

These slides were made by
Tim Brody and Stevan Harnad
(Southampton University)

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Putting the Berlin Principle into Practice

The Southampton Keystroke
Policy

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

<http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>

Here are its pertinent passages, distilling the essence
[while flagging the points that are still too vague/ambiguous
for a practical, concrete implementation]

“Open access [means]:

“1. free... [online, full-text] access *[to what?]*

“2. A complete version of the [open-access] work *[= what?]* ... is deposited... in at least one online repository... to enable open access, unrestricted distribution, [OAI-] interoperability, and long-term archiving.

“[W]e intend to... *encourag[e]*... our researchers/grant recipients to *publish [?]* their *work [?]* according to the *principles [?]*... of the open access *paradigm [?]* .”

[underlining and **color** added to flag important and **problematic** portions]

UK House of Commons Science and Technology Committee Recommendation to Mandate Institutional Self-Archiving

<http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39903.htm>

“This Report recommends that **all UK higher education institutions establish institutional repositories** on which their published output can be stored and from which it can be read, free of charge, online.



“It also recommends that **Research Councils and other Government Funders mandate their funded researchers to deposit a copy of all of their articles** in this way.

[The Report also recommends funding to encourage further experimentation with the “author pays” OA journal publishing model.]

US House of Representatives Appropriations Committee Recommendation that the NIH should mandate self-archiving

http://thomas.loc.gov/cgi-bin/cpquery/?&db_id=cp108&r_n=hr636.108&sel=TOC_338641&



“The Committee... recommends NIH develop a policy... **requiring that a complete electronic copy of any manuscript reporting work supported by NIH grants.. be provided **to PMC** upon acceptance... for publication... [and made] freely and continuously available **six months after publication**, or immediately **[if]... publication costs are paid with NIH grant funds.****

(since passed by both House and Senate, then weakened by NIH to “encourage” rather than require, and within 12 months rather than 6; publication-charge rider dropped; delay/embargo period up to author; encouraged to self-archive as soon as possible)

Open Access

- What?
- To What?
- Why?
- How?

Open Access: What?

Free,
Immediate
Permanent
Full-Text
On-Line
Access

Open Access: To What?

2.5 million annual
research articles

In 24,000
peer-reviewed
journals (conferences)

Open Access: To What?

ESSENTIAL:

to all 2.5 million annual
research articles

published in all 24,000 peer-
reviewed journals (or
conferences) in all
scholarly and scientific
disciplines, worldwide

OPTIONAL:

(because these are not all author give-aways,
written only for usage and impact)

1. Books
2. Textbooks
3. Magazine articles
4. Newspaper articles
5. Music
6. Video
7. Software
8. "Knowledge"

(or because author's choice to self-archive can
only be encouraged, not required in all
cases):

9. Data
10. Unrefereed Preprints

Open Access:

Why?

Open Access: Why?

To maximise:

research visibility
research usage
research uptake
research impact
research progress

By maximising:

research access

The objective of open-access self-archiving (and what will persuade researchers to provide it)

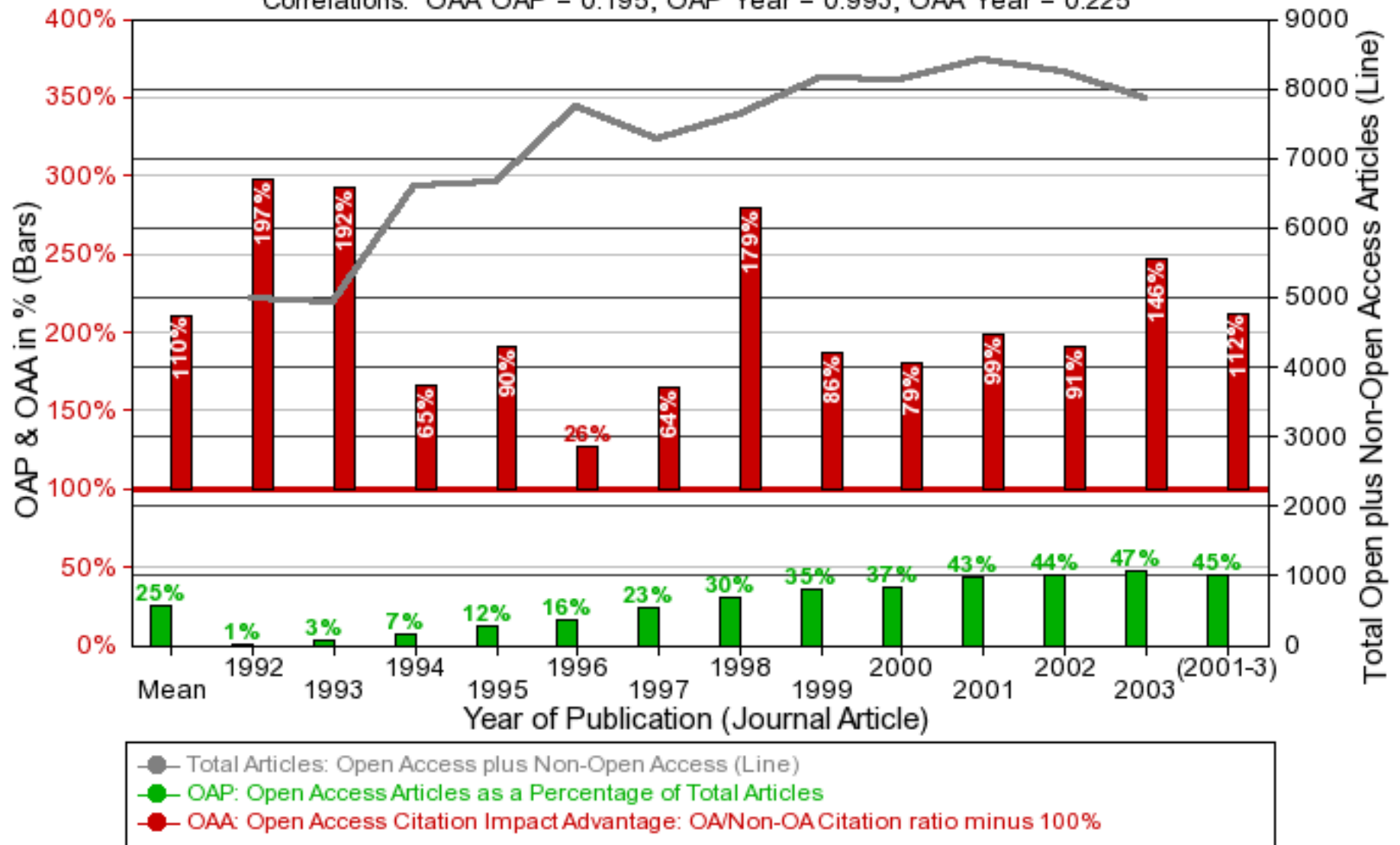
- **is not** to quarrel with, ruin or replace journals, publishers or peer review
(at all)
(Self-archiving is a supplement to, not a substitute for journal publication; it is done for the sake of providing access to all would-be research-users worldwide whose institutions cannot afford the publisher's official version.)
- **nor** will researchers be persuaded to self-archive for the sake of providing access to teachers - students - the general public **(*and yet that will come with the territory...*)**
- **nor** will researchers be persuaded to self-archive for the sake of providing access to the Developing World **(*and yet that will come with the territory ...*)**
- **nor** will researchers be persuaded to self-archive for the sake of providing access to medical information for tax-payers **(*and yet that will come with the territory ...*)**
- **nor** will researchers be persuaded to self-archive for the sake of making all knowledge/information free **(*and yet some of that will come with the territory...*)**
- **nor** will researchers be persuaded to self-archive for the sake of relieving the budgetary problems of libraries **(*and yet some relief for access needs that exceed the budget will come with the territory...*)**

