The open access landscape

Cross section between techn. & phil.

Jens Vigen, Nairobi, Kenya, 9th October 2018
If you have an apple &
I have an apple & we exchange apples
then you & I will still
each have one apple.

But if you have an idea &
I have an idea & we exchange these ideas
then each of us will have 2 ideas.

- George Bernard Shaw
“Full” Open Access
an opportunity for the crowds

- The print era had its natural limitations
- There is no reason to carry any of these limitations forward to the online era
- Today any scientist should have the possibility to read, textmine, remix material and publish without being confronted with any financial or legal barriers
... do authors submit?

A quick reality check on the annual production:

1. ~300 theoretical papers, we capture 0% (!!)
2. ~500 theses, we capture 10% (world average ...)
3. ~300 experimental papers, we capture 95%

How can this be compensated for?

1. Import from arXiv ensures 100% coverage for theory
2. Individually e-mailing authors retrospectively, brings the coverage up to 30%, even for theses dating 10 years back
3. Check for CERN authors in publishers feeds, contact the research group or import publishers’ version when permitted
Gold and green hand in hand

1. Targeted action: 13’000 theoretical articles over 57 years
   • Old copies of manuscripts retrieved and scanned from the CERN Archive and private archives of the authors

2. Hunt for theses

3. Requesting authors to publish in OA journals : goal 100%
   1. Mechanisms for publishing OA
      1. SCOAP³ for physics content
      2. Special deals with JINST, NIMA and IEEE for instrumentation content
      3. PRAB for accelerator related content
      4. CERN supports authors centrally, for occasional articles, with the payment of publication fees (APC)

4. Encouraging conference organizers to use OA outlet for proceedings

5. Sponsoring a few OA monographs per year
Mandating and advocacy have limits:

- “Top-scientists” tend to ignore both “mandating” and “mandated” librarians – Plan S might change this
- Authors need to see an immediate return from their time investment
- Authors get this return (visibility, standing) by submitting to subject repositories, *i.e.* arXiv
- Not all HEP-sub communities submit to arXiv, and we lose the content ...
- We observe a different situation for thesis: authors perceive that the IR offers a good preservation, and they are glad to submit theses once asked
Aiming for 100% OA coverage

• Institutional and subject repositories goes hand in hand. Ensure interoperability and co-operate to develop the services required by all the partners

• Capture non-submitted papers by:
  – Monitoring publisher feeds
    • In order to be discovered publishers have a strong interest to feed subject repositories
  – Working with OA friendly publishers
    • Allowing storage of version of record on institutional web sites
- Adds value to arXiv hep- *
- Index non-arXiv material
- Compiles historical material
- A gateway to scientific data

http://inspirehep.net
NASA Astrophysics Data System (ADS)

- ADS now indexes 12.2M metadata records (11.4M linked)
- Its citations database contains 70M records
- Currently over 4M records in fulltext archive, looking to grow to cover all peer-reviewed content currently in ADS
- Added metadata for 1,100 volumes of historical literature funded by Smithsonian grant
but not everything is available for free ...

Authors should ensure the availability of their manuscripts!
The International Nuclear Information System (INIS) hosts one of the world's largest collections of published information on the peaceful uses of nuclear science and technology. It offers online access to a unique repository of non-conventional literature. INIS is operated by the IAEA in collaboration with over 150 members.

In focus

- Nuclear safety
- Browse INIS Repository by Subject Category and popular search topics
- Include INIS Repository Search Widget on your page
- INIS in the World: Activities of INIS national centres
All researchers have an equal right to contribute their knowledge and evidence and participate in the global problem-solving process.

Academic publishing

Northern journals dominate global research, leading to an underrepresentation of knowledge from the South. Championing Southern journals is essential for redressing imbalance in the dissemination of global research.

Everyone has an equal right to access the world’s collective knowledge, irrespective of geography, wealth, race, ethnicity or gender.

Information access

In order to develop local solutions, people need access to evidence, facts and data. Access to research information and knowledge is essential for any strong research and knowledge system.

We support institutions and their librarians to provide sustainable access to the information that their academics and students need.
A selection of relevant resources for physicists:

- **American Astronomical Society**

- **American Institute of Physics**
  AIP publishes 12 journals, 2 magazines, and a conference proceedings series. AIP’s Scitation platform hosts over 2 million articles from more than 115 publications for 28 earned society publishers.

- **American Physical Society**
  Access 120,000+ free articles from journals published by the American Physical Society.

