

Open Access – some reflections from a Northern perspective

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Survey of how researchers search for information (2000)

2.3 How do you retrieve interesting publications?

Having been alerted somehow about the existence and potential interest of a particular publication, how do you retrieve it.

Grade between 1=never ... and 5=very often

Free material on paper:


 [2.5](#) | contact the author, his department etc. and ask for a paper copy.

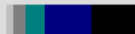
Paid for material on paper:

 [3.1](#) | go to the department or university library and fetch a copy.

 [3.1](#) | order the original publication through web, bookstore or library service.

Free material over the Internet:

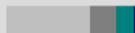
 [2.7](#) | contact the author and ask for a digital copy

 [3.9](#) | download a version from the author's website

 [3.5](#) | download from a publisher's website.

Paid for material over the Internet:

 [2.0](#) | download from a publisher's website (subscription or site licence)

 [1.7](#) | download from a publisher's website (pay per view)

SciX project 2002-2004

- Open, self organising repository for scientific information exchange
- European Commission funding €1.000.000
- IST-2001-33127, Key Action III
- Seven partners from six countries
- Main objective to make a demonstrator subject-based open access repository
- Secondary objective to study the scientific publishing process and new emerging business models



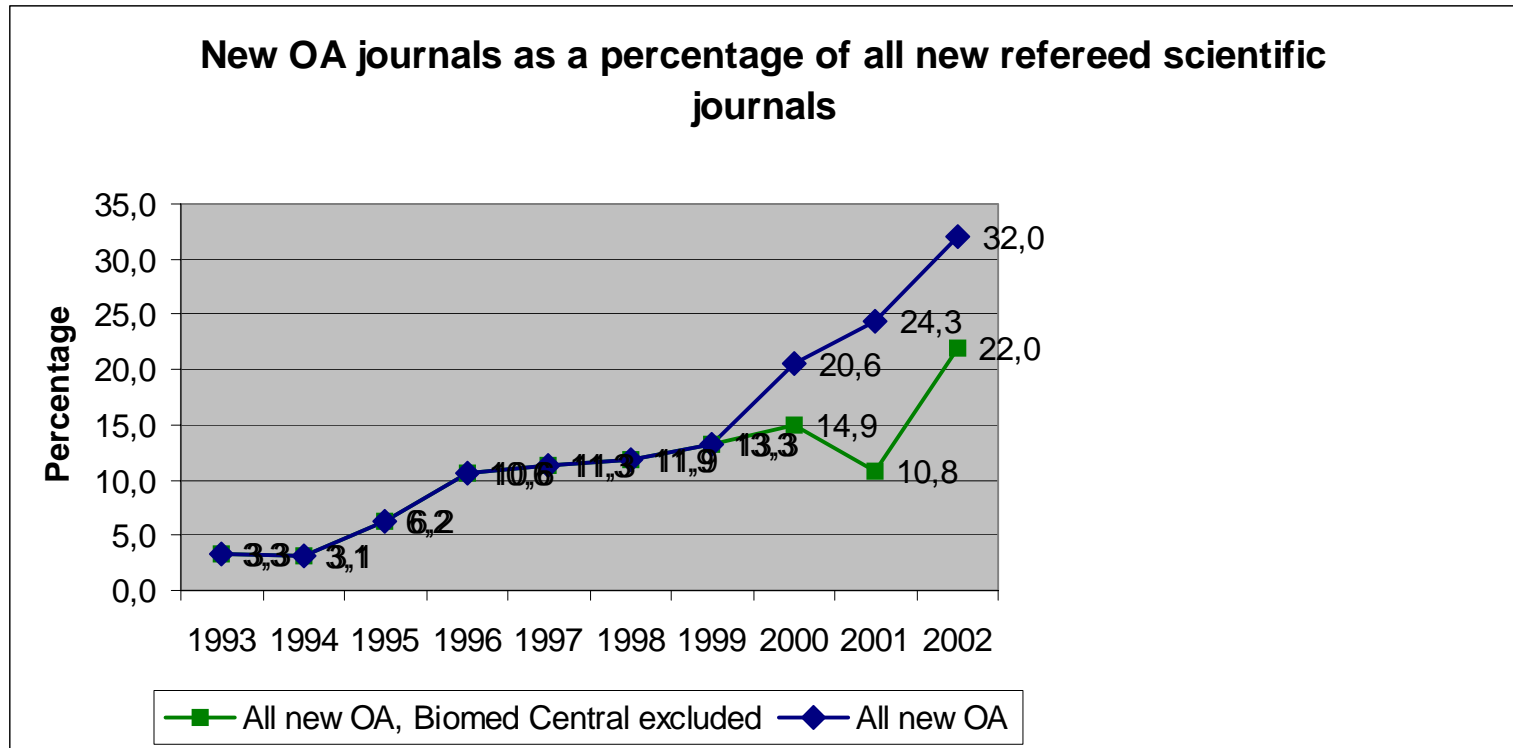
Some "deliverables" from the SciX project

