

# Open Access: Closed Discourse or Open Knowledge?

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- Toll Access & Open Access: What, how, why?
- Acceptance
- Open Access and Open Data: A confrontation
- Open Access: Actors and their interests in openness
- Open Access & the scientific field: a joyride into sociology of science
- Open Access: A balance

What can Open Access learn from the Open Knowledge Initiatives?

## Reader's perspective:

- Usage of scientific documents is charged/ has to be paid
- *pay per view* or subscription based model

## Author's perspective:

- Transfer of exclusive copyrights to the publisher

## Business model:

- subscription, article fees

## Open Access (OA)

refers to unrestricted online access to scientific publications

**Gratis OA** is no-cost online access

**Libre OA** offers some additional usage rights (or: it removes permission barriers)

[http://en.wikipedia.org/wiki/Open\\_access\\_%28publishing%29](http://en.wikipedia.org/wiki/Open_access_%28publishing%29)

## **Budapest Open Access Initiative BOAI**

### **Items:**

„The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. “

„Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. “

**Scientific Content, especially journal articles**



## Budapest Open Access Initiative BOAI

### Degree of Openness:

By "open access" to this literature, we mean its free availability on the public internet, permitting any users to **read, download, copy, distribute, print, search, or link** to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be **to give authors control over the integrity of their work** and **the right to be properly acknowledged and cited**.

## Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (BD)

### Items:

“Establishing open access as a worthwhile procedure ideally requires the active commitment of each and every individual producer of scientific knowledge and holder of **cultural heritage**. Open access contributions include **original scientific research results, raw data and metadata, source materials, digital representations of pictorial and graphical materials and scholarly multimedia material.**”

Scientific publications, (scientific and non-scientific) data, cultural heritage



## Berlin Declaration

### Degree of Openness:

The author(s) and right holder(s) of such contributions grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly **and to make and distribute derivative works**, in any digital medium for any responsible purpose, subject to proper attribution of authorship (community standards, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use.

## Gratis

- Open Access publications can be used free of charge
- No other rights barrier is removed (e.g. commercial use, derivative works)
- Refers mostly to self-archived documents in repositories

## Libre

- Open Access publications can be used free of charge
- At least one more rights barrier is removed (e.g. commercial re-use, derivative works)
- Refers mostly to documents published in open access publishing services (journals, publishing houses)

## Self-Archiving aka Green Road:

- Making scientific publications accessible free of charge on an Open-Access-Repository
- If authors do not retain copyrights by modifying the publishing contract these are transferred to the publishing house
- If copyright is transferred to the publisher a fulltext can only be available openly because of the publisher's goodwill

## Self-Publishing aka Golden Road:

- Scientific content is published in an Open Access Journal or in an Open Access Publishing house as a monograph
- Born Open Access
- No exclusive copyright transfer, often: CC-licences

## **BOAI:**

Open Access “gives readers extraordinary power to find and make use of relevant literature, and that it gives authors and their works vast and measurable new visibility, readership, and impact.”

## **Open Access promotes**

- Transparency
- Innovation
- Efficiency

## Economic efficiency

- „Open access self-archiving without subscription cancellations (i.e. ‘Green OA’) might save around EUR 30 million per annum nationally for Denmark in a worldwide ‘Green OA’ system, EUR 50 million in the Netherlands and EUR 125 million in the UK. “
- „Open access or ‘author-pays’ publishing for journal articles (i.e. ‘Gold OA’) might bring net system savings of around EUR 70 million per annum nationally in Denmark, EUR 133 million in the Netherlands and EUR 480 million in the UK (at 2007 prices and levels of publishing activity).”

Houghton, J. W. (2009). *Open Access - What are the economic benefits?* (p. 22). Victoria, Australia: Knowledge Exchange. Online: <http://www.knowledge-exchange.info/Default.aspx?ID=316>.

## Study of Open Access Publishing SOAP

**Dallmeier-Tiessen et al. (2011):**

8 - 10 % of all journal articles published are published in Open Access journals

Dallmeier-Tiessen, S., Darby, R., Goerner, B., Hyppoelae, J., Igo-Kemenes, P., Kahn, D., et al. (2011). Highlights from the SOAP project survey. What Scientists Think about Open Access Publishing. Retrieved February 2, 2011, from <http://arxiv.org/abs/1101.5260>.