- **Annals of Physics**
  Annals of Physics is indexed in the literature databases of the major science citation indexes for science, technology, and social sciences.

- **Over 50 publishers, covering 50,000 journals and 20,000 books, feature in INASP’s offer.**
  With support from INASP, over 1700 universities, research institutes, government agencies and hospitals across Africa, Asia and Latin America have been able to provide a steady flow of essential information to their staff and students.

- **IOP Publishing**
  IOP publishes over 60 of the world’s most prestigious journals in physics and related fields.
Consortium contacts

For more information about the research literature available in your country, or for access support, contact your local library consortium.

Africa

- Ethiopia: Consortium of Ethiopian Academic and Research Libraries
- Ghana: Consortium of Academic and Research Libraries, Ghana (CARLIGH)
- Kenya: Kenya Libraries and Information Services Consortium (KLISC)
- Lesotho: Lesotho Library Consortium (LELICO)
- Malawi: Malawi Library and Information Consortium (MALICO)
- Mozambique: Universidade Eduardo Mondlane
- Rwanda: Rwanda Academic and Research Libraries Consortium (RARLICO)
- Sierra Leone: University of Sierra Leone
- Tanzania: Consortium of Tanzania University and Research Libraries (COTUL)
- Uganda: Consortium of Uganda University Libraries (CUUL)
- Zambia: Zambia Library Consortium (ZALICO)
- Zimbabwe: Zimbabwe University Libraries Consortium (ZULC)

https://dashboard.inasp.info/page/consortium-contacts
The HINARI Programme

• HINARI Access to Research Initiative.
• Set up by WHO together with major publishers.
• Enables developing countries to gain access to one of the world's largest collections of biomedical and health literature.
• Up to 14,900 journal titles and 60,000 eBooks are now available to health institutions in 115 countries, areas and territories.
• Benefit many thousands of health workers and researchers.
• Contributes to improve world health.
ARDI was launched in 2009 by the World Intellectual Property Organization, in cooperation with major publishers, to assist developing countries in bridging the knowledge gap.

Currently, 100 publishers provide access to around 30,000 journals, books, and reference works for 120 developing countries and territories through ARDI.

ARDI is a member of the Research4Life partnership.
PubMed Central is a free digital archive of articles, accessible to anyone from anywhere via a basic web browser. The full text of all PubMed Central articles is free to read, with varying provisions for reuse. is a member of the Research4Life partnership.
In May 2016, SSRN was bought from Social Science Electronic Publishing Inc. by Elsevier
Economics

RePEc

General principles

RePEc (Research Papers in Economics) is a collaborative effort of hundreds of volunteers in 99 countries to enhance the dissemination of research in Economics and related sciences. The heart of the project is a decentralized bibliographic database of working papers, journal articles, books, books chapters and software components, all maintained by volunteers. The collected data are then used in various services that serve the collected metadata to users or enhance it.

So far, over 2,000 archives from 99 countries have contributed about 2.6 million research pieces from 3,000 journals and 4,600 working paper series. Over 50,000 authors have registered and 75,000 email subscriptions are served every week. See below on how you can be part of this initiative.

RePEc services

The following are services that use (principle) and contribute RePEc data. They also report usage statistics that can be used towards the RePEc rankings.

MPRA

Munich Personal RePEc Archive

Authors in institutions lacking a participating RePEc archive can submit their papers to MPRA and get them included in the RePEc database.

RePEc Author Service

RePEc Author Service

Author registration and maintenance of a profile on RePEc.

IDEAS

IDEAS

The complete RePEc database at your disposal. Browse or search it all.

EconPapers

EconPapers

Economics at your fingertips. EconPapers provides access to all of RePEc. Browsing and searching available.

RePEc Genealogy

RePEc Genealogy

Academic family tree for economics.

http://repec.org
SCOAP³ has started its operation in January 2014 and is supporting 4,500 Open Access articles per year.
What is Open Access?

Publishers and OA
Free access to everyone?

Some journals are called hybrid journals: they publish both open access and not open access articles.

Author or the related institution may have to pay for an article to be open access. This is called the author pays model.

Depending on the journal, the articles may be freely accessible right away or they may become open access later. after a certain period e.g. one year. This is called delayed open access.
Principles of Open Access

Unrestricted use?

Even Open Access, everything is not allowed!

You may access the information or material for free, but there may be restrictions and limitations how you can use that information or material and what you can do with it.

OA literature is free of charge, and usually free of most copyright and licensing restrictions. This is made possible by the consent of the author or copyright-holder.

