Modelling Sustainable Systems and Semantic Web Open Culture

Lecture in the Module 10-202-2309 for Master Computer Science

Prof. Dr. Hans-Gert Gräbe http://www.informatik.uni-leipzig.de/~graebe

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Open Culture as Phenomenon

In the lectures and seminars we were faced in many places with "Open Culture" (Open Source, Open Design, Open Access etc.) as a phenomenon of digital change. In the last lecture we developed an interpretation framework for this phenomenon in the context of cooperate action.

- ▶ Digital change is a change within the bourgeois civil society.
 - Essential constituent elements of a civil society privacy, prohibition of penetration, right to free speech, personal rights, property, monetary system – are not questioned.
- ► These constituent elements stand in tension to one another and need to be rebalanced socially under the new conditions.

Open Culture as Phenomenon

- Concept of the *author's work* as individually attributable intellectual output that is publicly available.
 - ▶ At the legal level, this means to weigh up between the legitimate particular interests of owners and the public interest in free accessibility.
- With the technological simplification of access to digital works the field of tension between the consequences of individual attributability of intellectual output ("intellectual property") and their public accessibility of this output shifts at the center of the controversy about the further development of the civil society.
- ▶ With a broader concept of *Open Culture* a new "cease-fire line" started *practically* to establish itself since around 2005.

Open Culture as Phenomenon

- ► These *practical* changes started with the transition from the "Free Software" concept to the "Open Source" concept initiated around 2000.
- ▶ The visionary beginnings of Free Software in the 1980s and its forms of institutionalisation prepared the ground for these developments, even if not everyone of the activists from the first hour is satisfied with that further development.
- The practical activities and social experiences in the GNU project and the GPL as a first legal technical instrument played a particularly important role.

In the following, some aspects of the historical genesis of the term *intellectual property* and the practical struggle for a related balancing facts between the aforementioned poles are shown.

Invention of printing.

- ► The book as opus leads to a stronger alignment of content and form.
- The haptic perception of books as artifacts enhances the perception of knowledge as a thing.
- The new medium also creates new craftsmanship and professions closely related to the formation of the relationships of a civil society.
- It emerges a new symbioses of technology and power.
 - ▶ 15th century: Copyright as a monopoly right of the book printers' guild copying rights, secured by the crown
 - ► In mutual interest economic interests of the book printers and control of "public opinion" by the power.

Two "cultures of knowledge" form the poles of a field of tension.

- Perception of ideas as individual performance, as a result of creativity and ingenuity.
 - Basis for the formation of the term "work" and its embedding in the (civil) right of personality.
- ▶ Panta rhei knowledge as a procedural element of a changing world.
 - ▶ Newton: "Standing on the shoulders of giants"
 - Ideas as permanent recombination. Flow of ideas as inherently societal achievement.
 - ► The safeguarding of the conditions of creative productivity is in the foreground.

The tension between these two cultures manifests itself as a field of tension between two pillars of the civil law:

- ▶ Level of action execution → property as the basis of responsibility.
- ▶ Level of action planning → freedom (free as in free speech; liberty, freedom of contract) of combinability

Development of the legal constitution of a civil society in the 19th century.

- United States declare their Constitution (Bill of Rights. September 17, 1787) as an important result of the American Independence War.
- ➤ Civil Code (BGB. January 1, 1900) as the first codification of private law in the German Empire.

The beginnings cannot be presented here in a comprehensive way.

- ▶ 1790: Copyright becomes part of the American Constitution (regular 14-year period of protection).
- Major differences between Anglo-American and continental European legal systems.
- Berne Convention for the Protection of Literary and Artistic Works.
- ▶ 1886 first version, 1908 revised Berne Convention.
- Protection period of at least 50 years after the death of the author.
- ► Harmonization of property rights, equality between nationals and foreigners.

The spiritual fathers.

- ➤ Significant increase of the economic importance of science and knowledge in the 20th century.
- ▶ 1950s: Fourastié claims that in the tertiary sector will be the most important sphere of future value creation.
- ▶ 1960s and 1970s: Milton Friedman and the Chicago School Theoretical foundation for neoliberalism.
- Late 1970s: Daniel Bell and the post-industrial society.

The roadmap: Revised Berne Convention

- Other versions Rome 1928, Brussels 1948, Stockholm 1967
- ▶ 1952 UNESCO Universal Copyright Convention (UCC), in order to involve also the USA.
- ► In 1967 these topics are united under the roof of the World Intellectual Property Organization (WIPO).
- ▶ RBC, Paris version of July 24, 1971 with amendment of September 29, 1979 – the version which is valid today.
- ▶ 1973 The Soviet Union joins the RBC.
- 1989 The USA joins the RBC.
- ► Today (2020) 179 states joined the RBC. https://www.wipo.int/treaties/en/ip/berne/

The roadmap: the supporters are joining forces.

- ▶ 1967 founding of WIPO as an umbrella organization for worldwide administration of intellectual property rights.
- ▶ 1974 upgrading of WIPO to a sub-organization of the UN
 - Manages today RBC, trademark protection agreement, harmonization of the patent system and the handling of rights on industrial designs.
- ▶ 1984 the International Intellectual Property Alliance (IIPA) was founded for the worldwide implementation of the concept of *Intellectual Property* as legal term.
- ▶ 1986 the Intellectual Property Committee (IPC) was founded as industry lobby organization complementary to the IIPA to fix "Intellectual Property" in the course of the Uruguay Round in GATT.