## **Björk et al. (2010)**

From all peer-reviewed articles published about 20% are available under Open Access conditions

- 8,5% Self-Publishing/ Golden Road
- 11,9% Self-Archiving/ Green Road

Björk, B.-C., Welling, P., Laakso, M., Majlender, P., Hedlund, T., & Guðnason, G. (2010). Open Access to the Scientific Journal Literature: Situation 2009. *PloS one*, 5(6), e11273. doi: 10.1371/journal.pone.0011273.



How do scientists appreciate Open Access publications as sources of information?



*Figure 6: Experience in accessing Open Access literature by disciplines*

Hess, T., Wigand, R. T., Mann, F., & Walter, B. V. (2007). *Open Access & Science Publishing. Results of a Study on Researchers' Acceptance and Use of Open Access Publishing*. München.

Online: [http://openaccess-study.com/de\\_publications.html](http://openaccess-study.com/de_publications.html).

How do scientists appreciate Open Access publishing?

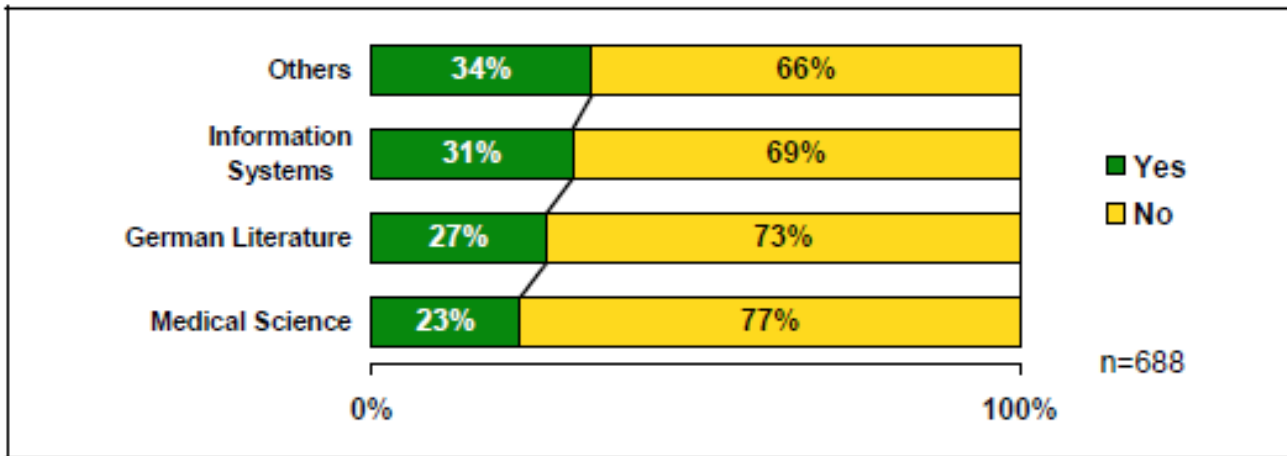


Figure 7: Experience in Open Access publishing by disciplines

Hess, T., Wigand, R. T., Mann, F., & Walter, B. V. (2007). *Open Access & Science Publishing. Results of a Study on Researchers' Acceptance and Use of Open Access Publishing*. München.  
Online: [http://openaccess-study.com/de\\_publications.html](http://openaccess-study.com/de_publications.html).

# Acceptance



## Hess et al. 2007: Pros & Cons of OA

Supporting factors	Inhibiting factors
... for the further diffusion of Open Access publishing	
Attitude towards Open Access is extremely positive	Low level of peer use
Experience in accessing Open Access literature is quite high	Deficient reach of core target group of colleagues of own discipline
Almost one fourth of the respondents plans to publish in Open Access media	No institutional support
Higher speed of publication	Higher reputation of traditional publication media
Possibly higher citation rates	Little familiarity
Easy access for researchers in developing countries	Deficient impact factor
Large readership	No guarantee of long-term availability
Belief that Open Access publishing is easy to learn	Lower chances to secure research funds
Choice of preferred publication medium is mostly within researchers' control	Negative impact on promotion and tenure (career choices)
Technical requirements and know-how exist	

Hess, T., Wigand, R. T., Mann, F., & Walter, B. V. (2007). *Open Access & Science Publishing. Results of a Study on Researchers' Acceptance and Use of Open Access Publishing*. München.  
Online: [http://openaccess-study.com/de\\_publications.html](http://openaccess-study.com/de_publications.html).

