Publishers & Research Integrity and Ethics

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Environment of the Digital Revolution

Domain

- Digital documents
  - Infinitely reproducible
  - Impossible to freeze or protect from alteration

- Attitudes from .com
  - E = free
  - Yours = Mine
  - (intellectual) property is theft
  - Public funding means public access

Consequences

- Distribution and reproduction not a basis for business models
- Trust and integrity challenged by impossibility of freezing authorised versions
- Traditional copyright undermined
- Political debate altered

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STM Market and OA Penetration
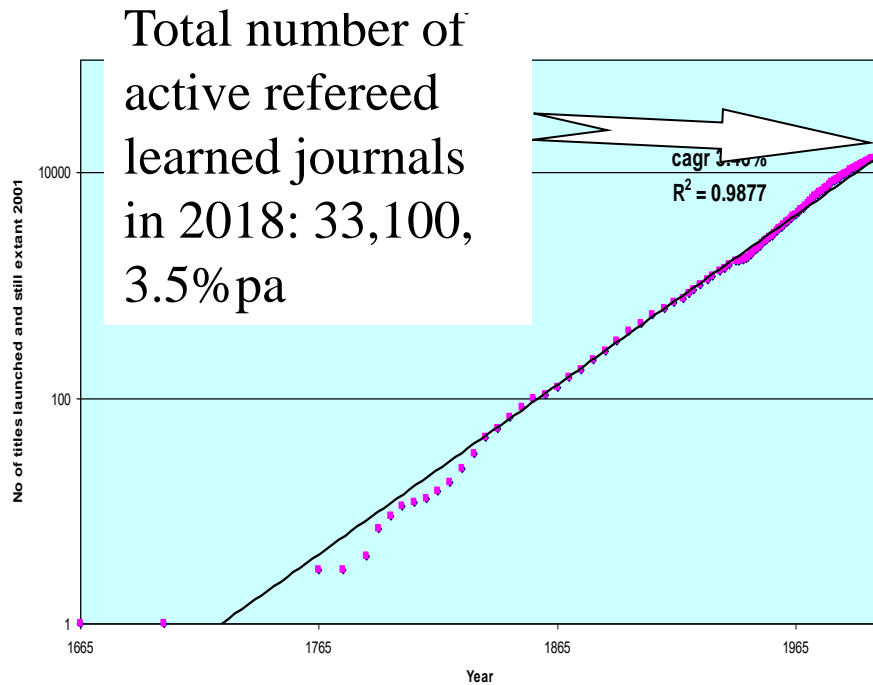
Academic market

- Global
- About 33,000 peer reviewed journals, 3.5 million articles annually
- Growth due to growth of researchers
- Articles expanding by 3-4% p.a. and peer reviewed journal titles by about 3.5% p.a.

