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Commons-based information markets as a means both for innovation in the economy and for progress in science

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About ENCES

ENCEES (European Network for Copyright in support of Education and Science) is an EU-wide network of organizations and individuals in science and education who share the view that copyright is a socially valuable construct and that the primary objective of copyright is to promote the progress of science, education, and culture as public goods.

ENCEES’ basic assumption is that knowledge and information in its digital form should be made available to everyone from everywhere and at anytime under fair conditions. This is particularly true in science and education, where access to knowledge and information is indispensable.

More Information (pdf)

News

Rainer Kuhlen presenting ENCES at OA Week in Tartu
Rainer Kuhlen, chairman of the ENCES e.V. association, will contribute to the Open Access Workshop in Tartu during the International Open Access Week (October 18-24, 2010). On Wednesday 20th of Oct... [mehr...]

Presentation on ENCES in Lisbon on 8 November 2010
The 5th UNICA Scholarly Communication Seminar “Find it, Get it, Use it, Store it” will take place on 7-9 November 2010 at the Universidade Nova de Lisboa in Lisbon. Don’t miss the present... [mehr...]

ENCEES on Twitter
You are welcome to follow us on Twitter! [mehr...]
Content

- Questions
- Proprietary and open Informations markets
- Knowledge economy – knowledge ecology
- Towards a commons-based understanding of knowledge and information
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- Will commercial publishers accept the OA paradigm?
- Models for commercial open access
- Will open access (OA) become gradually the default publishing in the future
- Is there still a need for copyright related to science and education?
- Objectives of a generic clause for science and education
### Questions

1. Is there a crisis of commercial information markets?  
   - **Yes**

2. Is there a crisis in copyright?  
   - **Yes**

3. Is open access publishing a real competition to commercial publishing?  
   - **Yes**

4. Will commercial publishers accept the OA paradigm?  
   - **Yes**

5. Will public institutions be willing to pay for commercial OA publishing? Should they?  
   - **Yes - but**

6. Will open access (OA) become the default publishing in the foreseeable future?  
   - **Yes - but**

8. Is there still a need for copyright regulation when OA publishing become the generally accepted norm?  
   - **Yes - but**
Are commons-based information markets a means both for innovation in the economy and for progress in science? yes

Knowledge economy and knowledge ecology - can they be compatible? yes - but
Proprietary and open Informations markets

access to and use of knowledge and information

- proprietary
  - private
  - commercial
  Information markets

- open
  - public
  - commons-based
  Information markets

Knowledge economy

Knowledge ecology
Knowledge ecology does not object to the commercial use of knowledge, but suggests that publishing models are only acceptable when they acknowledge the status of knowledge as a commons, allowing free and open access for everyone not claiming exclusive property rights.
Towards a commons-based understanding of knowledge and information

Commons

Common heritage of nature
Common heritage of social life
Commons heritage of cultural creativity

Common Pool Resources

Commons are institutionalized „common-pool resources“

water, air
Public spaces
law, libraries

the arts
knowledge and information
Towards a commons-based understanding of knowledge and information

- regulated by contracts
- protected by copyright
- privatization
- enclosure of the mind
- profitability
- scarce resource
- sharing free use
- inclusion
- sustainability
- commitments, CC, Open Access
- enabled by copyright-limitations
- principles, values
- institution-alization
- procedures
- communication (reaching a consensus)
- commitments
- contracts
- rules, laws, legal norms
- control mechanisms, sanctions

Knowledge economy

Commons-based information markets

Knowledge ecology
Knowledge Economy

- knowledge resources
  - regulated by contracts
  - protected by copyright

- privatization
  - enclosure of the mind
  - profitability
  - scarce resource

- principles, values
- institution-alization
  - procedures

- communication (reaching a consensus)
  - commitments
  - contracts
  - rules, laws, legal norms
  - control mechanisms, sanctions

Knowledge economy
5000–10,000 journal publishers globally (5000 in the SCOPUS database)

