



The Future of Scientific Publishing



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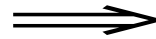
*Paris,
October 30th 2014*



What is scientific publishing?

Scientific research is a collaborative activity, in both space and time, that advances through discussions, seminars, conferences and peer-reviewed articles

Publishing means
making scientific results
publicly available
(1)



This guarantees
validation, reproduction, transmission and conservation
of scientific results for the advancement of knowledge

(1) To whom? How? Who pays?

To whom are articles available ?

Only to scientists working in institutions and countries rich enough to afford the very costly subscriptions and article processing charges imposed by publishers

but

scientists in developing countries, companies, highschool teachers and all citizens who finance public research cannot access scientific papers

Principle of intellectual commons :

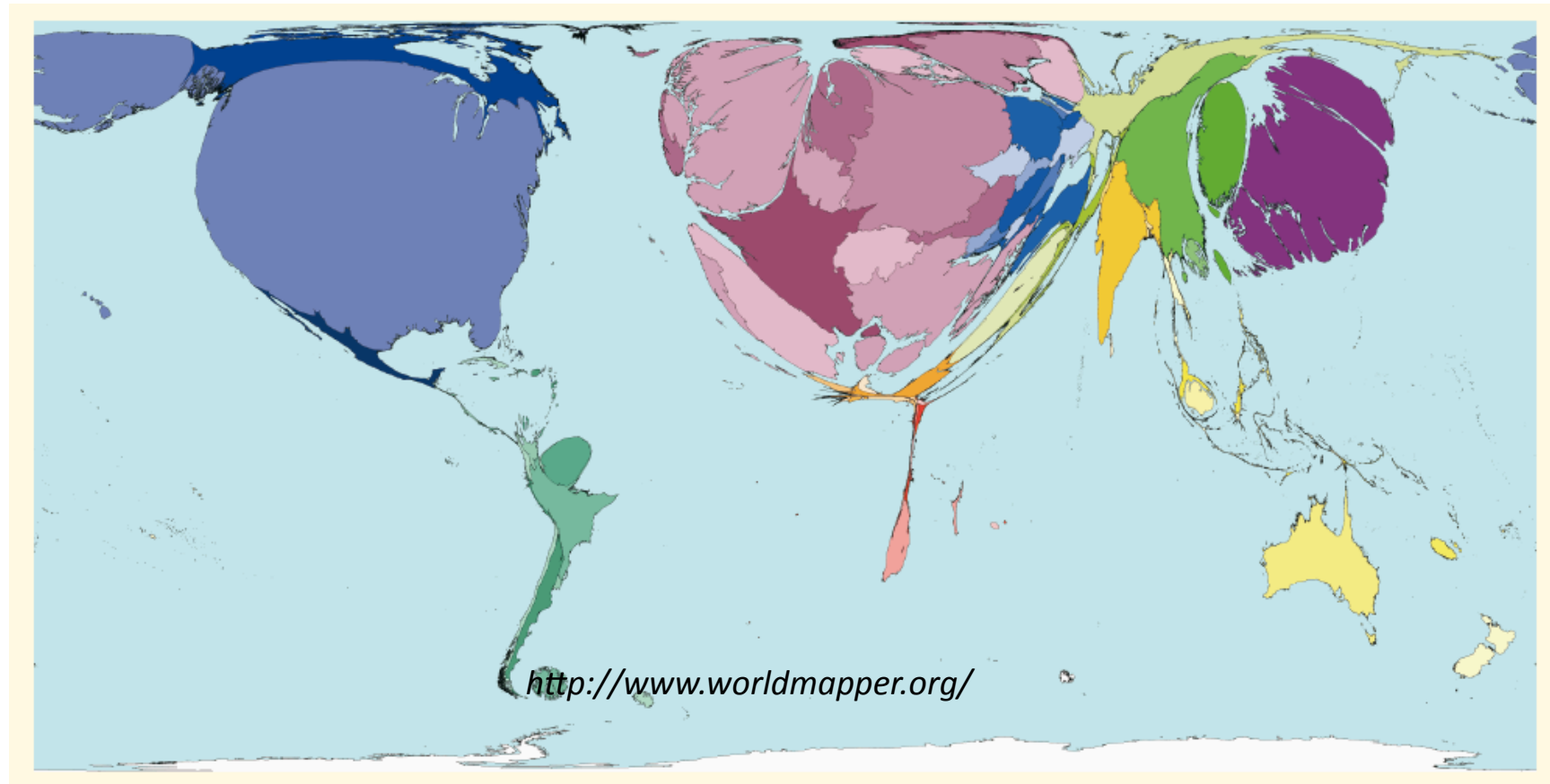
Ideas are not of the same nature as material objects.

