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Beyond the Creative Commons
Framework for production and
dissemination of information

Master thesis
30 credits

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Master's Programme in International Human Rights Law and
Intellectual Property Law

VT2011

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Summary

This thesis is about the licensing system of the Creative Commons discussed from the perspective of the theory of the commons mostly as formulated by Elinor Ostrom. The work is started by describing the concepts and theory of common pool resources and regime of the commons for production and distribution of these resources. The main characteristics for successful traditional commons – efficiency, equity and sustainability are taken as the basis for an analysis of an example of a new form of commons – the commons for production and dissemination of information. The framework of the Creative Commons is analysed in detail as an example of such commons. It is chosen because of its popularity and scope of inclusion.

The question of effectiveness is answered using ideas from the field of economics on different ways of production of information and the maximization of its value for society. The equity is assessed using international human rights as a universal standard of equity in national and international communities. Sustainability of the Creative Commons is assessed comparing it to other movements of the commons for information that are older and seemingly better established. Special emphasis is given to the strength and structure of communities these frameworks give basis to.

The work does not claim to answer if the Creative Commons is the best tool for commons of information, but merely to assess it from selected perspectives. The conclusions of this thesis show that the framework of Creative Commons has its problems, but nevertheless is a good starting point to create commons for information (especially for cultural works). Some suggestions that could make this framework even stronger and more sustainable are made in the very end of the work.

Preface

Shortly after I learned how to read, I discovered science fiction which became then my most favourite genre of literature and still takes a significant place among my favourite books. The thing that attracted me in these imaginary stories most was the sense of unknown, the joy of discovery the experience of the great vastness of the world we live in and the worlds we could maybe live in. Discovering new planets and ancient civilisations – all this was breathtaking. I dreamed to become an astronaut one day and leave everything here and start a journey into the new endless unknown.

Well, it did not work this way. When I grew up, other motivations prevailed and I became a lawyer. And just a few years ago I got a chance to remember my childhood dreams. From a lawyer perspective.

We all have recently experienced an opening of one more dimension of our ordinary world, we have witnessed a new planet emerging within ours. It is endless and has not that much in common with the ordinary world we used to live in. The laws of physics and the laws of states are not valid there in the same way as here. It reveals some most horrible and most wonderful aspects of humanity, there are no maps of it and the way to map it completely is not even invented yet. What I speak about here is, of course, the cyberspace - the Internet.

As a social scientist and a lawyer one is now facing the door into something that will have to be documented, researched without much base to start with. It is easy to get lost in these labyrinths and it will need a lot of insight to understand what is happening there: what actions cause which consequences, what is wrong and what is right, etc. But, indeed, it is exactly what I wanted!

This thesis is an expedition to this new world. I am thankful to my supervisor – Anna Maria Nawrot – for the assistance in this first journey. There are many other people that were always there to help me if my path became too steep. I thank them too.

This thesis was a big work for me, but merely a small step in this big new world in general. Nevertheless, it was a great experience and I hope I

will continue my expeditions into this world of unknown during my life. My dream to become an astronaut (or better here maybe an cybernaut) is becoming a reality.

Abbreviations

CC	Creative Commons
UDHR	Universal Declaration of Human Rights
ICESCR	International Covenant of Economic, Social and Cultural rights
CESCR	Committee of Economic, Social and Cultural Rights
OA	Open Access
OS	Open Source
EU	European Union
EC	European Commission
WIPO	World Intellectual Property Organization
IP	Intellectual Property
US	United States
UK	United Kingdom
UN	United Nations
CRC	Convention on the Rights of the Child
ICERD	International Covenant on the Elimination of all forms of Racial Discrimination
CRPD	Convention on the Rights of Persons with Disabilities
ECHR	European Convention of Human Rights
ECtHR	European Court of Human Rights
ACHR	African Charter of Human and Peoples' Rights
IGO	Intergovernmental Organization

1 Introduction

1.1 Background

Everyone who is even a bit familiar with intellectual property law or economic, social and cultural human rights will instantly name at least two points where intellectual property is in tension with the interests of society (or requirements of human rights). Actually, the most usual answer is patents and drug prices, but more and more people happen to note the issues between copyright and cultural rights or rights to education (that the exceptional rights of author creates problems for the general society to access knowledge, culture etc.). These people are also almost always aware of the Creative Commons – a way to diminish these tensions by a personal author’s choice to allow others to use her works, share them, build upon them, etc. Creative Commons is by far not the only way to reduce these tensions, but it is, for sure, the most popular one. According to the website of the Creative Commons, in December 2009 the number of Approximate Minimum Total CC Licensed Works¹ was around 350 million². We can only guess that now it has increased even more.

Many of those who know Creative Commons are not exactly sure, how this system works, but they know the general ideas behind it – to create a pool of works that anyone can use without hesitation and without asking for permission and to enable their access in a centralized way. However, even this approach of the Creative Commons is not beyond controversy. Some criticize the idea itself, some argue, that the ways to fulfil it are chosen wrongly. Therefore, the questions like where did the Creative Commons movement come from, where does it go to, what are its benefits and problems, are very important to answer. Given its popularity, Creative Commons is capable of achieving great things, but if there really are major flaws and contradictions in this movement, it is better to fix it now, than to regret later.

¹ As explained by the CC website, this means the minimum amount of licensed works across all licenses since the data is taken from Yahoo search queries and Flickr only.

² <<http://wiki.creativecommons.org/Metrics> > visited 4 May, 2011.

1.2 Research Questions

I will not claim that the Creative Commons is a panacea from the tensions regarding intellectual products in our society, or, as other's do, that it is a total failure and that we need something much stronger (something like abolition of copyright, for example). I see Creative Commons as one of the alternatives, maybe even the best suitable for some of the present problems, but not necessary always perfect. The main question about this movement I want to answer in this thesis is "Is the Creative Commons a suitable alternative framework for production and dissemination of information?". Even as an alternative, it might be a good and suitable one we will be happy to adopt ourselves and advise to others, or a bad one we would discourage people from using. Actually, by 'we' I mean everyone, but it could also mean 'we' as human rights lawyers. And this work will discuss the human rights' issues as well, since I consider it as one of the most important criteria to measure the suitability of Creative Commons for production and dissemination of knowledge, culture and other information.

In any case, this research intention above is still quite vague and I have therefore divided my main question into smaller ones. Namely, what is the idea behind the Creative Commons? What are its aims? Does it fulfil these aims? From this analysis, some more questions followed, namely, what kind of communities does Creative Commons encourage? is the Creative Commons framework and the communities efficient? Are they based on equity? Is the framework and communities sustainable as such? In other words, I want to try to look beyond the Creative Commons framework and see what are the rules and circumstances that shape it, what are its effects on the society, what could be its future..?

One could maybe choose one single question from this list and write a whole master thesis on it. However, I decided to try to answer all of them at least in general terms, since there is really not so much research done on any of them. And especially now, when copyright is obviously loosing the fight for the control of production and dissemination of information in the digital

environment, it is exactly the time to research on these other options (and especially on the most popular of them), that might help to restore the balance.

1.3 Objective and Methodology

To answer the questions enlisted above, a research of many different fields of scholarship was carried out. The part on the theory of the Creative Commons is based on economic, sociological and legal articles and books. The normative part (human rights and legal instruments of the Creative Commons) are based on international legal instruments, case law and analysis of other semi-legal norms. The practical examples are based on relevant scholarship (like anthropological studies of Open Source communities) and throughout analysis of the relevant online communities as well. I have registered to all of them and tried out quite a few of their features, read forum discussions, etc.

A lot of articles were gathered from the open access repositories and personal websites of the authors. Still most of them were accessed through Lund University library subscription system. The sources are analysed in systemic way, trying to summarize the main conclusions and dominating views. Some historical and comparative analysis is done to present the dynamics of open licensing frameworks and to describe the Creative Commons in the light of their development.

1.4 Delimitation

The delimitation of the topic is partly revealed by the research questions. The thesis will only concentrate on the analysis of the Creative Commons. Other movements are presented as the material to compare Creative Commons with. The criteria, the Creative Commons movement was chosen to be assessed by, are effectiveness, equity and sustainability. Why this choice was made, will be revealed in the second chapter of the thesis. The thesis treats Creative Commons as a tool for building creative communities, but also as a framework joining them together into one big

community (this will be, again, explained in detail in the thesis). The thesis will only analyse digital (online) communities or communities that have an online component. Arguably, Creative Commons can be used in the physical world as well, but it is not why they were created in the first place. “Information” in this work means any information the Creative Commons can be used to – cultural products as well as knowledge of different kinds. It is of course true, that different types of information might build different communities and request different type of rules, however, the thesis is aimed at discovering general trends in the Creative Commons and start a basic discussion on the research questions, not to answer them completely.

1.5 Structure

The first part of the work will concentrate on describing the philosophical basis of the Creative Commons – the idea of the “commons” for tangible resources and information. The work of Elinor Ostrom will be mostly used to explain the theory of the commons. In addition, the ideas behind the existing regimes of commons for information will be presented in this part. The following parts will analyse if the Creative Commons regime satisfies the conditions for long-lasting and lively commons, set by Ostrom and the aims declared by the movement.

Therefore, after the theoretical background, a discussion about effectiveness of Creative Commons will follow. This question will be considered from the economic and other legal-philosophical points of view. Afterwards, the problematic of equity in the Creative Commons community will be presented. To assess equity, the human rights framework will be employed. The rights of the author and society will be assessed separately to check if the Creative Commons regime does not contradict the basic standards. In addition, the possibility that the Creative Commons (and generally any commons for knowledge) is one of the best tools to ensure human rights in the field of culture and knowledge will be discussed shortly.

Thirdly, the issue of the sustainability of the Creative Commons framework will be discussed. First aspect of sustainability – normative

infrastructure will be analysed in chapter 5.1. Here, the possibility to enforce these licenses and the ability to fulfil legal expectations connected to them will be analysed. This part will start the discussion about the sustainability of the Creative Commons in the sense that this instrument has to prove itself functional and reliable in the long-term period to build any kind of sustainable community.

In chapter 5.2. Creative Commons communities will be compared with the first communities that were established for common production and dissemination of information (Open Source communities). This will allow to make some conclusions about the sustainability of the Creative Commons over time. Being one of the youngest regimes Creative Commons has not proven itself to be as successful as those first communities yet, so comparing them will give insight on the elements that are necessary to make similar communities sustainable.

The general analysis of the research questions, as will be presented in this work, will not, as mentioned, give a definite answer if the Creative Commons is the most suitable alternative framework for production and dissemination of information. however, looking beyond Creative Commons can give some insights about the benefits and flaws of this movement and possibilities to improve it.

2 Beyond the Creative Commons – Theory.

2.1 The commons for information

As L. Lessig has put it (quoting C. Rose) in one of his first books - we now live in a world where the best imaginable way to deal with all resources is believed to be their distribution into the hands of private owners.³ We think that when we make people compete we get the best allocation of goods since free market makes individuals personally motivated to use their possessions effectively or to sell them if they are not capable of doing this. Remembering the tragedy of the publicly owned and distributed resources in the Soviet Union we refuse to believe anyone who looks for the most effective way to distribute resources outside the scope of private property rights and market economy.

However, there appear more and more evidences that some resources are allocated and consumed effectively when they are not in the hands of a single owner or the government but when they are shared and exploited commonly by a community. There are more and more opinions that information, knowledge and culture are exactly the resources the common use of which would not only assure the effectiveness of allocation but also is necessary to fulfil the principles of human freedom and equality.

As it is clear from its name, the Creative Commons also has something to do with communities and common enjoyment of creativity and the results of creative work (as opposed to private ownership). Indeed, it is based on the idea of “commons”, as explained by the establisher of the Creative Commons L. Lessig in his book – ‘The Future of Ideas’⁴, that was published almost at the same time when the Creative Commons was launched. Therefore, we will start with explaining what the commons are, and exploring the elements that are necessary to build robust communities and sustainable regimes to govern the common resources.

