#### Strategies for Open Access

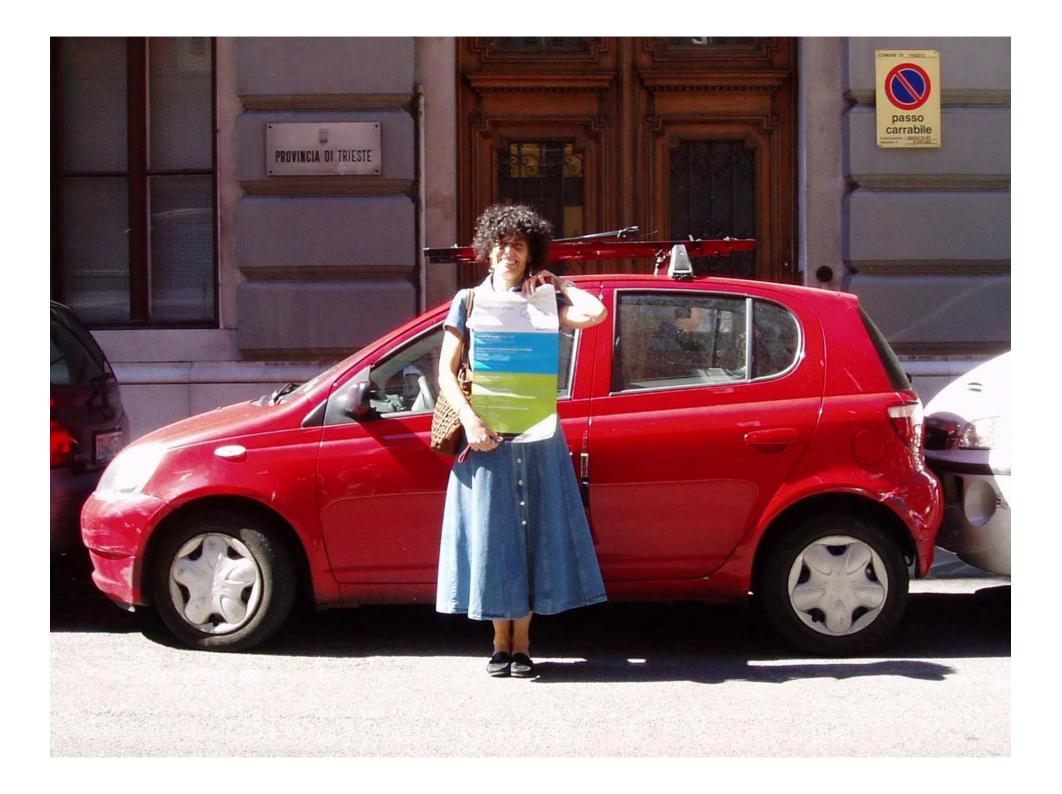
Alma Swan Key Perspectives Ltd Truro, UK

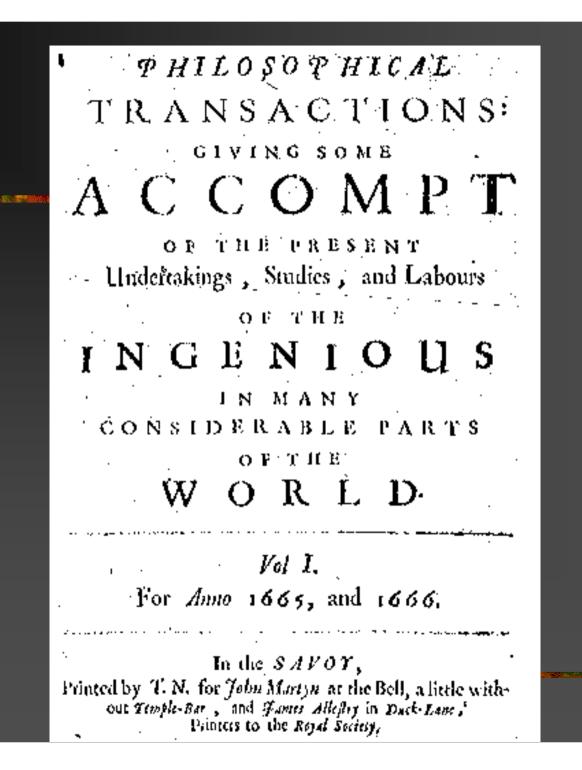
Berlin 5 Conference on Open Access Padua, 19-21 September, 2007

#### **Categories for strategies**

- OAJs
- IRs
- Policies
- Societies

Institutions / funders (including the EU)





#### (1) Numb. 1. PHILOSOPHICAL TRANSACTIONS.

Munday, March 6. 166.

#### The Contents.

An Introduction to this Tract. An Accompt of the Improvement of Optick Glasses at Rome. Of the Observation made in England, of a Spot in one of the Belts of the Planet Jupiter. Of the motion of the late Comet prædicted, The Heads of many New Observations and Experiments, in order to an Experimental History of Coldztogether with some Thermometrical Discourses and Experiments. A Relation of a very odd Monstrons Calf. Of a peculiar Lead-Ore in Germany, very useful for Essays. Of an Hungarian Bolus, of the same effect with the Bolus Armenus. Of the New American Whale fishing about the Bermudas. A Narative concerning the fuccess of the Pendulum-watches at Sea for the Longitudes; and the Grant of a Patent thereupon. A Catalogue of the Philosophical Books publisht by Monsteur de Fermat, Counsellour at Tholoufe, lately dead.

#### (10) An Account of a very odd Monstrous Calf.

By the same Noble perfon was lately communicated to the Royal Society an Account of a very Odd Monstrous Birth, produced at Limmington in Hampshire, where a Butcher, having caused a Cow (which cast her Calf the year before) to be covered, that the might the fooner be fatted, killed her when fat, and opening the Womb, which he found heavy to admiration, faw in it a Calf, which had begun to have hair, whose hinder Leggs had no Joynts, and whofe Tongue was, Cerberus-like, triple, to each fide of his Mouth one, and one in the midft: Between the Fore leggs and the Hinder-leggs was a great Stone, on which the Calfrid: The Sternum, or that part of the Breast, where

#### (17) Numbre PHILOSOPHICAL TRANSACTIONS.

Munday, April 3. 1665.

#### The Contents.

Extrail of a Letter written from Rome, concerning the late Comct, and a New one. Extrait of another Letter from Paris, containing fome Reflexions on the precedent Roman Letter. An Obfervation concerning fome particulars, further confiderable in the Monster, that was mention d in the first Papers of these Philosophical Transactions. Extrait of a Letter written from Venice, concerning the Mines of Mercury in Friuly. Some Obfervations, made in the ordering of Silk-worms. An Account of Mr. Hooks Micrographia, or the Physiological descriptions of Minute Bodies, made by Magnifying Glasses.

An Observation imparted to the Noble Mr. Boyle, by Mr. David Thomas, touching some particulars further considerable in the Monster mentioned in the first Papers of these Philosophical Transactions.