Citation impact for articles in the same journal and year are consistently higher for articles that have been self-archived by their authors. (Below is a comparison for Astronomy articles that are and are not in ArXiv.)

OA vs. Non-OA Citation Impact Advantage (Astronomy & Astrophysics)

On average 20.1 journals/year (incl. self-citations) - Fri Aug 20 20:37:18 2004

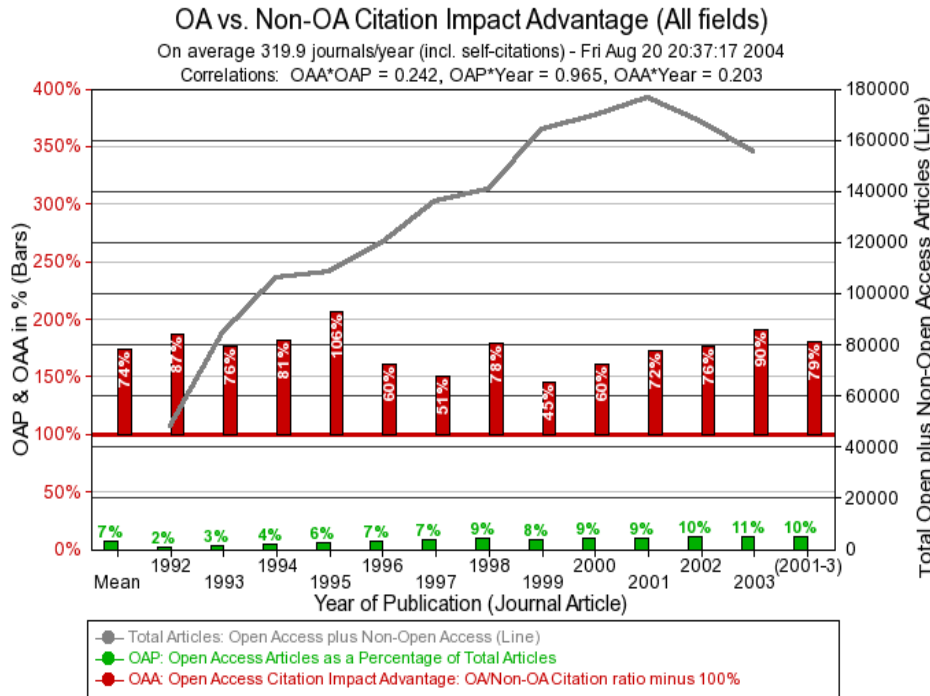
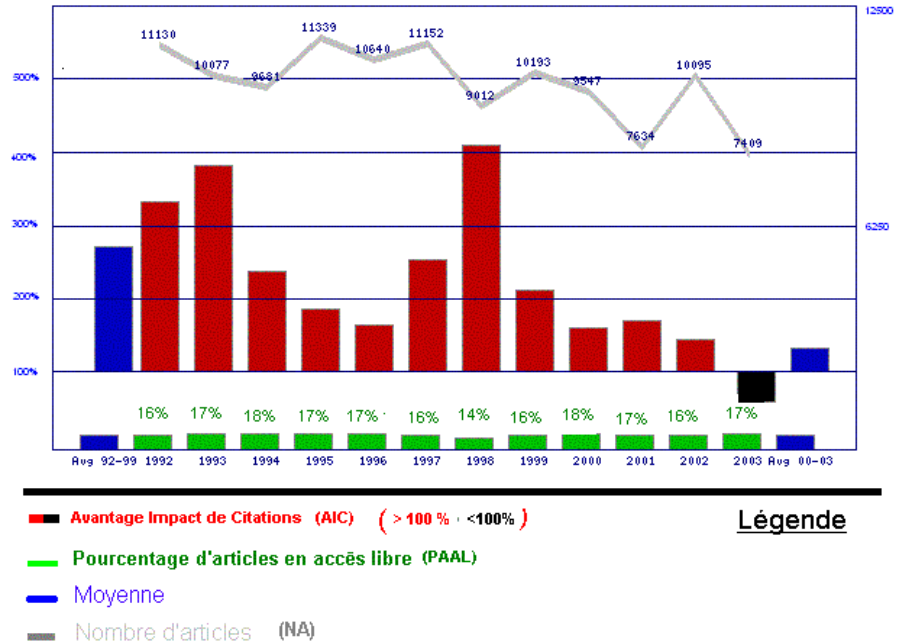
Correlations: $OAA * OAP = 0.195$, $OAP * Year = 0.993$, $OAA * Year = 0.225$



The citation impact advantage is found in all fields analyzed so far, including articles (self-archived in any kind of open-access website or archive) in social sciences (above right) biological sciences (below right) and all fields of Physics (self-archived in ArXiv, below). Note that the percentage of published articles that have been self-archived (green bars) varies from about 10-20% from field to field and that the size of the open-access citation impact advantage (red bars) varies from about 25% to over 300%, but it is always positive. <http://opcit.eprints.org/oacitation-biblio.html>