- ▶ 1980s US policy develops various penal mechanisms against countries with insufficient IPR legalisation.
- ➤ 1995 TRIPS-1 Trade Related Aspects of Intellectual Property Rights as partial result of the GATT negotiations which resulted in the establishment of the WTO.
- 1996 WIPO Copyright Treaty member states must implement legal measures against circumvention of IPR protection measures.
- ▶ 1998 DMCA legal protection of technical IPR protection measures in the USA (Digital Millenium Copyright Act).
- ➤ 2001 EU guideline on the implementation of the WIPO specifications in national copyright law.
- 2003 German UrhG amendment, basket 1 "German DMCA".

- Further German debate: https://dini.de/ag/ehemalige-arbeitsgruppen/urhg/
- ► Subjects:
 - § 31a contracts for unknown types of use.
 - ▶ § 52a, 52b availability to the public for teaching and research (later moved to a new § 60 and new sections 4, 5 and 5a).
 - ▶ § 53 Reproductions for private use and other purposes.
- ► ACTA 2006–2012:
 - With a vote on July 4, 2012, the EU Parliament decided not to ratify ACTA, which means that ACTA does not come into effect for the EU.
- ► TTIP since 2012 ... the next attempt.

Counteractions from within Science

October 2003 – Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities

https://openaccess.mpg.de/Berlin-Declaration

- Signed by well-known European and American Research organizations and universities.
 - ▶ As of March 2011, more than 297 institutions from around the world were supporting the Berlin Declaration on Open Access.
- The signees commit themselves to further develop the idea of open access by e.g. encouraging researchers to share their findings in Open Access publications.
- ▶ Inclusion of the cultural heritage, i.e. of the cultural assets kept in archives, libraries and museums, in the demand for Open Access.

Counteractions from within Science

2004 – Göttingen Declaration on Copyright for Education and Research

http://www.urheberrechtsbuendnis.de/ge.html.en

- ► Foundation of the Coalition for Action "Copyright for Education and Research" as a lobbying organization for science in the struggle around the amendment of the German UrhG. http://www.urheberrechtsbuendnis.de
- ▶ At the end of 2004 on the basis of the Göttingen Declaration the six major German science organizations Science Council, University Rectors' Conference, Max Planck Society, Helmholtz Association, Leibniz Association, Fraunhofer Society and almost 200 other institutions and 3 000 individuals join forces in this alliance.
- ► The Open Access principle is thus becoming increasingly important in the scientific field, conducive to the principle structures are established and institutionalised.

Perspective yet around 2005: The (re)production conditions of the creatives have changed dramatically in the last 20 years. In a world that is more restrictive and more immaterial, with ownership and and IPR the creatives have bad cards and are largely defenseless and at the mercy of the owners and their lawyers.

As, in the new digital society, creators establish genuinely free forms of economic activity, the dogma of bourgeois property comes into active conflict with the dogma of bourgeois freedom. (Eben Moglen, The dot Communist Manifesto, 2003)

Visionaries like *Richard Stallman* already envisaged such problems in the early 1980s: the sustainable reproduction of the conditions of creativity cannot and must not be left to the owners.

When the freedom of access to the *works* of others is an essential part of the conditions of creative, then there *must* be enforced an appropriate legal weighing of the facts even against the will of the property owners — even if the monetary incentives are immense: "Be creative once and then collect money forever".

"Free as in free speech not as in free beer" is a basic requirement of creative work, Richard Stallman never tires to repeat.

It is in the hands of the creative people themselves – because they are producing that "property" – to organize their own conditions of production in such a way that knowledge is freely available and everyone has access to it.

Our time offers like no other a vast collection of knowledge in text form. The entire intellectual history of mankind is availably on CD-Roms, on internet sites, in second-hand bookshops and in book trade, everything is well networked and easily accessible, that it would be a shame not to use this material awake and with open senses. Because, to cite the smart Bacon once more: Knowledge is power. (Matthias Käther, Utopie kreativ, 2005)

With the *GNU Project and Free Software*, that thought first emerged in an area central to the digital society – the area in which the tools of the new society are built.

With the *GNU Public License* (GPL) the meaning of an adequate legal-technical regulation was early recognized and successfully "implemented".

Creative Commons extends this approach to other areas of culture and creativity, Free Culture (based on the book of the same name by Lawrence Lessig) captures the cultural significance of such principles.

In this way, processual knowledge is developed to shape the own conditions of creativity within the framework of the civil legal system.

On December 13-14, 2010, the **International Expert conference** "**Open Access** – **Open Data**" took place. Six years after the first open access conference in Cologne, it is time to sum up the state of development and discuss the challenges for the next ten years. In addition, new ways for the increasingly important open data movement are to be discussed.

The conference is organized by **Goportis** (now part of TIB Hannover). Goportis is the name of the *Leibniz library network of research information*, consisting of the three German central specialised libraries TIB (Technical Information Library, Hanover), ZB MED (German Central Library for medicine, Cologne/Bonn) and ZBW (German Central Library for Economics – Leibniz Information Center for Economics, Kiel/Hamburg).

After all, with *Open Access* the scientific community as a whole raised the principle of free access to its own productions as one of their central future projects. This is shown by the Conference *Open Access and Open Data* once again.

- On December 9, 2014, the Senate of Leipzig University passed a resolution "Open Access Policy"
- With Qucosa http://www.qucosa.de, Saxony creates with ERDF funds (European Regional Development Fund) a Saxonian Open Access infrastructure for its academic institutions.

The major scientific publishers as the previous advocates of restrictive IPR can hardly withstand this pressure – some of them, such as Springer, already started with *Springer Open Access* to develop appropriate business models that take account of the new framework conditions.