Paving the road in virtual spaces
How to materialize rights to immaterial commons

Rainer Kuhlen
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University of Konstanz, Germany
Openness – Grundprinzip des Handelns in elektronischen Räumen
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Princeton University untersagt Universitätsangehörigen, ihre Rechte abzutreten

Erfasst von *iuwis-Redaktion* am 29. September 2011 - 14:30

Die Princeton University verschärft ihre Open Access Policy, so berichten verschiedene US-amerikanische Nachrichtenmedien. The 4700 Blog beschreibt die Details wie folgt:

Erstinstanz hat zu E-Learning (§ 52a UrhG) geurteilt!

Erfasst von *Thomas Hartmann* am 28. September 2011 - 22:30


*Lehrstühle von* 27.09.2011 – 16:30

Content - Topics

- Virtual spaces
- Knowledge spaces, knowledge road
- (Knowledge) ecology
- Commons
- Towards an understanding of knowledge as a commons
- Who owns knowledge?
- Access – institutionalization of knowledge
- Copyright as a form of institutionalizing knowledge
- Open Access as a form of institutionalizing knowledge
- Models for the institutionalization of knowledge
- What needs to be done? Consequences
Paving the road

Are there roads in virtual spaces?
Virtual spaces
... seeks to define virtuality in terms of the actual space that is perceived through visual media.

In the framework of "Unternehmen Capricorn" project we developed a virtual knowledge space ["Virtueller Wissensraum"] in collaboration with 10 Austrian museums. The programme...enables 3 users to enter a cross-disciplinary environment based upon objects ... which then were translated into a spatial structure of rooms, corridors and places of different size, shape, remoteness or proximity.

http://syl-eckermann.net/expositur/index.html
Knowledge spaces
Knowledge spaces

Paving the road in virtual spaces— IRS Workshop Territoriality of the Commons 29.-30. Sept.2011

http://bit.ly/ombf1w


http://bit.ly/ou7fSr


(Knowledge) ecology
(Knowledge) ecology

**Ecology in general** is concerned with the **sustainability** of natural resources (for instance water, air/climate, wildlife, forests) by protecting these resources from overuse.

**Knowledge ecology** is also concerned with sustainability but **sustainability of immaterial goods**. This can only be achieved by making **knowledge** an **open space** and providing **free access** to it and **unrestricted use**.
Let’s eliminate the need for making special, accessible copies and all that, and instead let's build access into the e-publishing technology from the ground up. That way we all can access the same content on our e-readers or computers, whether or not the person using it happens to be sighted or blind.

Robert Englebretnson, Prof. of Linguistics at Rice, in a comment on the WIPO proposal
Knowledge ecology


Shamans, Software, & Spleens

Law and the Construction of the Information Society

James Boyle

The Public Domain

Enclosing the Commons of the Mind

James Boyle

Paving the road in virtual spaces– IRS Workshop Territoriality of the Commons 29.-30. Sept.2011
Open Access – part of knowledge ecology

Open access is part of knowledge ecology

Open Access provides an alternative or complement both to existing commercial publishing models on the international information markets and to international copyright regulations, which, in the last 20 years, have mainly emphasized the economic impact of knowledge and information and thus have made knowledge a scarce resource.
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.
Commons

Commons is the central concept of knowledge ecology
Commons are often understood either as common goods/common-pool resources or as public goods.

<table>
<thead>
<tr>
<th>Rivalrous</th>
<th>Excludable</th>
<th>Non-excludable</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Private goods</td>
<td>Common goods (Common-pool resources)</td>
</tr>
<tr>
<td></td>
<td>food, clothing, cars, personal electronics</td>
<td>fish stocks, timber, coal</td>
</tr>
<tr>
<td>Non-rivalrous</td>
<td>Club goods</td>
<td>Public goods</td>
</tr>
<tr>
<td></td>
<td>cinemas, private parks, satellite television</td>
<td>free-to-air television, air, national defense</td>
</tr>
</tbody>
</table>

http://en.wikipedia.org/wiki/Public_good

But commons are neither common goods nor public goods.
What are commons?

Commons are institutionalized common-pool resources

Aus: Peter Barnes: Capitalism 3.0
Institutionalizing common-pool resources making them commons

Common Pool Resources

- clean air and water
- oil pools
- air
- knowledge

Institutionalization

- principles
- procedures

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

sharing
justice, fairness
inclusion
sustainability

Commons
Towards an understanding of knowledge as a commons
Knowledge commons

The Knowledge Commons offers:

- access to the Internet
- ALEPH, the online catalogue
- indexes to journal articles
- full-text electronic journals
- SABINET, the online catalogue of South African libraries
- electronic reference books
- MS Office software, with online training
- Typing tutor software
- Printing & scanning facilities


The Open Knowledge Commons (OKC) works to make the record of human knowledge as broadly available as possible. We envision development of a “knowledge commons”—a distributed, interoperable universal access digital library of information that may be queried, combined, annotated, mined, manipulated and shared to extract new information.