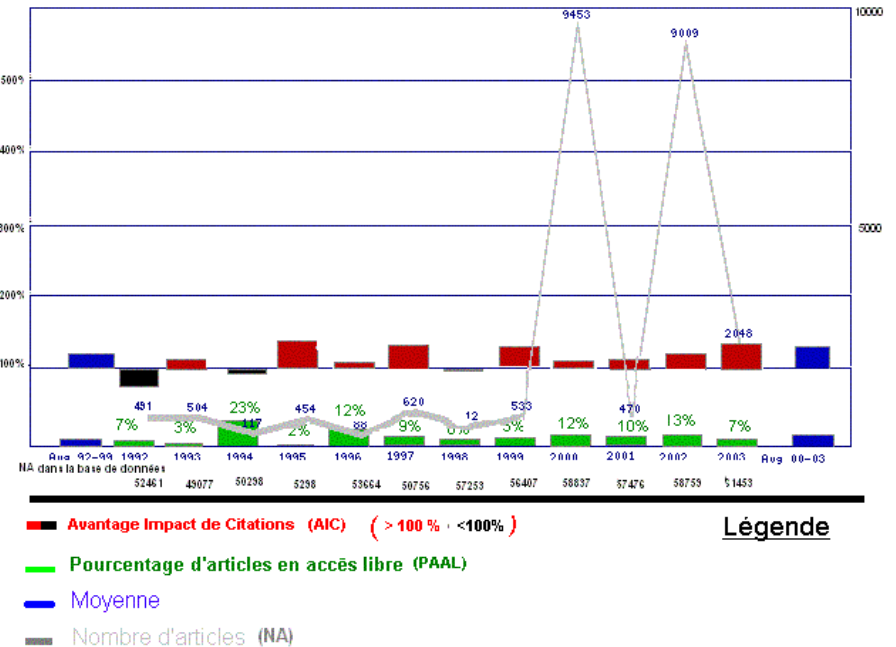
Discipline Sociologie

Corrélations: PAAL vs AIC -0.52, PAAL vs année -0.12, AIC vs année -0.66, PAAL vs NA 0.081, NA vs année -0.66, AIC vs NA 0.321



Discipline Biologie

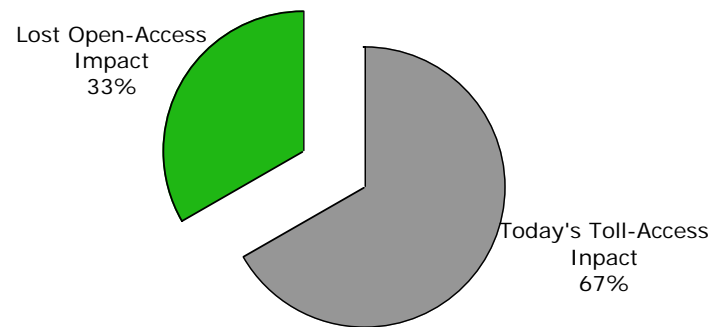
Corrélations: PAAL vs AIC -0.320, PAAL vs année 0.074, AIC vs année 0.193, PAAL vs NA 0.259, NA vs année 0.525, AIC vs NA 0.092



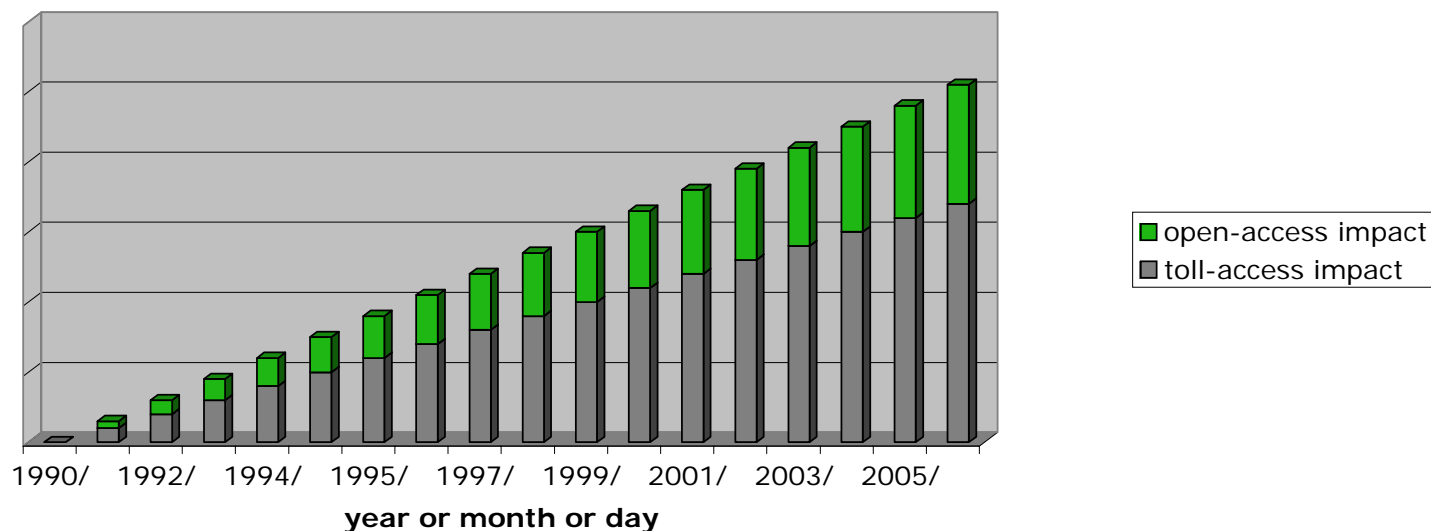
Quo usque tandem patientia nostra...?

How long will we go on letting our cumulative daily/monthly/yearly research-impact losses grow, now that the online medium has at last made this all preventable?