Upon the strictest inquiry, I find by one, that faw the Monftrous Calf and stone, within four hours after it was cut out of the Cows belly, that the Breast of the Calf was not stony (as I wrote ) but that the skin of the Breast and between the Legs and of the Neck (which parts lay on the smaller end of the stone ) was very much thicker, then on any other part, and that the Feet of the Calf were so parted as to be like the Claws of a Dog. The stone I have since seen; it is bigger at one end then

#### The Motion of the late Comet prædicied.

There was lately sent to one of the Secretaries of the Royal Society a Packet, containing some Copies of a Printed Paper, Entituled, The Ephemerides of the Comet, made by the same Person, that sent it, called Monsieur Auzout, a French Gentleman of no ordinary Merit and Learning, who defired, that a couple of them might be recommended to the faid Society, and one to their President, and another to his Highness Prince Rupert, and the rest to some other Persons, nominated by him in a Letter that accompanied this prefent, and known abroad for their fingular abilities and knowledge in Philosophical Matters. The end of the Communication of this Paper was, That, the motion of the Comet, that hath

#### Extract of a Letter, lately written from Rome, touching the late Comet, and a New one.



Cannot enough wonder at the strange agreement of the thoughts of that acute French Gentleman, Monsieur Auzout, in the Hypothesis of the Comets motion, with mine; and particularly, at that of the Tables. I have with the same method, where-

by I find the motion of this Comet, eafily found the Principle of that Author's Ephemerides, which he then thought not fit to declare; and 'tis this, that this Comet moves about the Great Dog, in fo great a Circle, that that portion, which is deferi-C bed.

# Of Way of killing Ratle-Snakes.

There being not long fince occasion given at a meeting of the Royal Society to discourse of Ratle-Snakes, that worthy and inquisitive Gentleman, Captain Silas Taylor, related the manner, how they were killed in Virginia, which he afterwards was pleased to give in writing, attested by two credible persons in whose prefence it was don; which is, as follows.

The Wild Penny-royal or Ditany of Virginia, groweth streight ip about one foot high, with the leaves like Penny royal, with ittle blue tufts at the joyning of the branches to the Plant, the colour of the Leaves being a reddish green, but the Water distilled, of the colour of Brandy, of a fair Yellow: the Leaves of it bruifed are very bot and biting upon the Tongue.

#### What are we trying to get to?

**Optimal communication:** worldwide almost real-time organised conversation about scholarly work

### Why? And why is OA the best way?

- Speeds up progress
- Maximises the involvement

- Increases the reach
- Enables better management and assessment of research
- Enables new technologies to create new knowledge



#### What is Open Access?

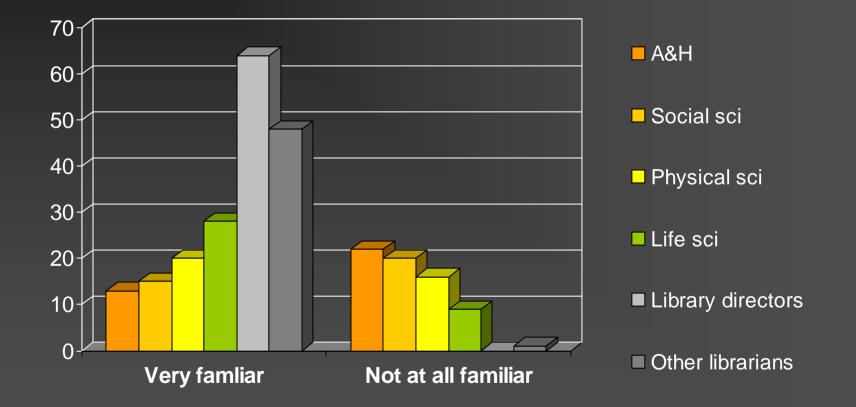
Definition creep
 Immediate, online, free, unfettered access to research outputs

#### No one's told the authors

Level of awareness is still lowLevel of understanding even lower



#### Awareness

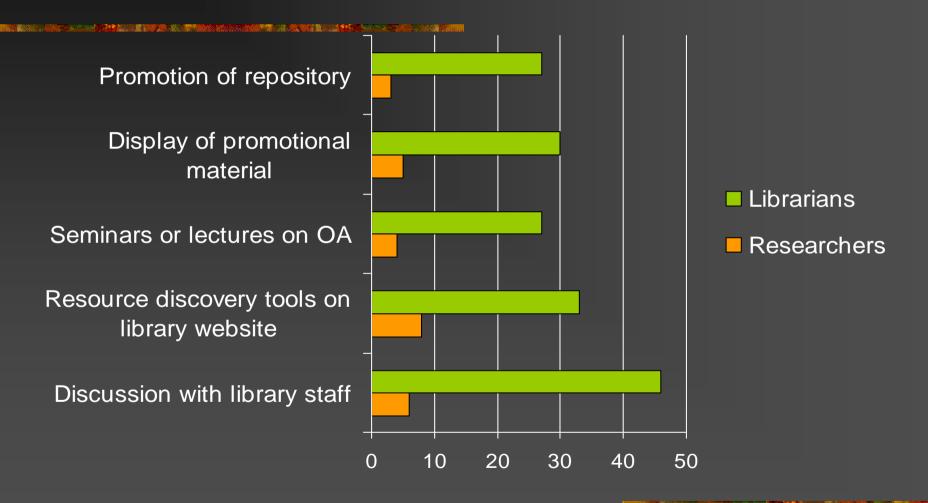


## Strategy 1

## [Continue to]

# Raise awareness amongst researchers

### Researchers are deaf ...



Who <u>does</u> get the message through?

Their funder
Their publisher
Their peers
Their library
The outcomes of OA



#### Testimonies

"Self-archiving .... has given instant world-wide visibility to my work. As a result, I was invited to submit papers to refereed international conferences/journals and got them accepted."

### Tactic 1

# Collect testimonies and feedback

#### OAJs

Proven business model
 PLoS, BMC, Hindawi :

 70% rise in submissions over two years
 Hindawi already profitable
 BMC about to breakeven
 PLoS now sustainable on all but the two flagships

 Bentham launching 200+ this year...
 Societies

#### The money go-round

Move it from library budgets to author-end
Not trivial (this is university finance we are talking about here)
Three vanguard examples:

U Nottingham
U Wisconsin
U Amsterdam

# Strategy 2

- Continue to work on ways of reorganising the money in the system.
- Reorganising rather than spending new money
- Give new money to libraries to buy books!