³ L. Lessig, *The Future of Ideas* (Random House 2001), p. 13.

⁴ *Ibid.* pp. 17-55.

2.1.1 What is the “commons”?

*“Imagine a pasture open to all...”*⁵

It is not hard to imagine such thing, right? The whole village owns it, because no one can tell, whose the land is. No one knows how much rights does he or she have. It might very well be, that at some point someone will just come and claim the whole land to his or her property. So what will the villagers do? It looks unwise not to exploit this valuable resource, but how to do it best? Try to negotiate with neighbours? Try to use the land as much as possible as fast as you can? Actually, there seems to be an answer to that.

Apparently, many people who have been historically put into situations like this chose to cooperate and did it efficiently. Some examples of these communities have been sustained until today. Such regime of cooperation over the distribution of a resource is usually called simply “commons” .

In the world of scholars, the idea of commons was conceived quite a while ago, however it started to attract the biggest attention only when the International Association for the Study of Common Property was established in the mid-1980s. Consequently, a large number of studies started to pop up focusing on different kind of common resources.⁶ And indeed, although the research on commons was started in the context of property, a simple article search in an electronic library catalogue today shows an exponential growth of the quantity of articles with the keyword “commons” during the years and clearly increasing differentiation in research disciplines.

As mentioned above, a general meaning of the term “commons” is a resource that is commonly shared by a group of people. This can be any kind of resource – the one which is shared by a small group or, arguably, even one of a global scale; easily definable or one which has no defined

⁵ G. Hardin, ‘The Tragedy of the Commons’, 162:3859 *Science* (1968), <<http://www.sciencemag.org/cgi/content/full/162/3859/1243>> visited 7th of March, 2011

⁶ E. Ostrom, Ch. Hess, *Understanding Knowledge as commons*, (MIT Press 2007), p. 6

boundaries.⁷ For instance, the Oxford English Dictionary describes the word common (noun, formerly also commons) as a community or the undivided land belonging to the members of a local community as a whole. Hence, often, the patch of unenclosed or ‘waste’ land which remains to represent that.⁸ Wikipedia – which is considered to be one of the examples of knowledge accumulated and shared commonly itself – describes commons as “terminology referring to resources that are collectively owned or shared between or among populations. These resources are said to be "held in common" and can include everything from natural resources and land to software”⁹.

We all are probably aware that such thing as commons can exist and there is even a special legal institute - common property - in the property law to describe it. In any case, the common property is pictured by many as an inevitable and undesirable consequence of marriage or inheritance or as a certain legal regime enforced by the government to distribute certain resources between the tax-payers (public roads, education resources, etc.). And these all cases, indeed, are examples of commons in one way or another. The term has also a strong historical element and was used to name different things – the house of British Parliament representing the non-titled citizens and agricultural fields in Europe and England prior to their enclosure¹⁰. It also seems, that different scholars sometimes construe their own notion of the commons for the need of the argument they want to make. However, for the purpose of this thesis, we will concentrate on the common property use of common pool resources, as mostly researched by E. Ostrom who also won the Nobel Prize in economics in 2009.

To understand her work, and the ideas of this thesis it is important, first of all, to be able to make a distinction between the commons in the sense of common resource (common-pool resource) and commons as a property

⁷ *Id.* p.4

⁸ Oxford English Dictionary, 2nd edition, 1989, online version, < www.oed.com > visited 15 May, 2011.

⁹ *The Commons* in Wikipedia <http://en.wikipedia.org/wiki/The_commons>, visited 5 of March, 2011.

¹⁰ Ch Hess, E. Ostrom, “Ideas, Artifacts and Facilities. Information as a Common-Pool Resource”, 66:111 *Law and Contemporary Problems*, 2003, p. 115.

regime (a set of rules governing the use of certain resource in a community).¹¹ The notion of common-pool resource describes the nature of the resource. All the resources can be described using two key features – the scope in which the benefits consumed by one individual are subtracting from the benefits of the other individual and the costs needed to exclude an individual from the use of the resource. In one extreme of these both scales are such private goods as personal computers, chocolate, cloths etc. (easy to exclude, subtraction is very high); in the other – such public goods as sunlight, air, and so on (hard to exclude, no subtraction).¹² Following these criteria, the common-pool resources are such resources from which it is hard and expensive to exclude someone, but the use of which by one, subtracts certain amount of benefits from the rest of individuals. The resources that do not allow to exclude others easily and the use of which by one does not take anything from another are called “public goods”.¹³ The theory of the commons concentrates mostly on the common-pool resources and E. Ostrom is famous for research of common pool resource communities.

The second notion – “common property regime” are the rules developed by the relevant community (without interference of the government or with some interference) that could be (but are not automatically) employed to govern the use of the resource. The mere fact that a resource has one or the other nature does not decide what kind of property regime will govern it. As a rule, people try to select the most effective regime depending on specific circumstances and needs of the society. Sometimes the most effective way is to divide and privatise it completely. At the same time, it is not a rule, that a regime of common property is the most effective or perfect way to govern any specific resource.¹⁴ If there are no apparent rules governing the use of the common-pool resource such regime is called an “Open-Access” regime,

¹¹ E. Ostrom, Ch. Hess, “Common and private property”, (2000), pp. 8-10, <<http://valuefronteira.com/vf/images/textbooks2/private%20and%20common%20property%20rights.pdf>> visited 10 May, 2011.

¹² Hess, Ostrom, *Supra* note 10, p. 120.

¹³ *Ibid.*

¹⁴ *Ibid.* p 123.

where everyone can take whatever they want and have no consequential duties.¹⁵

E. Ostrom devoted her life to analyse the common-pool property regimes and to specify the requirements for their existing. Her approach was that “a resource arrangement that works in practice, can work in theory”¹⁶. In other words, she researched the long-lasting common property regimes that already existed in practice to gain information on how they could be applied to other resources in our over-privatised resource distribution.

By doing this, she managed to prove, that common-property systems can be an effective way to govern common-pool resources. Before her, the idea of commons had some very skeptical comments, from which especially well known is G. Hardin’s theory of the tragedy of the commons.¹⁷ He claimed, that if any resource is left to divide to a group of people, each will try to benefit from it more than the others causing a destruction of the resource. G. Hardin used an example of a pasture available to all and alleged that every rational farmer will try to maximize his gain and will try to feed more and more cattle from it. On the other hand, E. Ostrom, and other more recent researchers pointed out that common property regimes are not the same as a pasture open for all. These regimes, where they can be observed in practice, exclude other individuals for the benefit of the whole group and have many informal but strong rules to ensure sustainable exploitation of the resource. Commonly used resources do not raise prisoners dilemma, as claimed by some, but encourage people to cooperate and look for solutions together.¹⁸ A pasture open for all is an example of a open-source resource, not a resource governed by a regime of common property.

As stressed by E. Ostrom and Ch. Hess, essential questions for the analysis of any commons are their **equity, efficiency and sustainability**.¹⁹ According to the authors, “*Equity* refers to issues of just or equal

¹⁵ *Ibid* pp. 121-122.

¹⁶ L. A. Fennel, “Ostrom’s Law: Property Rights in the Commons”, 5:1 *International Journal of the Commons* , (2011). p. 10.

¹⁷ G. Hardin, ‘The Tragedy of the Commons’, 162:3859 *Science* (1968), <<http://www.sciencemag.org/cgi/content/full/162/3859/1243> > visited 7th of March, 2011

¹⁸ Fennel, *Supra* note 16, p.12-13; Ostrom, Hess, *Supra* note 11, pp. 121-123.

¹⁹ Ostrom, Hess, *Supra* note 6, p. 6.

appropriation from, and contribution to, the maintenance of a resource. *Efficiency* deals with optimal production, management, and use of the resource. *Sustainability* looks at outcomes over the long term.”²⁰

In addition, one of the most significant contributions of E. Ostrom’s work was describing the formal criteria for the analysis of these requirements:²¹

- Clearly defined boundaries should be in place.
- Rules in use are well matched to local needs and conditions.
- Individuals affected by these rules can usually participate in modifying the rules.
- The right of community members to devise their own rules is respected by external authorities.
- A system for self-monitoring members’ behavior has been established.
- A graduated system of sanctions is available.
- Community members have access to low-cost conflict-resolution mechanisms.
- Nested enterprises — that is, appropriation, provision, monitoring and sanctioning, conflict resolution, and other governance activities — are organized in a nested structure with multiple layers of activities.

All these principles, again, were deduced from the real life and real rules observed in different communities. We now can say that we received substantial guidance to solve the dilemma of confused villagers who happen to have a pasture open to all. But what does it have to do with the knowledge, creativity and Creative Commons? Explanation follows.

2.1.2 Common pool of information

“If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea

²⁰ *Ibid.*

²¹ *Ibid.*, p. 7.

*and I have an idea and we exchange these ideas, then each of us will have two ideas”*²²

The pasture open to all was clearly a common pool resource, because it would be hard and costly to exclude someone from it (not impossible, though, and this was done in many cases) and the use of it by one individual would subtract from the benefits available to the other. These are the resources the regime of commons work very good for. Information (knowledge, culture) is somehow different.

From the first sight, information asks to be compared with the sunlight. It is very problematic to exclude someone from the consumption of it and the consumption of one does not make any effect on the use of another. In some literature information is described as a “public good”²³ (the meaning of which was discussed in the previous section). From this it might seem, that there is no need for any kind of property system to share this resource. As the quotation in the beginning of this section reflects – information is not something that is scarce, in the opposite, the more people have access to it the more use it brings to all. When Hardin described the “tragedy of the commons” he pictured a physical resource open to all – one that can become misused and overused. Another theorist, M. Heller, who developed a notion of “Anticommons” – a resource that becomes unusable because of too many property claims to it – based his research on economic properties of physical apple-like goods as well.²⁴ But information can not be overused. Because of this, scholars took quite some time to find use for the theory of the commons in the research on information management. Since if there is no need to make the sharing sustainable and there is no risk of the tragedy of the commons, who needs any kind of property regime including the regime of commons?

First of all, “information” is a very general term which might make us to imagine it as something that is floating in the air all around us. It is not

²² George Bernard Shaw

²³ C. Antonelli, ‘Economics of knowledge and the governance of commons knowledge’, 1:1 *Revista Brasileira de Inovação*, (2002). p. 30.

²⁴ C. M. Rose, ‘Ostrom and the Lawyers The Impact of Governing the Commons on the American Legal Academy’, 20 *International Journal of the Commons*, (2011). pp. 6-7.

so. The information (or knowledge/culture) as a resource consists of three parts: facilities, artefacts and ideas.²⁵

Artefacts are namable, observable representations of ideas, such as books, articles, songs, films, computer files, etc. Artefacts are, in classical sense, easily excludable and rivalrous in nature (the use of one subtracts from the benefit of other).²⁶ Though, it also has to be noted that some types of artefacts such as web pages or computer files can be non-rivalrous and problematic to exclude from. **Facilities** – store artefacts and make them available. Traditional facilities were libraries and various archives.²⁷ The facilities of today are the physical infrastructure – wires, computers and the virtual facilities – internet in general and various systems, databases and similar intangible intermediaries. Before the emergence of new technologies libraries could easily exclude users, they had certain rules for using artefacts and were in general a physically limited and rivalrous resource.²⁸ Now the access to the artefacts of information is, in principle, (but not necessary in reality) available to all in any place of the world. In addition, this change of technology also changes the nature of artefacts in general. We are now able to make unlimited number of perfect copies of any artefact and make them available through the unlimited facilities. **Ideas** are coherent thoughts, creative images, innovative information. They are intangible content located in the artefact.²⁹ Some ideas as mathematical formulas, facts, very general features of a film character, etc. are not protected by copyright and are in the public domain. The most distinctive feature of ideas is that they are non-rivalrous and non-excludable.³⁰

This thesis is not really about sharing facilities or those ideas which are not copyrightable in nature, although the concept of some system of the commons seems to be applicable to them as well. It is about the artefacts and those ideas, that are copyrightable. When we discuss information and its

²⁵ E. Ostrom, Ch. Hess, 'A Framework for Analyzing the Knowledge Commons' in Ostrom Hess *Understanding Knowledge as a commons*, p. 47.