What we stand to gain once we provide Open Access
(assuming minimal 50% OA Advantage)



Our cumulative yearly/monthly/daily impact losses as long as we keep delaying Open Access
(assuming even only a minimal 50% OA advantage)



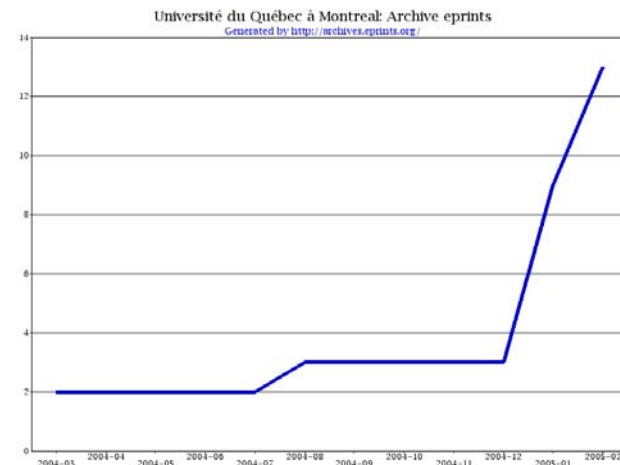
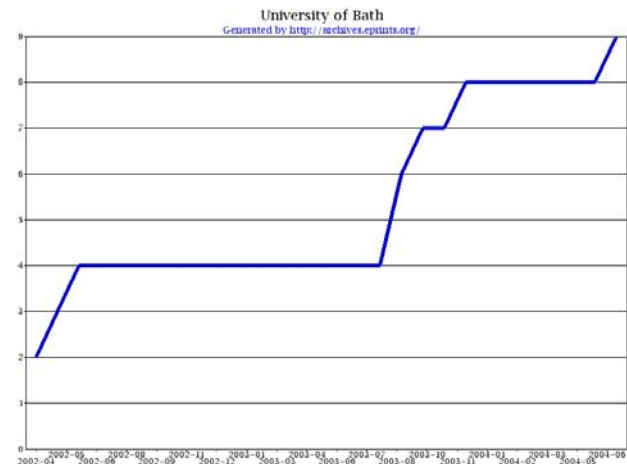
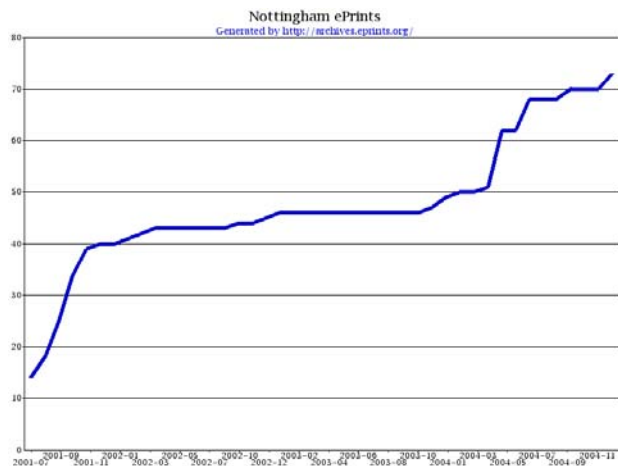
Open Access: How?

**Deposit all institutional research article
output**

In institutional OAI-compliant repositories

Open Access: **How Not:**

Archives **without** an institutional self-archiving policy
(near empty, in some cases for several years)



Institutional Archives Registry: (395 Archives, most near empty!)

<http://archives.eprints.org/eprints.php>

Archive Type

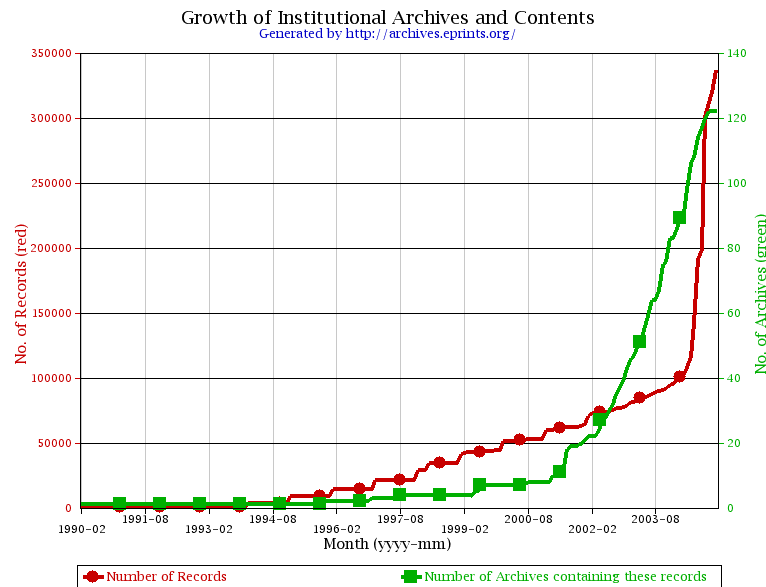
- * Research Institutional or Departmental (170)
- * Research Cross-Institution (51)
- * e-Theses (56)
- * e-Journal/Publication (33)
- * Database (8)
- * Demonstration (39)
- * Other (38)

Software

- * GNU EPrints v1 & v2 161)
- * DSpace (66)
- * CDSWare (9)
- * ARNO (2)
- * DiVA (1)
- * other (various) (155)

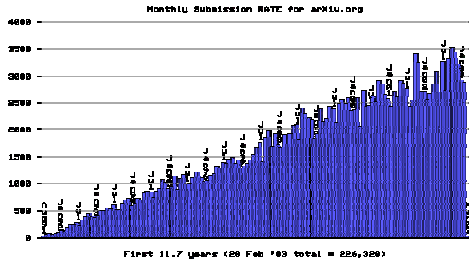
Country

- 1 United States (116)
 - 2 United Kingdom (51)
 - 3 Germany (29)
 - 4 Canada (26)
 - 5 France (18)
 - 6 Sweden (17)
 - 7 Australia (16)
 - 7 Netherlands (16)
 - 8 Brazil (14)
 - 9 Italy (13)
 - 10 India (6)
- * Japan 4)
 - * Spain 4)
 - * Hungary 4)
 - * China 4)
 - * Finland 4)
 - * Belgium 4)
 - * Denmark 4)
 - * Colombia 3)
 - * Mexico 3)
 - * Austria 3)
 - * Portugal 3)
 - * South Africa 3)
 - * Chile 2)
 - * Switzerland 2)
 - * Ireland 2)
 - * Singapore 2)
 - * Norway 2)
 - * Russia 1)
 - * Turkey 1)
 - * Argentina 1)
 - * Greece 1)
 - * Israel 1)
 - * Slovenia 1)
 - * Croatia 1)
 - * Namibia 1)
 - * Peru 1)
 - * Taiwan 1)