Open Access Penetration

- 35% in total, 15% Gold (chiefly hybrid)
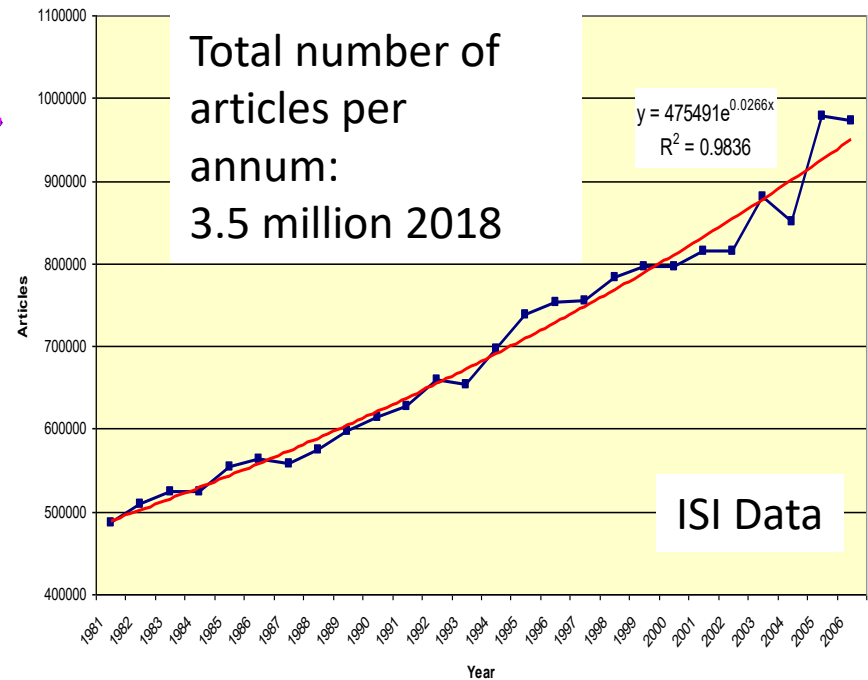- Highly variable by discipline and by region
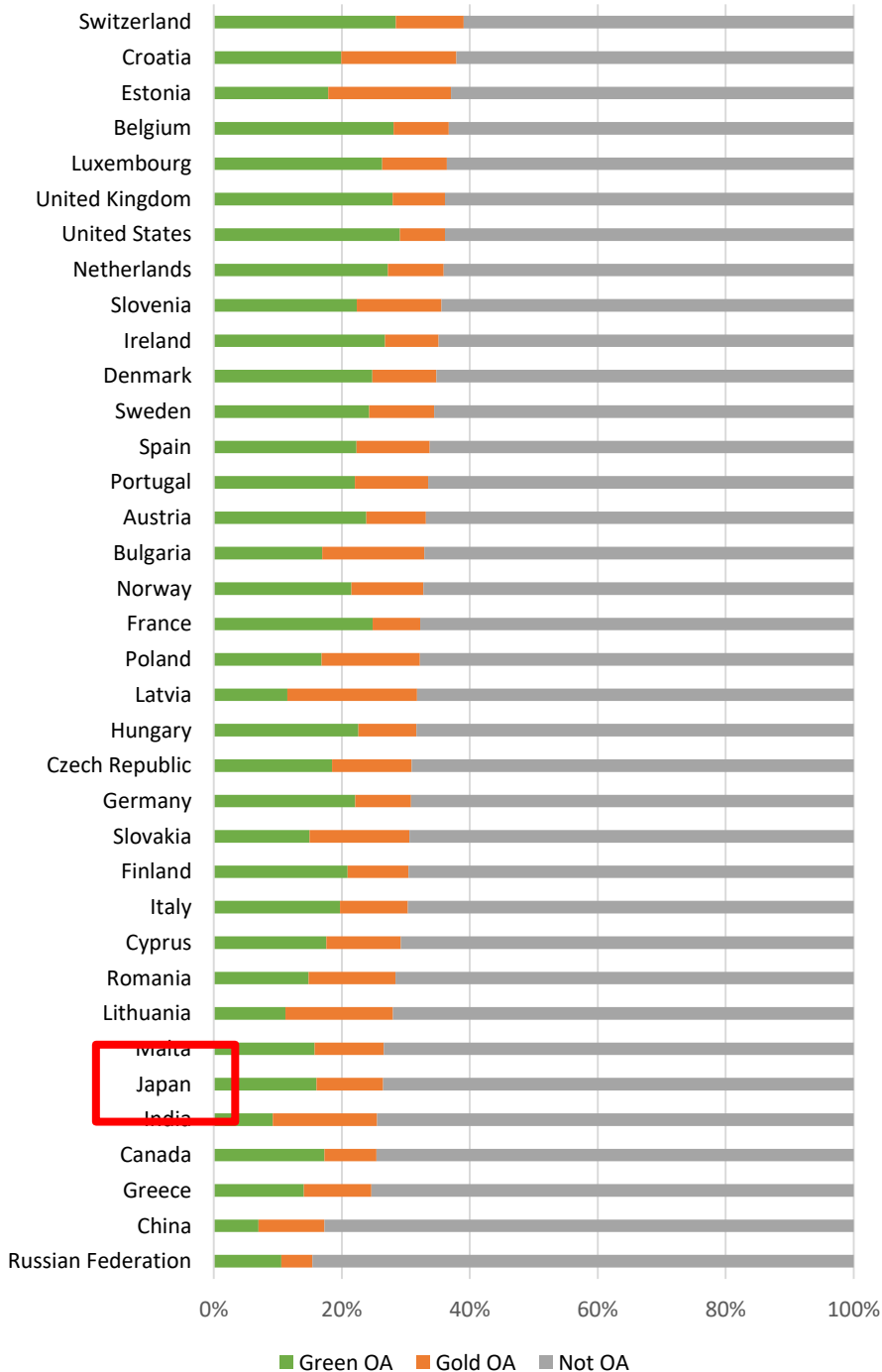
Scholarly Market Overview

