers put them online,
insure their visibility,
occasionally **print them**,
and **sell them**.

this is paid
by taxpayers



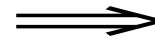
Librarians negotiate subscription contracts,
pay them, **control access** to the journals
and **curate collections** of articles.

Researchers give their copyright for free!



30-40%
profit margin!

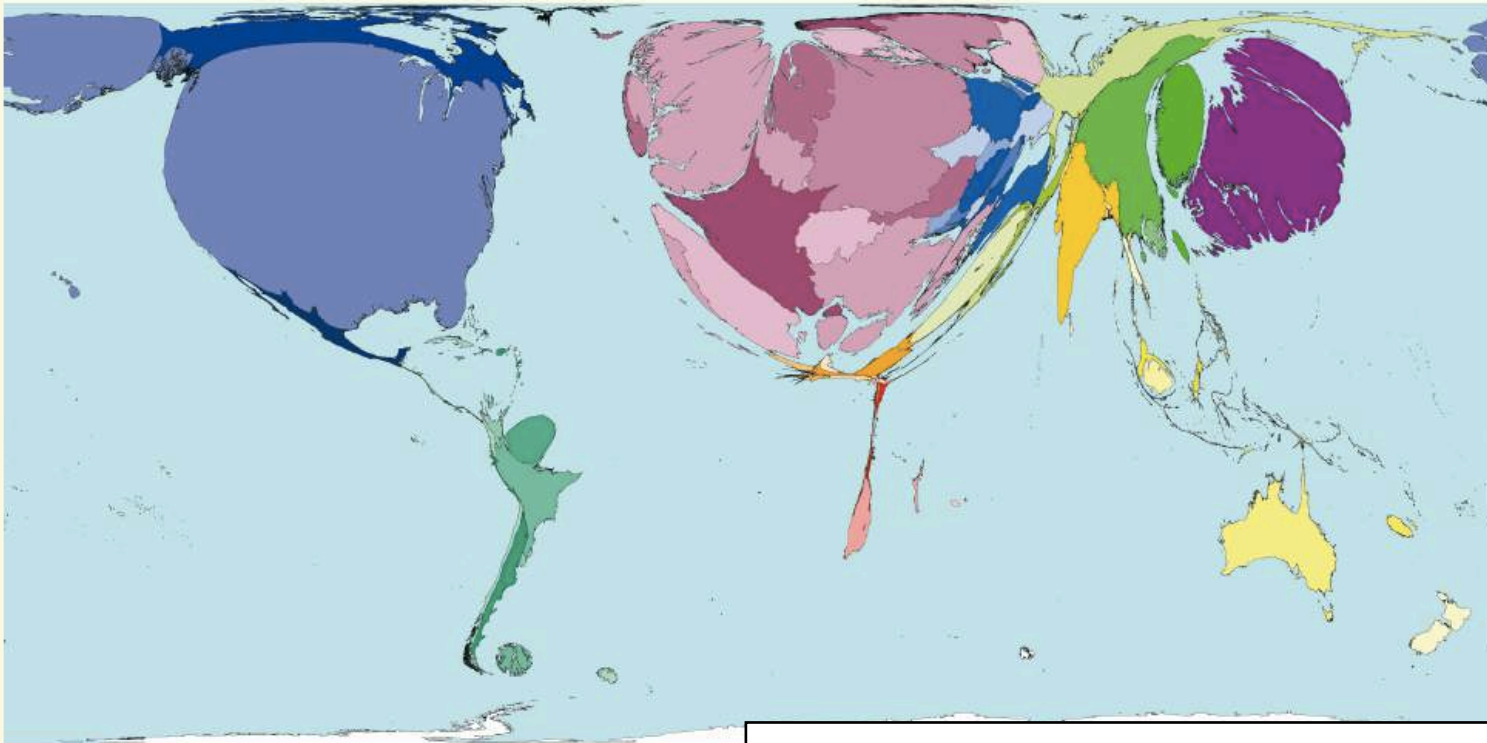
Before publishing the accepted papers,
Publishers require that researchers
transfer them their copyright for free.



Publishers own intellectual property of
the text, figures and data contained in articles,
this for more than 100 years. They can thus
sell articles at the prices and conditions
they set, with non disclosable contracts.

Publishers also own scientific journals,
plus all derivatives (such as databases),
plus the bibliometric statistics used to evaluate
research projects and researchers' careers.