- The scientific Communication Life-cycle model
- A study of the barriers to OA
- A study of the economy of OA journals

Barriers for OA proliferation?

	Journals	Subject repositories	Institutional repositories
Legal framework	-	*	**
IT-infrastructure	**	**	**
Business models	***	**	*
Institutional behaviour	***	**	*
Standards	**	*	***
Awareness, critical mass	***	**	***

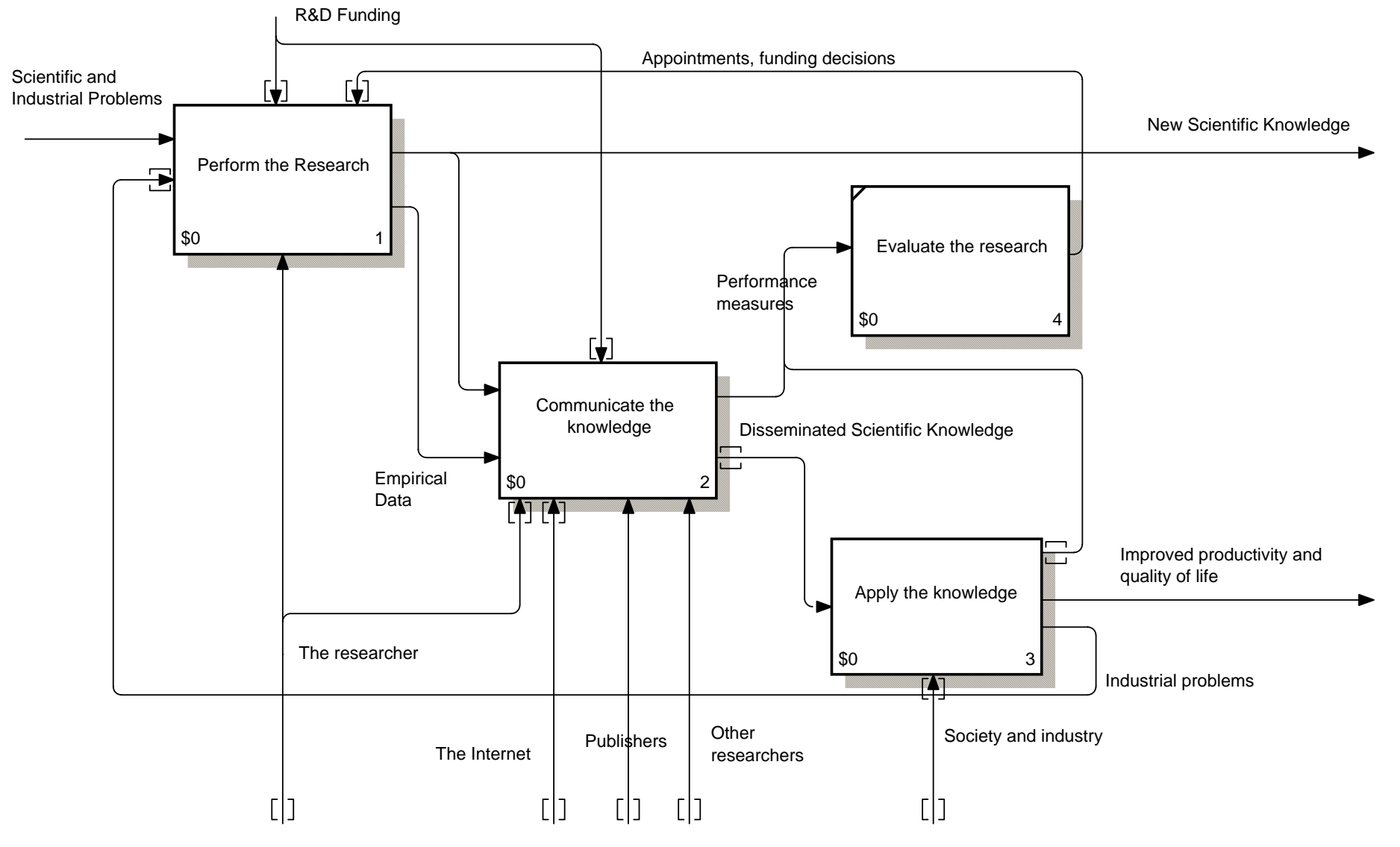
A study of the economics of OA journals

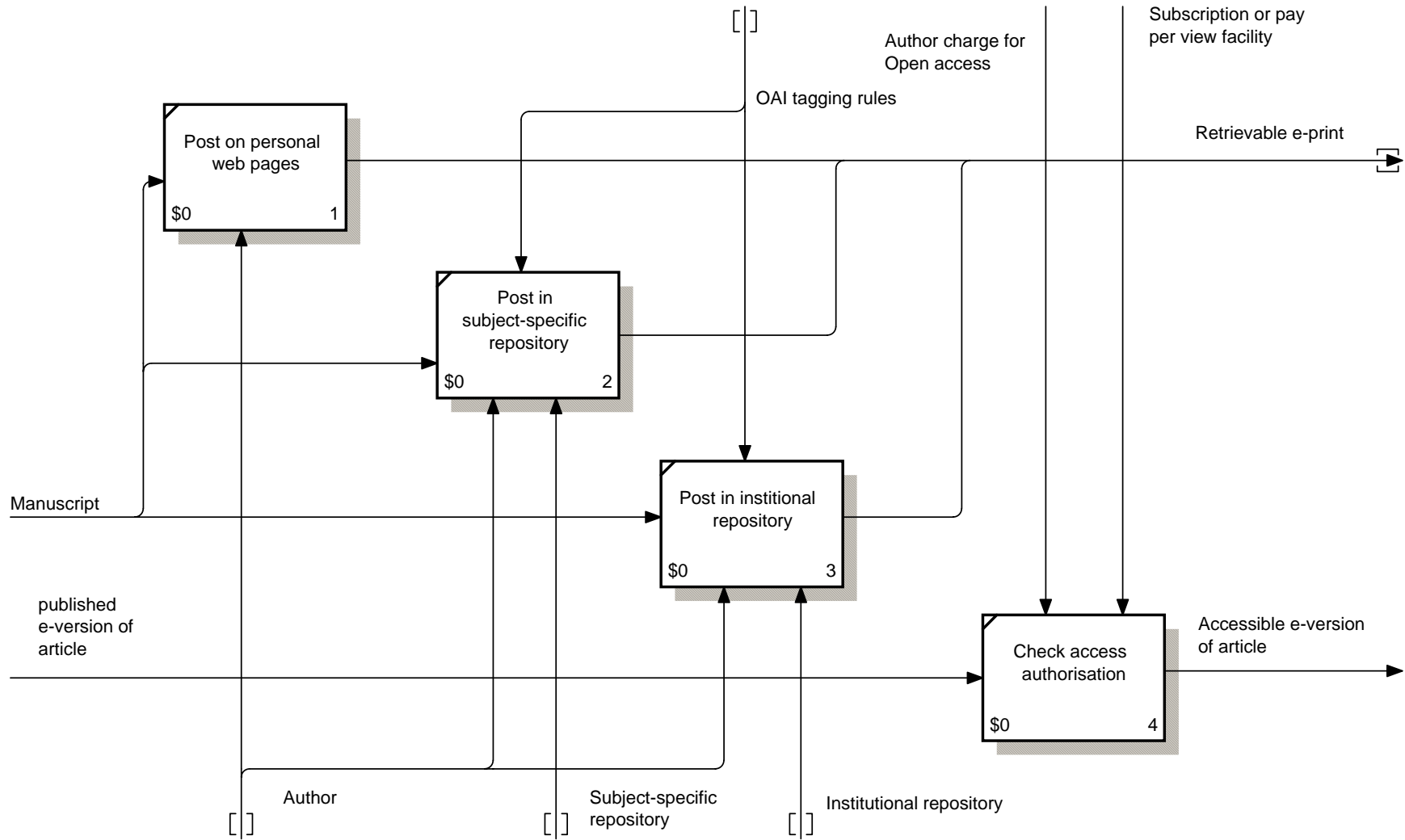


OACS project 2004-2007

- Funding from the Academy of Finland
- Further development of the Scientific Communication Life-cycle Model
- A study of why the REPEC repository is successful
- Copyright aspects related to OA publishing







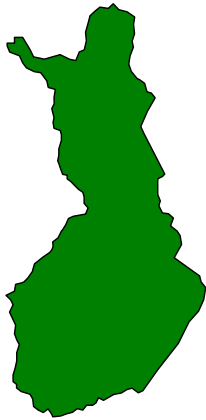
FinnOA working group

- Founded in April 2003
- Unofficial status
- Lobbying and informing main tasks
- Subgroups for information, Institutional repositories and OA-journals



”National policy situation”

- High level ministry work group appointed in September 2004 by the Minister of Education
- Has completed its work in February 2005



The government OA committee report

- Appointed by the minister of education in Sept. 2004
- Report published in March 2005
- Central high-level policy makers members
- Rapid work, consensus on most issues easily achieved

