



The Diamond Open Access : a model for researchers and funding agencies to recover control of their articles and journals

Marie Farge

CNRS-INSMI and ENS Paris

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*Institute of Mathematics,
Universität Potsdam*



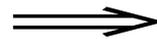
Who has access to research articles?

Only researchers working in institutions rich enough to pay the very costly journals they need!

Researchers working in enterprises, or in poor countries, teachers, students, retired researchers and citizens who finance public research do not have access to most of the research articles.

Most of the research journals have been bought by few major publishers, whose exorbitant profits rely on the work that researchers and their funding agencies offer them for free.

Today, publishers benefit from the digital revolution and the Web to reduce production costs using online peer-reviewing and publishing, but keep the business model designed for printing on paper.



Major publishers have acquired an oligopolistic position!



2003, the Berlin Declaration

Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities

Preface

The Internet has fundamentally changed the practical and economic realities of distributing scientific knowledge and cultural heritage. For the first time ever, the Internet now offers the chance to constitute a global and interactive representation of human knowledge, including cultural heritage and the guarantee of worldwide access.

Goals

Our mission of disseminating knowledge is only half complete if the information is not made widely and readily available to society. New possibilities of knowledge dissemination not only through the classical form but also and increasingly through the open access paradigm via the Internet have to be supported. We define open access as a comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community.

In order to realize the vision of a global and accessible representation of knowledge, the future Web has to be sustainable, interactive, and transparent. Content and software tools must be openly accessible and compatible.



22nd October 2003, signatories

German research organisations

Hans-Jörg Bullinger
President of the Fraunhofer Society

Karl Max Einhäupl
Chairman des Wissenschaftsrates

Peter Gaehtgens
President of the Hochschulrektorenkonferenz

Peter Gruss
President of the Max Planck Society

Hans-Olaf Henkel
President Leibniz Association

Walter Kröll
President Helmholtz Association

Ernst-Ludwig Winnacker
President German Research Foundation

Friedrich Geisselmann
Head of the Deutscher Bibliotheksverband

Dieter Simon
President, Berlin-Brandenburg Academy of Sciences and Humanities

international

Bernard Larrouturou
Director General, Centre National de la Recherche Scientifique (CNRS)

Jürgen Mittelstraß
President, Academia Europaea

Paolo Galluzzi
Director, Istituto e Museo di Storia della Scienza, Florence

Christian Bréchet
Director General, Institut National de la Santé
et de la Recherche Médicale (INSERM)

