The changing role for European research libraries

Dr Paul Ayris

Director of UCL Library Services and UCL Copyright Officer
Chief Executive, UCL Press
Chair of the LERU community of Chief Information Officers
Adviser to the LIBER Board on Horizon 2020 and EU issues
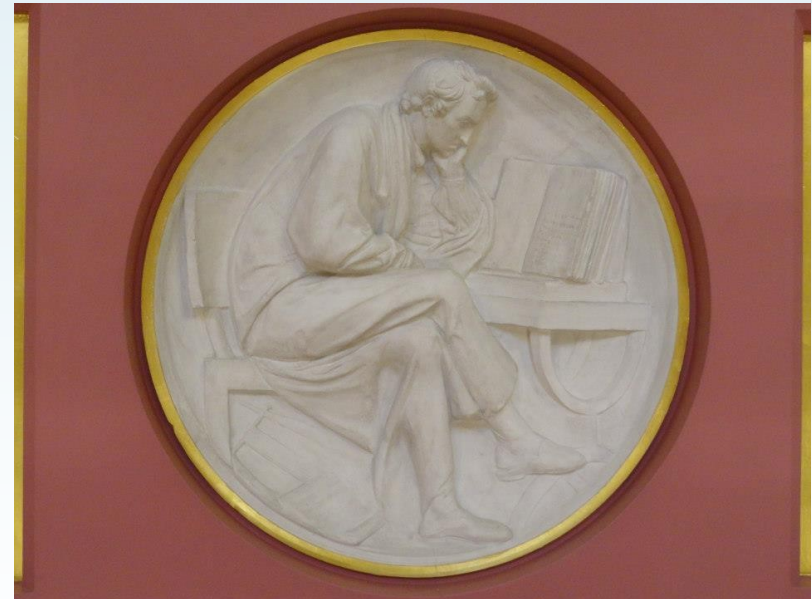
e-mail: p.ayris@ucl.ac.uk

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National OA Policy?

- ❑ Wellcome Trust and associated charities (COAF)
    - ❑ http://www.wellcome.ac.uk/About-us/Policy/Spotlight-issues/Open-access/Charity-open-access-fund/
- ❑ Will provide single block grants to 36 universities to pay for Gold OA APCs resulting from research they fund

Research Councils UK

- ❑ OA policy favours Gold OA as way forward
- ❑ Mirrors Finch Report in this respect
- ❑ RCUK will pay block grants to universities for set proportions of their funded research outputs to be available as OA outputs
- ❑ Applies to journal articles and conference proceedings, **not** monographs;
- ❑ CC-BY licence to be attached to outputs
- ❑ Independent Review of the RCUK policy now published

Funding for OA in the UK: Funding sources

❑ UK Funders
    ❑ Wellcome Trust/COAF
    ❑ Research Council UK (RCUK)

❑ International Funders
    ❑ European Research Council

❑ Universities on the whole will not fund Gold OA compliance themselves

RCUK compliance Findings
Years 1 and 2 (12/14, 14/15)

Theme	No.
Total reported publications in UK with RCUK funding	20580
Total no. of Gold publications	9297
Total no. of Green publications	3355
Total reported 'non-compliant' publications	5121
No. of Gold publications arising from spend	6504
Median average institutional APC	£1614
Maximum average institutional APC	£2392
Minimum average institutional APC	£1233