## A confrontation

### Open Data

- Content is generated out of more or less altruistic reasons (OSM)
- Content production is part of administrative routines (Open Government Data): Content generation is an end in itself
- Mostly: No commercial interest

### Open Access as a model of scientific publishing

- Content (scientific publications) is generated out of professional aspirations: *publish or perish*
- Mostly: commercial interest of publishing houses

## Authors

- producers of content
- often promiscuous about Open Access or Toll Access – as long the publication conveys impact and reputation

## Scientists: Advocates of Openness or Free Riders?

- Scientists are eager to accumulate scientific capital
- Scientific capital is indispensable for a scientific career and offers access to desirable symbolic and material goods (expert activities, promotion, tenures, higher income, better material equipment, reputation, ...)
- Scientific capital is gained by publishing articles in renowned journals or by publishing monographs in renowned monograph publishing houses

## Gerhard Fröhlich:

the officially proclaimed free and open competition of ideas is often replaced by strategic retention of information in science:

- Communicate informally *just as much as absolutely necessary* to keep corporations alive.
- *Publish only as much as indispensable* to preserve one's claim for priority on findings and their originality.
- *Circulate informally or publish as little information of practical use as possible* to prevent competitors from taking competitive advantage of this information.

Gerhard Fröhlich, 1998. "Optimale Informationsvorenthaltung als Strategem wissenschaftlicher Kommunikation," In: Harald H. Zimmermann and Volker Schramm (editors). *Knowledge Management und Kommunikationssysteme [Workflow Management, Multimedia, Knowledge Transfer]*. *Schriften zur Informationswissenschaft*, volume 34. Konstanz: Universitätsverlag Konstanz, pp. 535–549. (not available in English language)

Herb, Ulrich (2010): Sociological implications of scientific publishing: Open access, science, society, democracy, and the digital divide. *First Monday*, Volume 15, Number 2 - 1 February 2010  
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2599/2404>

## Gerhard Fröhlich:

- valuable information are objects of secrecy, objects of barter, gifts
- generally as objects of value they will not be randomly scattered
- retention of information pertains, for example, to details about experiments (so-called *local knowledge*), undocumented information of practical use, information relative to the context of scientific discovery, and of course specifics defined in a very codified jargon

Gerhard Fröhlich, 1998. "Optimale Informationsvorenthaltung als Strategem wissenschaftlicher Kommunikation," In: Harald H. Zimmermann and Volker Schramm (editors). *Knowledge Management und Kommunikationssysteme [Workflow Management, Multimedia, Knowledge Transfer]. Schriften zur Informationswissenschaft*, volume 34. Konstanz: Universitätsverlag Konstanz, pp. 535–549. (not available in English language)

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## Pierre Bourdieu:

- field of science is “a place and an object of battle, in perception as well as in reality.”
- the assumption that there are no distributive mechanisms or distributive struggles in this field is an *illusio*

“Thus, in a certain way, the strategies of the actors are always two–faced, ambiguous, driven by interests as well as disinterested, inspired by a kind of unselfish self–interest which allows for completely antagonistic but equally erroneous (on account of their one–sidedness) description of motives – one hagiographic and idealizing, the other cynical and reductionist in its denunciation of a scientific capitalist as a capitalist like any other.”

Pierre Bourdieu, 1998. *Vom Gebrauch der Wissenschaft: Für eine klinische Soziologie des Wissenschaftlichen Feldes*. Konstanz: UVK Universitätsverlag Konstanz (not available in English language)

Herb, Ulrich (2010): Sociological implications of scientific publishing: Open access, science, society, democracy, and the digital divide. *First Monday*, Volume 15, Number 2 - 1 February 2010  
<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2599/2404>

## Publishing Houses

- driven by commercial interests

Divergence:

- OA is considered a menace to commercial publishing models, calumny campaigns by publishing industry (e.g. <http://bit.ly/jOqDli>)
- OA is considered a sustainable business model (Springer Science bought the Open Access Publisher BioMed Central)

## Libraries

- Are hosting most of the Open Access Repositories
- Are establishing Open Access Publishing Services (Open Access Journals, Open Access Monograph Publishing Houses)
- Are undertaking (often extensive) infrastructure projects to exchange and process Open Access publications and to make them openly available
- Have a great experience with the storage, collection and management of scientific information
- Have much less experience in the production of scientific content
- Are bureaucratic institutions

## Open Access

- Content production is mostly not primarily driven by intrinsic altruistic motivation
- Dissemination of content is mostly driven by commercial interests
- Funding of Open Access is often focused on large infrastructure projects, not on incentives

What can Open Access learn from the Open Knowledge initiatives?

**Thank you very much for  
your attention!**

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