#### Learned societies

Not homogeneous
 Open access sounds like a publishing issue but it aligns with the mission of a scholarly society
 Target the scientific officers, and

make sure the message is clear

Tactic 2

Work with the learned societies to help them understand, persuade them to embrace the concept of opening up scholarship, encourage them to take the necessary steps

#### Say what?

Demonstrate the benefits of OA
 Discuss green and gold
 Be prepared to discuss the evidence against damage to business

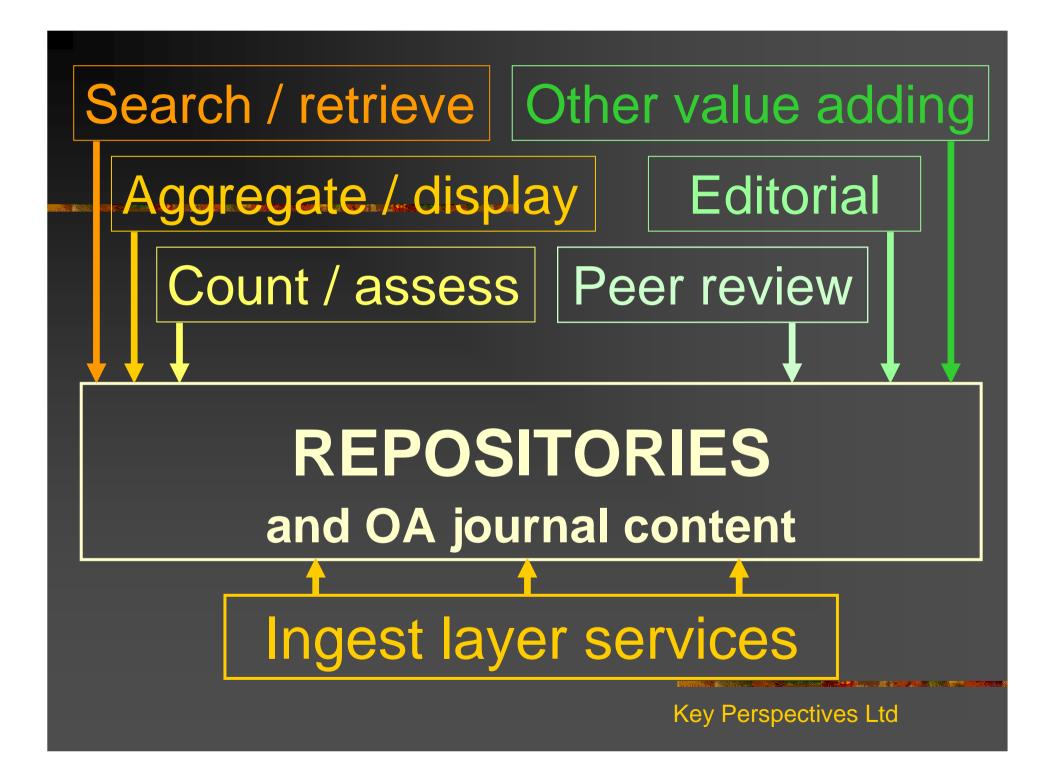
#### a na ana amin' amin'

- Praise and encourage those that do move forward
- Even those that are coy
- Support members who work for change in societies that are unsure of or obstruct Open Access
- History will record their contributions

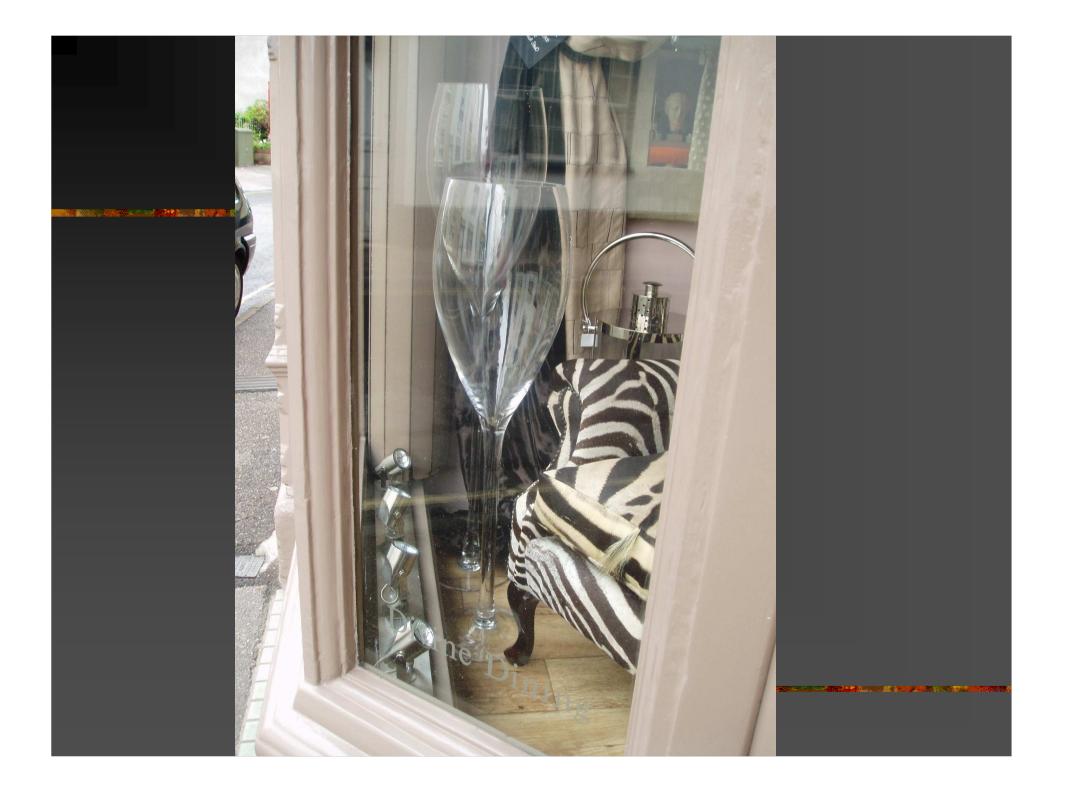
- Encourage societies at least to make the proceedings of their conferences OA
- Provide the testimonies of societies that have adopted OA and are happy to shout about it
- ASCB, Jim Pitman (Inst Mathematical Statistics), Tom Walker (Florida Entomological Society)
- 380 journals from 350 societies

#### **Digital repositories**

- Family of types
- Corresponding variation in detailed purpose
- Shared overall purpose to disseminate outputs in ways that have not been possible hitherto