²⁶ *Ibid.* p. 47- 48

²⁷ *Ibid.* p. 47

²⁸ Hess, Ostrom, *Supra* note 10, p. 130.

²⁹ Ostrom, Hess, *Supra* note 25, p. 48.

³⁰ *Ibid.*

role in our society we have to keep all these levels in mind. Even despite the change brought by new technologies, these levels have different characteristics and might need to be dealt differently with. Tangible artefacts, such as books and DVD CDs, for instance, still have high level of excludability and depletion.

Secondly, even despite the fact that the “output” resource in digital world is non rivalrous and the marginal production cost of an additional artefact is zero (computer files), it still has to be created first. Therefore, even in this sense information is not like sun, it’s more like a candle.

The nature of information (ability to make unlimited number of copies) does not normally give direct economic incentives to produce this first copy. The standard solutions for this problem are the excluding intellectual property rights and government subsidies.³¹ They help to remunerate the authors of works and to give back the investments made by business companies by introducing an artificial scarceness of informational goods. According to this scheme, when the candle is produced, the light of it is still treated like a resource that can be sold by unit to the ones that are prepared to pay most. However, “standard” solution does not mean the only one. Here again we see two possible extremes – allocation of a resource for private individuals by giving rights which are almost as strong as private property rights and excluding others and a possibility of the resource being owned by the government, which is not an attractive one, as mentioned before. But it is also here, where the third option – the commons come into the picture. If a community is capable of accumulating capital and providing other kinds of motivations for production and dissemination of the resource of knowledge, as it is happening in the ‘real world’ with tangible resources, we have a very strong alternative for the two traditional scenarios.

Of course, there is still a long way to understand what elements of the standard regime of the commons can be borrowed to make the commons of knowledge sustainable, equal and effective. The formal standards listed by E. Ostrom seem to be little bit out of place in governing this resource.

³¹ M. J. Madison, B. M. Frischmann, K. Strandburg, ‘Constructing Commons in the Cultural Environment’, 95 *Cornell Law Review*, (2010).

Information has no described boundaries, so the dispute over the optimal size of a possible community still remains pronounced.³² There are other issues such as what level of exclusion is necessary for this inexhaustible resource, or who should participate in the norm setting, when the boundaries of community are not clear, but this will be discussed later. Works concentrating on understanding the ways the theory of commons can be applied to information and big debates surrounding them already exist.³³ However, they give no definite answers.

On the other hand, in the real world there are already many existing common/semicommon regimes for production of information like patent pools or Wikipedia. They differ from each other and are governed by different normative frameworks. Since the emphasis of this work is on the Creative Commons the regimes that are similar to it will be shortly described in the following chapter. The idea being E. Ostrom's "from practice to theory", we will try to see what kind of communities and rules already exist and what does it say us about the applicability of the economic theory of the commons to production and dissemination of knowledge.

2.2 Functioning frameworks of information commons

There just are things that seem to be contradicting common sense. Commons (ironically) is one of them for a "modern person". It was already discussed that the theory of commons had a lot of sceptical comments and was developed from practice to theory because no one even dared to analyse this possibility without 'real life' proof, since it contradicts common sense so much.

³² Rose, *Supra* note 24, pp. 21 - 22.

³³ M. J. Madison, B. M. Frischmann, K. Strandburg, 'Constructing Commons in the Cultural Environment', 95 *Cornell Law Review*, (2010).and answers to this article e.g. L. B. Solum., 'Questioning Cultural Commons', 95 *Cornell Law Review*, (2010), Illinois Public Law Research Paper No. 09-24. <<http://ssrn.com/abstract=1601420>>, visited 21 April, 2011.

Accordingly, as was, for instance, pointed out by T. Hancock³⁴, there was and still are many similarly sceptical myths about commons of information. There seems to be a common sense opinion that common projects can be only small³⁵. Actually even E. Ostrom's theory suggests so, since the commons she researched are always created by limited and pretty small communities. There seems to be an opinion that it's hard to make participants coordinate and a big discussion about lack of common motivation in a group. Y. Benkler, on the other hand, seems to contradict this by describing an emerging model of *global* commons of peer-production of different resources.³⁶ We will now name three global regimes of commons for production and dissemination of information that have proven themselves possible, despite the fact that the common sense dictates differently. In addition, a short theoretical background of these frameworks will be given and the reasons they emerged will be presented. This will help us to understand how are the ideas of commons being adopted to for the resource of information. It also proves that the commons for information are possible at least to some extent.

One of them is the Creative Commons but since it is the newest one, the theoretical background of this regime will be discussed the last.

2.2.1 Open Source

Computer software is a product of human mind. A programmer creates a set of commands that tell a computer what steps to take to fulfil a certain task and it's, indeed, a challenging process to find the shortest and clearest set of commands for computer to operate most efficiently. Because of this reason computer programs are also protected by copyright under the same terms as any literary work. It is considered that because of the time and other resources invested in the process you have material rights to exploit your creation (ant to prohibit others to do the same) and because it's

³⁴ T. Hancock, *Achieving Impossible Things with Free Culture and Commons Based Enterprise*. (Free Software Magazine Press 2009). Pp. 7-9.

³⁵ *Ibid.*

³⁶ Y. Benkler, *The Wealth of Networks*, (Yale University Press 2006), pp. 68-90.

a fruit of your mind, you have moral rights to put your name on it and to contradict it being mutilated in the way contrary to your reputation.

Computers, just as any other electrical appliances, are made up from many very small parts working together. The easiest way to make those parts communicate and solve tasks is through a signal code which is made from intervals of presence of electric current and absence of it. In other words, 1 and 0. Humans, however do not think in ones and zeroes, therefore, the most efficient way for us to give commands to a computer is in logical commands – words. So a programmer, actually, writes a computer program in standardized commands (so called source code) which are made from words and only later the program is transformed to computer language (so called object code) by other programs designed for it.³⁷

In most commercial programs that we buy there is no source code to look at. You can not just open a file and see how exactly did the programmer make the computer to do those different things. Theoretically, it is possible to understand the functionality of a program from the object code using reverse engineering but this is very complicated and time consuming and is only rarely attempted.³⁸ This was not always so. In the times when computers were big and clumsy and the number of them was relatively small, all the software was shared together with the source code. However later, actually at around 1980s, when the computers moved into homes of many, the computer software became more and more commercialized and common practice became to exclude the source code from any software.³⁹

This process was met with hostility of a substantial part of the programmer world. Richard Stallman was one of the leaders who claimed that proprietary model of software production might be harmful to the quality and accessibility of it. He insisted that possibilities to built on the software created by others become greatly diminished.⁴⁰ In addition, he

³⁷ S. Chopra, S. D. Dexter, *Decoding Liberation: The promise of Free and Open Source Software*, Taylor & Francis Group, (New York, 2008). pp. xiii – xiv.

³⁸ *Ibid.* p. xiii.

³⁹ C. S. Brown, “Copyleft, the Disguised Copyright: Why Legislative Reform is Superior to Copyleft Licenses”. 78 *University of Missouri Kansas City Law Review*, (2010). p. 758.

⁴⁰ *Ibid.* p. 759.

considered that such enclosure of information contradicts the freedom to argue about the best ways to solve problems, to adapt program to your own needs, to share your improved program with others to help them and so on.⁴¹ He also stressed that such way of software production was only directing everyone's attention to the exact functions the program can do, totally ignoring the sense of community that program developers share.⁴²

Communities of dissenting programmers formed and started to develop non-proprietary software following certain unwritten rules.⁴³ But these rules were not legally enforceable and could not be transferred from one community to the other and it was then when a special licence – GNU General Public Licence (GNU GPL) was created. The idea behind it is explained in the preamble of the licence itself: “The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. [...] When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.”⁴⁴

As we see, the aim of this legal license was to create a pool of free software with a source code open to communities of programmers (or anyone else) to analyze, use, change and share with a condition, that any work which was built on free software will be licensed under the same license. This type of license is also called a *copyleft* or a reciprocal license.⁴⁵ The GNU license also became a framework to sustain the communities, to

⁴¹ R. M. Stallman, *Free Software, Free Societies* (Joshua Gay, ed. 2002). p. 18.

⁴² *Ibid.*

⁴³ Brown, *Supra* note 39, p. 760.

⁴⁴ Preamble of GNU GPL v. 3. <<http://www.gnu.org/licenses/gpl.html>> visited 20 March, 2011.

⁴⁵ L. Rosen, *Open Source Licensing, Software Freedom and Intellectual Property Law*, (Prentice Hall Professional Technical Reference, 2005). pp. 105-106

facilitate communication among them and to ensure that products of different projects can be combined easily. To promote the license and the ideas the Free Software Foundation was created as well.⁴⁶

This model appeared to be successful. It encouraged creation of many smaller or bigger communities that were developing the code commonly, licensing their work to each other and to everyone else and adding new participants with this “viral” requirement to share in the same way. This normative framework of commons facilitated many big and successful projects such as GNU, Linux, Debian, operational systems and programs based on their platforms and allowed them compete with the proprietary systems effectively.⁴⁷ In addition, it actually appeared to be a system to build business models on. For instance - the RedHat, a Linux distributor which is one of the 500 most successful companies in the US and had 220 million dollar revenues in the second quarter of 2010.⁴⁸

With time more and more variants of licenses emerged and more and more successful projects were carried out. To sustain these kind of producing communities and to ensure that there always would be a pool of free software to use and build upon, gradually, the main principles of open source software were developed. The licenses and projects that comply with the open source principles are given a special certificate and are considered as a part of the movement. The Open Source principles are as follows⁴⁹:

- Licensees are free to use open source software for any purpose whatsoever.
- Licensees are free to make copies of open source software and to distribute them without payment of royalties to a licensor.
- Licensees are free to create derivative works of open source software and to distribute them without payment of royalties to the licensor

⁴⁶ <<http://www.fsf.org/>> visited 20 March, 2011.

⁴⁷ Hancock, *Supra* note 34, pp. 11-16.

⁴⁸ <http://www.redhat.com/about/news/prarchive/2010/Q2_2011.html> visited 20 March, 2011.

⁴⁹ Rosen, *Supra* note 45, pp. 9-11.

- Licensees are free to access and use the source code of the open source software
- Licensees are free to combine open source and other software.

If a project or a license doesn't have even one of these features, it is not considered a part of the Open Source movement. The movement has started with the copyleft approach, where any improvements had to be given back to community, but as we see from these principles, even the communities that are not based on copyleft can be considered Open Source communities now. However, the GNU GPL still remains the most used license in the Open Source projects.⁵⁰

2.2.2 Open Access

This movement was an attempt to create alternative incentives for production of information and knowledge in the field of scholarly publishing. Although the name of it is a bit misleading (open access in the commons theory means access without any rules or restrictions), it is a form of commons and it has a more or less clearly defined community that participates in the resource production, uses the results jointly and shares them with others.

The main principles of Open Access (OA) movement were formulated in three documents which are still a very important source to understand the idea of open sharing of scholarly information. These are “the three Bs”: Budapest, Bethesda and Berlin declarations. The three are not identical but they all address the possibility to common pool of scholarly information, given the emergence of new technologies and the fact, that “in all times scholars were willing to publish their works free of charge only for the sake of the inquiry and knowledge”.⁵¹ In other words, they point out the possibility to make the non-rivalrous and royalty-free contents of scientific

⁵⁰ T. K. Armstrong, “Shrinking the Commons: Termination of Copyright Licenses and Transfers for the Benefit of the Public”, 47:358 *Harvard Journal on Legislation*, (2010), p. 369.

