The Case for Active Library Copyright Advocacy both Now and in the Future

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In 2014 Florida Polytechnic University opened the premises of its new totally bookless library.¹ Promoted as a hub for intellectual discovery, the digital library not only represents an innovation in library architecture or in the visual presentation of accessible information, it is also symptomatic of an era where information is abundant, where the rise of information goods makes data the raw materials of the digital information economy, just like land for the agriculture society or iron for the industrial age. It is also representative of a new reality for the library community, where a shift in purchasing strategy from physical books to electronic resources and licensing and new demands in information supply from our client researchers and public has been apparent for quite some time. How will libraries face the new phases of digitization and changes in digital information economy?

The digital economy differs from the previous agricultural and industrial economies in its potential for production output in unlimited numbers at zero marginal costs. Once a digital information product has been produced it can be copied and spread endlessly. The last few years has also seen the costs of the physical infrastructure for digital storage, bearers and storage space, plummet exponentially.

In such an environment intellectual property, access to and ownership of knowledge, becomes the key asset of both businesses and academia. 90 percent of the data on the internet has been generated in the last two years. At the centre of this is therefore the regulation of access to information – intellectual property law, including copyright. Since its creation in 1971, LIBER has been the voice of Europe's research, university and national libraries. LIBER has acted as a networking and

cooperation platform for research librarians as well as a communication organ towards researchers and universities but also a lobbying organ advocating regulation beneficial to the library and research community. Defining Europe in the very broadest sense, with 400 member libraries in 40 countries from Iceland in the northwest to Turkey in the southeast, LIBER takes an interest in regulation all across the European continent but has of late focused on the legal development in the European Union.

Challenges of Digitization

To understand the scale of the effect digitization and its corresponding legislation will have on libraries and librarians it is crucial to look at the library as an institution against the background of the future digital information economy.

The debate on the automatization and robotization of jobs has hardly escaped anyone up to date on current news reporting. Likewise, it is important to note that while manual labour can be

https://floridapolytechnic.org/library/about-the-digital-library/

handled by a robotic workforce, tomorrow's jobs and production will be about extracting data, actually much like it has always been in the world of academia. This data comes from big clusters of information such as the one we hold in our library collections, but also from data voluntarily provided us as users and citizens. Every time we do something online or on our electronic devices we add to our personal basket of data. Businesses like *Google* and *Facebook* has long based their business models on structuring and using data given to them by users accepting their terms and conditions.

British journalist *Paul Mason* tellingly describes the Google cloud service as "airconditioned server farm space".² For most of us, this has been demonstrated mainly in algorithms for personalized advertising. The computer knows us and markets us things that we are likely to be interested in purchasing. President *Obamas* re-election campaign in 2012, successfully used big data to target and mobilize voters, but techniques for big data analysis also hold great potential for research and development.

Promises and Perils of Emerging Technologies

Much of this development is good. The next twenty years or so will see the so-called *Internet of Things*, machines interacting wirelessly and independent of human interaction rebuild the workplace and consumer electronics at home. Connected to a cloud service full of data, robotics and the Internet of Things will be able to develop and interact. 3D printing is well underway in everything from the fashion industry to engineering. We will also see great advances in life science.

As the mapping or genetic sequencing of the human genome moves towards completion, human DNA will become big data available for analysis. Imagine what mapping cell structures could

A perhaps more imminent example is health algorithms for recommending personalized optimal healthy behaviour based on one's genetic disposition. Similarly, smartphones could be used to give blood tests and other diagnostics in rural areas where the doctor or nurse is far away. As a former American government advisor *Alec Ross* has put it: "if you can imagine an advance, somebody is already working on how to develop and commercialize it."³

New Information Economies

This development also carries risks. From a democratic perspective, not irrelevant to libraries as public institutions, it is important to ask who will be able to benefit from this regionally and globally? There are legitimate concerns about data protection and privacy. The way intellectual property law in the forms of patents in the pharmaceutical industry has affected the poor but ill is known. The human factor in the speed of development must also be observed with caution – people are not as easy to upgrade as software.

The near future also belongs to new economic systems such as sharing economies. Companies like *Airbnb* providing travel accommodation and *Über* providing transport are now the biggest players in their fields and micro payment models like Bitcoin and other blockchain solutions will make us rethink currency.

Not everything is commercial though. The world's biggest source of information and the one that made leather bound encyclopaedias almost obsolete – Wikipedia – is operated on a non-

do for cancer research or mapping the largely undiscovered human brain could do for Alzheimer's research and psychiatry? We could also see this put to use in artificial organ transplants or so called xenotransplantation, where living cells from animals are transplanted into humans.

² Mason, Paul. *Postcapitalism – A Guide to Our Future.* Allen Lane, London 2015, p 165.

³ Ross, Alec. *Industries of the Future.* Simon & Schuster, New York 2016, p 5.

profit basis with just 280 employees⁴ but thousands of user contributors. And the world's most sold smartphone *Android*, operates on software with an open source code - available for anyone to modify for free, and so is *Linux*, the world's largest free computer operating system. Research institutions and libraries are taking their place within such an economy by encouraging and supporting open access and data sharing.

Open Science Policy Making

So why does all this matter to libraries? As our collections becomes increasingly digitized, as the focus of our strategic purchases shifts from analogue to digital, as academic publications shift from subscription models to open access models, the libraries stock of information will continue to increase.

Many governments in Europe are starting to look at introducing national open access policies and related legislation for academic publishing. Several countries already have electronic deposit laws facilitating mandatory delivery of data to national libraries. The Netherlands has made open access a priority during its 2016 presidency of the European Union, a step LIBER welcomes.