However, the original author must at the least be credited for the work. This means usually mentioning the author either by quoting him or her, or referring appropriately to his (her) text.
Free access to everyone?

Some journals seek for sponsors to make articles open access.

For example, The APS FREE TO READ Initiative:

-Since September 2006, by paying a one-time fee, anyone may make articles published in their seven journals available to all readers at no cost and without a subscription

-Readers will have access to the PDF and postscript versions of the

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**American Physical Society phases out Free-to-Read program in lieu of Creative Commons licensing**

Published on February 16, 2011 at 6:50 AM

As of 15 February 2011, authors in most Physical Review journals have a new alternative: to pay an article-processing charge whereby their accepted manuscripts will be available barrier-free and open access on publication. These manuscripts will be published under the terms of the Creative Commons Attribution 3.0 license (CC-BY) (http://creativecommons.org/licenses/by/3.0/), the most permissive of the CC licenses, granting authors and others the right to copy, distribute, transmit, and adapt the work, provided that proper credit is given. This new alternative is in addition to traditional subscription-funded publication; authors may choose one or the other for their accepted papers.
What is Open Access? Publishers and OA

Hindawi

- A rapidly growing academic publisher in Egypt.
- 400+ Open Access journals, 22 000 articles/year
- All major areas of science, technology, and medicine
- Book publishing program that spans all scholarly disciplines.
Hindawi Publishing Corporation

Hindawi Publishing Corporation is one of the world’s largest publishers of peer-reviewed, fully Open Access journals. Built on an ethos of openness, Hindawi is committed to enabling the widest possible access to scholarly literature.
Gauging journals

Most used, despite several limitations: the Journal Impact Factor (Garfield, 1955) provided by Thomson Reuters.

In a given year, the impact factor of a journal is the average number of citations received per paper published in that journal during the two preceding years.

The 2018 impact factor of a journal would be calculated as follows:

\[
A = \text{the number of times that articles published in that journal in 2016 and 2017, were cited by articles in indexed journals during 2018.}
\]

\[
B = \text{the total number of "citable items" published by that journal in 2016 and 2017.}
\]

("Citable items" are usually articles, reviews, proceedings, or notes; not editorials or letters to the editor.)

2018 impact factor = A/B.
Two “families of journals”

• **Subscription**
  – Often well established
  – Free to publish
  – Limited access
  – Prevents text mining
  – Strict copyright

• **Open Access (OA)**
  – Many new titles
  – Often “author pays”
  – Unlimited access
  – Promotes eScience
  – Liberal copyright

not necessarily “either-or”:

• Many subscription journals tolerate “green OA”
  • [http://www.sherpa.ac.uk/projects/sherparomeo.html](http://www.sherpa.ac.uk/projects/sherparomeo.html)
  • Some are hybrid, both subscription and OA
• Some “gold journals” do not require author fees
Be aware of over-kind solicitations …

The former Beall’s list is by no means “the absolute truth” – take it as a guideline.

In the end of the day you have to rely on your own judgment (or seek advice from your librarian 😊)
Happy to be published 😊

A 50-year story from High-Energy Physics

Nobody cared about retaining copyright.

... which is obviously causing issues today.

You shall avoid this mistake and still be published.
Choose a license

This chooser helps you determine which Creative Commons License is right for you in a few easy steps. If you are new to Creative Commons, you may also want to read Licensing Considerations before you get started.

Choose Features  ➔ Optional Info  ➔ Get License

https://creativecommons.org/share-your-work/
License Features

Your choices on this panel will update the other panels on this page.

Allow adaptations of your work to be shared?

- Yes
- No
- Yes, as long as others share alike

Allow commercial uses of your work?

- Yes
- No

Selected License

Attribution 4.0 International

This is a Free Culture License!
CC0 use for data

CC0 (read “CC Zero”) is a universal public domain dedication that may be used by anyone wishing to permanently surrender the copyright and database rights (where they exist) they may have in a work, thereby placing it as nearly as possible into the public domain. CC0 is a legal tool that improves on the “dedication” function of our earlier, U.S.-centric public domain dedication and certification. CC0 is universal in form and may be used throughout the world for any kind of content without adaptation to account for laws in different jurisdictions. And like our licenses, CC0 has the benefit of being expressed in three ways – legal code, a human-readable deed, and machine-readable code that allows works distributed under CC0 to be easily found.