From Digital Libraries to Knowledge Commons
by Yannis Ioannidis

http://www.knowledgecommons.org/category/mhl/

http://www.lib.uct.ac.za/kc/

Paving the road in virtual spaces— IRS Workshop Territoriality of the Commons 29.-30. Sept.2011
Institutionalizing knowledge as a commons

knowledge resources

privatization
enclosure of the mind
profitability
scarce resource

It's our choice

sharing
justice, fairness
open
inclusion
sustainabilty

principles

access to information products services systems

institution-alization

procedures

rules
commitments
contracts
control mechanisms
sanctions
Knowledge as a commons
An understanding of knowledge as a commons

What is the status of knowledge?

res nullius
res privatae
res publicae
res communes

Justinian I., Mosaikdetail aus der Kirche San Vitale in Ravenna
Who owns knowledge?
An understanding of knowledge as a commons

Who owns knowledge?

producers/authors?

exploiters/content providers/publishers?

users/those who need it for their work?

knowledge is part of the commons – of the res communes

nobody should own knowledge exclusively
Who owns knowledge?  
is it the right question?  
knowledge itself, ideas, facts, theories, ...data(??)  
is not protected by copyright laws  
The Letters of Thomas Jefferson: 1743-1826  
NO PATENTS ON IDEAS

To Isaac McPherson Monticello, August 13, 1813

If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me.
Who owns knowledge?

is it the right question?

knowledge is a commons but only usable **when it is accessible**
Who owns knowledge?

Who has access to knowledge?
Who controls the access to knowledge?

The question is not one of knowledge but one of information

Who has access to information – who controls information?
Open access is one of many forms of institutionalizing knowledge and making it a commons, a common property

but

Copyright regulation is also one of many forms of institutionalizing knowledge and making it a private property, a (scarce) good
Copyright as a form of institutionalizing knowledge
Copyright as a regulative model for institutionalizing knowledge

International main-stream assumption

**Strong copyright** - an appropriate means to further progress in the arts, science and education
Copyright as a regulative model for institutionalizing knowledge

What is a strong copyright?

(a) One that makes knowledge and information a scarce good – a commodity?

or

(b) One that supports open, free access to knowledge and information?
The enforcement of strong copyright regulations (in Europe and North America in the last 20 years) heavily supports the commercial exploitation of knowledge and information (not necessarily creators’ rights).

This makes it more and more difficult to freely access world-wide information resources, in principle available on world-wide information markets.
Copyright as a regulative model for institutionalizing knowledge

The default in copyright law is the **exclusive right** of the rightholders – **authors** or (by contract) **exploiters/publishers/content providers**

The **interests of the public**, in particular for science and education, are **only taken into account through exceptions and limitations** to the exclusive rights of the right-holders

**under the control of the three-step-test**

The right to exclude others from access to published knowledge and from using it freely
under the control of the three-step-test

**disabling?**

**enabling?**

**English:** A barrier, restricting the access for cars for a nature reserve.

**Deutsch:** Eine Schranke, die die Einfahrt von Kraftfahrzeugen in ein Naturschutzgebiet verhindert.


„Schranke“ (barrier, gate) is a German copyright term (in international law: „exceptions, limitations“) which abridges the otherwise exclusive rights of knowledge producers.
Copyright as a regulative model for institutionalizing knowledge

**TRIPS** - Agreement on Trade-Related Aspects of Intellectual Property Rights

*Article 13*

*Limitations and Exceptions*

Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder.
Exceptions for science, education ($§$ 52a German copyright law)

UrhG § 52a Öffentliche Zugänglichmachung für Unterricht und Forschung

§ 52a: Nicht mehr anzuwenden gem. § 137k (F 10. September 2003) mwV 1.1.2007
(1) § 52a
1. einzelne Beiträge aus Zeitungen oder Zeitschriften zur Veranschaulichung
   im Unterricht an Schulen, Hochschulen, nichtgewerblichen Einrichtungen der
   Aus- und Weiterbildung sowie an Einrichtungen der Berufsbildung
   ausschließlich für den bestimmt abgegrenzten Kreis von
   Unterrichtsteilnehmern oder
2. veröffentlichte Teile eines Werkes, Werke geringen Umfangs sowie einzelne
   Beiträge aus Zeitungen oder Zeitschriften ausschließlich für einen
   bestimmt abgegrenzten Kreis von Personen für deren eigene
   wissenschaftliche Forschung
   öffentlich zugänglich zu machen, soweit dies zu dem jeweiligen Zweck geboten und zur
   Verfolgung nicht kommerzieller Zwecke gerechtfertigt ist.

(2) Die öffentliche Zugänglichmachung eines für den Unterrichtsgebrauch an Schulen
   bestimmten Werkes ist stets nur mit Einwilligung des Berechtigten zulässig. Die
   öffentliche Zugänglichmachung eines Filmwerkes ist vor Ablauf von zwei Jahren nach
   Beginn der üblichen regulären Auswertung in Filmtheatern im Geltungsbereich dieses
   Gesetzes stets nur mit Einwilligung des Berechtigten zulässig.