Science publishing industry employs an estimated 110,000 people globally, of which about 40% are employed in the EU

STM book market (about $5 billion annually) – ebooks 17% 2012 –rapidly increasing

28,100 active scholarly peer-reviewed journals late 2014

Publishing about 2.5 million articles a year

More than 50 million articles subject to retrieval and download

Virtually all STM journals are now available online

Annual revenues generated from English-language STM journal publishing are estimated at about $10 billion in 2013 - a broader STM information publishing market worth some $25.2 billion

Data-intensive research is challenging publishers to create new solutions to link publications to research data (and vice versa), to facilitate data mining

Knowledge economy - the private **commercial exploitation** of knowledge and information

distributed, **sold or licenced** on global information markets

Information products - **protected by copyright and considered private intellectual property**

**people can thus be excluded** from an unrestricted use of knowledge.
Commercial scientific publishing market – knowledge economy

still a very powerful and profitable market

and supported/financed by public money

German science libraries pay about 600 Mio Euros/y for commercial publications

Contract between Baden-Württemberg and Springer starting 2015

Free access to 1.917 Springer journals for 51 academic institutions in B.-W.

Contract between Elsevier and France (Couperin and Agence bibliographique de l’enseignement supérieur)

2014-2018 - 172 Mio. EURO for closed access journals

Commercial scientific publishing market – knowledge economy

still a very powerful and profitable market

but

More and more people claim that the public should have the right to freely access and use scientific work produced in public environments and supported by public money.
Commercial scientific publishing market – knowledge economy

still a very powerful and profitable market

but

More and more authors in science frustrated by publishers’ business models choose open access journals and free licenses as the primary or at least secondary means of publication

Open access golden

Open access green
Knowledge ecology

- **Knowledge resources**
- **Institution-alization**
  - Principles, values
  - Procedures
- **Communication** (reaching a consensus)
  - Commitments
  - Contracts
  - Rules, laws, legal norms
  - Control mechanisms, sanctions
- **Access to and use of information products services**
  - Sharing free use
  - Inclusion
  - Sustainability
  - Commitments, CC, Open Access
- **Commons-based information markets**
- **Knowledge ecology**
Open access as an alternative to traditional commercial publishing

Open-Access-based information markets

DOAJ https://doaj.org/

7183 journals, 650572 articles (19.10.2011)
7449 journals, 745962 articles (31.1.2012)
9411 journals, 1099912 articles (1.6.2013)
9741 journals, 1,592,661 articles (26.3.2014)
**10,319 journals, 1,852,651 articles (18.3.2015)**

approx 4 journals/day since 2011

but still only about 4 % of all commercially available articles

DOAB http://www.doabooks.org/doab

3100 Academic peer-reviewed books from **107 publishers**
*(09.06.2015)*
Will commercial publishers accept the OA paradigm?

More and more publishers (in particularly the four dominating ones) accept the OA-paradigm and see their future in OA publishing enforced by Markets Moral behavior

Users, NGOs science organisations Research funding organisations Political commitment
Will commercial publishers accept the OA paradigm?

**Open access enforced**


Publishers increasingly agree to open access green/self archiving

About 80% of all published articles could be open access available (OA green) – mostly with an embargo time between 6 and 8 months

This might change if the right to a second open publication will be introduced to copyright law and will be mandated.

**Sherpa/Romeo**

http://www.sherpa.ac.uk/romeo/

In reality probably less than 30%
Will commercial publishers accept the OA paradigm?

Open access enforced

Welcome SpringerOpen authors

- Authors retain copyright under the Creative Commons Attribution License.
- Articles freely available online and can be freely redistributed and reused.
- Easy to use submission system allows the upload of manuscripts in various formats as well as multimedia and datasets.
- Personalized website allows users to track manuscripts they are working on as authors, editors or reviewers and even pause and return to task later.
- Authors can supply information about payment by invoice or credit card or indicate their eligibility for waivers.
- Articles by authors from a member institution enjoy centralized payment and/or a discounted fee as well as promotion on a special member page.
- Use of blogs, tweets and social networking for promotion and visibility.

