

# Transitions to Open Access

Michael Jubb  
Research Information Network

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## Political and policy context

- “developing the UK’s knowledge base and translating this knowledge into business and public service innovation”

■ *UK Science and Innovation Investment Framework 2004-2014*

- “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*

## Policy context: research funders

- to develop and sustain a dynamic and internationally competitive research sector that makes a major contribution to economic prosperity and national wellbeing and to the expansion and dissemination of knowledge.
  - *Higher Education Funding Council for England (HEFCE) Strategic Plan*
- to strengthen the impact of arts and humanities research by encouraging researchers to disseminate and transfer knowledge to other contexts where it makes a difference
  - *Arts and Humanities Research Council Strategic Plan*
- accelerating the translation of research outputs into business and policy applications to increase social and economic impact
  - *Biotechnology and Biological Sciences Research Council Strategic Plan*
- advance and disseminate knowledge to improve the quality of life and economic competitiveness of the UK
  - *Medical Research Council Strategic Plan*

# Non-UK Funder Missions and Strategies

## *NIH (USA)*

- expand the knowledge base in medical and associated sciences in order to enhance the Nation's economic well-being and ensure a continued high return on the public investment in research

## *NWO (Netherlands)*

- enhancing researchers' awareness of research utilisation by integrating communication and knowledge dissemination in programme development







## *ARC (Australia)*

- capturing and quantifying the outcomes of research and knowledge transfer and the contribution of research to the economic, social, cultural and environmental well-being of Australians

## *CSIC*

- el fomento, la coordinación, el desarrollo y la difusión de la investigación científica y tecnológica, de carácter multidisciplinar, con el fin de contribuir al avance del conocimiento y al desarrollo económico, social y cultural. Además se ocupa de la formación de personal y del asesoramiento a entidades públicas y privadas en estas materias.

## Some Themes

-  research excellence
-  assessment and evaluation
-  dissemination and access
-  socio-economic impact
-  stewardship and preservation
-  costs and sustainability

# Funders' policies on open access

## 1. Research Councils

# Research Councils UK (RCUK)

## Four Principles

- ideas and knowledge derived from publicly-funded research must be made available and accessible for public use, interrogation, and scrutiny, as widely, rapidly and effectively as practicable.
- effective mechanisms to ensure that published research outputs must be subject to rigorous quality assurance, through peer review.
- the models and mechanisms for publication and access to research results must be both efficient and cost-effective in the use of public funds.
- the outputs from current and future research must be preserved and remain accessible not only for the next few years but for future generations.

## Natural Environment Research Council

- NERC requires that, for new funding awards, an electronic copy of any published peer-reviewed paper, supported in whole or in part by NERC-funding, is deposited at the earliest opportunity in an e-print repository.
- full implementation of these requirements requires that current copyright and licensing policies, such as embargo periods, are maintained by publishers and respected by authors.



## Arts and Humanities Research Council

- it is the AHRC's position that authors choose where to place their research for publication.
- the AHRC requires that funded researchers:
  - ensure deposit of a copy of any resultant articles published in journals or conference proceedings in appropriate repository wherever possible
  - ensure deposit of the bibliographical metadata relating to such articles, including a link to the publisher's website, at or around the time of publication
- it is for authors' institutions to decide whether they are prepared to use funds for any page charges or other publishing fees. Such funds could be part of an institution's indirect costs under the full economic costing regime.
- full implementation of these requirements must be undertaken such that current copyright and licensing policies, for example, embargo periods and provisions limiting the use of deposited content to non-commercial purposes, are respected by authors.

# Medical Research Council

- The MRC supports unrestricted access to the published outputs of research as a fundamental part of its mission and a public benefit, and this is encouraged wherever possible.