Data from the RCUK Review Report

UCL's compliance with the Wellcome Trust mandate

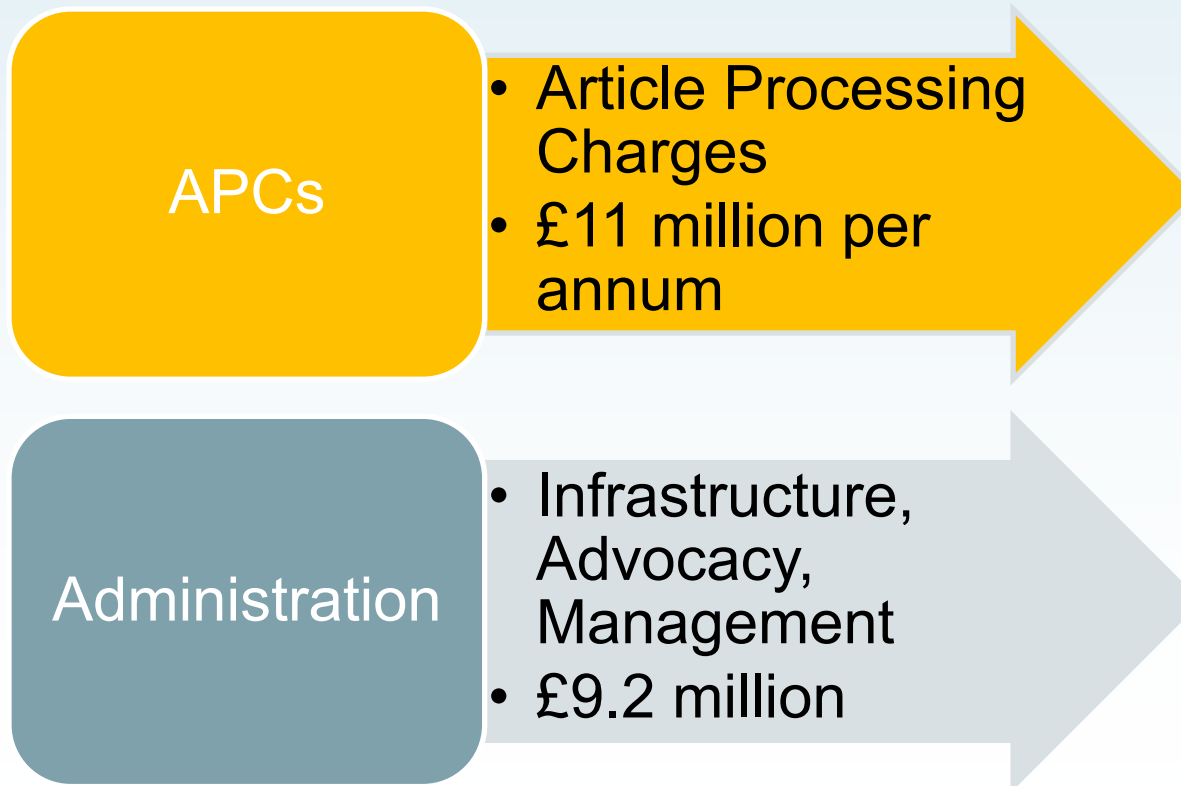| Year	Wellcome-acknowledged UCL papers in PubMed	Number of those papers in PMC	Percentage compliance
2009	484	305	63%
2010	528	361	68%
2011	562	423	75%
2012	656	492	75%
2013	752	574	76%
2014 to 31/7/14	725	528	73%

UCL compliance with RCUK requirements

Year	Year	% of RCUK papers to be deposited	OA target for deposit of full text	Achieved	% achieved against target
1	2012/14	45%	693 papers	797 papers	115%
2	2014/15	53%	815 papers	963 papers	118%
5	2017/18	75%			

Funding for OA in the UK: Costs of Implementation for RCUK

❑ Research Consulting undertook a study of the costs of OA implementation

APCs	• Article Processing Charges • £11 million per annum

Administration	• Infrastructure, Advocacy, Management • £9.2 million

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Funding for OA in the UK: Costs of Implementation for HEFCE REF mandate

Costs of Implementation

- £4 million - £5 million
- Administration -£9.2 million

Costs of Gold OA administration

- £81 per article
- 1 extra FTE needed for every 500 APCs

Costs of Green OA

- £33 per article
- 1 extra FTE needed for every 1500 repository deposits

Double Dipping

❑ Countries which favour Gold OA have to pay APCs for Gold OA and journal subscriptions costs

  ❑ Sometimes called Double Dipping

  ❑ Better called Total Cost of Ownership (TCO)

❑ JISC Collections has produced Principles on TCO

❑ Publishers should not charge the same institutions twice, through the payment of subscriptions and APCs

❑ Solution is to implement offsets, either against the subscription price or against the cost of APCs

Total Cost of Ownership

DOUBLE DIPPING

❑ UK agreement with Springer

Springer Science+Business Media and Jisc have agreed on a new arrangement which takes into account UK scientists' need to comply with multiple funders' open access policies and to have access to the vast library of scientific articles published by Springer, while containing the combined costs of article processing charges and subscriptions.