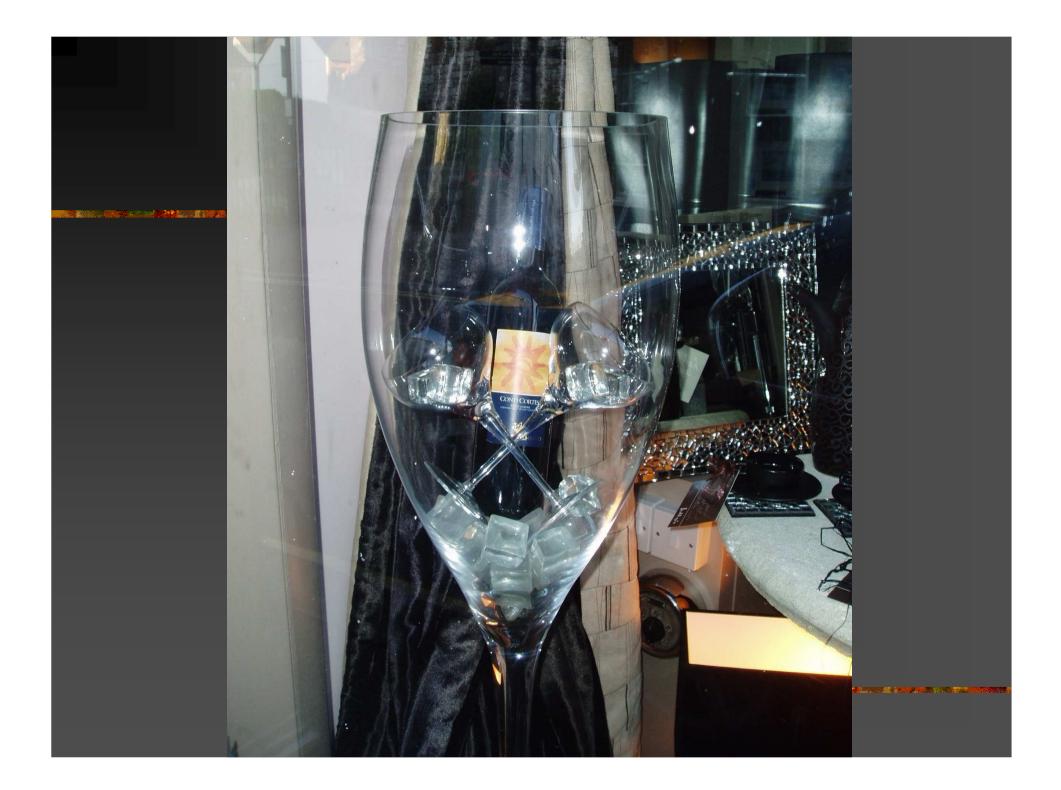


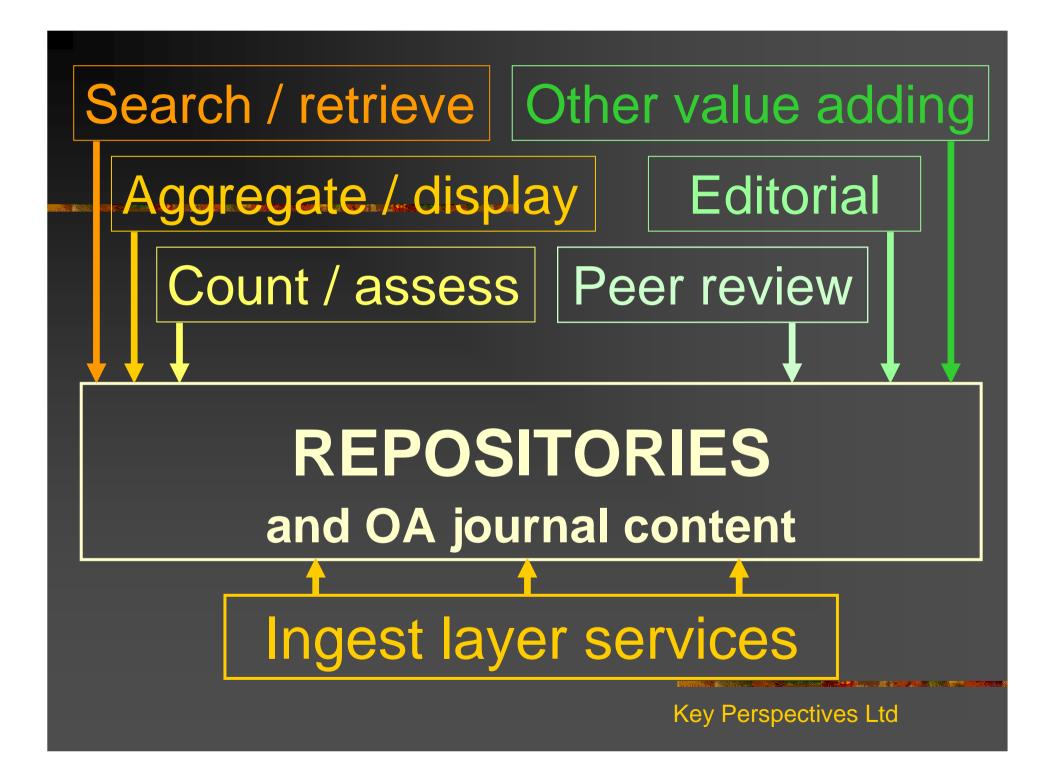




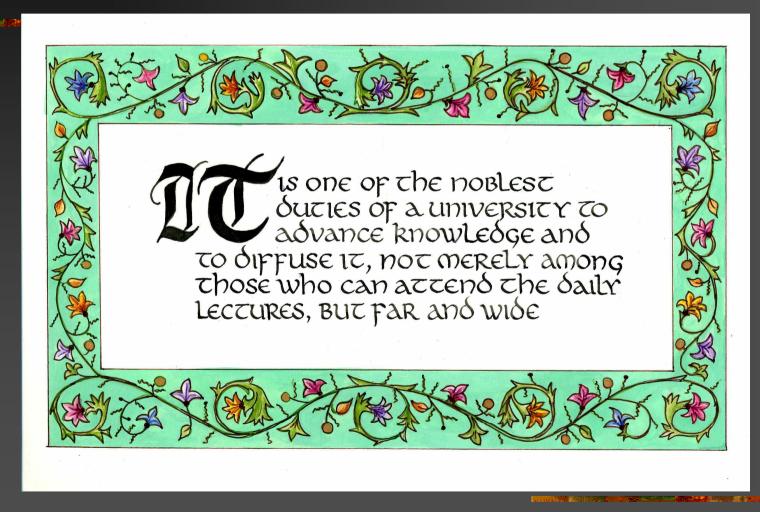


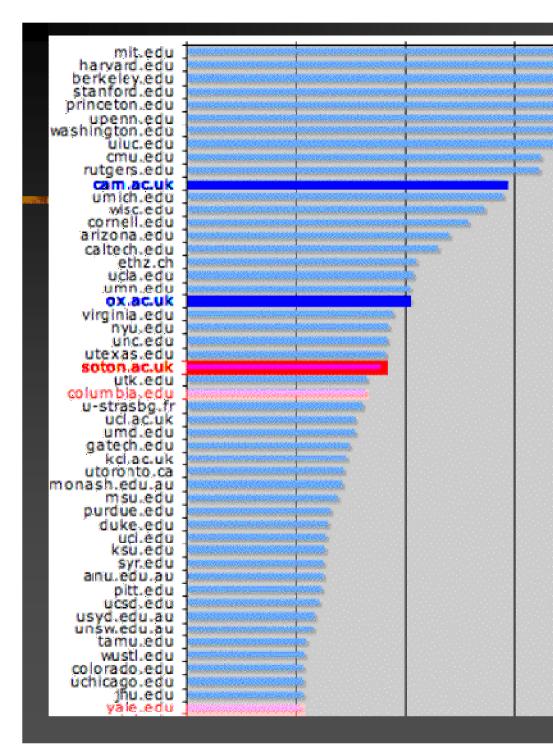






# For institutions: The visibility and impact argument





The G-Factor rankings (universitymetrics.com)

# The USouthampton conundrum...

### Why is Southampton so strong?

- Strong research base
- TBL et al
- Mandatory deposit of research output in ECS repository for 4 years (c11K items)
- University repository actively managed and now to have mandatory deposit
- All = very strong web presence

# For funders: The economic arguments ...

"Governments would boost innovation and get a better return on their investment in publicly funded research by making research findings more widely available .... And by doing so they would maximise social returns on public investments."