## *basic principles*

- authors should maximise the opportunities to make their results available for free and, where possible, to retain their copyright.
- MRC will pay OA publication fees where these have been included in grant proposals and where the costs fall within the period of the grant. Anticipated costs beyond then should be calculated as part of an institution's indirect costs under the full economic costing regime.
- copies of papers accepted for publication in a peer-reviewed journal should be deposited into PubMed Central (PMC) or UKPMC, to be made freely available as soon as possible and in any event within six months of final publication.
- where an open access fee has been paid papers must be licensed so that they may be freely copied and re-used for purposes such as text and data mining, provided that such uses are fully attributed.

## Developments in RCUK Policy?

- Report in 2008 on impact of
  - RCUK policies
  - open access more generally and its impact on 'traditional' scholarly communications processes
- in response, Chief Executives agreed that over time the UK Research Councils will support increased open access by:
  - building on their mandates on grant-holders to deposit research papers in suitable repositories within an agreed time period
  - extending their support for publishing in open access journals, including through the pay-to-publish model.

# Funders' policies on open access

## 2. Wellcome Trust

## Wellcome Trust

- policy on open and unrestricted access originally published in 2004, became mandatory for all grant-holders in October 2006
- all research papers – funded in whole or in part by the Wellcome Trust – must be made freely accessible as soon as possible, and in any event within six months of the publication
- commitment to meet costs (estimated 1-2% of total spend)
  - funds for universities and individuals for payment of publishing fees

# UK PubMed Central

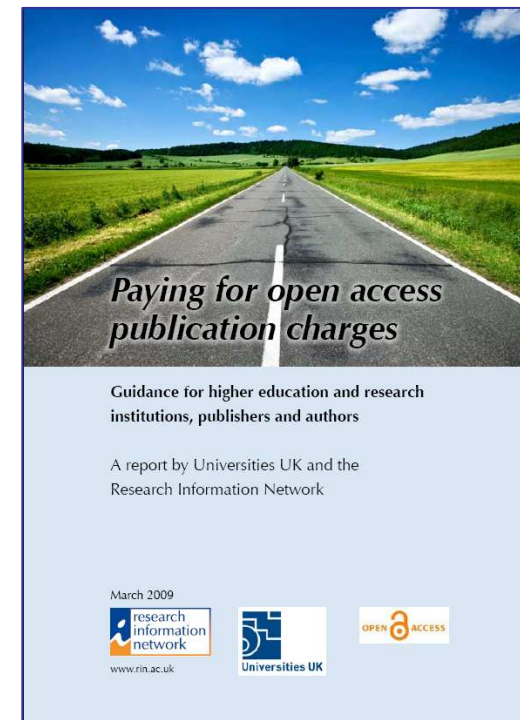
- UK PubMed Central launched in January 2007
- by December 2009, it housed over 1.7m research full-text papers
- phase 2 launched January 2010
- aims to become the information resource of choice for UK biomedical & health research communities:
  - comprehensive & sustainable repository for research outputs
  - improved information retrieval & knowledge discovery through text & data-mining technologies
  - additional content (inc. 19m indexed papers, patents, etc)
  - comprehensive analysis & reporting tools for researchers & funders

## UK PMC funders' group



# UKPMC Challenges

- improving compliance:
  - currently, around one-third of Wellcome-funded papers in UKPMC within 6 months
  - although 95% of journals used by Wellcome authors have a policy-compliant option
- communications and simplifying processes
  - funders must clarify how support is provided
  - publishers must have clear open access policies and processes
  - institutions need to improve communication and processes for payments
- persuading researchers of the benefits...



# Funders' policies on open access

## 3. University Funding Councils



# Higher Education Funding Council for England (HEFCE)






## *Objectives from strategic plan*

- to retain more of the benefits of research undertaken in the UK, we need to ensure that effective dissemination and application of research findings are accepted as integral parts of the research process. .... ensuring that knowledge and expertise .... are made rapidly and effectively available to potential research users, both in industry and public services, and across the wider community.
- we will continue to encourage the effective sharing of research findings, both to support research and teaching within HE and to inform the wider public.
- we will work with partners to improve systems for researchers to share information and disseminate outputs as widely as possible, including through new technology.