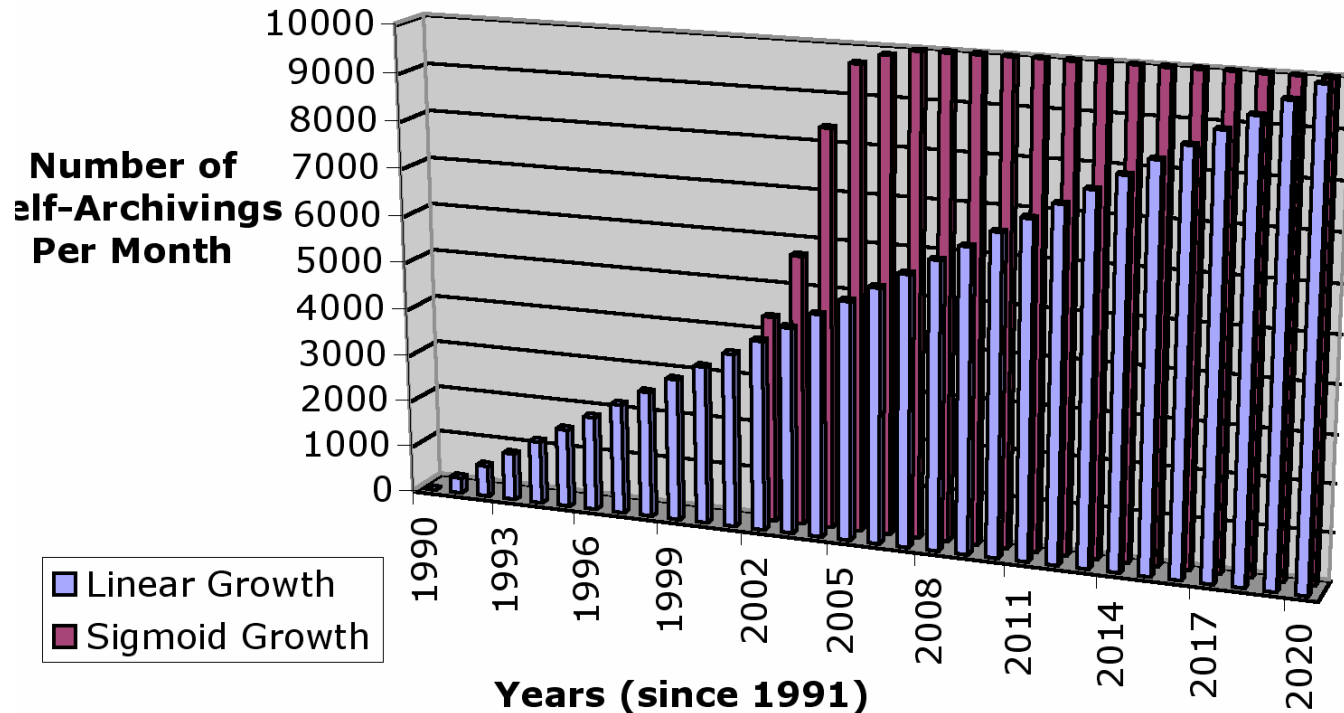


Even the fastest-growing archive, the Physics ArXiv, is still only growing linearly (since 1991):

At that rate, it would still take a decade before we reach the first year that all physics papers for *that year* are openly accessible (Ebs Hilf estimates 2050!)



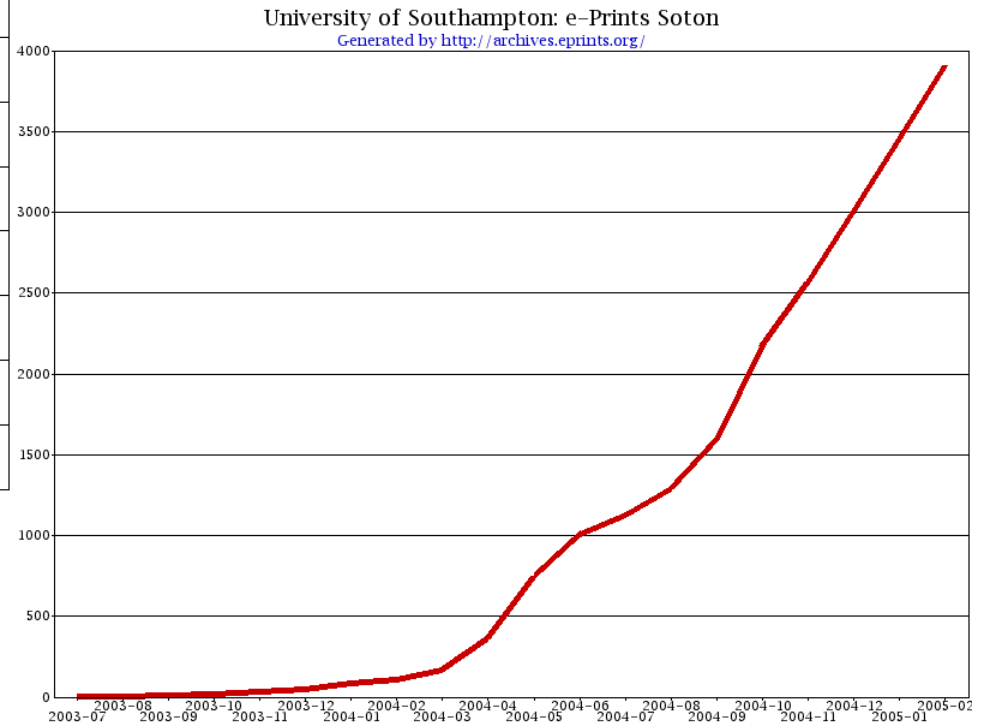
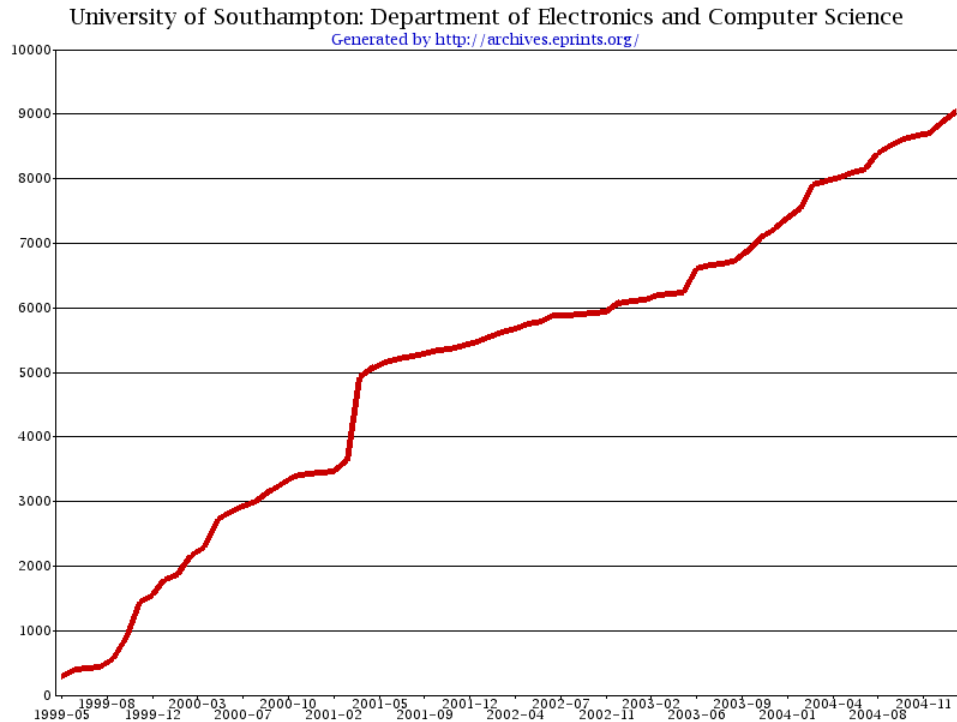
Physics ArXiv Growth (1991-2003-2020)