Ideas are **only fruitful if they are exchanged**, discussed, criticised, improved, reproduced and explained.

When you share your ideas you don't lose them.

Ideas are not merchandise but intellectual commons !

Most prolific publication of scientific papers



1	➔	1	➔	1	➔	Centre National de la Recherche Scientifique*	GO	FRA	WE	215261	↑	51.09	↑	1.32	↑	58.89	↓	0.53	↓
2	➔	1	➔	1	➔	Chinese Academy of Sciences*	GO	CHN	AS	157814	↑	22.69	↑	1.01	↑	42.39	↑	0.64	➔
3	➔	1	➔	1	➔	Russian Academy of Sciences*	GO	RUS	EE	97105	↑	32.24	↓	0.54	↑	23.03	↓	0.73	➔
4	➔	1	➔	1	➔	Harvard University	HE	USA	NA	80467	↑	37.54	↑	2.4	↓	77.14	↓	0.53	➔
5	➔	2	➔	1	➔	Helmholtz Gemeinschaft*	GO	DEU	WE	63414	↑	55.63	↑	1.57	↑	60.67	↑	0.63	➔
6	➔	3	➔	2	➔	Max Planck Gesellschaft*	GO	DEU	WE	54202	↑	66.08	↑	1.86	↑	71.94	↑	0.67	➔
7	➔	2	➔	1	➔	University of Tokyo	HE	JPN	AS	51796	↑	27.64	↑	1.26	↑	55.27	↓	0.51	➔

<http://www.scimagoir.com/>

How are peer-reviewed articles produced ?

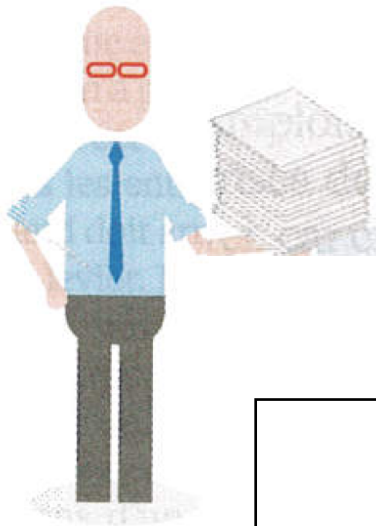


Scientists write papers, prepare them in final format, referee papers and are editors of scientific journals



this is paid by taxpayers

After papers have been accepted by referees and editors, publishers put them online, insure their visibility, occasionally print them and sell them



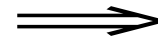
Librarians negotiate subscription contracts, pay them, control access to the journals and curate the collections

Scientists give their copyright for free!



30-40% profit !

Publishers
require scientists to give them
their copyright for free

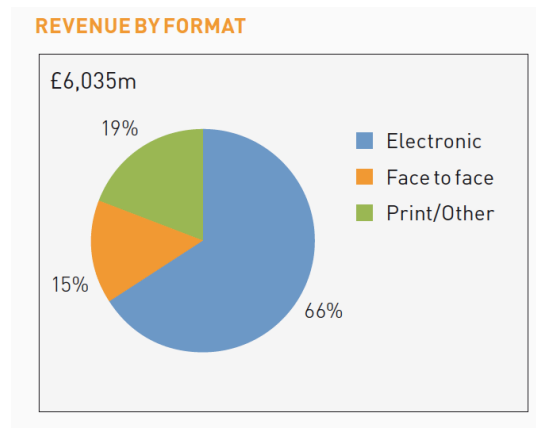


Publishers own the intellectual property,
of the text, figures and data contained in the papers
(for more than 100 years), they are thus able to
sell articles at the prices and conditions
they set, with confidential contracts