# Institutional policies and strategies

# University policies: 1

## repositories

-  c 100 UK institutional repositories
-  Cambridge (210k records) to Swansea Metropolitan (4 records)
-  influence of REF (new version of RAE)
  -  publication databases and IRs
  -  records of RAE submissions loaded into IRs

## open access fees

-  3-4 universities have co-ordinated arrangements for payment of publication fees
-  some evidence that membership of BMC and other OA publishers is falling
-  no UK equivalent as yet to the US “Compact on OA Publishing Equity”

## University policies: 2

- c 18 universities now have policies requiring deposit (4 Russell Group)
  - some distinguish between deposit and access
  - subject to copyright and other restrictions
- influence of RAE and REF
  - citation advantage and bibliometrics

### *Universities UK*

- 'supports the move toward 'open access' of research outputs and..... would encourage the REF guidance to require that all submitted outputs are available through some form of open access mechanism'

# Publisher policy and practice

# Open Access Publishing

- growth of OA journals
  - c4,500 (DOAJ)
  - c 3,500 (peer reviewed) OpenJ-gate)
  - c2,250 (Ulrich's)
- DOAJ lists 395 journals published in UK
  - 206 by BioMed Central
- major publishers all offering OA options
  - growth of hybrid journals, but low take-up
- estimates suggest 2-4% of peer-reviewed articles are freely available on publication
- few developments as yet in open access monographs

A vertical decorative bar on the left side of the slide, featuring a gradient from dark blue at the top to orange at the bottom.

Publishing and disseminating through  
channels other than journals and books

# Sharing and disseminating data: ownership, protection and trust

- data: responsibility, protectiveness and desire for control
  - lack of rewards for data sharing
  - concerns about inappropriate use
  - preference for co-operative arrangements and direct contact with potential users
  - decisions on when and how to share
  - commercial, ethical, legal issues
- belief that only researchers themselves can have the knowledge necessary to take care of their data
  - intricacies of experimental design and processes
  - data management plans required by funders, but not much sign of adoption
  - role of publishers?
- trust in other researchers' data?
  - *"I don't know if they have done it to the same standards I would have done it"*