⁵¹ Budapest Open Access Initiative <www.soros.org/openaccess/read.shtml>, visited 1 October 2010.

publications more accessible to everyone. The scholars are asked to grant free and irrevocable right to use, copy, distribute the work, create derivative works, distribute them, etc. Moreover, the work has to be published online without any restrictions of access. The publication can be done in any of the existing online repositories, the notice about the status of the work is to be attached to the work as well⁵². There are two proposed ways for publishing the work online: the Green Road – publishing post-print or pre-print version of your article in separate repositories and the Golden Road – publishing in special open access journals. The declarations are by no means compulsory, however, they have attracted support from many famous universities, institutes and other institutions.⁵³ The aim of the OA movement is to ensure free access to the peer reviewed (published) scientific articles, however, the pre-print and working paper versions are also encouraged to be made open.

There are many reasons why the information produced by scholars was made more accessible and shareable. Speaking in very broad terms, the idea reflected in many contemporary works is that humanity can not afford to remain in the state of eternal competition and enclosure and has to move towards more cooperation and sharing.⁵⁴ There are suggestions that the fastest development and innovativity of nations occurred mostly in the conditions where people lived in bigger proximities, had to interact with other cultures and had good opportunities to share ideas freely. This is, for instance, suggested to be the reason why Eurasian civilisations managed to grow faster and conquer the other nations.⁵⁵ Logically, the world of modern science should not be enclosed as well. The free(er) sharing of ideas brings promises to enable globally inclusive scholarly communication, to raise the amount of comparative and transnational research, increase public visibility

⁵² The Berlin Declaration on Open Access to Knowledge in Sciences and Humanities <oa.mpg.de/files/2010/04/berlin_declaration.pdf> visited 10 May 2011.

⁵³ F.i. see Signatories of the Berlin declaration: <oa.mpg.de/lang/en-uk/berlin-prozess/signatoren/> visited 10 May 2011.

⁵⁴ I. Kubiszewski, J. Farley, R. Costanza 'The production and allocation of information as a good that is enhanced with increased use', 69 *Ecological Economics*, (2010), but also works of L. Lessig, J. Boyle etc.

⁵⁵ J. N. Diamond, *Guns, Germs and Steel: The fates of human societies*, (W.W. Norton & Co.1999).

and enhance impact on teaching and learning, etc.⁵⁶ The knowledge that is not cited and used by anyone else is futile. A scientist from any discipline wants to make change, to have her work recognised, to contribute to the common pool of knowledge. Sharing openly and being accessible to many people is the tool to reach all these aims. The openness is also the key to cheaper innovations in the community of scholars because it reduces or even eliminates the costs of “raw” information necessary for research and development of new products.⁵⁷

The Open Access framework for common production and dissemination of knowledge also has a promise to fix some important problems existing in the world of scholarly publishing. For instance the paradox, that other researchers from the same institution are not able to access the works of their colleagues for free, or that results of a research which was funded with the money of local tax-payers are not available for the same tax-payers freely. These problems gave rise to such initiatives as, for instance, the Petition for guaranteed public access to publicly-funded research results⁵⁸ or analogical movement in the United States⁵⁹. More and more concerns were also raised about the actual power of the big publishing companies and their ability to dictate the price of the scientific information. Although scientists are not paid for their articles, prices of journals are very high. The prices have been increasing extremely rapidly during the last two decades and is likely to keep increasing since the biggest players in the demand side of the subscription based journals – the libraries and universities – have no possibility to change the subscription of one journal to another. They are seeking to supply their students and scholars with the most prestigious and reliable publications and the demand side of this

⁵⁶ C. Armbruster ‘Five Reasons to Promote Open Access and Five Roads to Accomplish it in Social and Cultural Science’, Working Paper (2005), <ssrn.com/abstract=846824>, visited 2 October 2010

⁵⁷ Kubiszewski, Farley, Costanza, *Supra* note 54.

⁵⁸ *The Petition for guaranteed public access to publicly-funded research results* <www.ec-petition.eu/> visited 2 October 2010.

⁵⁹ J. Boyle ‘Mertonism Unbound? Imaging Free, Decentralised Access to Most Cultural and Scientific Material’, in Sh. Hess and E. Ostrom (eds.) *Understanding Knowledge as a Commons. From theory to practice*. (Massachusetts Institute of Technology 2007), pp. 136-137.

market becomes very price inelastic.⁶⁰ Moreover, the common practice of the publishers is to transfer all the intellectual property rights from the authors to themselves and this, again, leads to such situations as scientists not being able to share their works with anyone they want or to publish it anywhere, even if the article would be used for non-commercial purposes

Here we see that a possibility to create small communities which connect into bigger networks proved to be very attractive in the world of scientific publishing. At the same time, common pool of scientific information is being created and basically anyone can use it. However, there are specific restrictions on putting resources to the pool since the information has to be reliable (i.e. peer reviewed). At the same time, the financing of the scientific research leading to the publications is in no direct way related to the participants of the commons, so these communities are not totally independent and self-governing.

2.2.3 Creative Commons

The Creative Commons (CC) movement is the most recent one and probably the best known to an average internet user. As it was noted above, this movement is the main object of research in this thesis. Now, we will describe the theoretical background and the history of its conception.

The aim of the previous frameworks of commons was to create communities and pools of information in very specific fields, the Creative Commons framework is directed at everyone who owns a computer and at virtually all fields of information exchange. The Creative Commons framework also has less restrictions, more possibilities and, actually, seems to have a suitable license for everyone.

The Creative Commons organization was established in the United States of America in 2001 by L. Lessig and his colleagues. By 2002 it released the first version of licenses crafted in the example of the Free

⁶⁰ T. C. Bergstrom, D. L. Rubinfeld 'Alternative Economic Design for Academic Publishing' in R. C. Dreyfuss (ed.), *Working within the boundaries of intellectual property: Innovation policy for the knowledge society*, (Oxford University Press 2010), pp. 137-138.

Software Foundation's GNU General Public License⁶¹ - the copyleft license which was described above. As its predecessors, the CC movement was concerned that not only was the current intellectual property law unable to suit the changes in technology and to satisfy the needs of the creators and users of information, but also that the emerging legislature initiated by commercially motivated copyright owners is further enclosing the possibilities to distribute, share, change and use information normally. One of the biggest events around the time of establishment, which made some kind of alternative action inevitable, was the U.S. Sonny Bono Copyright Term Extension Act of 1998⁶². This act extended the period of copyright protection for 20 years more (from 50 to 70 years after the death of the author) and made the extended protection applicable not only to newly created works but also to those, which were about to enter the public domain. In other words, the establishers were not satisfied with the "all rights reserved" approach and the way the private rights of the author are used to satisfy the greed of the commercial industries and repelled the "one size fits all" approach in favour of free choice of an author. The official mission statement of the Creative Commons is that it "develops, supports, and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation."⁶³ In addition to that, Creative Commons is also spreading globally and rapidly adopting the licenses to different national legal systems⁶⁴, so it also seems that the ambition in the official mission is not merely to be an alternative framework in the U.S. but also throughout the world.

As is clear from its name, the CC is designed to provide a certain regime of commons for works which are currently, by default, copyrighted and appropriated by individuals. As the project states in its website: "We build infrastructure at Creative Commons. Our users build the commons itself. We are working to increase the adoption of our tools, to support and listen to our users, and to serve as a trusted steward of interoperable

⁶¹ <<https://creativecommons.org/about/history>> visited 15 May, 2011.

⁶² The Congress of The United states of America. The text of the act can be found online at: <<http://www.copyright.gov/legislation/s505.pdf>> visited 10 February, 2011.

⁶³ <<http://creativecommons.org/about>> visited 5 April, 2011.

⁶⁴ <http://wiki.creativecommons.org/CC_Affiliate_Network> visited 10 May, 2011.

commons infrastructure.”⁶⁵ Lessig’s idea was to provide copyright owners with alternative tools to restructure their private rights to limited public goods into the commons.⁶⁶ According to him, the tragedy of the commons can only occur if we will not do something to protect the commons that are created by the internet already.⁶⁷ So the primary aim was to put as many works as possible into certain form of the public domain – to give away certain exceptional rights of an author to the general public which could use the works without asking the permission from anyone. This was also what L. Lessig called a “free” resource – following Stallman, “not “free” as in free beer, but free in the sense of free speech” – i.e. usable without anyone’s permission, or when permission was given neutrally.⁶⁸

The creator can, of course, have a very specific aim and community in his mind when choosing the CC license. But she can also just decide that she wants her work to be available for everyone – for the global community to work on or to share and also choose a license according to the use she wants to put her work to. Creative Commons provides infrastructure for this. So the Creative Commons serves both – as a tool for communities to use but also as a framework to unite all these different communities and the independent works, that were given to the public into one big pool of information or one big global community which can find and exchange information instantly with help of search engines and other platforms. The web page of the Creative Commons keeps track on different communities and gives information to everyone about their projects and allows anyone to use the results or contribute to them. In addition it also provides a special search engine to look for CC licensed works.

The copyright owner steps into this community of commons voluntary and, while retaining her copyright, can choose which rights she wants to give for everyone to use and which rights are to be kept private. The standard “all rights reserved” status of information is changed to “some rights reserved” and the tools, the CC community offers, help to announce

⁶⁵ <<http://creativecommons.org/about>>, visited 5 April, 2011.

⁶⁶ H. A. Hietanen, “Creative Commons’ Approach to Open Content“, 2008, p. 9. <<http://ssrn.com/abstract=1162219>>, visited 1 February, 2011.

⁶⁷ L. Lessig, *The Future of Ideas*, (Random House 2001). p. 23.

⁶⁸ *Ibid.* p. 12.

what exact rights have been reserved. According to the needs and preferences of the author/copyright owner the CC proposes a standardised license (the web site of Creative Commons offers a simple test to find the most suitable type of license) which grants certain rights for anyone who agrees to comply with it's conditions. All licensed works can be used for free and there is no way to ask for remuneration through the Creative Commons licensing system (Except the countries where it is impossible to wave author's right to collect royalties through some statutory or compulsory licensing scheme, where author sustains his right to be remunerated for the use of his work allowed by CC license.⁶⁹).

As all of the previous frameworks of commons, the Creative Commons is designed to be used in digital environment and therefore has a "three layered structure"⁷⁰. The first layer is a traditional licence as it is understood by lawyers – a text listing the exact terms and conditions of use. This part is called "Legal Code". The other part is the so called "Human Readable" license or the "Commons Deed", which is basically a short text accompanied by relevant pictures summarising the most important conditions of the license. The last part is the "machine readable" part of license and is a special information attached to every licensed work allowing different kinds of software, such as search engines, to distinguish between differently licensed and non-licensed content. From the user's perspective, if you see a digital work labelled with the CC symbol and other symbols explaining the concrete rules of use, you can click on the picture and you will be instantly taken to the website of the Creative Commons where you'll be able to see the human readable license and, after one more click, the legal code of it.

In this way the Creative Commons, create a pool of information which is commonly owned by all (except the cases where some groups of subjects are explicitly excluded). Even the smaller communities created with a specific aim can not use the CC license only for allowing the sharing among

⁶⁹ A provision found in all CC licenses, see e.g. the legal text of the "Attribution" (CC BY) license part 3(e)(i) <<http://creativecommons.org/licenses/by/3.0/legalcode> > visited 12 February, 2011.

⁷⁰ <<http://creativecommons.org/licenses/>> visited 12 February, 2011.

themselves. If CC license is used, the work will be findable by search engines all over the world. To make the pool more global the Creative Commons are trying, as mentioned, to incorporate the CC license in the national legal systems of many countries in the world. The information in the pool can be used to create more common information or can be appropriated by others dependent on the type of license the author decides to choose.