A reasonable fee needs to be paid to collecting societies in any case

Time limit end of 2006, then 2008, now 2012

For the use of defined research groups

Only small parts of works

Only for use in classroom

Only for registered students in classes

Without any direct or indirect commercial interest

Use of copyrighted material in schools only with special permission of rightholders

Use of movie/video material only 2 years after public performance
Question: Is § 52a UrhG too liberal (restricting exclusive rights of rightholders too much) or too restrictive (useless for research and education)

<table>
<thead>
<tr>
<th>Group</th>
<th>zu liberal</th>
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<tr>
<td>Alle</td>
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<td>IndustrieF</td>
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<tr>
<td>Wissmanagement</td>
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<tr>
<td>Bibliotheken</td>
<td>89,9</td>
<td></td>
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<tr>
<td>Schulen (Lehrer)</td>
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<td></td>
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<tr>
<td>Schüler/Studenten</td>
<td>92,5</td>
<td></td>
</tr>
<tr>
<td>Medien</td>
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<td></td>
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<tr>
<td>Politik</td>
<td>76,9</td>
<td></td>
</tr>
</tbody>
</table>

German coalition copyright in favour of research and education 2.539 answers

Question: **Should published knowledge, at least knowledge produced through public financial means, be freely accessible and usable by everyone?**

Open Access as a form of institutionalizing knowledge
But copyright is not the only form of institutionalizing knowledge and making it a commons, a common property.

Open access is a form of institutionalizing knowledge, not by law but through the initiative of the commoners – the people who are concerned in the production, publishing and usage of knowledge.

The Berlin Declaration of Open access is an example for establishing guidelines for the publication and the usage of knowledge and information by acknowledging the moral rights (die Persönlichkeitsrechte) of the authors.
But copyright is not the only form of institutionalizing knowledge, making it a commons, a common property

From the Berlin Declaration of Open - 2003

Open access contributions must satisfy two conditions:

1. The author(s) and right holder(s) of such contributions grant(s) to all users a free, irrevocable, worldwide, right of access to, and a license to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship (community standards, will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use.

2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in an appropriate standard electronic format is deposited (and thus published) in at least one online repository using suitable technical standards (such as the Open Archive definitions) that is supported and maintained by an academic institution, scholarly society, government agency, or other well established organization that seeks to enable open access, unrestricted distribution, inter operability, and long-term archiving.

http://www.zim.mpg.de/openaccess-berlin/berlin_declaration.pdf
Models for the institutionalization of knowledge
Models for the institutionalization of knowledge

(1) Proprietary commercial information markets

- objects
  - trade with information objects
  - transformation of authors´ rights into exploiters´ rights

- exclusive rights for the exploitation
  - with the consequence that
    - knowledge is made a scarce good
    - copyright
      - law
    - DRM
    - contractual agreement licenses
Models for the institutionalization of knowledge

(2) Freeconomics markets – prototpye Google

- objects
  - information objects
  - search engines

- private property rights

- profit
  - not through information itself
  - but
    - by using user search profiles for advertisement
    - merchandizing
    - cross financing
    - value-added effects

- free use

Will SpringerOpen mutate into a freeconomics model?

Usage open/free, copyright remains by the authors – the public finance the production costs and the profit of a company on the information market.
Models for the institutionalization of knowledge

(3) Open free markets

Information objects

given for open access

claimed as

personal moral rights

or
given into the commons, directly

non-exclusive commercial exploitation rights

exploitation

possible

in the copyright paradigm but free open use

Creative Commons

Open Access

default

a means of development

possible

type 1 proprietary markets

type 2 freeconomics

(4) commons-based information markets

Commons

air/sky
water
wildlife
natural resources
the public space
knowledge
....

A property of mankind

but

private rights for
exploitation possible and
often necessary

but only

with non-exclusive exploitation rights

with sufficient compensation to the public

as long as free access to everyone is guaranteed
What needs to be done?
Consequences
Consequences

Needed

a new understanding of intellectual property

knowledge as a commons is **not to be considered a res nullius**, which can be used ad libitum by everyone for whatever purpose

**Knowledge** and its derivative information products **cannot be the subject of exclusive private property rights**
Consequences

a new understanding of intellectual property

a new understanding of copyright
free access → the default
commercial exploitation → the exception

developing a concept of common property rights

without denying private individual property rights
Conclusion

Knowledge and its derivative information products cannot be the subject of exclusive private property rights.

Production and use of knowledge and its derivative information products depend on commons-based institutionalization forms appropriate to electronic environments.

Commons-based information markets do not make the commercial use of knowledge and its derivative information products impossible but rather are the realistic chance for the information economy to survive successfully.
Paving the road in knowledge spaces

and

materializing rights to immaterial commons

means to institutionalize rights to free access and

usage to published knowledge as a commons
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