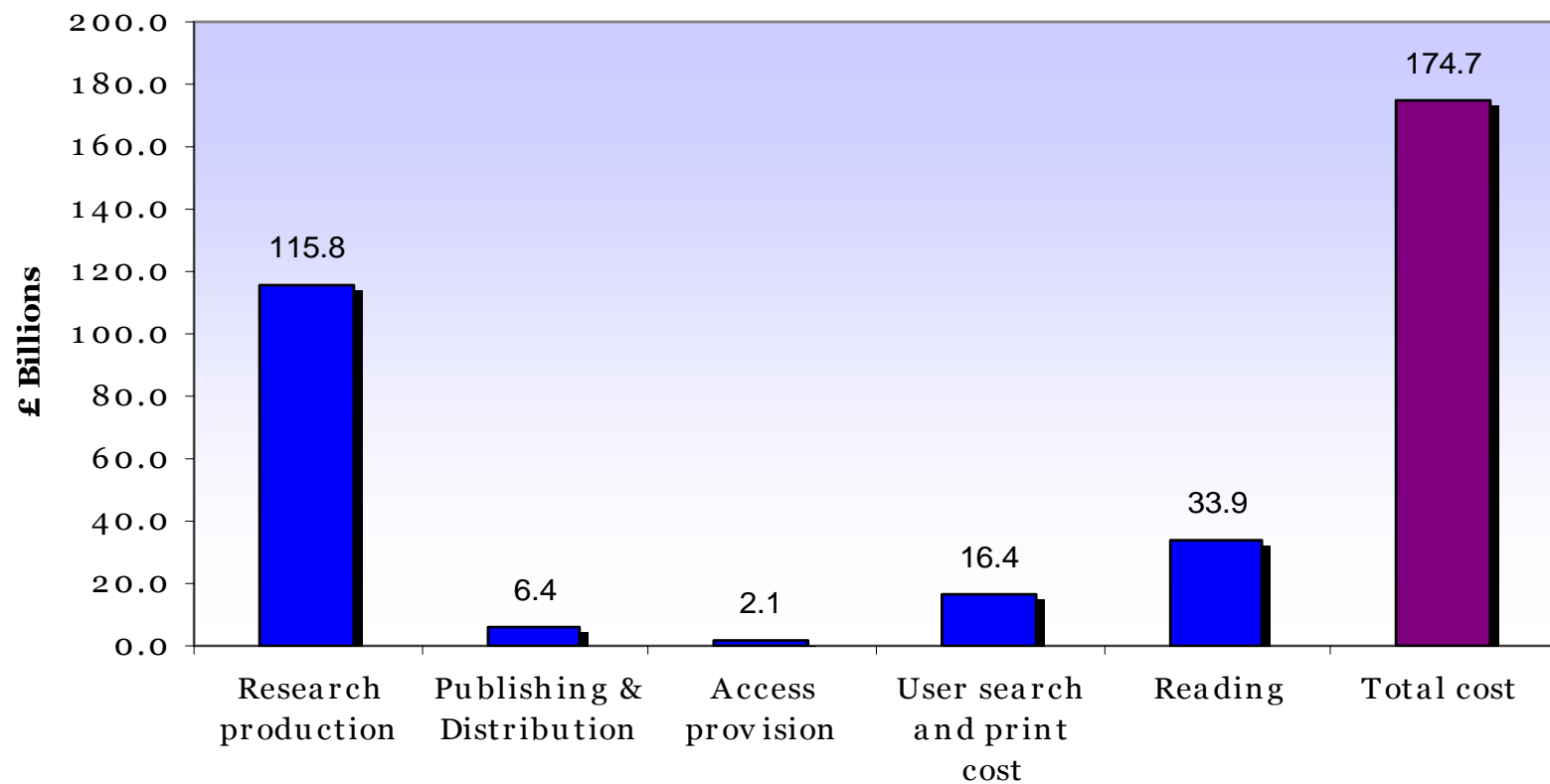


# Web 2.0?

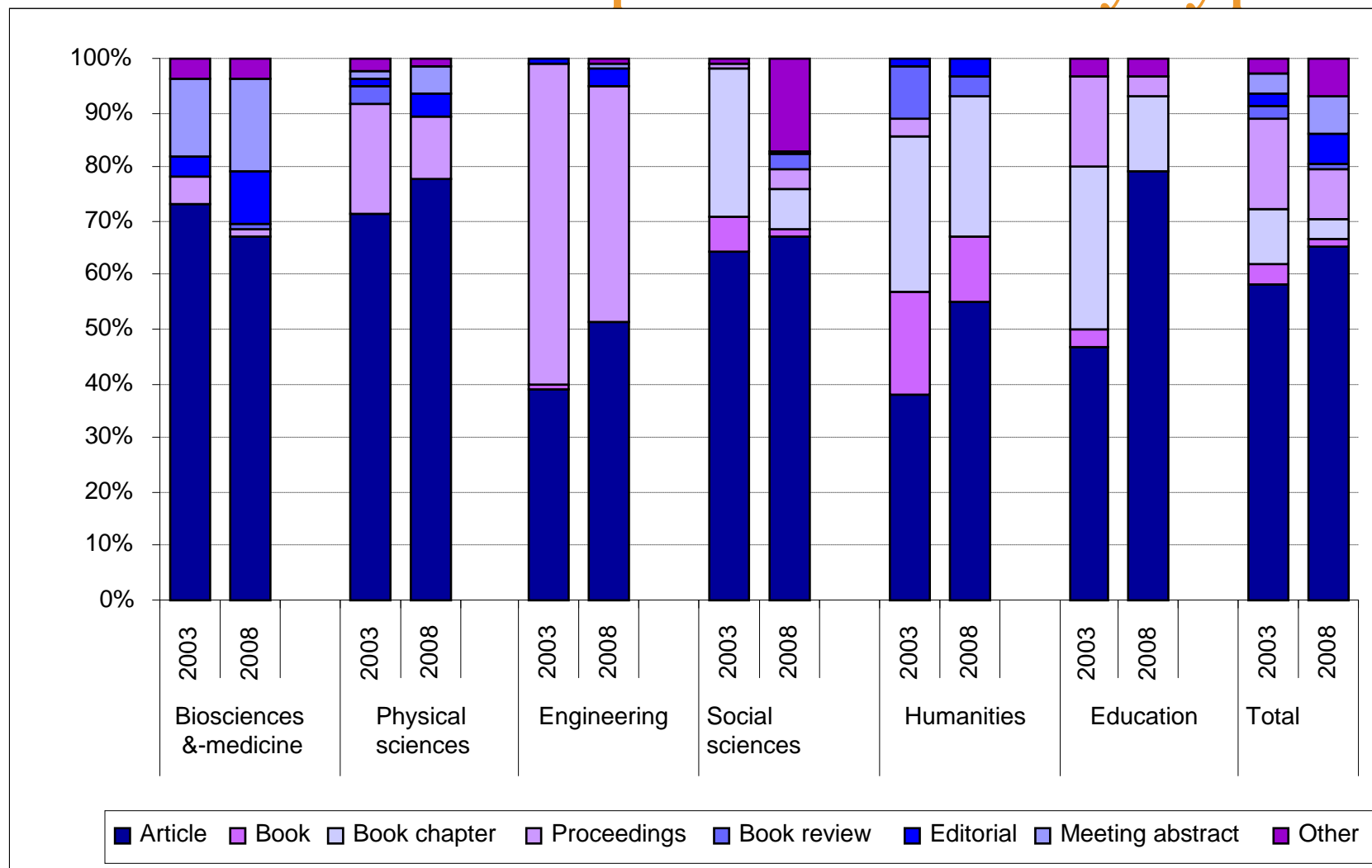
How often do you do the following in the course of your research activities?					
	25-34	35-44	45-54	55-64	over 65
<b>Write a blog</b>					
Never	79%	80%	85%	91%	100%
Occasionally	6%	12%	10%	6%	0%
Frequently (At least once a week)	4%	6%	2%	0%	0%
I do this outside of work	11%	2%	3%	3%	0%
<b>Comment on other people's blogs</b>					
Never	69%	68%	81%	82%	93%
Occasionally	17%	22%	16%	15%	7%
Frequently (At least once a week)	0%	2%	0%	0%	0%
I do this outside of work	15%	8%	3%	3%	0%
<b>Contribute to a public wiki (e.g., Wikipedia)</b>					
Never	69%	74%	75%	80%	80%
Occasionally	22%	21%	23%	18%	13%
Frequently (At least once a week)	0%	1%	1%	0%	0%
I do this outside of work	10%	4%	2%	3%	7%
<b>Add comments to online journal articles or more general media publications</b>					
Never	81%	76%	80%	73%	93%
Occasionally	17%	21%	14%	27%	7%
Frequently (At least once a week)	0%	1%	2%	0%	0%
I do this outside of work	2%	2%	4%	0%	0%
<b>Post slides, texts, images, code, algorithms, videos or other media on an open content sharing site</b>					
Never	65%	56%	52%	52%	93%
Occasionally	19%	30%	40%	30%	7%
Frequently (At least once a week)	8%	10%	5%	11%	0%
I do this outside of work	8%	4%	3%	6%	0%