2.2.4 Conclusion

As we see, the production and dissemination of information can work in the setting of commons. Even From the first sight these discussed frameworks have something that connects them. All of them have certain features that allow to look at them as at the regimes of commons. Although it's quite hard to put a finger on it, the first feature is that the goods of information are created here without the exclusion on the basis of copyright where all rights are reserved. Many individuals participate and share the results without or with some restrictions. In addition, it also seems that the people that are participating, indeed, form specific communities with their own rules, declarations proclaiming these rules, etc.

However, after that, the first observation that comes into one's mind and is that at least a few of the Ostrom's rules are not met in either of these examples. None of these resources have clearly defined boundaries. In fact, it is not even clear what those resources are. The 'others' (other individuals) are not excluded from the benefits of the commons by person. They are only excluded by their agreement or disagreement to follow the rules of the community (but this is not really an exclusion as well, it's more a prohibition of certain actions. When the disallowed action is ceased the person can use the resource further or put his works in the common pool without any restrictions) In this sense, it also becomes unclear what the communities exactly are. Of course, people can form small communities in the classical sense, but as noted above, all of them will be related and interoperable because of one global framework. Therefore the questions

about those global communities and their status still remain unanswered. In addition, as it was described above, these regimes are not even common ownership of resources. The result of production is not automatically owned by the community, it still stays (to bigger or lesser extent) the property of the person that contributed that part to the resource. In addition to this, we can also observe, that the described communities are not homogeneous. They are, in fact, composed of smaller communities and Open Source, Open Access and Creative Commons are frameworks uniting these all communities into one system.

In any case, we still see that models of commons for information somehow manage to exist, so why is it so? As explained, knowledge is not a typical common pool resource, but is a non-rivalrous in nature. Therefore the conclusion that can be made here is that as long as certain community develops rules to produce the information, there is no need to excessively limit the resource in any way after it comes into existence. The bigger the openness of the resource, the bigger use it will bring. Therefore there seems to be no need even to describe the communities in any strict manner, nor to exclude someone. Also, the resource of information, especially in the age of internet, is very hard to destroy or abuse in any significant way. Virtual villagers don't need therefore such strict rules anymore.

What is left of the Ostrom's theory when we eliminate these elements are the rules that create communities and keep them together. In the case of these big global frameworks there still has to be something that makes people to feel that they are connected to each other, that they can participate and that they want to participate for one or the other reason. In addition, people have to perceive a resource as owned (or controlled) commonly together and have to feel good in their community. To explore if the Creative Commons is, indeed, such community I will use the criteria of **efficiency, equity and sustainability**, set forth by E. Ostrom, and the formal requirements that are needed to reach these principles, as much as they are applicable to the commons of information.

First point to discuss is efficiency, which will answer us the questions about the production of information in the setting of the commons. Does the

(Creative) commons for information make sense? Is it better to the general public or to the author? This will be discussed next.

3 Efficiency of the Creative Commons

As M. Lemley stresses in his article⁷¹, for some years we have been observing a slow and gradual process of equating intellectual property to the real property. Even the term “intellectual property” already suggests this attitude. In the field of legal and economic scholarship more and more authors argue, or just assume, that information is indeed a form of private property and has to be protected as such.⁷² In addition, this kind of reasoning is also an argument for consistent strengthening of intellectual property protection, especially in the face of the new technologies that invented new ways for “non-owners” to get benefits from it. We are witnessing the protection being increased, new intellectual property objects introduced, the uses of information that were allowed in the “real world” being now prohibited in the virtual world. Such trends have already raised strong criticism of such scholars as J. Boyle (who called it the “second enclosure movement”⁷³), L. Lessig⁷⁴ and others, but the trend stands strong.

At the same time, more and more research is made on different aspects of efficiency of the traditional proprietary system and the efficiency of the alternative mechanisms for production and dissemination of information. There are concerns, that intellectual property should not be equated to real property at least in the economic terms, since the economic mechanisms behind production and dissemination of these goods are not the same. It would be untrue to say, that there is one certain conclusion about what regime would be the most effective to adopt. However, here arguments proving that the regime of commons (such as the Creative Commons) can indeed deal with information effectively exist. It seems, that although there is almost no way to say if commons is a more effective tool yet, there are

⁷¹ M. A Lemley, “Property, Intellectual Property, and Free Riding”. 83 *Texas Law Review*, (2005): <<http://ssrn.com/abstract=582602>> visited 11 April, 2011.

⁷² *Ibid.*

⁷³ J. Boyle, *The Public Domain. Enclosing the Commons of the Mind*, (2008 Yale University Press), pp. 42-46.

⁷⁴ L. Lessig, *Free Culture. How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, (The Penguin Press 2004), pp. 119-124.

strong arguments for the conclusion that it is at least as effective as the proprietary IP regime in certain cases.

3.1 Economic efficiency

The economists today are only starting to understand the processes behind the production and dissemination of information. For instance, as R. Towse states, the field of cultural economics was essentially established by W. Bowen in 1966 (when he released his book ‘Performing arts: the Economic Dilemma’). However, according to him, after thirty-five years, in modern scholarship, the complexity of markets in the arts, heritage and cultural industries and how they interact with government policy, subsidy and regulation are still not researched enough.⁷⁵

From the economic perspective, information has a certain paradox inherent in it. As J. Litman points out, the copyright as it is today was designed to suit the needs of the intermediaries – producers and distributors.⁷⁶ This was very reasonable before the digital networks since the production and distribution of informational artefacts was an investment intensive occupation and there was no other way for information to reach the general public. Today, when perfect copies of any material can be made with one click of a button and instantly transferred to anyone anywhere, the cost of an additional unit of information is very close to zero (even including the first-copy costs, that could be divided by the amount of copies sold). According to economic theory, the market functions most efficiently when the price of a good equals its production cost.⁷⁷ This demands that the price, the information is sold by, would also be close to zero and higher costs creates dead-weight in society, reducing efficiency. In these circumstances, the economic surplus of information is also maximised when the price of it is essentially zero.⁷⁸ Consequently, it can be argued, that a

⁷⁵ R. Towse, *Creativity, Incentive and Reward. An Economic Analysis of Copyright and Culture in Information Age*, (Edward Edgar Publishing 2001), p.3.

⁷⁶ J. Litman, ‘Real Copyright Reform’, 96:1 *Iowa Law Review*, (2010). pp. 9-13.

⁷⁷ I. Kubiszewski, J. Farley, R. Costanza ‘The Production and Allocation of Information as a Good that is Enhanced with Increased Use’, 69 *Ecological Economics*, (2010).

⁷⁸ *Id.*

system of production of information which allows to share it for free is as close as it can get to the maximum efficiency of a perfect market.

The distribution of information also has new alternative forms available today. It can be argued that we don't need any kind of intermediaries for this and can use communities to disseminate knowledge efficiently. As J. Boyle nicely puts it in one of his articles, "With enough brains, all contents is interesting."⁷⁹ If you make a framework – as open as possible – and allow people to organize the chaos of information in the internet themselves - they will. Communities can select the most important news, to put music into categories, to render a database of recommendations according to person's taste and similar things much better than one single program or company. Boyle gives many examples such like digg.com and del.icio.us, etc. A similar community based framework which I started using myself recently and which does not cease to amaze me is stumbleupon.com. Similar framework can be adopted to create free distribution networks. In addition, there are also open business models already, that ensure dissemination in the setting similar to community dissemination, taking money only for the framework they provide. And taking money not from the authors or users, but from other companies, that want to advertise on the sites, for instance. One of the examples is Jamendo, which will be discussed in the last part of this thesis.

Finally, there are those who argue, that the common production of information is the efficient way, because the standard proprietary regime of copyright is treating intellectual property as ordinary property, which, as mentioned, it is not.⁸⁰ In the case of property, private rights are given to one individual because of the need to protect the rest of the society from negative externalities which could occur if the resource is overused. The owner is asked to internalize these externalities and other maintenance costs, his rights are regulated in a way to avoid any other negative effects in the external world, such as pollution, damage to others , etc..⁸¹ This also creates a problem of free-riding, when someone else uses the benefits of the source

⁷⁹ Boyle, *Supra* note 59, pp. 123-143.

⁸⁰ Lemley, *Supra* note 71.

⁸¹ *Ibid.* p. 11.

only the owner can use in exchange of the internalization of negative externalities. This can discourage the owner to continue to do so and this would harm the whole society.⁸² However, economic theory does not tell that all the positive externalities (the surplus that is left after the cost of internalizing negative externalities is covered) have to be internalized as well. In fact, there are many positive externalities of property no one even tries to internalize. For instance, if I plant nice flowers in my yard or paint a house in a nicer colour, I will not be able to demand anyone who enjoys it to pay me.⁸³ The same can be said about intellectual property, were virtually all externalities are positive. So again, the method which allows to create and sustain a resource without internalizing any positive externalities would be economically efficient since the consumer surplus would be maximised.

All this shows that the Creative Commons could be an efficient framework to maximise the use to the general society. However, speaking about economic efficiency of information production and dissemination in the system of commons (and Creative Commons for this matter), it still needs to be explained how is the “first copy” of information produced (since even if the cost of any additional unit is zero, artists have to have incentives and resources to produce the first copy) and what are the economic processes behind the community production (peer production). In other words, are there any use for the authors to produce such first copy and how are their economic expenses covered. Apparently, this happens because of a phenomenon called “Gift economy” or “Sharing Economy” as described thoroughly by Y. Benkler⁸⁴ and L. Lessig⁸⁵ in the context of information goods. They invite us to think about the exchange of goods or services (if they can be called this way) which are not based on monetary remuneration but on other kind of benefits. On the opposite, introduction of money could destroy the relationship and stop the exchange. We have these all around us in the real world – you help your neighbour to start his car for free, you don’t pay your friends for listening to your problems and advising you.

⁸² *Ibid.* pp. 12-13

⁸³ *Ibid.* pp. 18-26.

⁸⁴ Y. Benkler, *The Wealth of Networks*, (Yale University Press 2006). pp 52-

⁸⁵ L. Lessig, *Remix*, (Bloomsbury Academic 2008), pp. 143-225.

Insisting to pay or be paid for such things would simply deprive you from all these goods in the future. According to L. Lessig, “[g]ifts in particular, and the sharing economy in general, are thus devices for building connections with people. They establish relationships, and draw upon those relationships. They are the glue of community [...]”⁸⁶. The digital technologies enabled people to act similarly in the virtual world. More than this, we see an emerging trend that if you give people internet access and a successful platform they will form communities that will engage in exchange of “gifts” - goods and services - without any remuneration, just like the neighbours in the real world. Motivations of these people can be very different, they can have different levels of commitment but various types of communities just form and such giants as, for instance, Wikipedia are born. Here we see that, in fact, not only is the community a more efficient way to produce information for all society, it is the only possible way to employ certain powers of personal relations and gifts for production of valuable goods. Without internet and certain framework of commons the potential of gift economy would be wasted, or even worse – misused, spent, for instance, for playing games that make one feel important but does not create any useful product.

We can conclude that although quite different from the commons described by E. Ostrom, Creative Commons and similar frameworks seem to be able to function efficiently. The main feature of them is that not only they become stronger because of the non-monetary nature of the transactions in them (personal relationships are built), but they also become more efficient for both, the society and the author. The Creative Commons is both a framework and a set of specific rules for such sharing economies to emerge and function.

⁸⁶ *Ibid*, p. 148.

3.2 Efficient creativity

The information has a key feature that it is an output but also an input of creative process.⁸⁷ In this sense, a system, that gives enough cheap input can also be considered effective, since it decreases the cost of the final product. On the other hand, not everything is about money. The commons-based sharing system is not only efficient because it makes creativity cheaper or gives other economic benefits. It is efficient and desirable because it makes creativity happen freely and become more diverse in the first place. These benefits can arguably be also measured by economic terms, but in this part, it will be only argued that freedom and diversity are to be valued as such, because they make our lives more interesting and fulfilling.