Open access is now increasingly a part of an overall push towards Open Science, which threatens, or promises, to disrupt the whole scholarly communications system and will compel libraries to rethink their interaction with this system. All of this calls for a coherent strategy and adequate legislation in order for libraries to ensure sustainable long-term access to digital information.

Copyright Laws and Libraries

Laws on copyright can be traced back to the *British Statute of Anne of 1710* – back in the early days of the printing press. Copyright legislation has its legal history both in theories of natural

rights – the right to ownership to what he or she creates – and in utilitarianism, the idea that society benefits from financial protection for ideas and inventions for a certain period of time. These rights were easy to exercise and enforce in the era of physical printing.

In the digital age, however, where copyright protected works flow freely on the internet independent of national borders and jurisdictions, the current copyright laws are no longer optimal. On an international level, the Berne convention—an international treaty—brings some uniformity to international copyright law, but only to a very limited extent. *The Berne convention* was also created over a hundred years ago when today's digital conditions were inconceivable. Even today within the single market of the European Union copyright legislation in the various members' states is still very diverse.

The other factor when discussing copyright and libraries is that libraries are not, or should not be, a commercial player competing in a market. Libraries have very specific missions that are not intended to inflict upon and compete with regular producer-consumer-market models. Cultural heritage institutions like libraries constitute exceptions to the system for which copyright law was constructed and are therefore in need of exceptions in the copyright law legislation.

Libraries are often forced to revert to licensing schemes where they have unequal bargaining power. Several existing copyright exceptions are outdated today, such as the exception rule for access to digitized copies of material on dedicated terminals on the library premises. In the era of smartphones and other handheld devices such an exception no longer makes sense. Another issue is how research and development globally could benefit if libraries could share academic production online cross-border, something that is now hindered by the very nature of national copyright regimes.

https://wikimediafoundation.org/wiki/Staff_and_contractors.

The right to Mine

Big data is a current buzzword in the media but it is also a reality for researchers, businesses and libraries. The mentioned advances in technological development have made the issue of analysing big chunks of data previously impossible using the human eye through techniques such as *Text and Data mining* (TDM) or content mining a very important issue. Since libraries are holders of such big data, LIBER has made TDM its main priority in copyright advocacy.

By coding algorithms, researchers can extract large information patterns that could potentially be used to create translation software to help people communicate despite language barriers. TDM could be useful in precision agriculture to ease global food crises through real time analysis on factors such as weather, earth nitrogen levels and air quality to find optimal farming locations. TDM could provide lifesaving statistics in global health epidemics. Paired with GPS technology, big data will likely lead to the development of driverless cars. The analysis of genetic data could in the future be used to turn back the effects of aging. The recent growth in computing power also enables this and the mined data could be paired with new developments in data visualization.

The current legal framework surrounding TDM in Europe is currently unclear, however. Legal access to material protected by copyright probably requires separate consent in addition to the already acquired reading rights. In December 2014, LIBER brought together a team of academics, librarians and lawyers to draft *The Hague Declaration on Knowledge Discovery in the Digital Age*, 5 a document that argues the case for legal access for TDM processes on materials where reading access has already been legally obtained. LIBER's message has been that the right to read is the right to mine.

Open Science and Copyright Reform

LIBER's own strategy very much aligns with several current European initiatives. Open Science⁶ and copyright reform are priorities on the European agenda. European policy in these areas will have a very real impact on how libraries deliver access to information and it is therefore important that libraries position themselves at the heart of Open Science.

LIBER has been making the case that the Open Science and copyright agendas are interlinked. The emergence of Open Science has been driven by access to digital technologies and its success will be predicated on a healthy intersection with the legislation affecting access to and reuse of digital content.

Libraries enabling Open Science⁷ has been at the heart of LIBER's advocacy strategy at the European level. Within this framework, LIBER has advocated for open access, research data management, an open research infrastructure, as well as copyright reform.

Influencing Brussels and Beyond

LIBER has welcomed the initiative for legal reform, launched in 2015, in the area of copyright by the European Commission called the Digital Single Market. Throughout the last year LIBER has been meeting regularly with European Commission officials, with various stakeholders and a number of European Parliament members to build alliances ahead of the expected parliament voting process on the Commission reform proposals later this year.

Alliances with other stakeholders in the research community have been important in strengthening the case for reform. In this respect the Hague Declaration on Knowledge Discovery in the Digital Age has been an important platform as it pro-

⁵ http://thehaguedeclaration.com/

⁶ https://ec.europa.eu/research/openscience/index.cfm?pg=open-science-cloud

http://libereurope.eu/blog/2014/09/30/liber-statementon-enabling-open-science/

vides common principles and a roadmap that can be adopted across the whole research community.

It is not just important for LIBER as an organization to engage; every voice counts both at the European and at the national level. LIBER strongly encourages libraries to engage in and advocate for policies that support access to information in the digital age. Through awareness raising and development of support documentation and case studies LIBER supports institutions in making the case for engagement. *The LIBER Leadership Programme* builds capacity and serves the dual purpose of developing future libraries leaders and voices to speak out on behalf of libraries in Europe.

LIBER – the Future as an Active Player

As a library community, we need to constantly assess our situation in the broader research, technology and associated policy landscape. The policy discussions that are happening at the European level today will influence the delivery of library information services well into the future. A strategy for engagement in the Open Science debate is essential for research libraries wishing to support researchers in taking advantage of the potential of digital technologies and data driven innovation.

A copyright regime that is compatible with the reality of digital technology will underpin sustainable access to information and help libraries become an active player in the future digital research communities, economy and society. As the ongoing copyright debate has shown, if we are serious about our responsibility to ensure sustainable access to information, it is not acceptable for libraries to accept the status quo without debate.

The technological, legal and political landscape is not easy to navigate, but for all of us passionate about knowledge and curious about the world and our future – it won't be boring.

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