Density per country of published articles

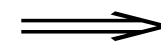


<http://www.worldmapper.org>

- | | | | | | | |
|---|---|---|---|---|---|---|
| 1 | → | 1 | → | 1 | → | Centre National de la Recherche Scientifique* |
| 2 | → | 1 | → | 1 | → | Chinese Academy of Sciences* |
| 3 | → | 1 | → | 1 | → | Russian Academy of Sciences* |
| 4 | → | 1 | → | 1 | → | Harvard University |
| 5 | → | 2 | → | 1 | → | Helmholtz Gemeinschaft* |
| 6 | → | 3 | → | 2 | → | Max Planck Gesellschaft* |
| 7 | → | 2 | → | 1 | → | University of Tokyo |

<http://www.scimagoir.com>

Publishers now impose on us their
Gold Open Access model,
which flips subscription costs
into article processing charges

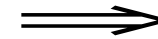


researchers might get **bankrupted**
or **stop publishing!**

We need alternative models

‘Neither author nor reader has to pay and the journal does not belong to the publisher but to the editorial board. The dissemination of the peer-reviewed articles is done through unit services whose role is to make them accessible for free.’

Marie Farge, Note for the French Minister of Research, 29 June 2012



Diamond Open Access

*Diamond Sutra.
The earliest complete survival
of a dated printed book.
China, 11th May 868*

British Library, London

The diamond open access model

1

Authors keep their copyright and make
Their article available in open access
using a Creative Commons license CC-BY.

2

The editorial board owns the journal (title and assets) while
editors and referees peer-review articles for free,
since it is part as their academic duty.

3

The publisher is no more the journal's owner but
becomes a service provider, that the editorial board
selects and hires by contract.

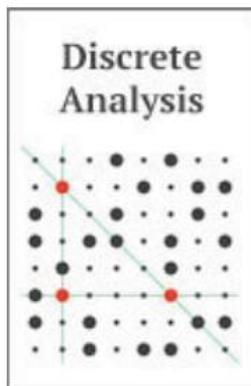
Two diamond open access journals

[//www.ipol.im](http://www.ipol.im) ISSN : 2105-1232 DOI : 10.5201/ipol



IPOP Journal · Image Processing On Line

Founded in 2010 by Jean-Michel Morel, it has 41 editors. It is financed by CNES, ERC and 13 institutions from 5 countries. Each article contains the **text**, the **algorithm** and its **source code**, which all are **peer-reviewed**. The journal platform also provides **online demonstration facility** and an **archive of experiments**. IPOP is thus an **Open Science and Reproducible Research journal**.



<http://discreteanalysisjournal.com> ISSN : 2397-3129

Founded in 2015 by Tim Gowers, it has 12 editors. It is an **overlay journal on** the open repository **arXiv**. It is financed by Cambridge University (10\$/submission).

We need publishing platforms

1

Funding agencies should provide to the scientific community publicly-owned platforms, developed in open source software, for editing, publishing and archiving peer-reviewed articles, with the help of librarians, and publishers as contractors.

2

Funding agencies could thus control the quality of peer-reviewing, by selecting the journals having good practices and reputable editors.

3

Reading and publishing will be free to anyone.
Publishing platforms will allow researchers to experiment new ways of publishing, e.g., open peer-reviewing.

Two publicly-owned publishing platforms



Created in 1999,
it publishes
1249 journals
in Open Access,
financed by public
agencies from Brazil
(FAPESP, CNPq,
BIREME) and from
15 countries.



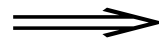
Created in 1999,
it publishes
431 journals
in Open Access,
financed by public
agencies from France
(CNRS, EHESS, BSN,
Aix-Marseille and
Avignon universities).

Green open access is a wise model

Today researchers are very dependent on
'*The Most Profitable Obsolete Technology in History*'
because publishers control bibliometry and 'Academic Capital',
they use as marketing tools to insure their control.

Vincent Larivière, Stéphanie Haustein, Philippe Mongeon
The Oligopoly of Academic Publishers in the Digital Era
PLOS one, 10th June 2015

The gold open access model leads to the creation
of predatory journals of very poor quality, even fake journals.
To avoid this and to guarantee a smooth transition to open access,
researchers would like to preserve the main traditional journals
which are useful, having a good reputation and good practices.



The wisest solution is the green open access model!

Dissemin to develop green open access

*<http://dissem.in>
[//association.dissem.in](http://association.dissem.in)
<https://github.com/dissemin>*



‘Spot your own paywalled papers.
Liberate them in one click!’

To find the papers of one researcher



Bienvenue sur dissem.in

Dissem.in est un service gratuit pour aider les chercheurs à vérifier que leurs publications sont librement accessibles pour leurs lecteurs. Notre service identifie les papiers qui ne peuvent être obtenus qu'avec des souscriptions payantes, et vous permet de les mettre en ligne en quelques clics sur Zenodo, un dépôt innovant soutenu par l'UE.

Vous hésitez toujours ? Lisez ce qui suit ou jetez un œil à la [FAQ](#).