First of all, the creativity becomes freer and overall efficiency increases because there is less uncertainty over the intellectual property rights in the creative community. The fair use doctrine in US and exceptions in Europe are usually used by artists, but they don't give 100% reassurance, that the author is legally safe. This uncertainty may prevent many works from being created in the first place. Eliminating this is essential for realisation of full creative potential of our society.

In addition, there are quite some research done on the process of creativity and most authors come up with a conclusion that nothing is ever created in vacuum. There have to be other works, experiences, knowledge (so called "raw material") available for an author to create something new, since creating means combining the existing elements and reacting to the surrounding culture in a subjective way.⁸⁸ As L. Zemer stresses it in his book, our society has been concentrating too much on the idea of a single extraordinary person, a genius, creating on his own – the so called idea of "romantic authorship", which is simply absurd.⁸⁹ Zemer argues, that a work

⁸⁷ Benkler, *Supra* note 36., p. 35

⁸⁸ See Lessig, *Supra* note 85, pp. 51-83; C. R. Sunstein, *Infotopia: How Many Minds Produce Knowledge*, (Oxford University Press, 2006); L. Zemer, *The Idea of Authorship in Copyright*, (Ashgate Publishing Limited 2007) pp. 97-122;

⁸⁹ L. Zemer, *The Idea of Authorship in Copyright*, (Ashgate Publishing Limited 2007), pp. 73-77.

is always created by both - the individual and community. So the community should also be able to claim authorship to the final product.⁹⁰

S. Johnson, in his book, makes a review of the optimal conditions and environments for using the potential of creativity to the fullest and concludes, that it is essential to allow the establishment of networks for information exchange that would be not too rigid (not putting people behind closed doors or discouraging exchange of information in other ways) and not too loose (where the elements of information seldom meet or they meet sporadically, exchange of information has no rules, there is no way to preserve the resulting creative works).⁹¹ He advocates for the “liquid networks”, such as cities or public spaces, where the proximity of individuals (elements of information) is high and there are many chances for ideas to meet and complement each other. In the sense of copyright, this, of course, would mean not to enclose information and allow it to be used (following certain necessary rules) by as many people as possible in order to have the biggest chance that something revolutionary new will be created again and again. An idea, has several stages of development before it just pops into someone’s head. Johnson explains it using the example of the discovery of evolution theory by Ch. Darwin.⁹² During these stages slow conscious and unconscious processes of connecting different facts observations, emotions take place. We have to allow these connections to happen freely.

In fact, this is exactly what the promise of the commons is – joint ownership, which, following Zemer’s theory, would allow the raw information to flow freely and result in more and better quality creations. In addition, it allows liquid networks between the members of communities, as S. Johnson puts it, that allow the generation of different connections between existing information and still has certain rules to preserve the results.

From all this it seems, that the Creative Commons, theoretically should be a very efficient way to produce creative works. It seems to be

⁹⁰ *Ibid.* pp. 187-225

⁹¹ S. Johnson, *Were Good Ideas Come From*, (Riverhead Books 2010), pp. 43-67.

⁹² *Ibid.* pp. 23-43.

possible to reach optimal production and management of information in the setting of commons. We also know, that this is indeed happening in practice and the numbers of CC licensed works mentioned in the introduction prove this. Following the outline of the thesis, we will now proceed by researching equity of Creative Commons communities.

4 Equity of the Creative Commons framework

As concluded above, the Creative Commons seems to be an efficient tool to introduce an alternative to proprietary intellectual property system. In some cases the system of commons seems to be even more efficient than the traditional one. In addition to that, E. Ostrom points out that any commons have to be based on equity in order for the community to feel that the system is fair and to continue to participate in it. Equity, according to her means just or equal appropriation from and contribution to the resource. As it so happens, we have a way to check if the system of Creative Commons is fair and based on equality from the perspective of international community using universally agreed standards. We have human rights norms for this. In fact, human rights norms is not only a suggestion on what should be considered fair, but also a requirement any system is bound to. If the Creative Commons would not satisfy these requirements, not only is it likely that soon the communities will break in dissatisfaction (as it is now happening in the system of proprietary IP) but also any government would have a duty to discourage the use of the CC licenses and even abolish them in the cases where they infringe human rights directly.

It seems that commons and the Creative Commons have certain general benefits as it comes to human rights. As Y. Benkler argues in his book, the promise of the commons for information is the promise of more freedom for an individual in general. Freedom to do more things alone and with others.⁹³ In fact, many claim that it's actually the intellectual property system, as it is now, which is infringing the norms of international human rights. In this chapter, we will shortly discuss the requirements of human rights most related with the mission and aims of the Creative Commons and what are the problems and benefits of the Creative Commons system from this perspective.

⁹³ Benkler, *Supra* note 36, p. 133.

4.1 Right to take part in cultural life

This right is one of the most important ones in the discussion about the Creative Commons. It shows what amounts to fairness in cultural life in the opinion of international community.

As for universal international norms, the right to take part in cultural life is enshrined in the article 27 of Universal Declaration of Human Rights⁹⁴ (UDHR) and article 15(1)(a) of ICESCR⁹⁵. Analogical or similar provisions can also be found in other instruments such as CRC (art. 31(2)), ICERD (art. 5 (e)(vi)) and CRPD (art. 30 (1)). According to these documents, *everyone has right to take part in cultural life*. But this is far from enough to understand what is required by this provision. Fortunately, the right is further explained in the recently issued General Comment No. 21.⁹⁶

First of all, the comment explains how “culture” has to be understood in the context of this right. Before the explanation of the General Comment human rights literature presented three possible ways to understand this notion⁹⁷. One of them identified culture with the accumulated material heritage of the humankind. According to this position, the human right to culture would mean equal access of everyone to accumulated cultural heritage.⁹⁸ The other view regarded culture as the process of artistic and scientific creation. This explanation would require to allow the creative part of the society (artists) to create without restrictions and to grant the general public access to the results through museums, concerts, libraries etc.⁹⁹ The third and broadest view was to see the culture as a total way of life. This anthropological approach explains culture to mean the total sum of material and spiritual activities and products of a given social group, a self-sustained

⁹⁴ *Universal Declaration of Human Rights*, G.A. res. 217A (III), U.N. Doc A/810 at 71 (1948).

⁹⁵ *International Covenant on Economic, Social and Cultural Rights*, G.A. res. 2200A (XXI), 21, U.N. Doc. A/6316 (1966)

⁹⁶ CESCR General Comment No. 21, ‘Right of everyone to take part in cultural life (art. 15, para. 1 (a), of the International Covenant on Economic, Social and Cultural Rights)’, E/C.12/GC/21 (2009).

⁹⁷ A. Eide, C. Krause, A. Rosas, *Economic, Social and Cultural Rights*, 2nd edition (Martinus Nijhoff Publishers 2001), pp. 87-90.

⁹⁸ *Id.* p. 87.

⁹⁹ *Id.* p. 88.

system of values and symbols as well as a set of practices which provide individuals with meanings for behaviour and social relations in everyday life.¹⁰⁰

The General Comment seems to follow the last view. In addition, it looks like it extends the notion even more by saying that the culture is “a broad, inclusive concept encompassing all manifestations of human existence”. According to the Committee, the term “cultural life” in the text of the treaties is an explicit reference to culture as to a living, dynamic process with its past, present and future.¹⁰¹ It encompasses everything: music, sports, non-verbal communication, ceremonies, food, clothing and anything else through which individuals and communities express their humanity.¹⁰²

The right to participate in this kind of life of society belongs to every human being. According to the Committee, “everyone” means an individual alone or together with others or within a community or a group as such.¹⁰³ The term to “participate” is also explained as meaning ability to participate, access and contribute. This, among other things, gives right to everyone to develop cultural expressions and to share them with others, to know and understand his or her culture, to be involved in creating the spiritual, intellectual, emotional expressions of the community, etc.¹⁰⁴ The Comment requires to treat all members of community equally in regard to access, participation and contribution, to give special attention to more sensitive groups, such as disabled people, or the ones, who live in poverty.

Now, the intellectual property, as we have it today, seems to be mostly adopted for the first two notions of culture. It gives special protection to the creative elite of our society and allows access to the results through libraries, theatres, limited exceptions etc. It gives the society full access only when the work becomes a part of the common cultural heritage (after 50 years after the death of the author, when it falls into the public domain). However, the human right to culture, as fully explained in 2009, requires

¹⁰⁰ *Id.* p. 89.

¹⁰¹ General Comment 21, para. 11.

¹⁰² *Id.* para. 13.

¹⁰³ *Id.* para. 9.

¹⁰⁴ *Id.* para. 15.

different things. The digital technologies have enabled the realisation of “ideal” cultural life as it was apparently imagined at the time the ICESCR was signed. They have erased the barriers of space and time, they now allow to include everyone without discrimination, even the poor and disadvantaged.¹⁰⁵

New technologies also enabled all those new regimes of the commons for knowledge. If to put the above listed requirements side by side with the ideas of the Creative Commons (and other types of commons) we instantly see a matching picture. Creative Commons speak about a network of communities where individual can participate alone, or together with others, in a community or a group. Individual can create and share with others or just consume and understand his or her culture and be a part of it. Everyone in this system can be creator and spectator at the same time. Everyone is involved .

The General Comment also provides that the right to participate can be limited, if there is such need in the society.¹⁰⁶ Of course, limitations can be needed to protect the human rights of the authors, which will be discussed later, or other interests of the society. The commons and Creative Commons seem to promise a better protection and fulfilment for the right to culture without limiting anyone’s rights to any significant extent reaching, at the same time, the same efficiency as in the standard IP system with strong limitations of the rights of the majority of population.

The right of everyone to take part in cultural life is also closely linked to the right to education through which individuals and communities pass on their values, religion, customs, language and other cultural references.¹⁰⁷ As an important part of the right to culture and as an important right in itself, the right to education will be discussed next.

¹⁰⁵ L. Shaver, C. Sganga, ‘The right to take part in cultural life: on copyright and human rights’, 27 *Wisconsin International Law Journal*, (2010), <www.ssrn.com/abstract=1437319> visited 10 September 2010, p. 649.

¹⁰⁶ General Comment 21, *Supra* note 96, part C.

¹⁰⁷ CESCR General Comment No. 17, ‘The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author (art. 15 (1) (c))’, E/C.12/GC/17, (2005).

4.2 Right to education

The right to education is laid down in the article 13 of ICESCR and article 26 UDHR and interpreted in the General Comment No.13¹⁰⁸. Similar provisions can also be found in other international instruments such as CRC (art. 29(1)(b)), ECHR (Protocol I art. 2), etc.

This right to is of a dual nature: it is not only a right by itself, but also a precondition for the exercise of other human rights.¹⁰⁹ The article 13 ICESCR provides that education must be “directed to the full development of the human personality and the sense of his dignity, shall strengthen the respect for human rights and fundamental freedoms” and “shall enable all persons to participate effectively in a free society, promote understanding, tolerance and friendship among all nations and all racial, ethnic or religious groups, and further the activities of the United Nations for the maintenance of peace.” This right is very important to enable the building of strong and sustainable knowledge sharing communities and to prepare people for effective participation in sharing of common informational resources. This right is also important as an end in itself for building (as noted) peace, self esteem, and respect in the world.

The right to education stipulates the right to free primary education, generally available free professional education and duty of progressive realisation of the same rights towards university level education. In addition, according to the Committee of Economic Social and Political Rights, all levels of education have to be accessible, available, acceptable and adaptable. This, among other things, implies quality of study materials, economical affordability of education, curriculum which would be directly aimed at addressing local community needs, etc.¹¹⁰ One of the main core obligations of a country in ensuring this right is non-discrimination¹¹¹ which

¹⁰⁸ CESCR General Comment No. 13, ‘Right to education (Art. 13)’, E/C. 12/1999/10 (1999)

¹⁰⁹ Eide, Krause, *Supra* note 97, p. 245.