http://www.jisc.ac.uk/news/springer-and-jisc-reach-agreement-31-mar-2015

Advocacy

❑ LERU (League of European Research Universities)

❑ Vice-Chancellors issued a statement on 18 March 2015

    ❑ Condemning Double Dipping

    ❑ Encouraging Publishers and all stakeholders to produce solutions

    ❑ Calling on all European countries to work on this challenge

    ❑ http://www.leru.org/index.php/public/news/leru-calls-for-fundamental-change-to-the-financial-model-behind-journal-publishing/

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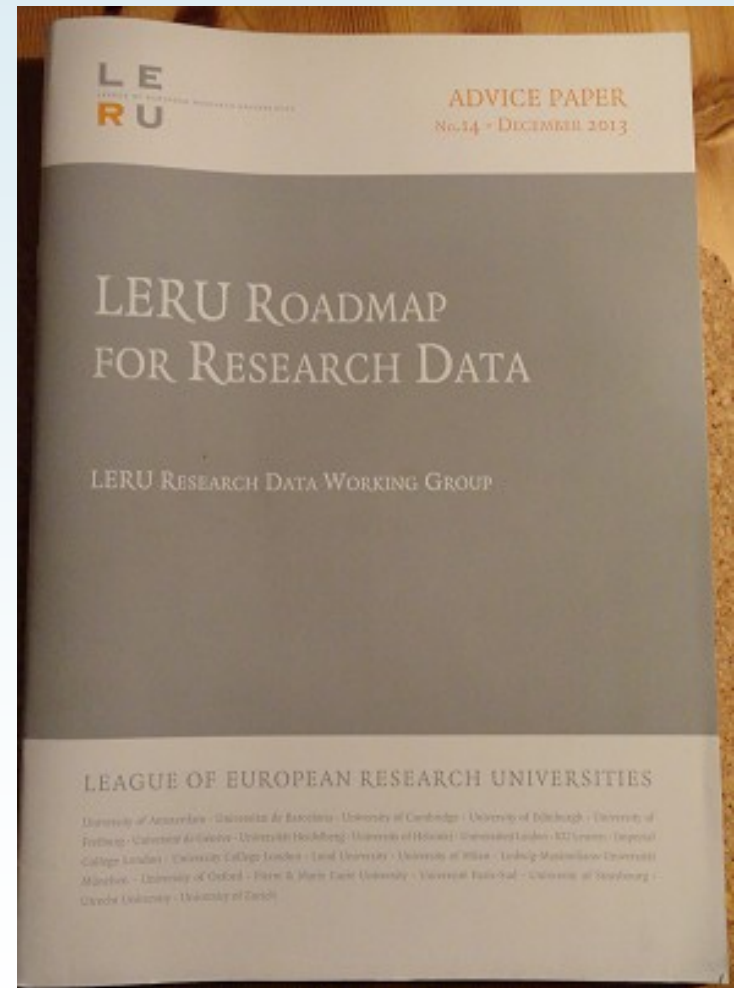- ❑ Conclusions

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LERU Roadmap for Research Data

☐ Overseen by Research Data Working Group

Pablo Achard (University of Geneva)
Paul Ayris (UCL, University College London)
Serge Fdida (UPMC, Paris)
Stefan Gradmann (University of Leuven)
Wolfram Horstmann (University of Oxford)
Ignasi Labastida (University of Barcelona)
Liz Lyon (University of Bath)
Katrien Maes (LERU)
Susan Reilly (LIBER)
Anja Smit (University of Utrecht)

LERU Roadmap for Research Data

1. Policy and Leadership
2. Advocacy
3. Selection and Collection, Curation, Description, Citation, Legal Issues
4. Research Data Infrastructure
5. Costs
6. Roles, Responsibilities and Skills
7. Recommendations to different stakeholder groups
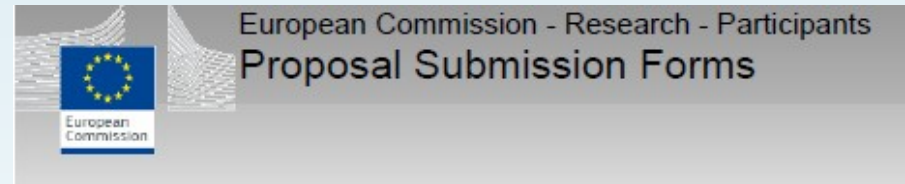
The Globe, Cern, Geneva