Open Access: How:

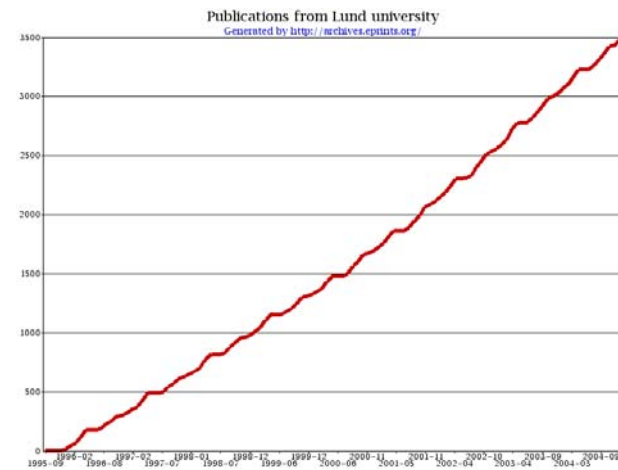
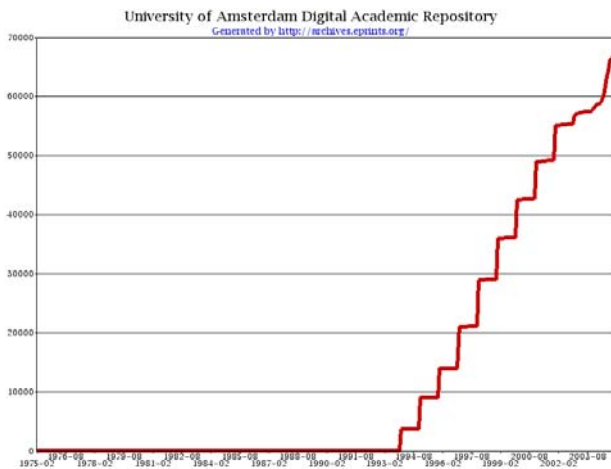
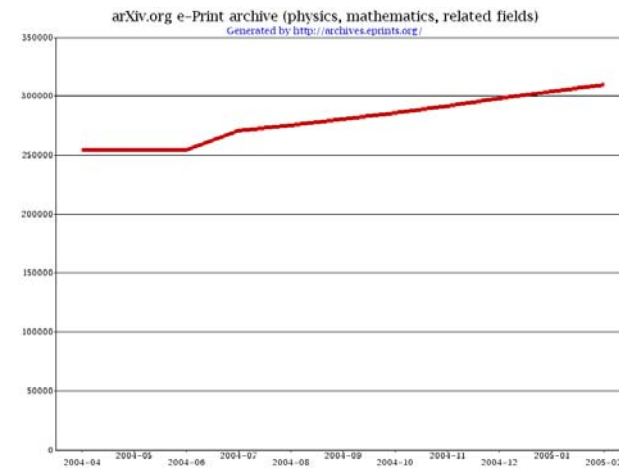
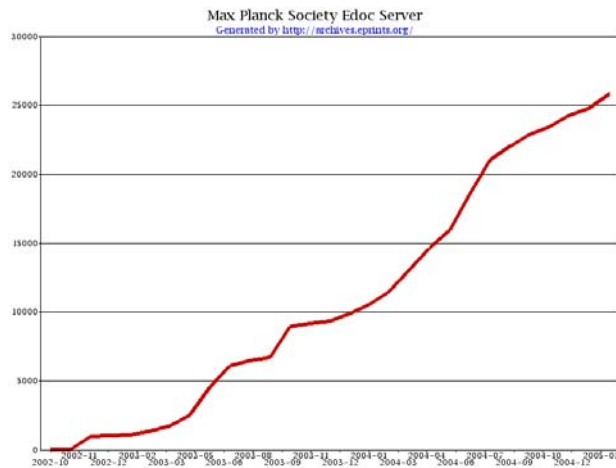
Two archives **with** an institutional self-archiving policy

Southampton Department of Electronic and Computer Science (since 2002)
and Southampton University (since 2004)



More archives with institutional self-archiving policies:

Max-Planck Institute (Edoc) (Germany), Physics ArXiv (USA),
University of Amsterdam (Netherlands), Lund University (Sweden)



**The author/institutional self-archived version
is a supplement to -- not a substitute for --
the publisher's official version**

1. Link the self-archived author/institution supplement to the publisher's official website
1. Pool and credit download counts for the self-archived supplement with downloads counts for the official published version
2. (All citation counts of course accrue to the official published version)

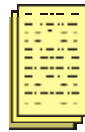
Limited Access: Limited Research Impact

12-18 Months

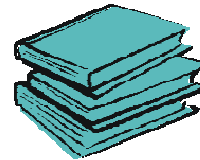
Impact cycle begins:
Research is done



Researchers write pre-refereeing "Pre-Print"



Submitted to Journal



Pre-Print reviewed by Peer Experts - "Peer-Review"

Pre-Print revised by article's Authors

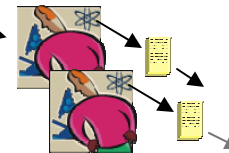
Refereed "Post-Print"
Accepted, Certified, Published by Journal



Researchers can access the Post-Print if their university has a subscription to the Journal