¹¹⁰ S. Kalantry, J. E. Getgen and S. A. Koh, ‘Enhancing Enforcement of Economic, Social and Cultural Rights Using Indicators: A Focus on the Right to Education in the ICESCR’, 32:2 *Human Rights Quarterly* (2010), <<http://ssrn.com/abstract=1501293>> visited 20 August 2010.

¹¹¹ General Comment 13, *Supra* note 108, paras 31-37.

should also mean equal access for the individuals from the lowest-income groups (as in the case of right to culture) and individuals with disabilities, etc.

These duties are closely related to the access to school books, research data and other progressive study materials, the lack of which is detrimental to the quality of education. However, this is exactly the problem we have in the world today. Recent research showed that the cost of education is the major single reason for parents to keep children at home.¹¹² The schools and higher education institutions in the developing countries are often suffering from lack of resources and inability to pay for the access to expensive databases and journals.¹¹³ Another big problem is the access of educational materials by people with print disabilities (blind or with impaired vision). Textbooks and other materials are not translated into accessible formats, students can not afford these materials, etc.¹¹⁴

Again, the emergence of new technologies allows us, theoretically, to transfer any educational materials to anyone, who has a computer (or maybe to community centres, libraries, public institutions that have computers and could print materials out for anyone who needs it, etc.) for free, or very cheaply. However, we have a legal barrier – the copyright, that does not allow us to make everything that simple. There are some provisions allowing exceptions and compulsory licenses of copyright, for educational purposes in the Berne Convention and its Appendix (Art. 10(2), and art II of the Appendix), many countries have provisions on educational use in their national intellectual property laws, but they are often not effective enough especially when talking about the developing countries.¹¹⁵

The Open Access movement for scholarly literature, which was already discussed above, was a very clear sign that there is a need for alternative information production mechanisms in education. The Creative Commons

¹¹² Y. Donders, V. Volodin (eds.), *Human Rights in Education, Science and Culture. Legal Developments and Challenges*, (UNESCO Publishing, 2007). p. 210.

¹¹³ D. R. Nicholson, 'Intellectual Property: benefit or burden for Africa?', *32 IFLA Journal* (2006).

¹¹⁴ H. Dakin, S. Wijesena, 'Access to Copyright Material by People with a Print Disability', *22:4 Copyright Reporter*, (2005).

¹¹⁵ G. Dutfield, U. Suthersanen, *Global Intellectual Property law*, (Edward Elgar Publishing Inc. 2008), pp. 287-289.

also offers a framework of alternative cooperation which can be adopted not only for textbooks and articles, but also for educational movies, music and other materials which are acknowledged to be even better for education in some cases and at the same time raise lots of problems for teachers today.¹¹⁶ The technical possibilities, the CC offers, also allows to search for these “free” materials and access them easily. (for instance, MIT Open Courseware project¹¹⁷) In addition, the Creative Commons and similar regimes of commons are likely to encourage communities to adopt educational materials for their own needs and circumstances (as required by the human rights provisions) in contrast to “rigid” and unchangeable textbooks, that promote “western” values, etc. This general overview seems to offer, that the alternative of commons is a very positive addition to the fulfilment of human right requirements in the field of education.

4.3 Author’s rights to her own work

When we speak about the benefits of the commons and Creative Commons for the “general public” we most often mean that the users can at any point become creators as well. However, this does not have to be so, and the benefits for the non-contributing individuals are the positive externalities we spoke about earlier. The Creative Commons are, indeed, also aimed at sharing with non-contributing individuals and it’s great that so many people can get so much good for free. However, serious attention has to be drawn to the contributing individuals in the community (even if the contribution is very small). If the human rights of these contributors would be infringed, the commons wouldn’t be based on equity even if the positive externalities to others would be very big.

Article 27 of the Universal Declaration of Human Rights as well as the article 15(1)(c) of the International Covenant of Economic, Social and Cultural Rights¹¹⁸ (ICESCR) provide the *right for any person to the*

¹¹⁶ D. N. DeVoss, S. Webb, ‘Media Convergence: Grand Theft Audio: Negotiating Copyright as Composers’, 25 *Computers and Composition* (2008), pp. 88-98.

¹¹⁷ <<http://ocw.mit.edu/index.htm>> visited 2 May, 2011.

¹¹⁸ *International Covenant on Economic, Social and Cultural Rights*, G.A. res. 2200A (XXI), 21, U.N. Doc. A/6316 (1966)

protection of moral and material interests resulting from any scientific, literary or artistic production of which he is an author. The contents of this right is further explained by the Committee of Economic Social and Cultural Rights in its General Comment No. 17¹¹⁹. According to it, the author of any work has two types of rights towards her creation – moral and material. The material aspect of authors rights means the right to get material benefits form her work in the form of any kind of remuneration or payment sufficient to ensure her adequate standard of living. This principle can be ensured by giving the author exclusive rights to exploit her work for a limited period of time as it is now with intellectual property law or giving her right to a one-time payment.¹²⁰ So, the Committee clearly concludes that intellectual property law as it is now is not the only way to ensure the material interests of an author.

In addition to this, authors are entitled to moral benefits, which encompass the right to be recognised as the creator of particular work and object to certain distortion, mutilation or modification of it. The moral rights, according to the Committee, express the personal character of every creation of human mind and durable link between creators and their creations. For this reason, the moral rights are not to disappear even when the work becomes the property of mankind.¹²¹ These rights allow the author to require to be attributed and to object to reputation-harming mutilation and distortion of her work. They are inseparable from the person of the author and can not be transferred or belong to legal entities. In the international IP regime the moral rights of an author has an independent role as well: according to the Berne Convention¹²² article 6bis, the moral rights are to be protected independently of the economic rights of the author for at least the same time as the economic rights itself. However, in many countries they

¹¹⁹ CESCR General Comment No. 17, 'The right of everyone to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author (art. 15 (1) (c))', E/C.12/GC/17, (2005).

¹²⁰ Ibid. paras 15-16.

¹²¹ Ibid. paras 12-14.

¹²² Berne Convention for the Protection of Literary and Artistic Works, September 9, 1886, S. Treaty Doc. No. 27, 99th Cong., 2d Sess. 41 (1986)

are protected indefinitely and this seems to be the requirement expressed in the General comment as well¹²³.

The General Comment and the analysis of historical circumstances of the drafting of the Covenant and the Convention¹²⁴ tells us that this right is closely related with other human rights, namely: freedom of expression (ICCPR, art. 19), right to adequate standard of living (ICESCR, art. 11), right to choose work freely and get adequate remuneration (ICESCR art.6-7), right to property (UDHR, art. 17), etc. The fact that the majority of elements of the authors' rights are already expressed in other human rights provisions was a reason of resistance in the drafting committee to the adoption of a separate provision for author rights. The special protection for author rights was given mostly because of the special nature of the moral rights, advocated by some delegations and the need to ensure freedom of scientific research.¹²⁵ In any case, the attention to the related rights helps to build a better understanding on what interests of the authors have to be protected in the context of Creative Commons licensing. It is also important to note, that the Committee stresses the duty of the member states to protect these interests of authors, but also to balance them with the interests of the rest of the society.

According to J. Lintman, J. Smiers¹²⁶ and others, as discussed above, the current copyright regime is not really created to protect the interests of authors, but more the interests of intermediaries. There are complains that authors suffer from exploitation and infringements of their moral and material interests made by publishing companies and recording corporations every day.¹²⁷ However, it is also not very clear if the Creative Commons is a very suitable instrument to protect the abovementioned rights as well.

¹²³ General Comment 17, *Supra* note 119, para. 2.

¹²⁴ P. K. Yu, 'Reconceptualizing Intellectual Property Interests in a Human Rights Framework', 40 *U.C. Davis Law Review*, (2007), , pp. 1050-1069, <<http://ssrn.com/abstract=891303>> visited 15 May, 2011.

¹²⁵ *Ibid.* p. 1057.

¹²⁶ J. Smiers, M. Van Schijndel, *Imagine There Is No Copyright, And No Cultural Conglomerates Too*, (Institute of Network Cultures, Amsterdam 2009).

¹²⁷ L. Bently, 'Between a Rock and a Hard Place: The Problems Facing Freelance Creators in the UK Media Market-place', <www.creatorsrights.org.uk/media/between.pdf> visited 18 April 2011, pp. 4-36

There are two types of membership in a CC community (any local or global) author can either contribute to an existing project, or just to publish his work or a part of it in the internet for others to use or built upon, etc. If an author chooses to participate in something that already exists, she will usually have to adopt the agreed license for subsequent works, and if there is no project, she is free to choose any license she wants (except if she has built on another work). So there is a clear freedom to arrange the rights according to the needs of the author.

Now, speaking about material benefits, none of the Creative Commons licenses has an option to ask for material benefits from the users of the work (except very specific cases where the laws of a state does not allow giving this right away). So, there is no way an author can earn directly through this system to ensure herself an adequate standard of living. However, first of all, the decision to give a work to a CC community is always voluntary. It can be presumed, that an author has certain benefit in doing so, even if it is not monetary. For instance, none of the CC licenses are exclusive so the author can still always use work in all possible ways – even to sell it to a record or publishing company etc. In addition, an author can also keep the right of commercial exploitation to herself exclusively. The CC licensed work can help to advertise an author and to build her reputation, etc. There are open business models, tips and tricks suggested for authors on the ways to benefit from the CC license indirectly.¹²⁸ A study made in 2008 also showed that 19% of all questioned CC licensors are making money from the licensed work and 3% of them reported CC licensed work as the main source of their income.¹²⁹ Even if no material benefits could be extracted from a particular work, the CC has no ambitions to replace the existing copyright regime totally. The two models can exist side by side the former being aimed for different than material benefits and as long as it would still be possible to ensure an adequate standard of living

¹²⁸ See e.g. < <http://audio.tutsplus.com/articles/general/creative-commons-for-musicians-can-you-make-money-by-giving-music-away/>> visited 18 April, 2011.

¹²⁹ M. Kim, ‘ The Creative Commons and copyright protection in the digital era: Uses of creative commons licenses’, 13 *Journal of Computer-Mediated Communication*, (2008), p 193.

for the authors in other ways, it would not contradict the human right requirements.

Speaking about the moral rights of attribution and right to prohibit harmful distortion, the Creative Commons seem to be generally for “leaving these rights as they are”. Attribution is a requirement of all the licenses (this includes also the right to object a false attribution), except the CC0 (will be discussed below) which gives the work to the public domain.¹³⁰ In this case, it can probably be argued that since author has a right to remain anonymous, she can waive her right to attribution in general, so CC0 would not contradict the human rights requirements in this sense. The right of integrity grants the right to object when the distortion of the work is harmful to the reputation of author. The Creative Commons licenses all have a requirement to abstain from the actions that would be harmful to the reputation of the author.¹³¹ So never is it even possible to waive this right contractually in the CC system. The general right of integrity which allows to object any distortion of the work is not a requirement of fundamental human rights, but in any case, CC does not ask to give it away either. Author can always choose not to allow any derivative works.

The other related rights such as right to choose work freely and freedom of expression and others are also not contradicted by the Creative Commons, but one could say, gives even more options and forms of expression an author can choose from and, hence, encourages her independence.

4.4 Right to property

This right, as mentioned, is closely linked to the general human rights of an author. However, it is worth discussing separately since it is often used as an ultimate argument for strongest possible protection of intellectual property and against rights of the general public.

¹³⁰ <<http://creativecommons.org/licenses/>> visited 18 April 2011. All standard licenses have the attribution (BY) requirement.