Key Messages

❑ Each LERU university needs a Research Data Management Strategy

❑ Researchers should have Research Data Management Plans

❑ LERU universities need to bring stakeholders together

❑ Benefits of 'open data' for sharing and re-use should be advocated and explored

A Box of Useful Knowledge
(Brougham Papers, UCL Library Services)

LEARN – LEaders Activating Research Networks

❑ Purpose is to develop the LERU Roadmap for Research Data to build a global co-ordinated global e-infrastructure

European Commission - Research - Participants
Proposal Submission Forms

❑ Outputs

   ❑ Model Research Data Management policy

   ❑ Toolkit to support implementation

   ❑ Executive Briefing in five core languages so as to ensure wide outreach

Horizon 2020

Call: H2020-INFRASUPP-2014-2

Topic: INFRASUPP-7-2014

Type of action: CSA

Proposal number: 654139

Proposal acronym: LEARN

The Hague Declaration on **KNOWLEDGE DISCOVERY** in the Digital Age

Vision

New technologies are revolutionising the way humans can learn about the world and about themselves. These technologies are not only a means of dealing with Big Data[1], they are also a key to knowledge discovery in the digital age; and their power is predicated on the increasing availability of data itself. Factors such as increasing computing power, the growth of the web, and governmental commitment to open access[2] to publicly-funded research are serving to increase the availability of facts, data and ideas.

See http://thehaguedeclaration.com/

The Hague Declaration aims to foster agreemer[t] access to facts, data and ideas for knowledge di[scovery] removing barriers to accessing and analysing th[e] society, we can find answers to great challenge[s] depleting natural resources and globalisation.

"This declaration will be a key pillar in the foundation of Open Science, in strong and innovative economies and in a healthy society."

-Susan Reilly, LIBER Europe

115
Organisations signed

174
People signed

Add your signature

What is text and data mining?

"Text and data mining (TDM) is the process of deriving information from machine-read material. It works by copying large quantities of material, extracting the data, and recombining it to identify patterns." – UK Government

There are four stages to the TDM process. First, potentially relevant documents are identified. These documents are then turned into a machine-readable format so that structured data can be extracted. The useful information is extracted (Stage 3) and then mined (Stage 4) to discover new knowledge, test hypotheses, and identify new relationships.

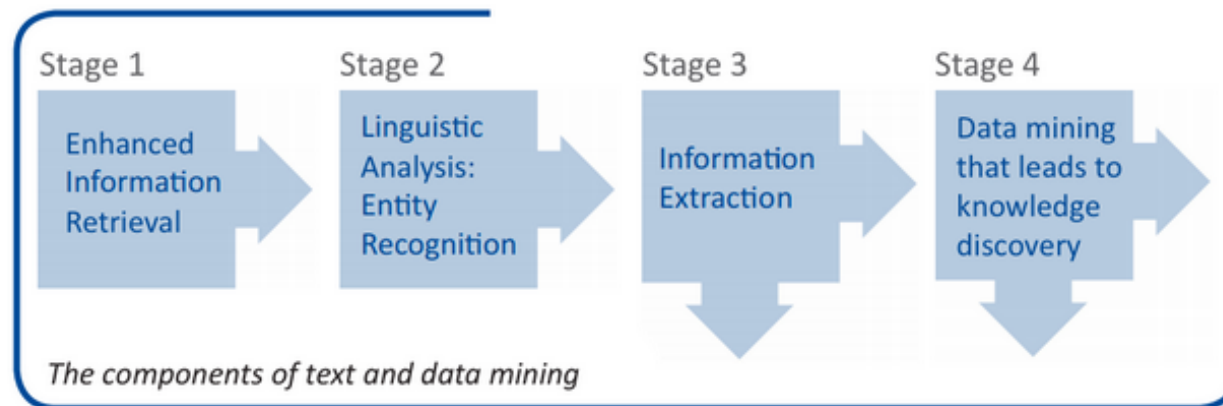| Stage 1	Stage 2	Stage 3	Stage 4
Enhanced Information Retrieval	Linguistic Analysis: Entity Recognition	Information Extraction	Data mining that leads to knowledge discovery