Yehuda Elkana
President and Rector, Central European University, Budapest

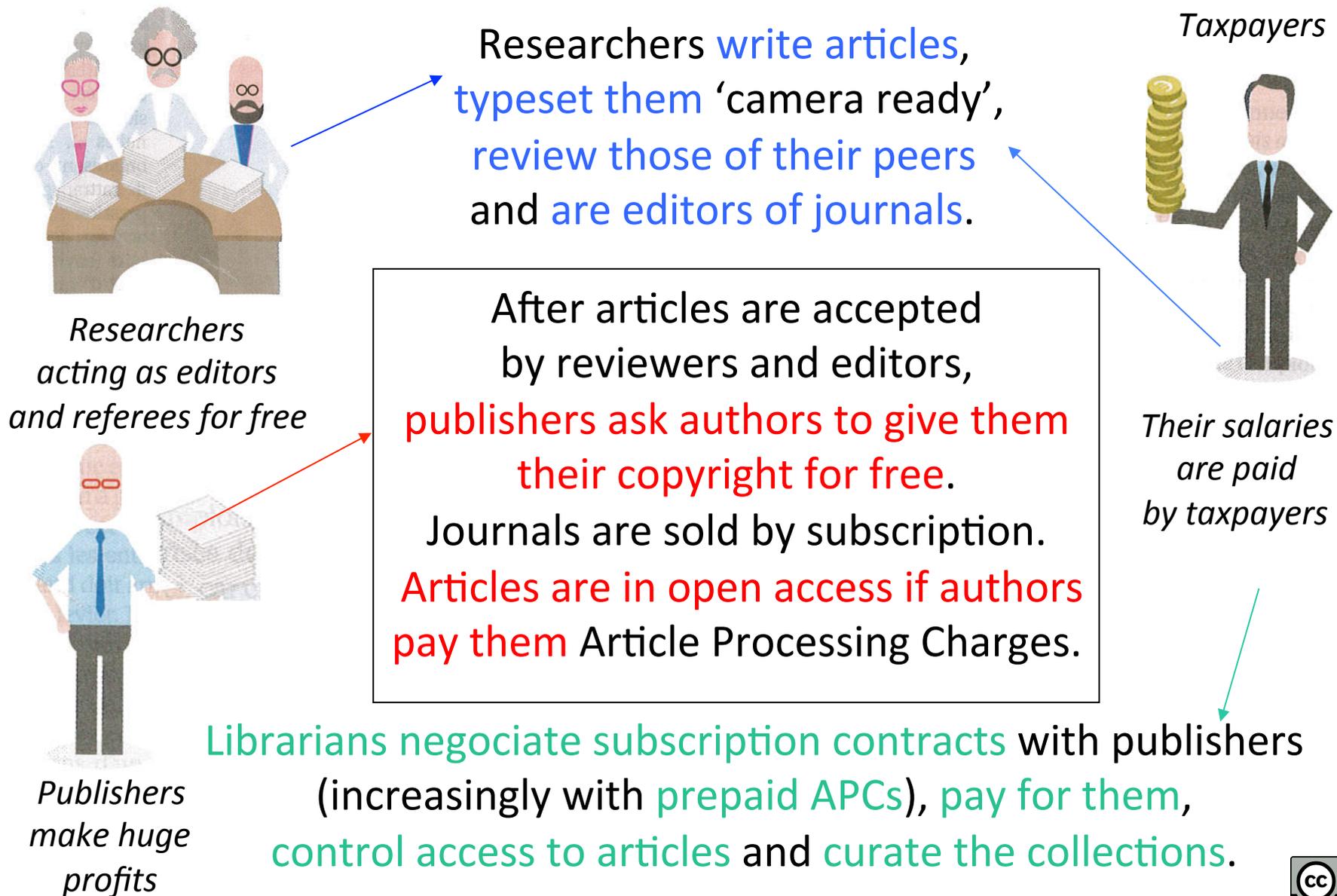
Jean-Claude Guédon
Open Society Institute

José Miguel Ruano Leon
Minister of Education, Cultura y Deportes Gobierno de Canarias

Jens Braarvig
Director, Norwegian Institute of Palaeography and Historical Philology



The business model of publishers



2012, the 'Cost of Knowledge' revolt

In 2012 *Tim Gowers* and 33 mathematicians called for a boycott of *Elsevier*. They succeeded in stopping the *Research Works Act*, a bill introduced in the U.S. Congress as a result of *Elsevier's* lobbying to control open access.



Sir Tim Gowers,
Cambridge University,
Fields medal 1998

16556 Researchers Taking a Stand. [See the list](#)

Academics have protested against Elsevier's business practices for years with little effect. These are some of their objections:

1. They charge exorbitantly high prices for subscriptions to individual journals.
2. In the light of these high prices, the only realistic option for many libraries is to agree to buy very large "bundles", which will include many journals that those libraries do not actually want. Elsevier thus makes huge profits by exploiting the fact that some of their journals are essential.
3. They support measures such as SOPA, PIPA and the ~~Research Works Act~~, that aim to restrict the free exchange of information.

<http://www.thecostofknowledge.com>



The 'Cost of Knowledge' proposition

'Neither author nor reader should have to pay to publish and a journal should no more belong to a publisher but to its editorial board. Peer-reviewing and publishing are done using public infrastructures where articles are archived and accessible online for free.'

M. F., Note for Geneviève Fioraso, French Minister of Research, June 29th 2012, http://openscience.ens.fr/MARIE_FARGE/



Diamond Sutra, the earliest printed book, China, 11th May 868

British Library

I suggested calling this model 'Diamond OA' to outbid the publishers' Gold OA model.



The Diamond Open Access model

1

Authors keep their copyright and allow their articles to be published in Open Access Under the Creative Commons license CC-BY.