Journal Growth 1665-2018

Total number of active refereed learned journals in 2018: 33,100, 3.5%pa

cagr ~~3.46%~~

$R^2 = 0.9877$

No of titles launched and still extant 2001

10000

100

1

1665   1765   1865   1965

Year

[Original Source: M A Mabe The number and growth of journals *Serials* **16**(2).191-7, 2003]

Article Growth 3%pa

Total number of articles per annum: 3.5 million 2018

$y = 475491e^{0.0266x}$
$R^2 = 0.9836$

Articles

1100000

1000000

900000

800000

700000

600000

500000

400000

ISI Data

1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

Year

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Percentage OA by Nation
Source:
EC Open Science Monitor,
(April 30th 2018)

OA Variability by subject

Gold, Green

- Medicine: 13,9 % / 7,8 %
- Biochemistry, Genetics & Molecular Biology: 13,7 % / 6,2 %
- Other Areas Related to Medicine: 10,6 % / 4,6 %
- Mathematics: 8,1 % / 17,5 %
- Earth Sciences: 7,0 % / 25,9 %
- Social Sciences: 5,6 % / 17,9 %
- Chemistry and Chemical Engineering: 5,5 % / 7,4 %
- Engineering: 4,8 % / 13,6 %
- Physics and Astronomy: 3,0 % / 20,5 %
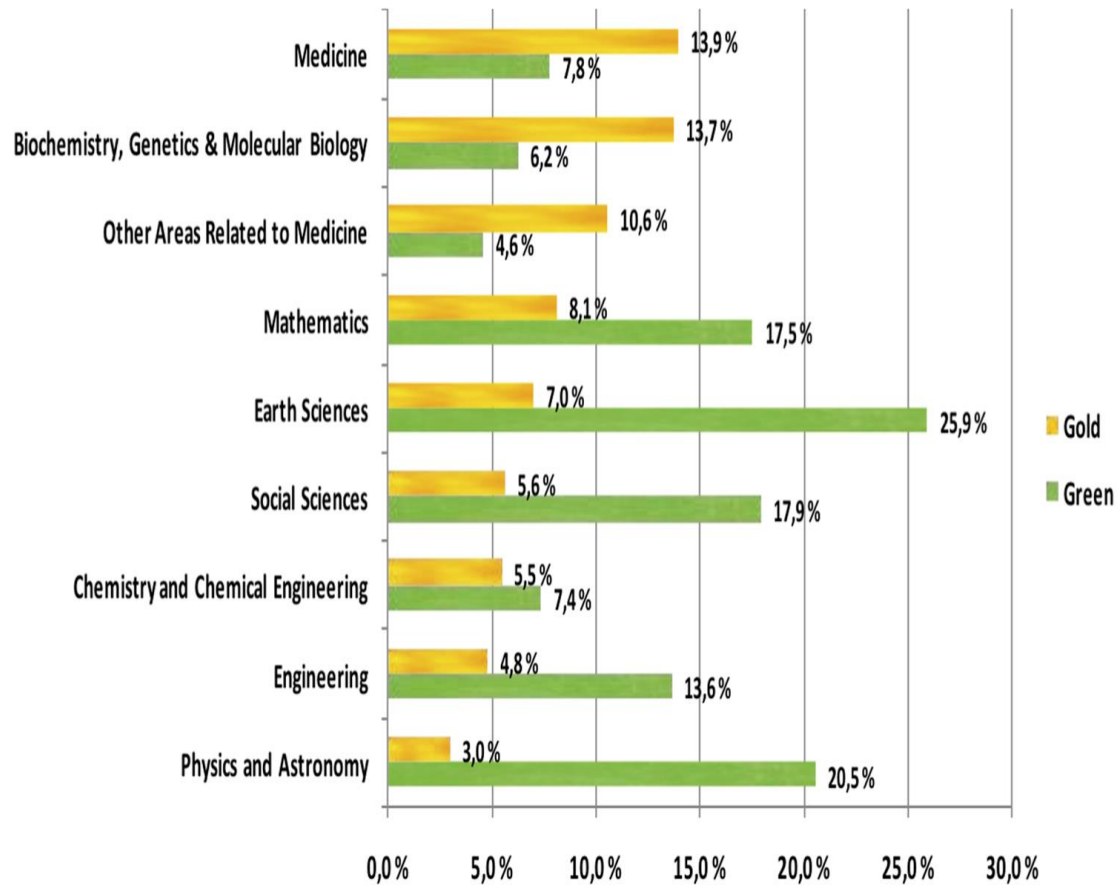
Source: Bjòrk et al. 2010