The components of text and data mining

Image credit: JISC / Value and Benefits of Text Mining (2012)

Principles of The Hague Declaration

Intellectual Property was not designed to regulate facts and ideas

People should have the freedom to pursue intellectual curiosity

Licences and contracts should not limit the freedom to use data and ideas

Ethics in Text and Data Mining should continue to evolve as technology changes

Innovation and commercial research should not be restricted by intellectual property law

Text and Data Mining

❑ The EU Commission's draft Digital Single Market Strategy sees data as the 'oil' of the new European economy

Benefits of Content Mining

The potential benefits of content mining are vast and include:
- Addressing grand challenges such as climate change and global epidemics
- Improving population health, wealth and development
- Creating new jobs and employment
- Exponentially increasing the speed and progress of science through new insights and greater efficiency of research
- Increasing transparency of governments and their actions
- Fostering innovation and collaboration and boosting the impact of open science
- Creating tools for education and research
- Providing new and richer cultural insights
- Speeding economic and social development in all parts of the globe

UCL LIBRARY SERVICES logo at top

Path to EU Copyright reform to support TDM

Libraries

- LIBER has led to the way to campaign for Copyright Exceptions in EU Copyright and Database Directives

Rightsholders /Publishers

- Want no change to current regimes
- Legislators fear loss of remuneration for rightsholders

Meetings, Meetings, Meetings

- With Commission officials
- With Members of the European Parliament

Digital Single Market Strategy (May 2015)

- Promises greater legal certainty for Text and Data Mining via pan-EU harmonised Exceptions
- Commission publishing Copyright reform proposals in September
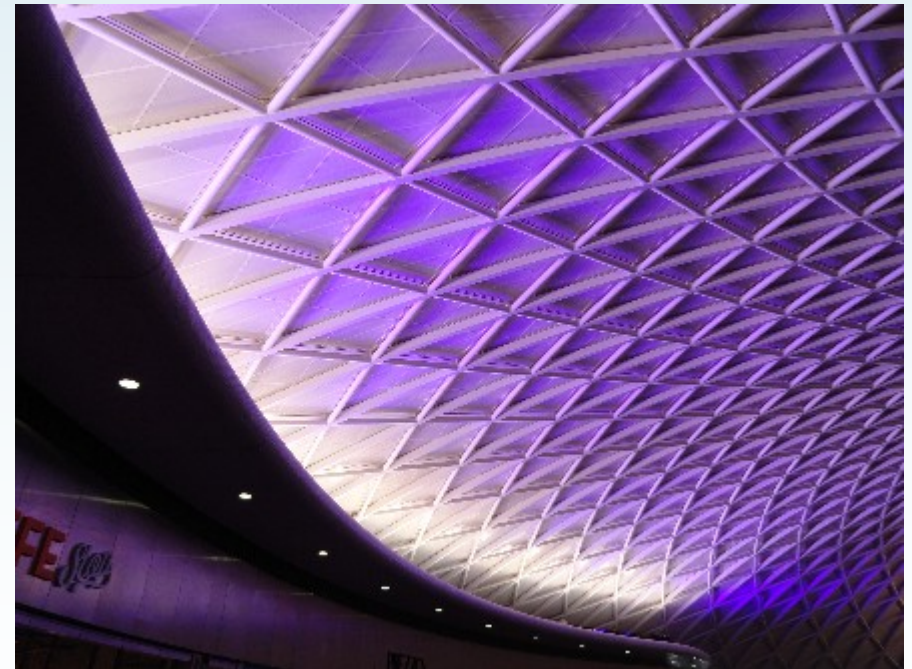
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Flaxman Gallery, UCL