New impact cycles:
New research builds on existing research



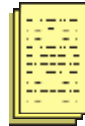
Maximized Research Access and Impact Through Self-Archiving

12-18 Months

Impact cycle begins:

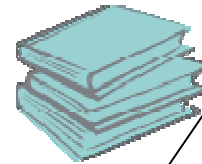


Researchers write pre-refereeing "Pre-Print"



Pre-Print is self-archived in University's Eprint Archive

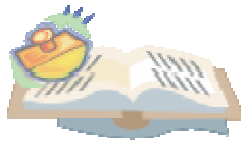
Submitted to Journal



Pre-Print reviewed by Peer Experts – "Peer-Review"

Pre-Print revised by article's Authors

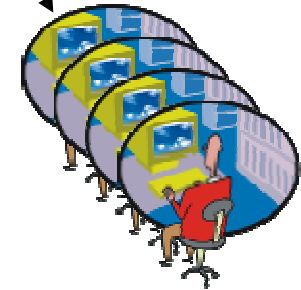
Refereed "Post-Print" Accepted, Certified, Published by Journal



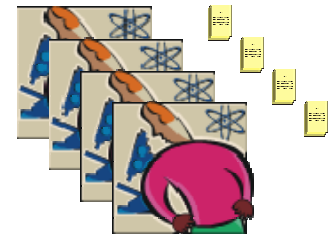
Researchers can access the Post-Print if their university has a subscription to the Journal



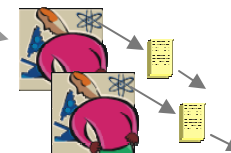
Post-Print is self-archived in University's Eprint Archive



New impact cycles:
Self-archived research impact is greater (and faster) because access is maximized (and accelerated)



New impact cycles:
New research builds on existing research



**For at least 10 years now,
keystrokes have been the only
barrier to 100% Open Access**

**Hence what is now needed is an
institutional keystroke policy.**

The Southampton Bureaucratic “Keystroke” Policy:

The keystrokes for depositing the metadata and full text of all Southampton research article output need to be performed (not necessarily by you)

For institutional record-keeping and performance evaluation purposes

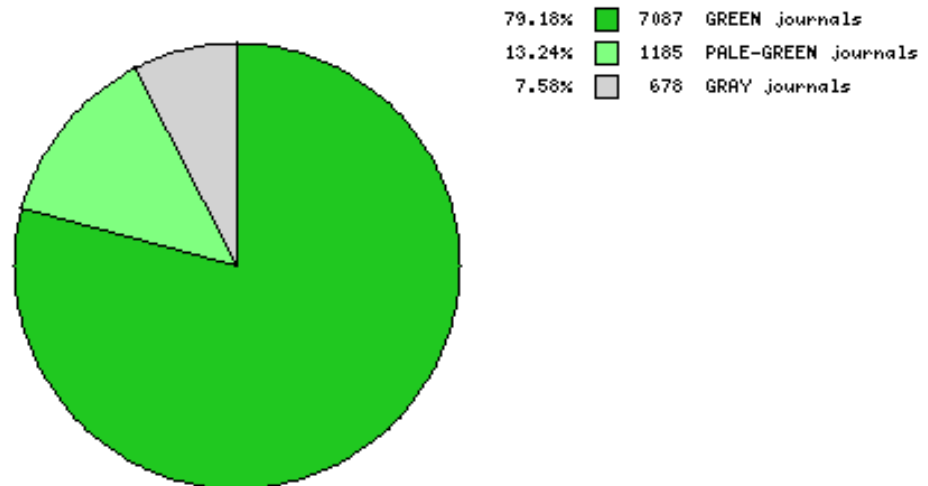
Otherwise your research productivity is invisible to the university (and RAE) bureaucracy

Southampton Bureaucratic “Keystroke” Policy: The Nth (OA) Keystroke

The metadata and full-text need merely be **deposited**, for the bureaucratic functions (for record-keeping and performance evaluation purposes)

The Nth (OA) Keystroke is strongly encouraged (for both preprints and postprints) but it is **up to you**.