Digital Consequences

- Digital articles are easy to reproduce and share, cannot be frozen in final form and are re-useable and re-editable

- Favours:
  - Open access pay to publish models
  - Article sharing modalities and new licensing models
  - Creation of collections of previously published papers
  - Data collection
  - Re-editing of "final" forms of papers

Advantages and Disadvantages of the Digital Revolution

Advantages

- More content available to more people than in the whole history of mankind
- Authors and readers able to interact more
- Multiple re-use
- Easy bi-directional linking of research data from and to the publication
- Text and Data mining
- User analysis and study
- Greater transparency over publication misconduct

Disadvantages

- Undermines peer review
- Undermines final versions
- Author citation and peer review rings easy to set up
- Easy for start-up open access publishers to thrive with minimal standards
- Easy to manipulate files allowing for interference in graphical data and images
- Creates impression that retractions are rising because easier to find

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Need for Added Vigilance

- Fraud
- Predatory publishing
- Image manipulation
- Peer reviewer scams
- Fake authorship

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What the STM Industry is Doing

- Publishers participate in Research Integrity conferences
- Publishers have adopted ethics guidelines
- Organisations such as COPE (Committee on Publication Ethics) created in 1997
- Publisher associations monitor new membership applications for predatory behaviour
- Education of researchers about what to look for in a legitimate publisher
- STM Year of Research Data in 2020

C O P E

Promoting integrity in research and its publication

COPE provides leadership in thinking on publication ethics and practical resources to educate and support members, and offers a professional voice in current debates.

Read more

New Guidance

Authorship Discussion Document

This new Authorship DIscussion Document provides practical advice on addressing the most common issues around authorship with specific guidance where there seems to be consensus and asking for further comments from COPE members in some areas.

Read more

S T M

STM Ethics Statement and COPE

- STM developed a Statement on Ethical Principles for Scholarly Publishing (https://www.stm-assoc.org/2013_05_21_STM_Ethical_Principles_for_Scholarly_Publication.pdf) in collaboration with its members

- STM worked with ICSU (now ISC) and COPE to develop an overarching ethics position that all could agree on

- COPE expanded from a largely medical publishing ethics body to covering all disciplines

STM Code of Conduct

- Created to prevent our brand being used to legitimise any new predatory publisher
- ALL members must
  - Adhere to professional standards
  - Follow the STM ethical principles or equivalent like COPE
  - Indicate the status of any publication with peer review policies clearly outlined
  - Editorial boards should be recognised experts who have agreed to serve
  - Any fees for publishing services should be clearly stated and easy to find
- Members failing this can be excluded