Open Science – the Motivation
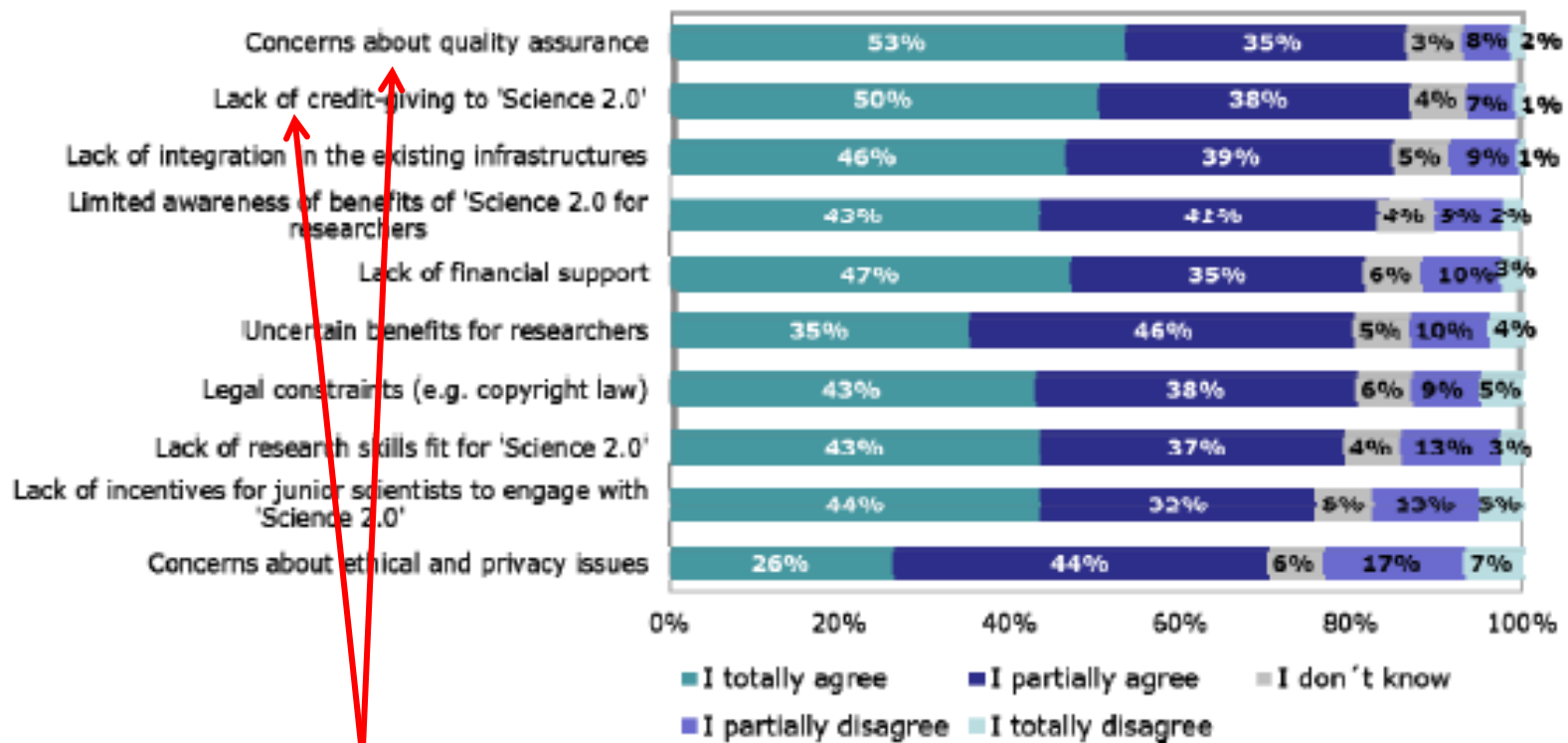
- ❑ [Validation](#) of the results of the EU's public consultation on *Science 2.0: Science in Transition* now published
- ❑ Science 2.0 now renamed 'Open Science'
- ❑ Trends in Open Science
  - ❑ Significant increase in scientific production
  - ❑ New ways of doing Science (data-intensive science)
  - ❑ Increased number of actors and addressees of science

King's Cross Station, London

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Barriers to Open Science – for individual researchers

Barriers to Open Science chart:

Barrier	I totally agree	I partially agree	I don't know	I partially disagree	I totally disagree
Concerns about quality assurance	53%	35%	3%	8%	2%
Lack of credit-giving to 'Science 2.0'	50%	38%	4%	7%	1%
Lack of integration in the existing infrastructures	46%	39%	5%	9%	1%
Limited awareness of benefits of 'Science 2.0 for researchers	43%	41%	4%	5%	2%
Lack of financial support	47%	35%	6%	10%	3%
Uncertain benefits for researchers	35%	46%	5%	10%	4%
Legal constraints (e.g. copyright law)	43%	38%	6%	9%	5%
Lack of research skills fit for 'Science 2.0'	43%	37%	4%	13%	3%
Lack of incentives for junior scientists to engage with 'Science 2.0'	44%	32%	6%	13%	5%
Concerns about ethical and privacy issues	26%	44%	6%	17%	7%

❑ **Academic issues and concerns around Career progression seen as the biggest barriers**

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% Agreement for Policy actions (abbrev.)