Ministry OA work group results

- 30 concrete recommendations to
 - Research funders
 - Universities and public research institutes
 - Individual researchers
 - Scientific journals and societies
 - Libraries
 - The ministry of education

Recommendations in a nut-shell

- Both OA journals and posting in OA repositories recommended
- No absolute mandating, only recommendations
- Recommends that the Academy and the universities collectively sign the Berlin declaration
- Costs for author charges to OA-journals will be allowable costs
- Funding is likely to be made available for setting up IRs and for converting scientific Journals to OA

Finnish Premier Vanhanen on Open Access

- "One important recommendation concerns the advancement of open access scientific publishing. The goal is that scientific publications will be freely available on the net for citizens and scholars. At the moment the usage and availability of the scientific publications is curtailed by the high subscription fees of printed journals and electronic scientific publications, and also by publishing agreements in which the scholars surrender some of their rights to the publishers. In the name of the progress of science and for the benefit of research it is necessary that the results of the scientific inquiry reach both the academic community and the general public as soon and as easily as possible. I regard this issue especially important also from the point of view of the Information Society Programme of the government."

Finnish Premier Matti Vanhanen in his opening speech of the Science Days, Jan 2005

Current global situation of OA

- Most stakeholders agree that global OA would be beneficial
- Nevertheless it is very difficult to get momentum in the shift from toll-access to OA
- This concerns both the "Gold" and the "Green Route"

The Gordion knot of Open Access



A possible solution? Institutional open choice

- It is very difficult to get researchers to pay article charges from their own research budgets
- Biomed Central has pioneered institutional membership in article charges
- The same technique could be used for the Open Choice options now offered by some major publishers

The viewpoint of the publisher

- Open access funded by author charges would be OK provided that they get the same income as before in relation to their costs
- A big problem is the transition from paid access to open access

Current offering from the publishers

- Author charges for open access in the range of 2500 – 3000 Dollars
- They promise that future subscription fees will be based on the total amount of non open access articles
- Seems be very slow in gaining acceptance