CC0 can be particularly important for the sharing of data and databases, since it otherwise may be unclear whether highly factual data and databases are restricted by copyright or other rights. Databases may contain facts that, in and of themselves, are not protected by copyright law. However, the copyright laws of many jurisdictions cover creatively selected or arranged compilations of facts and creative database design and structure, and some jurisdictions like those in the European Union have enacted additional sui generis laws that restrict uses of databases without regard for applicable copyright law. CC0 is intended to cover all copyright and database rights, so that however data and databases are restricted (under copyright or otherwise), those rights are all surrendered. CC0 is also particularly relevant to scientific data. An opinion piece in Nature on "Post-publication sharing of data and tools" explicitly recommends open sharing and the use of CC0 to put data in the public domain:

"Although it is usual practice for major public databases to make data freely available to access and use, any restrictions on use should be strongly resisted and we endorse explicit encouragement of open sharing, for example under the newly available CC0 public domain waiver of Creative Commons."

CC0 use cases

BioMed Central

BioMed Central (BMC) is one of the largest open access (OA) publishers in the world with 250 peer-reviewed OA journals, and more than 100,000 OA articles published yearly. BMC is also long-time user of CC licenses to accomplish its mission of husbanding and promoting open science. BMC has been publishing articles under a CC license since 2004. Starting September 3, 2013, in keeping with its forward-looking mission, BMC started requiring a CC0 Public Domain Dedication for data supporting the published articles.

CERN Library

CERN, the European Organization for Nuclear Research that is home to the Large Hadron Collider and birthplace of the web, released its book catalog into the public domain using the CC0 public domain dedication.
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I want something that I can...  
- use for commercial purposes;  
- modify, adapt, or build upon.

https://search.creativecommons.org/
Wikipedia: Who writes Wikipedia?

From Wikipedia, the free encyclopedia

This is a Wikipedia Information page, describing the editing community's consensus on some aspect or aspects of Wikipedia's norms and practices. It is not one of Wikipedia's policies or guidelines; where something is inconsistent with this essay, please refer to those.

This page in a nutshell: Everyone including you can make improvements to the encyclopedia.

You do! Yes, anyone can be bold and edit an existing article or create a new one, and volunteers do not need to have any formal training. The people who create and edit articles in Wikipedia come from countries all around the world, and have a wide range of ages and backgrounds. Any contributor to this encyclopedia, unregistered and registered alike, is called a "Wikipedian", or, more formally, an "editor".

When a large group of people work to compile information on a given topic, disputes may arise. A useful feature of Wikipedia is the ability to tag an article, or a section of the article, as subject of a dispute about a neutral point of view. This feature is especially popular for controversial topics, topics subject to changing current events or other topics where divergent opinions exist. To resolve the dispute, the interested editors will share their points of view on the article's talk page. They will attempt to reach consensus so that all valid perspectives can be fairly represented. This allows Wikipedia to be a place not only of information, but of collaboration.

Now, it's time to ask yourself: Have you edited an article on this wiki before?

Many users of Wikipedia consult the page history of an article in order to assess the number, and the perspective, of people who contributed to the article. You may also consult the talk page of any article to see what other readers and editors have to say about it.

Wikipedia's best articles are highlighted in the list of featured articles. These articles were granted "featured" status because they were judged to be of high quality by other editors. (If later edits reduce the quality of a featured article, a user can nominate an article for removal from the list.)

Who does contribute to Wikipedia?

Further information: [Wikipedia community]

The English Wikipedia currently has 28,850,954 users who have registered a username. An unknown but related number of anonymous users also contribute. Contributions come from diverse demographic and ethnographic segments:

- mid-20s males - the largest demographic
- retired males - 2nd largest demographic
- ~10% women of various ages
- students (e.g., in the context of a course)
- enthusiasts (e.g., people with interest in a particular subject, like butterflies)
- insiders (e.g., people who work for an organization, such as the Sierra Club)
- dabbler (e.g., people with interest in a particular subject, like butterflies)
- scholars (e.g., researchers)
- archives (e.g., a museum)
- marketers (e.g., individuals)
- evildoers (e.g., spammer)
Prof. Lawrence Lessig, Harvard Univ.:

“CERN has taken the lead in supporting Open Access”

Watch the lecture:
http://cdsweb.cern.ch/record/1345337
Open Access in not about making scholarly literature costless, but to find out and exploit better ways to pay the publishing costs than by charging readers and thus creating access barriers!
Open Access is not equal to e-science

BUT

e-science will require Open Access!