Journal Policy Chart



**Current Journal Tally: 92% of journals
have already given their official green light to self archiving**

FULL-GREEN = Postprint 79%

PALE-GREEN = Preprint 13%

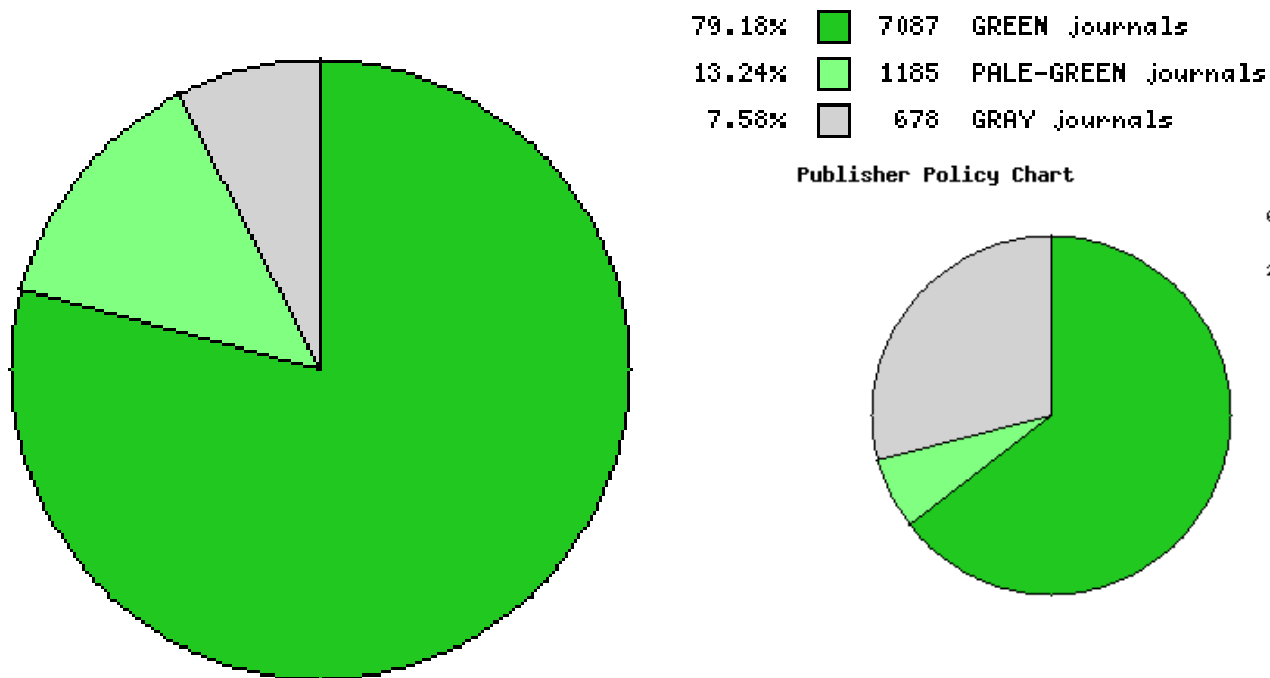
GRAY = neither yet 8%

Publishers to date: 110

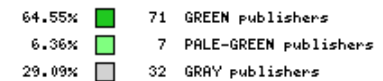
Journals processed so far: 8950

<http://romeo.eprints.org/stats.php>

Journal Policy Chart



Publisher Policy Chart



Dual Open-Access Strategy

GREEN (95%):

Publish your article in the toll-access journal of your choice (currently 23,500, >95%)

<http://romeo.eprints.org/stats.php>

OR

GOLD (5%):

Publish your article in an open-access journal if/when a suitable one exists (currently 1500, <5%)

<http://www.doaj.org/>

and

deposit all your articles

-- GREEN and GOLD --

in your own institutional repository

<http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39903.htm>



Berlin Declaration on



Open Access to Knowledge in the Sciences and Humanities

<http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>

The pertinent passages (updated in green):

“Open access [means]:

“1. **immediate** free... [online, full-text] access **to published research articles**

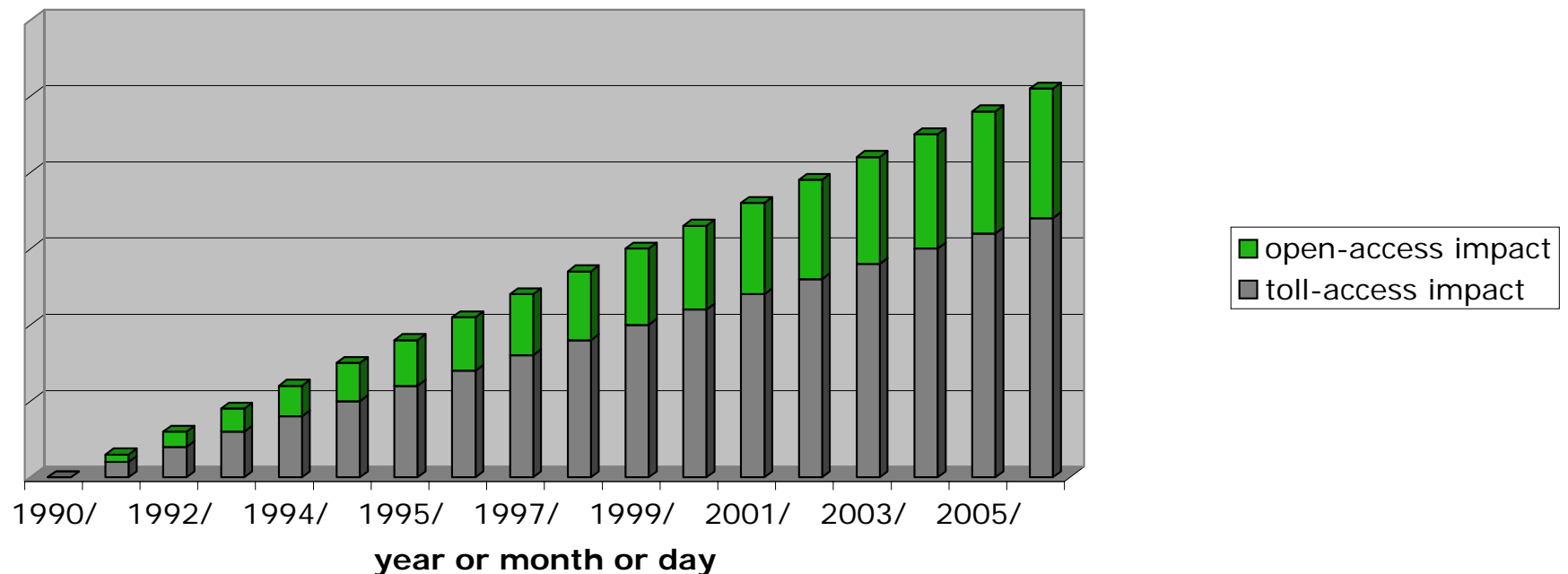
“2. A complete version of **every search article**... is deposited...
in at least one online repository... to enable open access, unrestricted
distribution, [OAI] interoperability, and long-term archiving.

“[W]e intend to... **(1) require**... our researchers/grant recipients to
self-archive all their research articles in our own institutional repository
and to (2) encourage them to make them... open access.”

Otherwise:

Berlin 4,5,6,7,8,9...?

Our cumulative yearly/monthly/daily impact losses as long as we keep delaying Open Access
(assuming even only a minimal 50% OA advantage)



Registry of Institutional Open Access Provision Policies

<http://www.eprints.org/signup/sign.php>

Universities and research institutions who officially commit themselves to *implementing* the Berlin Declaration by adopting a systematic institutional self-archiving policy for their own peer-reviewed research output are invited to describe their policy in this Registry so that other institutions can follow their example. *Self-archive unto others as ye would have them self-archive unto you...*

Institution	OA Archive(s)	OA Policy
Institut Jean Nicod, CNRS, France	http://jeannicod.ccsd.cnrs.fr/	Policy
Institut Nat. de la Rech. Agronomique (INRA), France	http://phy043.tours.inra.fr:8080/	Policy
Institute for Science Networking Oldenburg	http://www.isn-oldenburg.de/publications.html	Policy
Queensland Univ. Technology, Brisbane, Australia	http://eprints.qut.edu.au/	Policy
Rajiv Gandhi Center for Biotechnology	http://202.88.236.215:80/oai/oai2.php	Policy
Southampton Univ. Electronics/Computer Science	http://eprints.ecs.soton.ac.uk/	Policy
Universidade do Minho, Portugal	https://repositorium.sdum.uminho.pt	Policy
Universitaet Hamburg, Germany	http://www.rrz.uni-hamburg.de/FZH/archiv.html	Policy
University of Southampton, UK	http://eprints.soton.ac.uk/	Policy