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Membership Review

- Applications are received online

- Organisation is researched

- Any red flags noted

- Membership Committee decides to admit or not

- Disputes if any settled by the Board

THINK ✓ **CHECK** > **SUBMIT**

Choose the right journal for your research

Think. Check. Submit. helps researchers identify trusted journals for their research. Through a range of tools and practical resources, this international, cross-sector initiative aims to educate researchers, promote integrity, and build trust in credible research and publications.
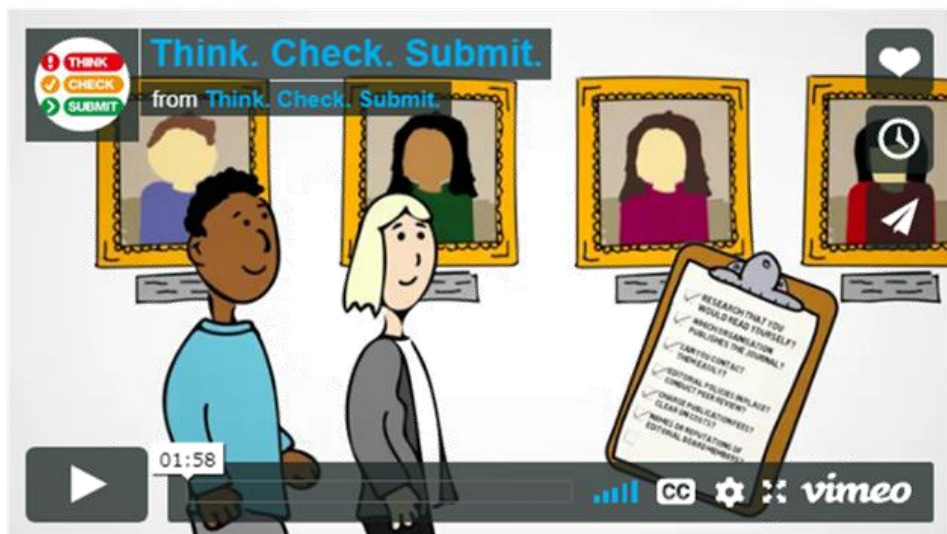
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10th July 2019

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10th July 2019

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STM Year of Research data - 2020

The STM action plan on research data will focus on the following three elements:

1. Data Availability statements (as a journal policy)

2. Data Linking (SCHOLIX as a shared infrastructure)

3. Data Citation (as common standard for guidelines)

Sharing of Research Data plays a key-role in the endeavors for Open Science and trust/integrity
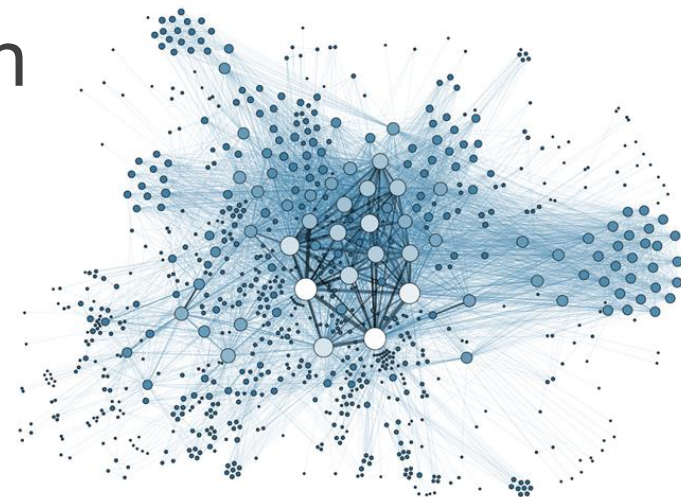
What about Blacklists?

- ## Beall's List
  - a prominent **list** of predatory open-access publishers that was maintained by University of Colorado librarian Jeffrey **Beall** on his blog Scholarly Open Access but now closed
  - Issues with how publishers were added or removed
  - Subject to legal concerns

- ## Cabell's International
  - Have created a follow-up

- ## Fairness and restraint of trade problems
  - Legally not advisable to create a blacklist

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Working with Others

- Previous work with COPE
- Previous work with ICSU (now merged to create ISC)
- Discussions with many organisations about how best to tackle abuses
  - International Science Council
  - ALLEA (all European Academies)
- STM is part of the Think Check Submit steering committee
- Keen to have discussions with Japanese agencies like JST, JSPS etc.

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