The viewpoint of the universities and their consortia

- They have a budget restriction of their current acquisition budgets for serials
- If the sum of author charges and subscriptions for a particular publisher stays within this budget they could be willing to go over to open access

A calculation of the demand side

- **Based on the data in spreadsheet produced at Cornell¹ a number of calculations can be made**
- **Estimate of the serials expenditure of 112 US universities (2003 SUM 308 Mill USD)**
- **Estimate of the number of first author paper for each university (318 000)**
- **This means that if the universities switched all their subscriptions to author payments the level would be 1000 USD /published article**

Long term solution

- The academic sector (including public research organisations) transform their subscription budgets for a particular publisher to institutional membership in their open choice schemes
- This will probably account for 70 -80 % of the current subscription income. Combined with the potential savings this should be a possible equation for the publisher

Transition problem

- What is the level author charges in the intermediate term when some institutions/countries buy open choice, others not?

Solution

- The consortium from country Z, the members of which produce x % of all the papers in the publisher's portfolio, makes a long term deal.
- The institutional open choice is at first $x/100$ times the current subscription, and the subscription is
- $(1-x/100)$ times current subscription
- As other consortia and institutions join and the overall share of open content in the portfolio grows the author charge part rises and the subscription decreases, so that the sum stays the same
- Those who don't join don't get a reduction in subscriptions but they do get the same service as before

Short term effects (OA < 50 %)

- The fast mover institutions who sign an Open choice agreement are in fact subsidized by those who just continue paying the current subscriptions
- The added value for fast movers is that the articles for the authors they represent are OA
- The income of the publisher remains the same
- This transition period should if possible be short

Long term effects (OA > 50%)

- Pressure to lower subscription prices also of those who only subscribe
- At some threshold % go for total OA and skip subscriptions to the electronic version altogether
- For those authors who are not covered by institutional open choice the publisher should offer individual open choice
- This should be at the average per paper cost of final equilibrium level of the institutional charges

Critical issues

- Much depends on the speed of signing the bigger institutional agreements. If this can be done within 1-2 years this might be feasible
- European library consortia are in a key position

Long term problem

- After OA has been achieved there is a need to calculate the institutional membership fees so that they reflect the number of articles produced rather than current subscriptions
- The overall level per article is also problematic since different publisher will have different levels

the free rider dilemma?

- If all journals of a publisher convert to OA and this is financed by author charges then current industrial and practitioner subscribers get a free ride!
- On the other hand Industrial R&D is heavily subsidized already
- Now those who use the journals benefit in exact proportion to usage and there are no bureaucratic overheads

References

OACS - Open Access Communication for Science

<http://oacs.shh.fi/>

Open, self organising repository for scientific information exchange - SciX

<http://www.scix.net/>

Finnish Open Access working group (FinnOA)

<http://www.lib.helsinki.fi/finnoa/>

Recommendations for the promotion of open access in scientific publication in Finland, Ministry of education 2005
<http://www.minedu.fi/julkaisut/tiede/2005/tr16/tr16.pdf>

SCIX Home Page

Björk, Bo-Christer, Turk, Ziga

How Scientists Retrieve Publications: An Empirical Study of How the Internet Is Overtaking Paper Media
Journal of Electronic Publishing, Michigan University Press, Vol. 6/2. 2000

<http://www.press.umich.edu/jep/06-02/bjork.html>

Hedlund, T., Gustafson, T. and Björk, B-C (2004).

The Open Access Scientific Journal: An Empirical Study,
Learned Publishing, Vol 17 No. 3 pp. 199-209

Björk, Bo-Christer

Open Access to scientific publications – an analysis of the barriers to change?

Information Research, Information Research, 9(2) paper 170 [<http://InformationR.net/ir/9-2/paper170.html>]

Björk, Bo-Christer. Scientific communication life-cycle model. Version 3.0, 2005-02-10.

<http://oacs.shh.fi/publications/Model35explanation2.pdf>

Björk, Bo-Christer. Scientific Communication life-cycle model

To be published, Learned publishing, June 2005

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