OECD Report on Scientific Publishing, 2005

"With the United Kingdom's GERD [Gross Expenditure on Research and Development] at USD 33.7 billion and assuming social returns to R&D of 50%, a 5% increase in access and efficiency [their conservative estimate] would have been worth USD 1.7 billion; and...With the United States' GERD at USD 312.5 billion and assuming social returns to R&D of 50%, a 5% increase in access and efficiency would have been worth USD 16 billion."

Houghton et al, 2006

# [repositories] "are vital to universities' economies and to the UK economy as a whole."

Professor J Drummond Bone President of Universities UK

### EU's "Innovation Reports"

The R&D Triangle: research, education, innovation

SMEs find it hard to get access to the basic research information they need to innovate

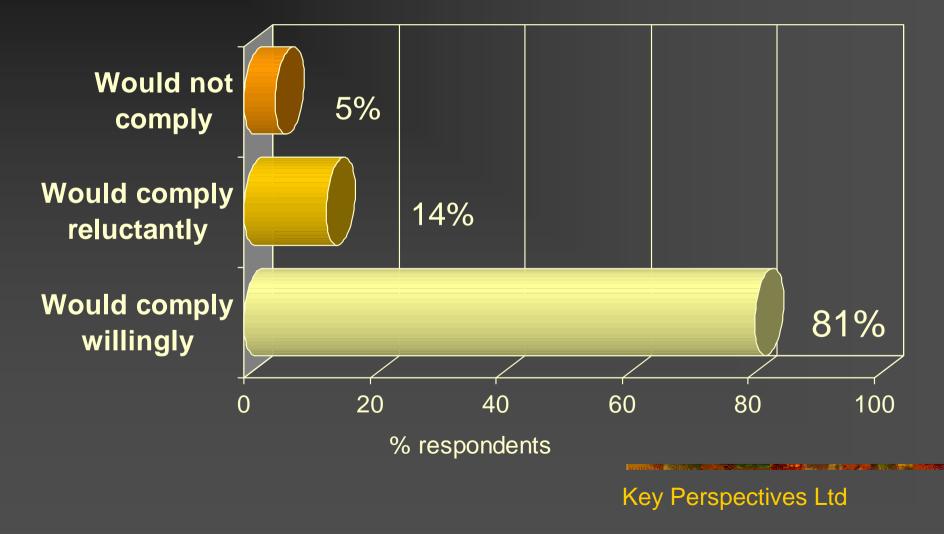
### Terence Dolak (SDR Pharmaceuticals)

"With a small oncology company ... it is imperative that I have access to the literature. But small companies do not have the "deep pockets" necessary... The for-profit journal publishers have effectively barred access to key scientific information except to those who can afford their outrageous fees. Much of the most innovative work is being done at companies like mine that cannot afford to pay \$30+ per paper or pay persearch charges in abstracts or journal collections."

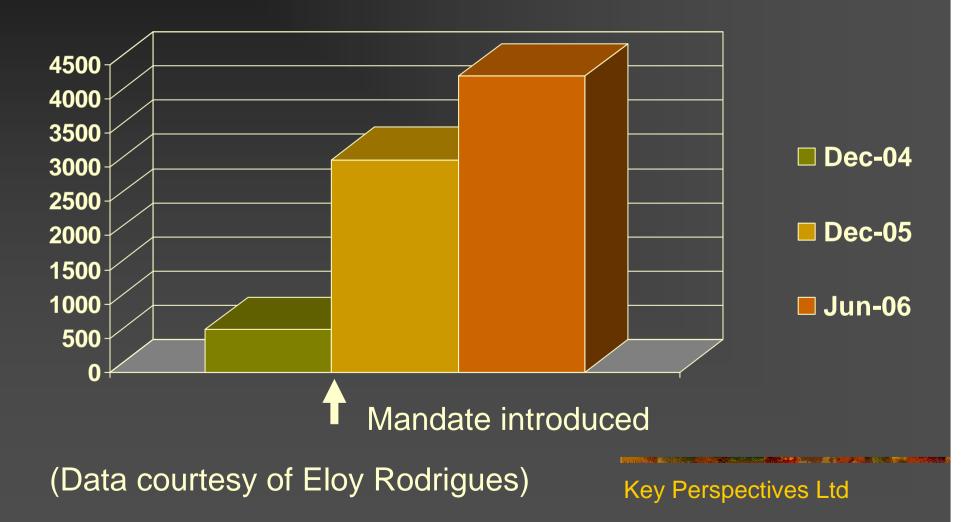
# **Strategy 3**

Continue to advocate to employers and funders with tailored, evidencebased arguments for their engagement with OA

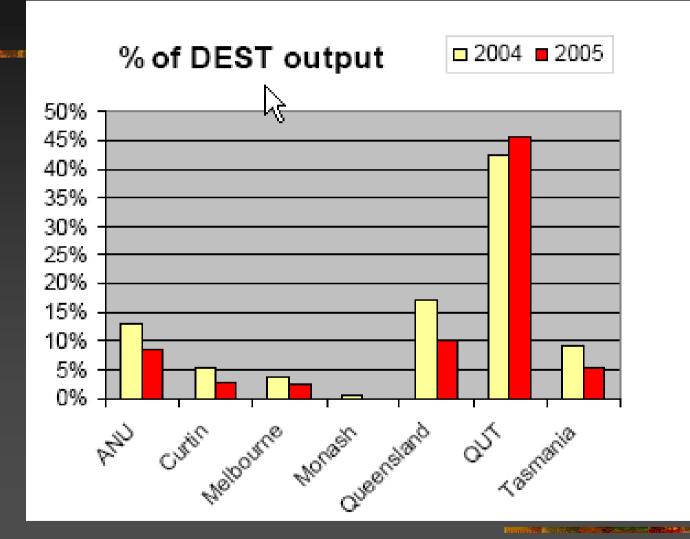
# Author readiness to comply with a mandate



### Minho University repository



### Australian study by Arthur Sale



# Mandate when?

- At acceptance for publication: the author's final version
- Mandate the <u>deposit</u> at that point
- Mandate OA to full-text unless there is a compelling reason against this
- If there <u>is</u> a compelling reason, mandate OA to metadata
- Mandate opening of full-text at 6 months
- The publisher's PDF can be added, or linked to, later

# Strategy 4

Continue to inform funders and employers about implementing OA policies (mandatory, decouple deposit from OA)

# Mandate what?

The author's final version
In the native format
Because text-mining and datamining tools need to work on OA articles

They work best on XML

# What about PDF?

 John Wilbanks (Science Commons):
 "Having to work with PDF is really scraping the bottom of the barrel."