Analyser mes publications ou Chercher un collègue

par nom Peter Sewell

ou par ORCID identifiant (par exemple, 0000-0001-2345-6789)

Recherche



David Kaloper-Meršinjak, Hannes Mehnert, Anil Madhavapeddy, **Peter Sewell** 2015
Supplementary material for the publication "Not-quite-so-broken TLS: lessons in re-engineering a security protocol specification and implementation"

[Télécharger](#) | Zenodo



Texte intégral: Indisponible

Maison d'édition: Association for Computing Machinery (ACM)

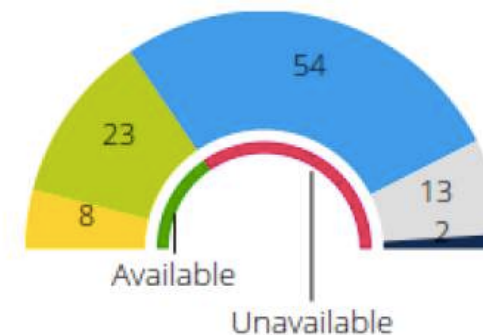
● Prépublication : dépôt autorisé. [Mettre en ligne](#)

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[Policy details \(opens in a new window\).](#)

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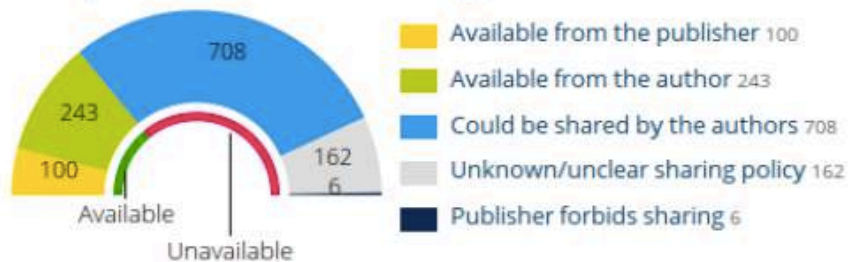


- Available from the publisher 8
- Available from the author 23
- Could be shared by the authors 54
- Unknown/unclear sharing policy 13
- Publisher forbids sharing 2

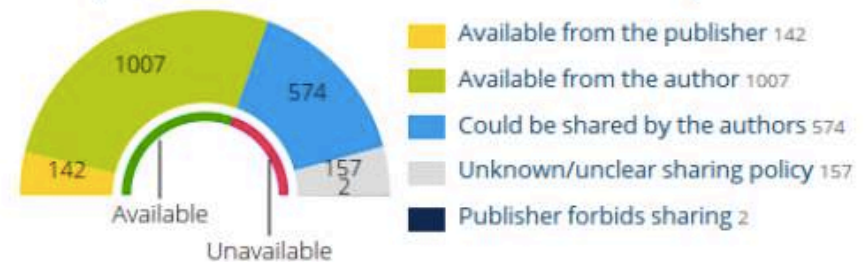
To find the papers of an institution

<http://dissem.in/institution/1/>

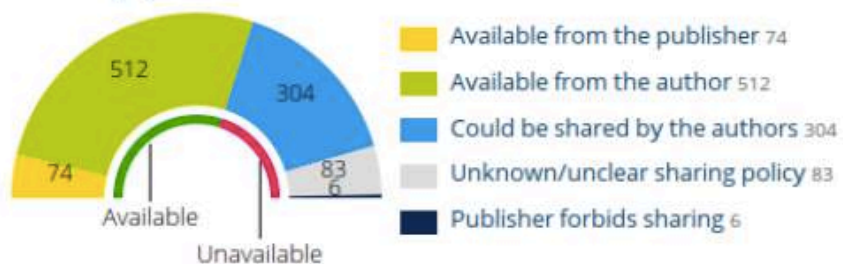
Département de géosciences



Département d'informatique



Département de mathématiques et applications



Département de chimie



Example of four departments of Ecole Normale Supérieure Paris

The team Dissemin/CAPSH

Dissemin is supported by the nonprofit association CAPSH
(Committee for the Accessibility of Publications
in Sciences and Humanities) founded on 5th September 2015.



Antonin Delpuch



Pablo Rauzy



Antoine Amarilli



M. F.



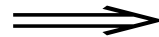
Thomas Bourgeat

Conclusion

Scientific publishing today :

Investments for writing and peer-reviewing papers are public, but ownership of journals and profits from subscriptions and from Article Processing Charges are private.

Publishers should become service providers to publicly funded and publicly owned publishing platforms, without having the intellectual property of scientific articles, journals, peer-reviewing exchanges, publishing platforms and bibliometric data.



Scientific publishing tomorrow :

The European Commission should maintain Zenodo and OpenAIRE and offer us publishing platforms, as parts of the Open Science Cloud. We need those tools to develop Knowledge as a Commons.