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- No page budgets or restrictions on color, multi-media, or other supplemental elements.
- Considered by ISI and other abstracting & indexing services; the services apply the same standards as they do for traditional journals.
- Thumbnails of additional files (e.g. embedded movies) shown in the article.
- Quick navigation in article HTML | XML can be downloaded.
- See 'most viewed' articles and articles citing an article.
The law states:

The [NIH Public Access Policy](http://publicaccess.nih.gov/policy.htm) ensures that the public has access to the published results of NIH funded research. It requires scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to the digital archive [PubMed Central](http://www.ncbi.nlm.nih.gov/pmc) upon acceptance for publication. To help advance science and improve human health, the Policy requires that these papers are accessible to the public on PubMed Central no later than 12 months after publication.

The NIH Public Access Policy applies to all peer-reviewed articles that arise, in whole or in part, from direct costs funded by NIH, or from NIH staff, that are accepted for publication on or after April 7, 2008.
Will commercial publishers accept the OA paradigm?

Private foundations require golden

*Wellcome Trust* policy tightening (June 2012)

introducing sanctions for non-compliance and a move to CC-BY licenses
In Horizon 2020, both the ‘Green’ and ‘Gold’ models are considered valid approaches to achieve open access.

All projects will be requested to immediately deposit an electronic version of their publications (final version or peer-reviewed manuscript) into an archive in a machine-readable format.

This can be done using the ‘Gold’ model (open access to published version is immediate), or the ‘Green’ model.

In this case, the Commission will allow an embargo period of a maximum of six months, except for the social sciences and humanities where the maximum will be twelve months (due to publications’ longer ‘half-life’).

The European Commission will continue to fund projects related to open access. In 2012-2013, the Commission will spend €45 million on data infrastructures and research on digital preservation. Funding will continue under the Horizon 2020 programme.
Models for commercial open access

Who pays?
Models for commercial open access

Public pays

APC (article-processing charge) paid by the authors respectively by their institutions

APC payed by foundations or by grants/sponsorships

APC payed by a library for its scientists or by a flat-rate contract

By library/research budgets

By nation-wide (flat-rate) contractual agreements

SCOAP-model – a network of domain-specific institutions (High-Energy Physics) pays

By nation-wide (flat-rate) contractual agreements

etc. etc.
Models for commercial open access

Public pays

Is it reasonable and/or is it in line with market principles when commercial publishing organizations are subsidized by public institutions?

Is it more reasonable when publicly financed organizations (such as libraries together with research institutions) build an open access publishing infrastructures by themselves?
Is there still a need for copyright related to science and education?

Not for a copyright in the existing form

Almost everyone agrees that there is a need to overcome the current copyright crisis
Is there still a need for copyright related to science and education?

What are the reasons for the copyright crisis?

Copyright regulation/laws still mirrors moral behaviour towards knowledge and information developed in analogous environments. Access to published knowledge is still considered an exception to the exclusive rights of the right holders (authors and, mainly, exploiters).
Is there still a need for copyright related to science and education?

What are the reasons for the copyright crisis?

An enlightened copyright should avoid the termn “Exception” and should rather use the term “limitation”

Access to knowledge and information is not an exception but a right in itself
Consequences of existing copyright limitations to exclusive rights of right-holders both for scientific creativity and for economic innovation

(Existing) copyright regulation/laws turn out to be an disabling means for new business models and information services in the Internet rather than an enabling one.

Why is that?
Is there still a need for copyright related to science and education?

The copyright myth

Strong copyright will stimulate creativity in science and will further commercial innovation

The opposite is true (according to many empirical studies)

The more open the system of copyright limitations is the better creativity and innovation are promoted
Is there still a need for copyright related to science and education?

The more open the system of copyright limitations is the better creativity and innovation are promoted.