Question/Issue	Need to Intervene Y	Need to Intervene N	Req'd Action Y	Req'd Action N	EU Action Y	EU Action N
Foster Open Science – raise awareness	52%	4%	48%	4%	19%	4%
Traditional Metrics do not capture Open Science	22%	7%	22%	7%	4%	7%
Develop research infrastructures	56%	4%	11%	4%	48%	4%
OA to publications and data	63%	11%	33%	26%	26%	11%

❏ **The most significant total in the Validation exercise**

❏ **Not much interest in any intervention**

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Metrics and Altmetrics

- ☐ San Francisco Declaration on Research Assessment (DORA)
  - ☐ LERU (League of European Universities) has signed
  - ☐ Not many universities have signed (yet…)
  - ☐ DORA rejects Journal impact factor as a mark of quality

- ☐ Altmetrics seen as a generalization of article level metrics,
  - ☐ alternative to the widely used journal impact factor and personal citation indices like the *h*-index
  - ☐ Too early for alternative approaches to win widespread support

Leiden Manifesto for research metrics

❑ [Leiden Manifesto](#) posits 10 principles to guide research evaluation

❑ Many encompass bibliometric indicators

❑ Being scrutinised in Europe as basis for Good Practice

❑ In UCL, Library chairs University Bibliometrics Working Group

Illustration by David Parkins

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Leiden Manifesto for research metrics

Qualitative Assessment	• Quantitative evaluation should support qualitative, expert assessment
Research Mission	• Measure performance against the research missions of the institution, group or researcher
Local Excellence	• Protect excellence in locally relevant research
Collection & Analysis	• Keep data collection and analytical processes open, transparent and simple
Verification	• Allow those evaluated to verify data and analysis

Leiden Manifesto for research metrics

Possible Indicators	• Account for variation by field in publication and citation practices
Qualitative Judgements	• Base assessment of individual researchers on a qualitative judgement of their portfolio
Realism	• Avoid misplaced concreteness and false precision
Impact of Indicators	• Recognize the systemic effects of assessment and indicators
Keep Up To Date	• Scrutinize indicators regularly and update them

UCL Publishing model

❏ Journal publishing platform
  ❏ OJS (Open Journal Systems) overlaying UCL Discovery as storage layer
  ❏ Peer-reviewed journals
  ❏ Run by academic Editorial Committees

❏ Research Monograph list being launched in 2014-15
  ❏ 10 titles in year 1
  ❏ Using Open Monograph Press