# What about PDF?

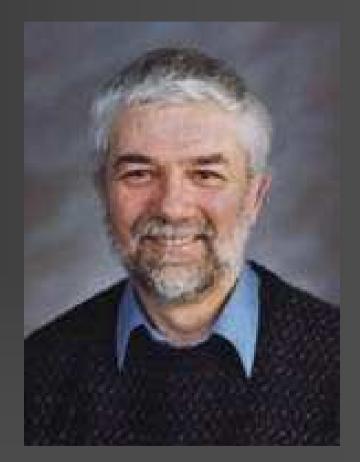
### Clifford Lynch (CNI):

### "PDF is evil"



# What about PDF?

Peter Murray-Rust (Cambridge): "Getting to XML from PDF is like starting with the burger and trying to get back to the cow."



## Tactic 3

# Encourage (with explanation) deposit of the author's native version

For the researchers: Usage stories

> UoC's eScholarship repository logged 2 million downloads:

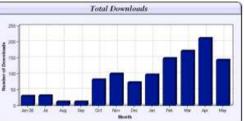
- 2 years 0.5m
- 1 year 1m
- 9mths 2m
- 10K records at end 2005
- University of Otago Business School
  - Launched mid-November 2005
  - 20K downloads by mid-February 2006
  - 220 records!

### Interoperable Repository Statistics (IRS)

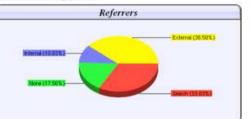
#### **Download Dashboard For Eprint #9225**

Hardoon, D. R., Szedmak, S. and Shawe-Taylor, J. (2003) <u>Canonical correlation analysis: An overview with application to learning methods</u>. Technical Report CSD-TR-03-02, Computer Science Department, Royal Holloway, University of London.

#### Monthly Downloads



#### **Referrer Types**



#### **Top External Links**

http://www.anowero.com/toplo/carlonicar controlation	×.	coa canonical contribution analysis
http://www.answers.com/topic/canonical-correlation	5	cca canonical correlation analysis
06.html	13	Kernel Canonical Correlation Analysis
http://www.public.asu.edu/~huanliu/dmml_presentation/P05-	10	Canonical Correlations
http://www.idiap.ch/lce/	28	Application to Learning Methods
http://en.wikipedia.org/wiki/Canonical_correlation	108	Canonical Correlation Analysis: An Ove
http://eprints.ecs.soton.ac.uk/9225/	114	canonical correlation
http://en.wikipedia.org/wiki/Canonical_correlation_analysis	257	Canonical Correlation Analysis

#### **Daily Downloads**



#### **Top University Visitors**



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12

9

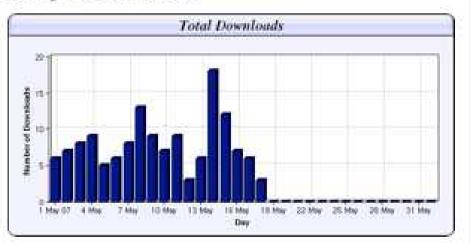
5

# **Download timelines**

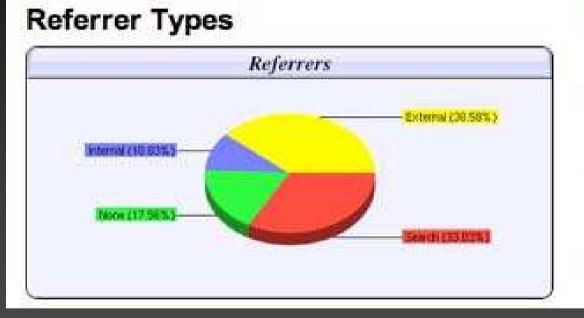
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#### **Top University Visitors**

asu.edu 6 ic.ac.uk 5 uiuc.edu 5 ucsd.edu 5 qmul.ac.uk 5 utexas.edu 5 ui.edu 5 stanford.edu 5 rit.edu 5

### Links and search terms

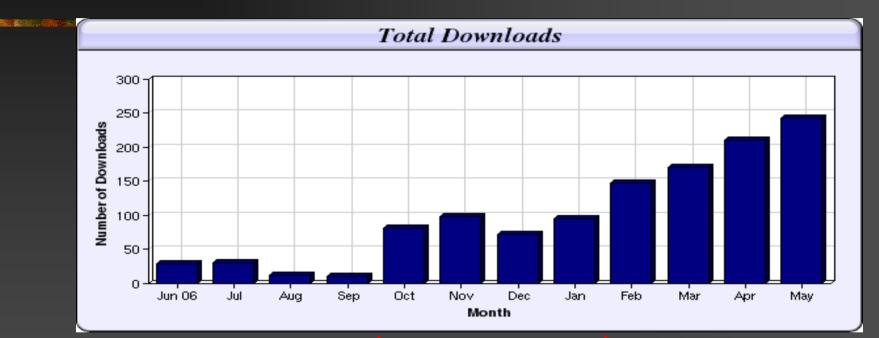
#### Top External Links

http://en.wikipedia.org/wiki/Canonical_correlation_analysis	25
http://eprints.ecs.soton.ac.uk/9225/	11
http://en.wikipedia.org/wiki/Canonical_correlation	10
http://www.idiap.ch/lce/	28
http://www.public.asu.edu/~huanliu/dmml_presentation/P05- 06.html	13
http://www.answers.com/topic/canonical-correlation	5

#### **Top Search Terms**

7	Canonical Correlation Analysis	32
4	canonical correlation	28
8	Canonical Correlation Analysis: An Overview with Application to Learning Methods	12
	Canonical Correlations	9
	Kernel Canonical Correlation Analysis	5
	cca canonical correlation analysis	4

### Every e-print tells a story...



NIPS Workshop linked to this eprint from its web page Link placed on "Canonical correlation" page in Wikipedia

# Strategy 5

Constituency-specific messages: Institutions: ROI; competitiveness Funders: ROI Authors: usage and impact data

### **Repository KPIs**

Not yet worked out a good list
Various measures can be used
Essential for engaging research managers (especially when making a business case)

Helpful for embedding repositories

### Carr & Brody, D-Lib July/Aug,2007



## **Rights**

 This is still the biggest barrier to selfarchiving

- Shouldn't be, but it is
- Promote the uptake of author addenda
- Clarify publishers' positions on rights
- Work on sorting out rights on data (and the organisation of data)

# Tactic 4: monitor and report

Copyright policies (RoMEO?)
Copyright retention
Use of author addenda
Testimonies

### It's the WEB, stupid

Still an ignorance about the Web and "the responsibilities of information provision that go with Web consumerism" (Les Carr)

# Item on the BBC news website: 4 links

- Researcher's home page:
  - bibliography 3 years out of date and with no information about the project
  - No links to full-text papers, the ECS repository, his research group, PHD opportunities, the School, the University...
- The project website: only link is to EU Information Society pages
- The School's home page
- The University's home page

## Google on the author's name...

 Official School personal information page, with links to projects and papers
 Project link goes to School projects database ...