<https://creativecommons.org/licenses/>

2

Editors of a peer-reviewed journal collectively own its title and assets, since they are in charge of peer-reviewing the submitted articles. Editors and referees peer-review for free, as their academic duty.

3

Publishers no more own journals but could provide services to editors who select them on a competitive basis.



Researchers need publishing platforms

Funding agencies should provide for free to researchers publicly-owned platforms, developed using open source software, for peer-reviewing, publishing and archiving articles, data and codes, with the help of librarians, and of publishers as subcontractors.

Anyone worldwide would have free access (i.e., open and gratis) to peer-reviewed publications (e.g., articles, data, codes, videos) without researchers have to pay and give their copyrights.

Publishing platforms would also control the quality of peer-reviewing, by selecting the journals having good practices and reputable editors. They would thus provide tools to researchers to experiment new ways of publishing their research outputs (e.g., open peer-reviewing).

2017, Mersenne Diamond OA Platform

► Mission

The Mersenne project has been initiated to address a growing demand within the scientific community for scientific publication alternatives.

The Centre Mersenne is created as an alternative publishing venue:

- public and not-for-profit (no privatisation of the research outputs),
- open access (to foster the dissemination of research results),
- diamond open access (no fee for the reader to read and the author to publish),
- sustainable and affordable,
- created by researchers for researchers.

The Centre Mersenne has a dual purpose:

- to promote scientific publishing and foster dissemination of open access publications: existing journals as well as newly-created journals,
- to offer, at affordable price, all the necessary tools and professional services to editorial teams to help them manage their journal.