❏ Textbook infrastructure
  ❏ Being constructed with JISC project monies

Paul Ayris
UNITED KINGDOM

❏ Open Access is an opportunity, not a threat

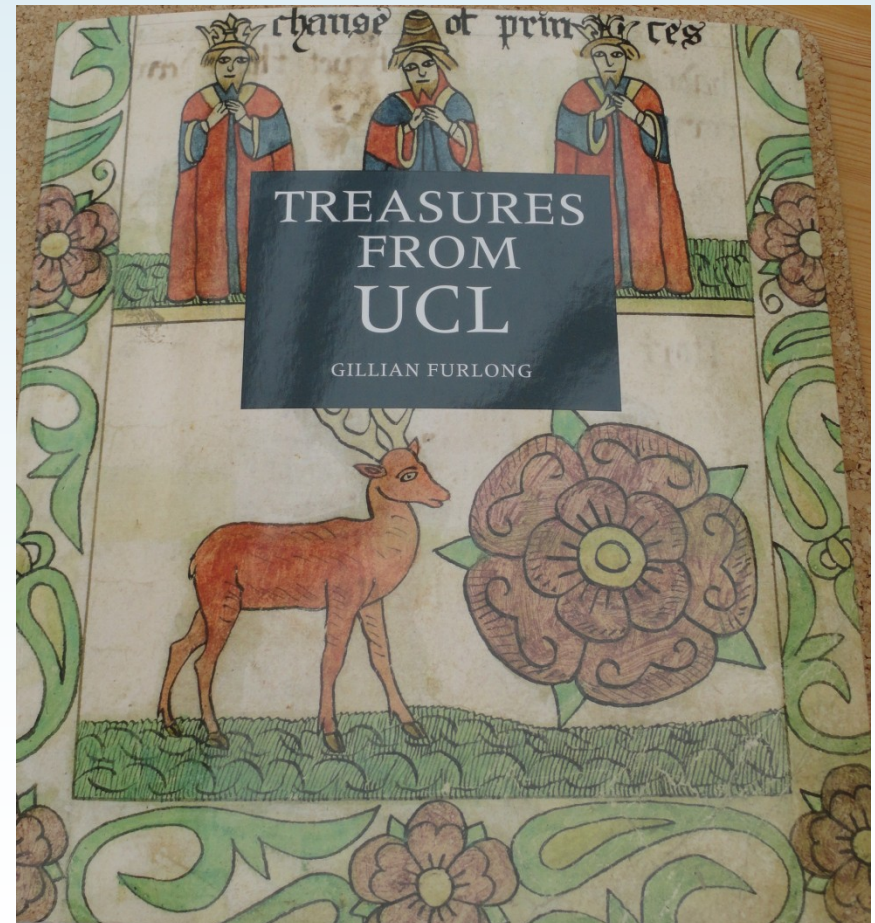❏ See http://www.ucl.ac.uk/library/ucl-press

UCL Publishing model

❑ Open Access business model

❑ Sales via Print on Demand/enhanced e-models

❑ Books will be peer reviewed before publication

❑ Innovative technical solutions for Monographs and Textbooks

❑ Open up publishing to new communities

❑ Global impact for the University as an outcome

A Box of Useful Knowledge
(Brougham Papers, UCL Library Services)
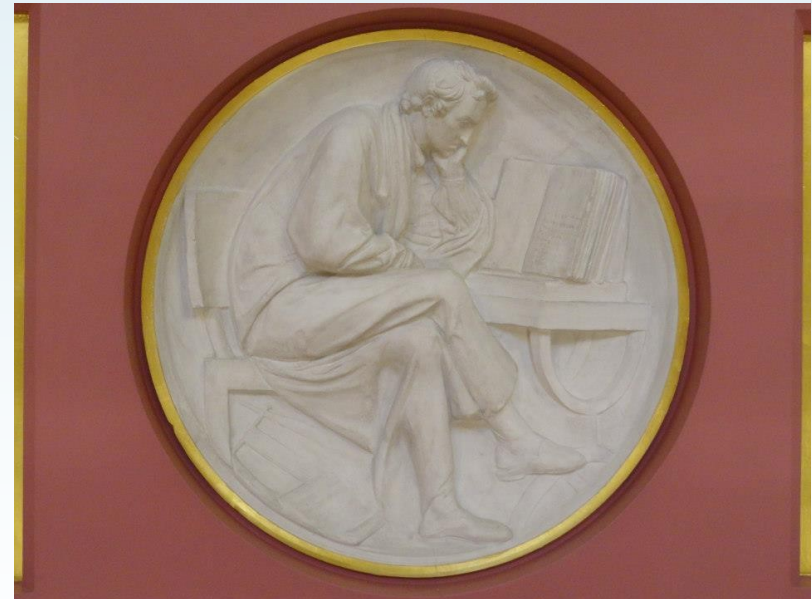
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UCL Press's First Publications

- ❑ UCL Press being launched on 4 June 2015
- ❑ 10 monographs in Year 1 (2015)
  - ❑ 60+ monographs currently offered
- ❑ Textbooks
  - ❑ JISC project funding 2 exemplar OA textbooks with new digital interface
- ❑ Academic Journals
- ❑ Hosted journals for Student productions

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Conclusions

❑ Common in Europe for libraries to run OA policy and practice for Universities

❑ Research Data Management is a major challenge for Universities

  ❑ Research libraries have a major role to play

❑ Open Science sets new agendas for libraries

  ❑ Bibliometrics
  ❑ Publishing

❑ If you have been…

❑ Thanks for listening

❑ Happy to hear any Questions

❑ UCL, Wilkins Building, 1826