where it ends up at an internal project page hosted by one of the other project partners and needing password access

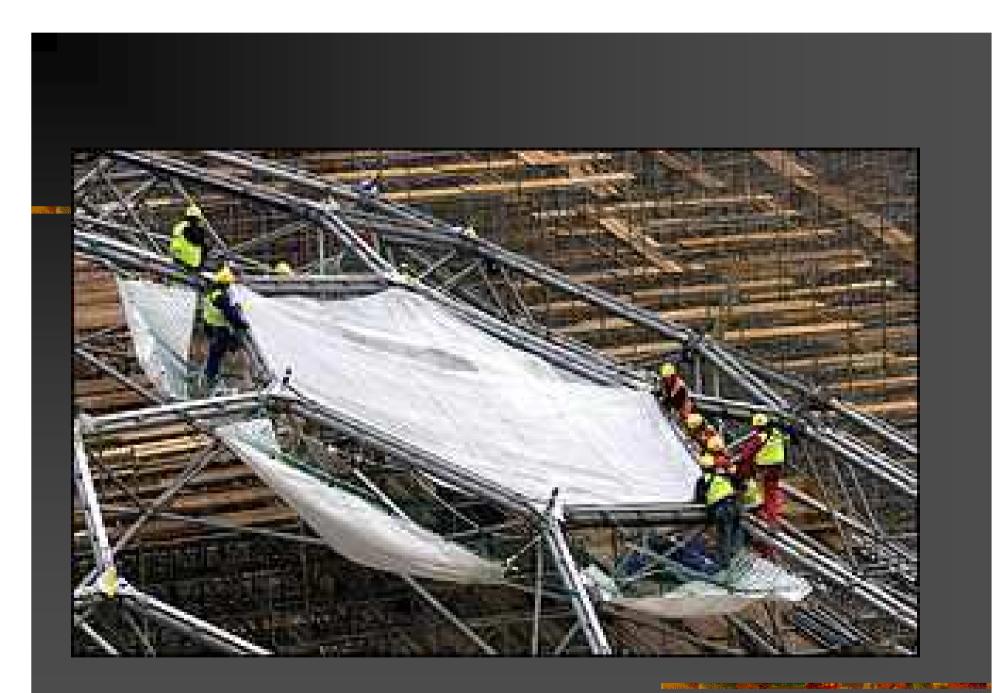
Computer scientists' web presence

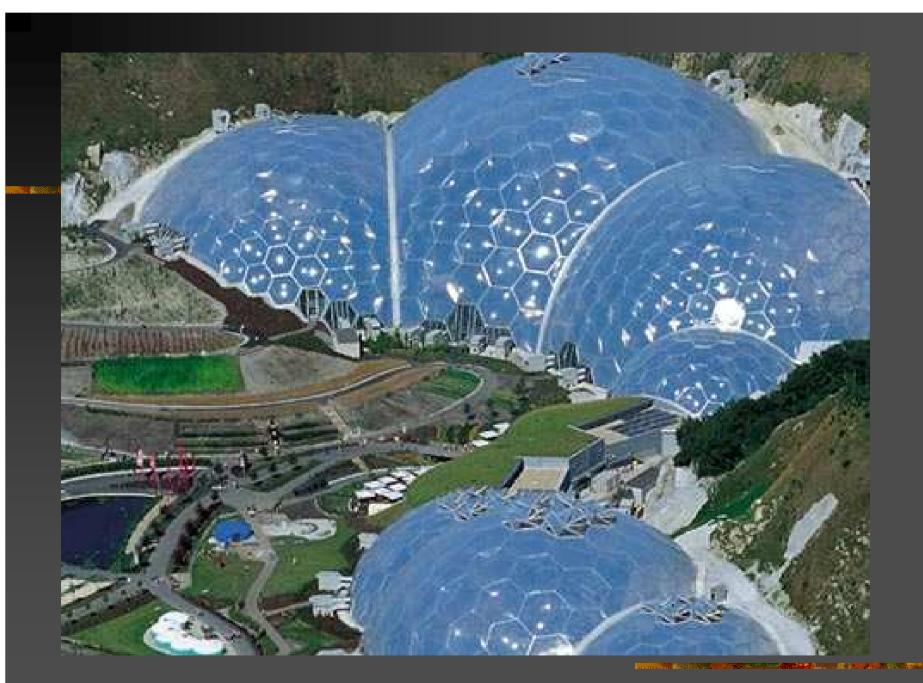
 ONE THIRD of ECS researchers have no working home page
 20% of professors in MIT's Department of Computer Science lack a home page



#### The new kids...

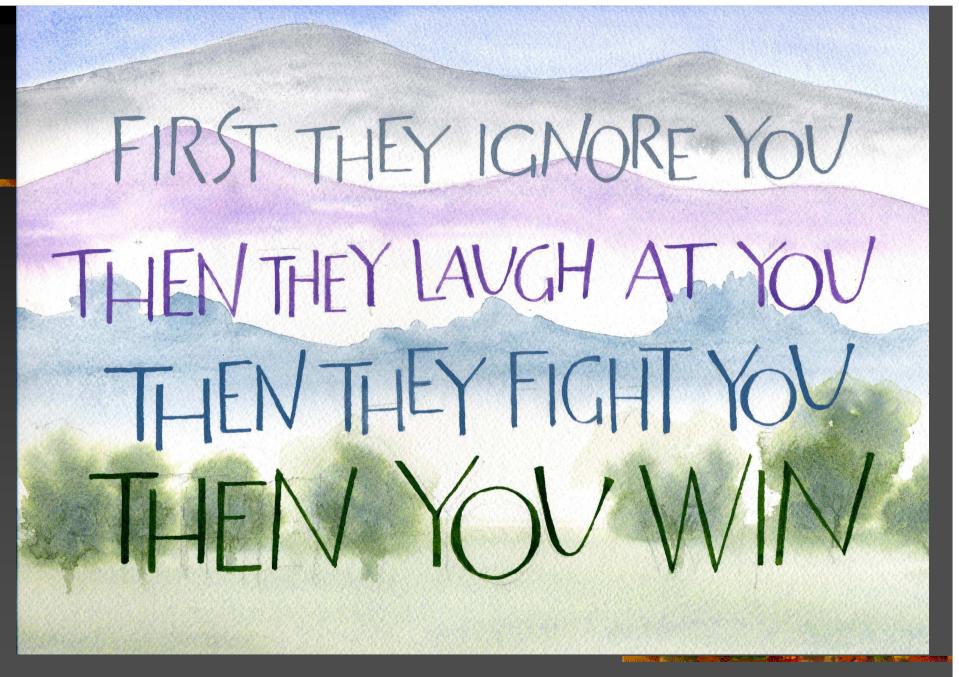






# Strategy 6: Joined-up thinking

- Re-educate the research community on the potential of the Web (it is a Web)
- Data, theses, articles
- Institutional repositories and CRISes
- Institutional repositories and university presses
- Google



# Lobbying and counter-lobbying

#### It's hard

# But not as hard as it was ...

Partners	ISBM hip for Research Integrity in Science & Medicine
	Home About Us Current Issues In The News Take Action
About Us	ABOUT US
PRISM Principles New Approaches Peer Review	The Partnership for Research Integrity in Science and Medicine (PRISM) was established by The Executive Council of the Professional & Scholarly Publishing Division of the Association of American Publishers (AAP) to educate policy makers and the American people about the risks posed by government intervention in scholarly publishing.
Dissemination & Access Preservation Contact Us	Government mandates that ignore the need for sufficient and sustainable financial support for peer- reviewed journals whether the source of support is from users, authors, or sponsors risk undermining the very fabric of the system of independent, formal peer-reviewed publication, a system that is of crucial importance for scholarly communication and the preservation of scientific knowledge.