Publishers also own scientific journals,
plus all derivative products, such as databases,
plus the bibliometric statistics used to evaluate
research projects and scientists' careers

Three publishers control publishing

Three transnational commercial corporations dominate market :
Reed-Elsevier, Springer-Kluwer and Wiley-Blackwell

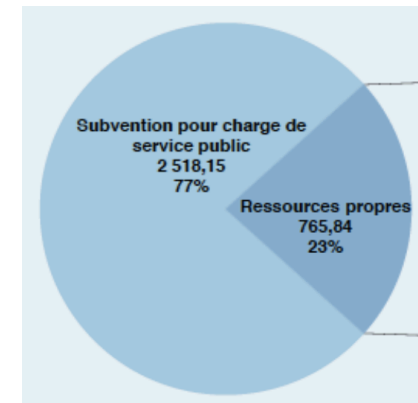


7.6 Billions €

Reed-Elsevier revenue in 2013

<http://www.reedelsevier.com>

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2.5 Billions €

CNRS budget in 2012

<http://www.dgdr.cnrs.fr>

Financial results of Reed-Elsevier for peer-reviewed journals in 2013

Revenue: 2.7 Billions € Profit: 0.8 Billions € Profit margin: 39% (+6% compared to 2012)

Those publishers impose **their model for Open Access journals**,
where **authors should pay them costly article processing charges**

How could scientists take back control?

1

Authors should keep their copyright and make their papers available in open access under a Creative Commons licenses CC-BY

2

Journals should be owned by their editorial board in charge of the peer-reviewing, while editors and referees will continue to do this for free

3

Funding agencies should no longer pay, subscriptions and article processing charges, directly to publishers as long as market is oligolistic with confidentiality clauses

Scientists need publishing platforms

1

Funding agencies should provide to the scientific community **publishing platforms**, developed in open source software, **for editing and publishing peer-reviewed journals** with the help of librarians and **publishers as subcontractors**

2

Publishing platforms would offer to anyone **freely usable scientific papers**, in open access under CC-BY licenses, **without authors having to pay to publish**

3

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

Publishing platforms already exist

 Brasil
+
 África do Sul
 Argentina
 Brasil
 Chile
 Colômbia
 Costa Rica
 Cuba
 Espanha
 México
 Peru
 Portugal
 Venezuela
+
 Bolívia
 Paraguay
 Uruguai


Scientific Electronic Library Online

Created in 1999
it publishes
1661 journals
in Open Access
financed by
public agencies:
FAPESP, CNPq,
BIREME and Spain


CENTRE POUR L'ÉDITION ÉLECTRONIQUE OUVERTE
CENTRE FOR OPEN ELECTRONIC PUBLISHING

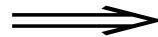
Created in 1999
it publishes
448 journals
in Open Access
financed by
public agencies:
CNRS, EHESS, BSN,
Aix-Marseille and
Avignon universities

In conclusion

Scientific publishing today :

Investments for writing and peer-reviewing scientific papers are public,
but ownership of scientific journals
and profits from subscriptions are private

Publishers should become competing service providers
to the publicly funded and publicly owned publishing platforms,
but no longer intellectual content owners



Scientific publishing tomorrow :

Scientific papers will be available for free in open access,
and their content usable, to anyone and to any institution,
for the sake of the advancement of knowledge

For more information

<http://wavelets.ens.fr>

Click on **Publications**

Paper n°**312** : *Avis sur les relations entre les chercheurs et les maisons d'édition scientifique*, Comité d'Ethique du CNRS, 2011

Paper n° **307** : *Oh! Une idée, c'est si rare!*
Wissenschaftskolleg zu Berlin, 2011

http://wavelets.ens.fr/OAC_ENS_2014

2nd Open Access Colloquium, ENS Paris, 2-3 July 2014

http://wavelets.ens.fr/BOYCOTT_ELSEVIER

Articles, declarations, blogs, conferences, videos, interviews, mails related to the movement *The Cost of Knowledge* that launched a boycott of Elsevier in 2012 followed by 14830 scientists worldwide