“The analysis of these innovation processes has also often shown a puzzling phenomenon: innovating users often do not sell or license their innovations to manufacturers. Instead, they freely reveal details of their innovations to other users and to manufacturers.”

Dietmar Harhoff; Joachim Henkel; Eric von Hippel (2003): Profiting from voluntary information spillovers: how users benefit by freely revealing their innovation.

Research Policy 32 (2003) 1753–17 -
http://www.inno-tec.bwl.uni-muenchen.de/files/forschung/publikationen/harhoff/Profiting_20from_20voluntary_20information_20spillovers.pdf
Is there still a need for copyright related to science and education?

The more open the system of copyright limitations is the better creativity and innovation are promoted

“from the side of the copyright industries there is preference for a strong copyright (strong protection of the authors’ and exploiters’ rights): “, no more incentive to create or to invest in the creation of the new works will exist“ when „too much is taken away from right holder” (518).

“This Article takes the opposite position. It argues that in a knowledge-based society, a well - designed limitation system can greatly benefit innovation and creativity, and also readjust the copyright balance in favor of creators, assuring that they receive their fair share of profits generated by their works.” (518)

Vanderbilt Journal of Entertainment & Technology Law, vol. 12, No. 3 (spring 2010)
Is there still a need for copyright related to science and education?

When everything will be published in the open access paradigm

**yes**

- protection of moral rights
- right to decide when and how to publish
- attribution of authorship
- protection of works’ authenticity

**no**

- With comprehensive community open access
- no need for exploitation rights
- no need for contractual licensing agreements

But this is momentarily not a realistic perspective
Is there still a need for copyright related to science and education?

- Yes, in addition to the protection of moral rights.

Protection and exceptions for published works from the pre-OA-era (still about 90%).

Protection of new commercially produced value-added services:
- Multimedia presentation
- Hypertextification, dossiers
- Summaries, translations
- Retrieval and data mining
- Innovative reviewing models
- Personal und institutional background information
- Etc. etc.

Protection and exceptions for special products in the close access paradigm.

A future market-oriented model for commercial publishing independent from public subsidy?
In the foreseeable future there will be still a need for copyright regulation in favor of education and science.

The fight for a science- and education-friendly copyright must be continued with the main objective to replace the various existing insufficient and obstructive copyright exceptions by a single comprehensive copyright clause in favor of science and education.

Is there still a need for copyright related to science and education?
A comprehensive education- and science-friendly copyright clause

As a means for greater creativity in science and innovation in the economy
A comprehensive education- and science-friendly copyright clause

(1a) Copying and making published works available to the public is permitted for non-commercial use a) of scientific research of members in well-defined research groups and b) for the support of learning and teaching processes.

(1b) Para 1a is also valid for documentation, archiving and preservation of predominantly publicly financed memory and service organizations (such as libraries, archives, documentation centers and museums).

(1c) Para 1a is also valid for education and science supporting actions provided by organizations mentioned in para 1b.
A comprehensive education- and science-friendly copyright clause

(2) No remuneration is envisaged for the use of works which have been produced by predominantly publicly financed persons in predominantly publicly financed organizations and projects.

(3) Remuneration for the use of works and services according to paras (1a) and (1c) will be paid on a flat-rate basis by contractual agreement between rights holders (organizations) and the legal entities of the organizations addressed in paras (1a-1c). For the use of service according to para 2 no remuneration is envisaged.

(4) Contractual agreements which rule out paras (1a,b,c - 4) are invalid.

(5) With the implementation of this comprehensive copyright clause §§ 46, 47, 51, 52a, 52b, 53 und 53a are no longer valid.
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Thank you for your attention

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Will open access (OA) become gradually the default publishing in the foreseeable future (long-term prospective)?

- **Closed access journals (books)**
- **Open access journals (books)**

**Commercial open access journals (books)**
- **open access constrained**
  - mainly by contractual licences agreement, e.g. read only

**Community open access journals (books)**
- **full open access**
  - according to principles of the Berlin Open Access Declaration