#### Dezenhall's advice

Equate traditional journal publishing with peer review
Equate OA with junk science
Keep OA proponents on the defensive

## "We did not expect to have encountered the sort of criticism we have seen thus far."

#### Brian Crawford, AAP

# Lobbying and counter-lobbying

#### It's hard

- The research community is starting to speak
- But it now has to SHOUT

- We need an organising centre in Europe
- I think we have one...
- And now we need your help

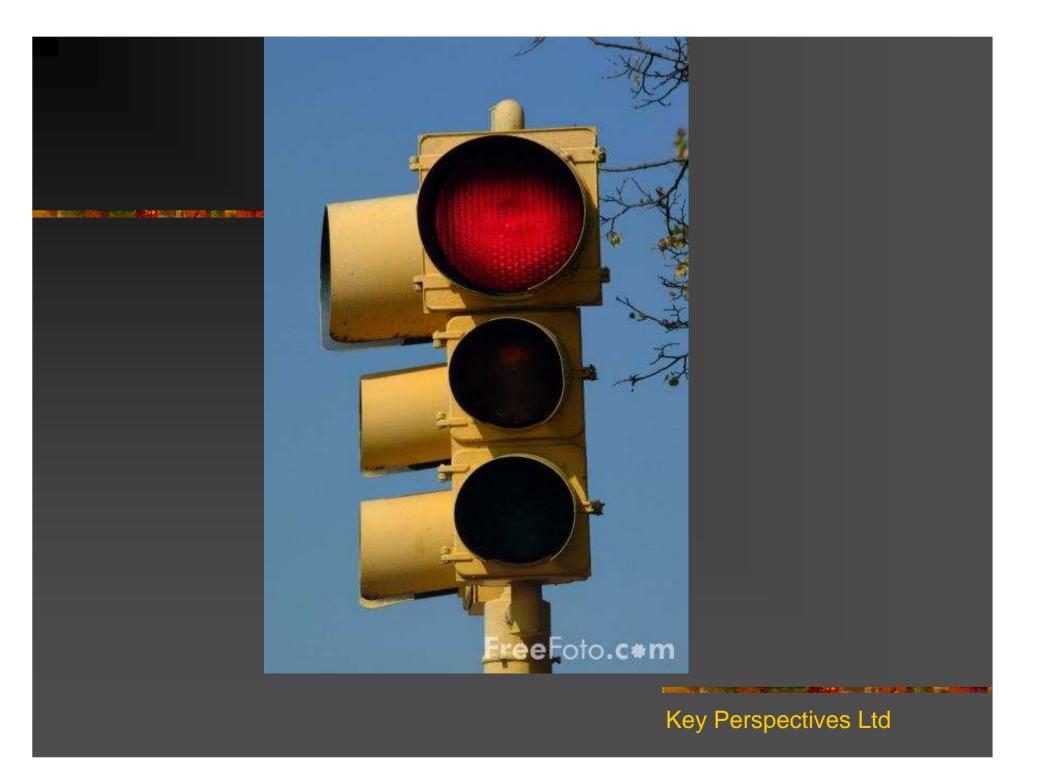
#### Personal strategy: stay cheerful!

Peter Suber's blog

- AmSci and SPARC OA lists
- The policy march: see David Prosser Public Policy and the Politics of Open Access

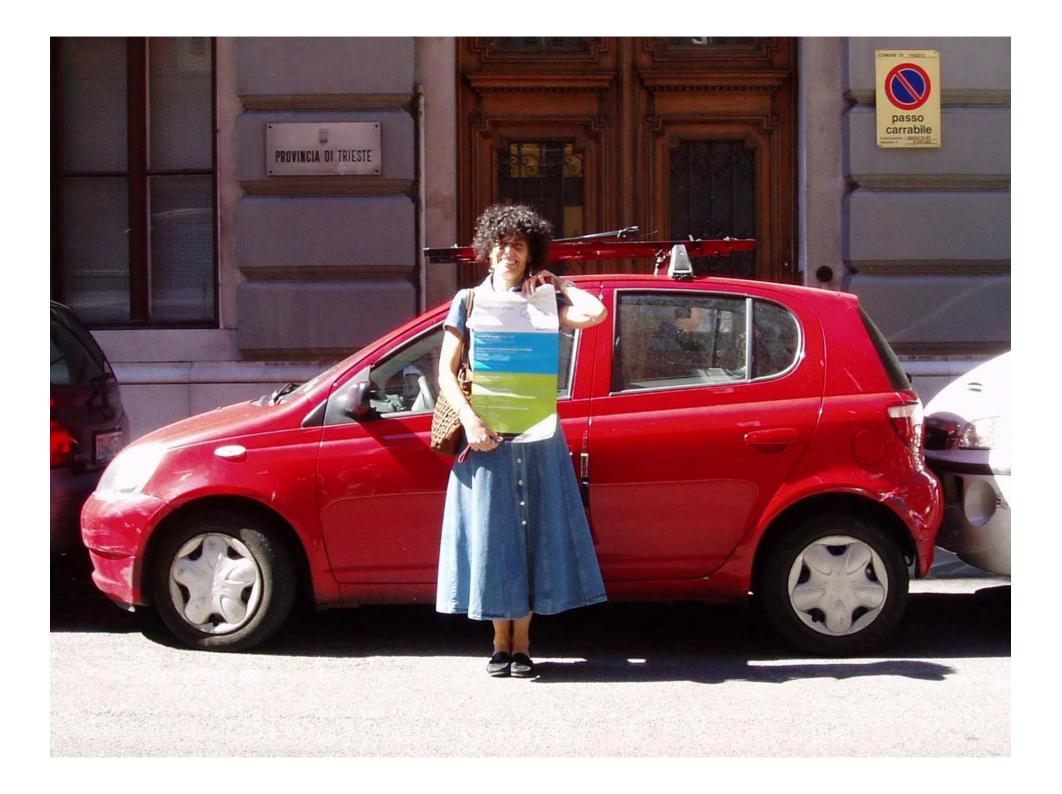
http://eprints.rclis.org/archive/00011042/

An OA calendar for 2008: <u>www.keyperspectives.co.uk</u>



#### Berlin 5

To paraphrase President Kennedy: "Wir sind Berliner"



## Thank you for listening

a na ana amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o

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