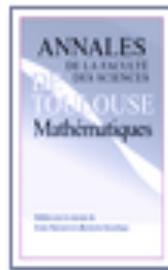
<https://www.centre-mersenne.org>



Mersenne Diamond OA Platform



Algebraic
Combinatorics
Mathematics



Annales de la faculté
des sciences de
Toulouse
Mathematics



Open Geomechanics
Geomechanics



Open Journal of
Mathematical
Optimization
Mathematics



Annales Henri
Lebesgue
Mathematics



Annales de l'institut
Fourier
Mathematics



Peer Community
Journal
Multi-disciplines



Publications
Mathématiques de
Besançon
Mathematics



Annales
mathématiques Blaise
Pascal
Mathematics



Confluentes
Mathematici
Mathematics

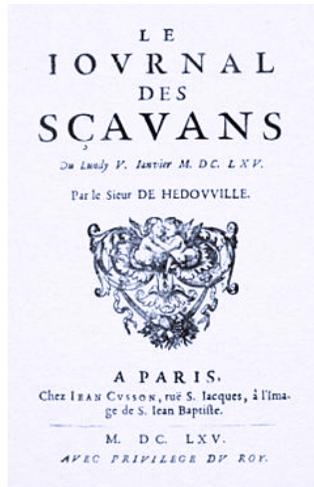


Revue ouverte
d'intelligence
artificielle
Artificial intelligence



SMAI Journal of
Computational
Mathematics
Applied mathematics

2020, Comptes-Rendus Acad. Sci. Paris



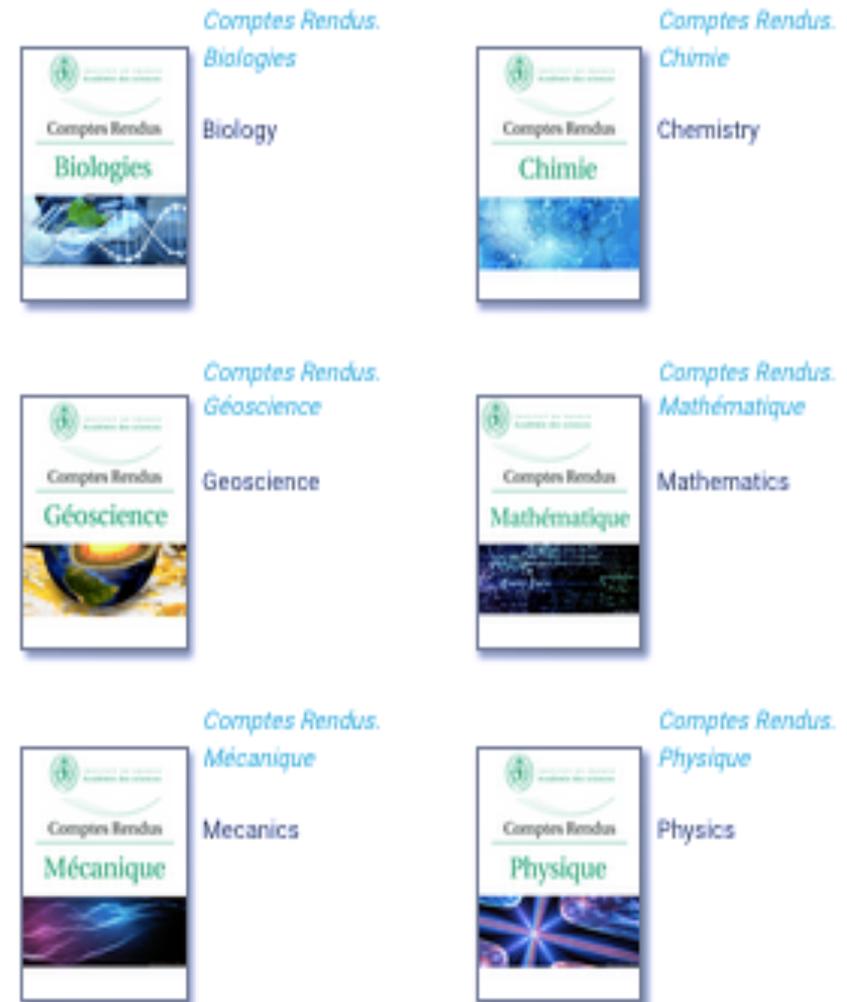
5th January 1665

In 1665 Denis de Sallo created the 'Journal des Sçavans'.
In 1835 the astronomer François Arago created the CRAS.
They were published by Gauthier-Villars, bought by Elsevier in 2000.

'It would be an excellent advertisement for the 'Académie des Sciences de Paris' if its 'Comptes-Rendus' (CRAS) were published using the 'Diamond OA' model.'

M. F., Note for Geneviève Fioraso, June 29th 2012

Since 2020, the CRAS are no longer published in Gold Open Access by Elsevier but in Diamond OA by Mersenne.



Scientific → Objective → Reproducible → Open

Ideas are not of the same nature as material products,
since when you give an idea you do not lose it.
Therefore knowledge is not a product to be traded,
but a commons to be shared.
⇒ Sharing ideas is a positive-sum game.

In 2009 Elinor Ostrom got the
Nobel prize in economic sciences for:
*'her analysis of economic governance,
especially the commons, showing how
common resources can be managed successfully
by the people who use them, rather than
by governments or private companies'*.

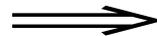
*Charlotte Hess and Elinor Ostrom,
Understanding knowledge as a Commons,
MIT Press, 2006*



Summary

Today investments, for producing and peer-reviewing articles, are public but ownership of journals, peer-reviewing reports, platforms (for peer-reviewing, publishing, bibliometry) and profits (from subscriptions, APCs and data) are private.

Publishers should become service providers to publicly funded and publicly owned publishing platforms, without owning anymore articles, journals, platforms (for peer-reviewing, publishing, bibliometry) and data.



Funding agencies should provide public platforms to researchers for peer-reviewing, publishing and archiving research outputs. Intellectual property laws (copyright/copyleft) should be improved to guarantee that research outputs remain public and open. We need those tools to develop knowlegde as a commons.



http://openscience.ens.fr/MARIE_FARGE

<http://wavelets.ens.fr>

[<marie.farge@ens.fr>](mailto:marie.farge@ens.fr)

*'Scholarly publishing and peer-reviewing in open access', Marie Farge,
in 'Europe's Future: Open Science, Open Innovation, and Open to the World',
European Commission, DG Research, Science and Innovation, April 2017*