# Transitions?

## The big picture: overall costs of the current system



# UK researcher publications by type



# Importance of different types of output

	Very important (%)	Quite important (%)	Not important (%)	Not applicable (%)
Scholarly journals	94	6	0.1	0.5
Conference presentations/posters	34	52	13	0.5
Monographs	34	25	32	9
Book chapters	23	60	16	1
Professional journals	19	30	36	14
Works in OA Repository	10	28	41	20
Reports	9	35	44	13
Datasets	8	20	39	33
Working papers	5	27	51	18
Creative works (inc exhibitions & performances)	3	8	40	50
Internet blog/forum	2	10	70	18
Other	7	5	19	70

# Researchers' views of the future?

The likelihood of changes in scholarly communications within your field over the next 5 years					
	Professor	Reader	Senior Lecturer	Lecturer	Research Fellow
<b>Existing peer review processes will become increasingly unsustainable</b>					
Likely	31%	34%	39%	30%	38%
Unlikely	63%	51%	50%	52%	56%
No opinion	6%	14%	11%	18%	5%
<b>Formal peer review will be increasingly complemented by reader-based ratings, annotations, downloads or citations</b>					
Likely	44%	37%	45%	41%	36%
Unlikely	42%	54%	38%	41%	38%
No opinion	15%	9%	18%	18%	26%
<b>New types of online publication, using new kinds of media formats and content, will grow in importance</b>					
Likely	72%	69%	76%	68%	82%
Unlikely	18%	20%	7%	18%	13%
No opinion	11%	11%	16%	14%	5%
<b>Open access publication supported by an 'author-pays' funding model will predominate</b>					
Likely	34%	20%	21%	23%	21%
Unlikely	47%	49%	52%	50%	51%
No opinion	19%	31%	27%	27%	28%

# Transitions to OA?

- Portfolio of projects being sponsored by RIN plus
  - [\*Joint Information Systems Committee \(JISC\)\*](#),
  - [Association of Learned and Professional Society Publishers \(ALPSP\)](#),
  - [Publishers Association \(PA\)](#),
  - [International Association of Scientific, Technical & Medical Publishers \(STM\)](#),
  - [\*Publishing Research Consortium \(PRC\)\*](#),
  - [British Library \(BL\)](#),
  - [\*Research Libraries UK \(RLUK\)\*](#)
  - [Society of College, National and University Libraries \(SCONUL\)](#)
  - [SPARC Europe](#)
  - [Research Councils UK \(RCUK\)](#)
  - [Universities UK \(UUK\)](#)
  - [\*Wellcome Trust\*](#)

# Transitions portfolio

- ***Transitions to e-only publication***, to investigate the barriers – from the perspectives of libraries, publishers and users – to moving to e-only publishing, and how those barriers might be overcome;
- ***Gaps in access***, to investigate the extent to which journal articles and other research outputs are available, or not, to different parts of the research and other communities; and to identify priorities in seeking to fill gaps in access, barriers to filling them, and actions that might be taken to that end;
- ***Dynamics of improving access to research papers***, to develop a better understanding of the dynamics of transition towards some plausible end-points, and the costs and benefits (cash and non-cash), opportunities and risks involved. The end-points will be associated with four broad models: open access publishing (gold OA); open access repositories (green OA); extensions to licensing; and transactional solutions.
- ***Futures for scholarly communications***, to develop a series of challenging scenarios for scholarly communications in ten years' time, bearing in mind current trends and underlying drivers in user cultures, needs and expectations; and likely developments in technologies and services.



## Conclusions?

- OA in principle ticks lots of boxes for Governments, funders, and universities
  - the momentum towards OA is likely to increase
- transition requires significant change in
  - research cultures
  - funding regimes
- unanswered questions
  - who pays, how much, and how?
  - how can we promote and organise a transition?
  - how can we make an OA system sustainable?

Thank you

Michael Jubb

[www.rin.ac.uk](http://www.rin.ac.uk)