<http://dissem.in>

<http://association.dissem.in>

<https://github.com/dissemin>



Level of popularization

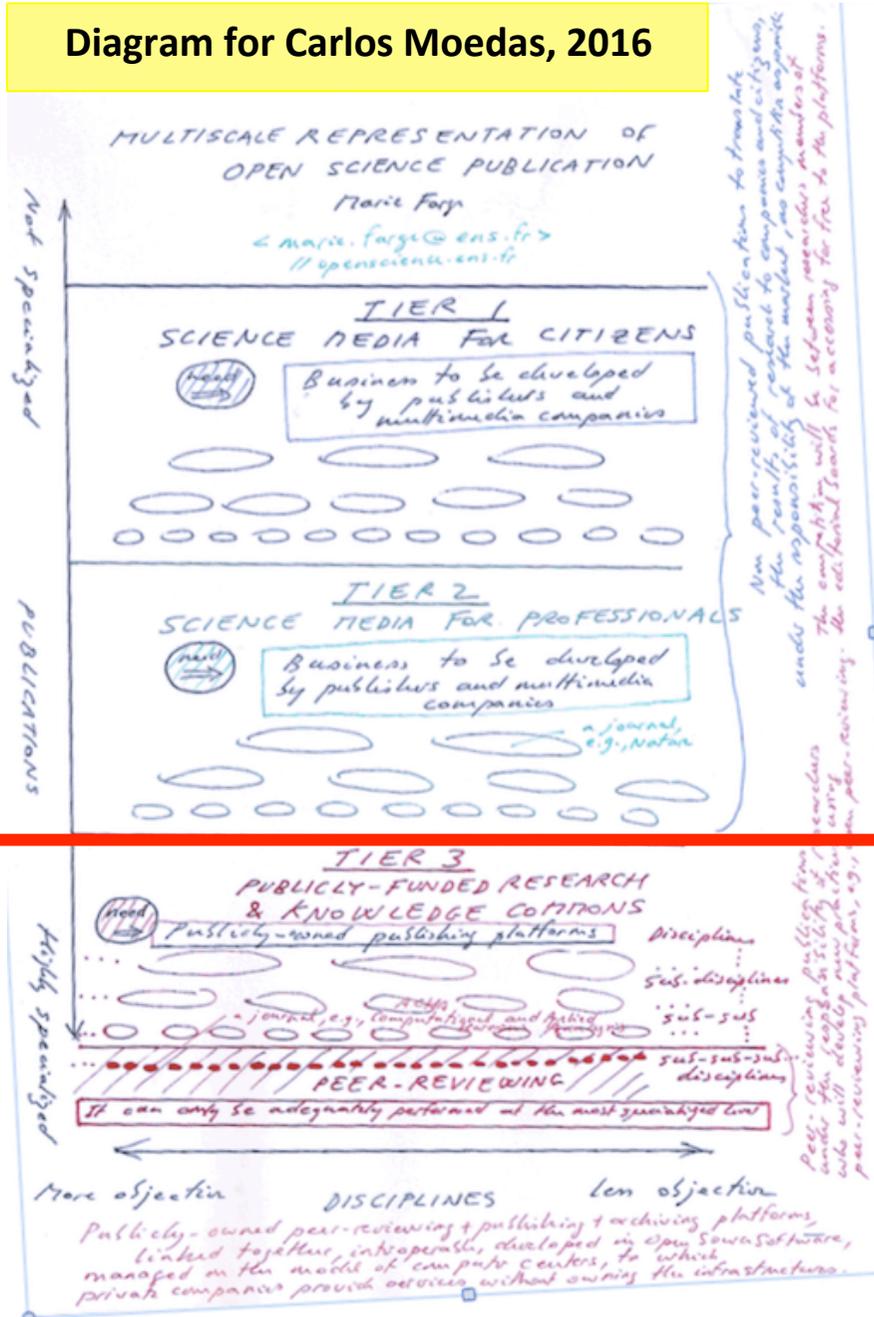
Diagram for Carlos Moedas, 2016

Popularization of science for citizens

Scientific information for professionals

Peer-reviewed articles for researchers

Level of specialization



For profit playground of commercial publishers

Non for profit knowledge commons

Disciplinary bibliodiversity