¹³¹ All licenses have it in section 4 - “Restrictions”, see e.g. CC BY 4 (c) <<http://creativecommons.org/licenses/by/3.0/legalcode>> visited 18 April, 2011.

It was already discussed, how do intellectual and real property differ from the economic point of view. In the field of human rights this distinction is less clear. First of all, the right to property has implications on many different spheres of human lives and can not be classified as purely civil, social or economic. In addition, it is interpreted quite differently by different nations - it was especially the case during the drafting of international human rights documents. There is still some controversy on the balance between individual property rights and the social function of property.¹³² Because of these issues, the right to property is not included in any of the two Covenants and can only be found in UDHR art. 17. So universally, the right to property is only of a declaratory nature. The article stipulates a right to everyone to own property alone or in association with others and not to be arbitrarily deprived of his own property. On regional level, a stronger provision on this right can also be found in Protocol 1 art. 1 of European Convention on Human Rights¹³³ where it is included among civil and political rights. However again, the fact that it was only included in one of the protocols and not the main body of the document shows, that this right is not beyond controversy even in Europe¹³⁴ and according to some, it was one of the weakest rights in the Convention for very long time.¹³⁵ The other regional instruments where this right can be found are American Charter of Human Rights (art. 21) with provisions on strong protection and African Charter of Human and Peoples' Rights (art. 14 and art.21), to which this right was added as independent right only the last minute and where it still has strong relation to community interests.¹³⁶

As we see, there is clear divergence in the understanding of importance of the right to property in general. The elements of this right are also interpreted differently from one regional body to another.¹³⁷ Again the

¹³² Eide, Krause, *Supra* note 97, pp. 191-193.

¹³³ The text of the article refers to 'possessions' instead of property, but this was explained to mean right to property by the ECHR. See Eide, Krause, *Supra* note 97p. 198.

¹³⁴ C. Ovey, R.C.A White, *The European Convention on Human Rights*, 4th Edition, (Oxford University Press 2006). p. 345.

¹³⁵ R. Helfer, 'The New Innovation Frontier? Intellectual Property and the European Court of Human Rights', 49:1 *Harvard International Law Review*, 2008. pp. 1-2.

¹³⁶ Eide, Krause, *Supra* note 97, p. 195 and footnote 15.

¹³⁷ *Ibid.* pp. 198-199.

most extensive interpretation can be found in the European region. The European Commission and the Court interpret possessions to mean many types of property, including existing possessions, but also licenses, social security payments (in some cases) and legal claims and legitimate expectations.¹³⁸ It also includes objects of intellectual property law although it is not clearly reaffirmed in any other regional bodies. If the object falls under the “possessions” under the article ECHR 1 Protocol 1 the court will then assess if there was interference with the right in form of deprivation of property or control of its use.¹³⁹ If this is the case, the Court will then see if the interference was justifiable and proportionate.¹⁴⁰ UDHR also prohibits arbitrary deprivation of property, which should mean a requirement of a similar test or hints to remuneration. ACHR is the only document which speaks about just remuneration explicitly in case when the property was taken from the owner.¹⁴¹ However, the term property is not interpreted that broadly in these jurisdictions.

The European Court has persistently reaffirmed that patents, trademarks and copyrights are possessions in the context of human right to property in the ECHR. The first case where this position was upheld by the Great Chamber was *Anheuser-Busch v. Portugal*¹⁴² which dealt with trademarks and acknowledged them to be covered by the right to property. The issues of copyright as property were previously addressed by the Court (other sections) in *Dima v. Romania*¹⁴³ and *Melnitchuk v. Ukraine*¹⁴⁴.

The ECHR’s only justification for the equation between intellectual property and traditional property is found in a brief quotation from the European Commission’s first intellectual property decision: “under Dutch law the holder of a patent is referred to as the proprietor of a patent and that patents are deemed, subject to the provisions of the Patent Act, to be personal property which is transferable and assignable. The Commission

¹³⁸ Ovey, White, *Supra* note 134, pp.349-358.

¹³⁹ R. Helfer, *Supra* note 135, p. 9.

¹⁴⁰ *Ibid.* pp. 9-11.

¹⁴¹ Eide, Krause, *Supra* note 97, p. 20.

¹⁴² *Anheuser-Busch Inc. v. Portugal*, App. No. 73049/01 (2007).

¹⁴³ *Dima v. Romania*, App. No. 58472/00 (2005)

¹⁴⁴ *Melnitchuk v. Ukraine*, App. No. 28743/03 (2005).

finds that a patent accordingly falls within the scope of the term “possessions” in Article 1 of Protocol No. 1”.¹⁴⁵ This shows that European Court does not really go into the human right to property that deep, but only checks if the object has the features of a possession (is transferable and assignable) in the national law. This is exactly the opposite to the point of those, who claim, that intellectual and real property are different and they should not be given the same protection and status just because they look quite similar and have similar aims. In other words, these critics believe that intellectual property is a monopoly and policy choice, not *property*.¹⁴⁶ However, the court obviously thinks differently. In any case, we also have to take into consideration that the European system has one of the broadest interpretations of property (as any kind of possession) in the world. In fact, the European Convention also allows to give this human right to companies, so it is quite an exceptional jurisdiction.

In any case, from the point of view of the Creative Commons, this makes no much difference. Even the standard real world objects can be divided using a regime of commons, as discussed above. The resources of knowledge are even easier to divide since they are inexhaustible. The right to property is also fulfilled if an individual owns property together with others. This can be the case even if those “others” are the whole world. In addition, as for the Creative Commons, they leave the right to the work for the author and it’s only up to him to decide if he shares them with others or not. If he decides to share, the right is still not lost. Even the ECtHR has found no interference with the right to property where one party surrenders possession of property to the other by a valid contract.¹⁴⁷

From the perspective of robust commons, actually, it could be argued that leaving the right for the author does still more harm than good to the community. Maybe if the community itself could be considered an author and owner of a particular work, (similarly to the ideas of M. Zemer, discussed above) members would feel more responsible for the resource

¹⁴⁵ R. Helfer, *Supra* note 135, pp. 13-14.

¹⁴⁶ Lessig, *Supra* note 74, p. 88.; S. Vaidhyanathan, ‘Copyright as Cudgel’, *The Chronicle of Higher Education*, 2002.

¹⁴⁷ *Aral v. Turkey* App. No. 24563/94 (1998), in Helfer ‘*Supra* note 134, p. 28.

they own. However, this is a question of sustainability of the CC community which will be discussed below. From the perspective of the equity and human rights, it is enough to say, that right to property, if we agree that it encompasses the intellectual property as held by the European Court, is not infringed by Creative Commons, on the opposite, the owner has more freedom to use his property as he pleases. So there is no ground to claim, that the right to property has to be strong and has to assure private property. We can share the benefits of artistic works with the public and still follow human rights of the author by giving an alternative of Creative Commons for production and dissemination of knowledge, culture and other information.

4.5 Conclusion

In his book “Free Culture” L. Lessig uses a very nice story about the changes in technology that have introduced whole new understanding on how certain rights should be exercised in a fair way to still preserve the balance between the interests of one and the interests of many.¹⁴⁸ The modern technologies, especially the internet, have created one more dimension of our lives to which the existing rules have to applied in such a manner as to protect the precious balance of our rights and to make our lives better, not worse.

When the Television was launched in the first half of the 20th century, this was the peak of consumerist culture. As N. Postman reviews in his famous book “Amusing Ourselves to Death”¹⁴⁹, the audience became consumers of entertainment. The competition between Television companies concentrated on the amount of entertainment they are able to give to their viewers. Everything from education to politics and culture were presented as entertainment and a user was not allowed to play any role in this process, she was only expected to choose the most interesting (i.e. the

¹⁴⁸ Lessig *Free Culture*, pp. 1-3. The story about chickens being scared and dying because of newly invented airplanes flying above chicken farms and the owners of these farms seeking to stop the airplanes on the basis of trespassing their land (the air above it).

¹⁴⁹ N. Postman, “Amusing Ourselves to Death”, (Penguin Book 2006. First published 1985).

most entertaining) channel. According to N. Postman, the television was a medium only able to transfer this form of information and we had to look for something else to give us deeper meaning of our lives. Otherwise, he warned, we will amuse ourselves into ignorance and child-like society as pictured in A. Huxley's "Brave New World"¹⁵⁰. There will be no censorship, no active interference with our participation in cultural life and other social rights, there will simply be no one to read serious books or participate in any way that is not entertaining enough.

The birth of Web 2.0 seems to have change the course of TV-doomed history. As, again, Y. Benkler points out in his book¹⁵¹ – we are now able to look at our culture, education, politics and everything else more critically, we are able to adapt it, to own it as one society where everyone is responsible. L. Lessig calls this "the return of Read/Write culture".¹⁵² Such kind of cultural life (recognizing that creativity is a quality of every individual expressed in every manifestation of her life), education (giving universal access and allowing communities to adapt education to their needs), author rights (allowing authors to enjoy adequate standard of living and freedom to share and cooperate) are exactly the requirements of international human rights, that are a universal standard for building just and robust societies. We can have our human rights ensured more completely without additional sacrifices because we have now a new dimension these rights can be expanded to. Surely the world as we know it will have to change. But well, the truth is that it has already changed to the better side. We just have to seize the opportunity and make this permanent.

¹⁵⁰ A. Huxley, *Brave New World*,

¹⁵¹ Benkler, *Supra* note 36. (Harper & Brothers 1932).

¹⁵² Lessig, *Supra* note 85, pp. 51-82.

5 Sustainability of the Creative Commons communities

According to E. Ostrom, sustainability, is the ability of a regime to sustain itself over time. In the case of Creative Commons, this kind of sustainability will be analyzed from two perspectives – legal and social.

5.1 The legal instruments of Creative Commons – normative sustainability

This part of the work will start answering the question if the Creative Commons is a sustainable regime. As stressed by P. Nicoletti Mizukami and R. Lemos, licensing is a way to give structure to social commons for production and dissemination of information.¹⁵³ They explain, that “Licenses function like social contracts, or even constitutions, [...] establishing the ground rules for efforts of collaborative creation.”¹⁵⁴ Since the normative framework is, indeed, creating space for community to evolve, it is very important, that it would be functional and sustainable in itself.

In other words, we have to answer the following questions: what legal norms are there in the framework? Is it possible to implement them? Is there any enforcement mechanism? The elements of the commons described by E. Ostrom also include the participation of the community in creating and implementing these norms and that the rules have to match community’s needs and conditions. Do the Creative Commons fulfill this?

The system of commons for information could not exist without a certainty, that a community or a person will not be punished for using a certain work in commons and that the permission to use it will remain valid.

¹⁵³ P. Nicoletti Mizukami, R. Lemos, ‘From Free Software to Free Culture: The Emergence of Open Business’, in L. Shaver (ed.) *Access To Knowledge in Brazil*, (Bloomsbury Academic 2010), p. 31.

¹⁵⁴ *Ibid*, p. 33.

Such uncertainty could hurt the communities and networks and discourage creativity¹⁵⁵, probably in the same way as the U.S. “fair use” doctrine¹⁵⁶.

In addition, every member of the commons has to be sure that the other members will not break the rules and that he will not be the only ‘sucker’ who is following them.¹⁵⁷ A member has to feel secure that he is not the only one who invests something in a particular resource and that his investment will be valued. This issue was also discussed by E. Ostrom, J. Heller, etc. These problems make some kind of sanctioning and enforcement mechanism essential¹⁵⁸

As noted above, the Creative Commons were conceived to provide more space in the legal exclusionary regime of the copyright. Every work, that is created receives an automatic legal protection allowing to exclude everybody else. E. Ostrom was analyzing the commons created by usually unwritten norms of a community. As mentioned, the main feature of such norms was flexibility and participation in changing them. The Creative Commons is based on a very usual right of an author to license her work to others. These ordinary licenses permitting a particular person or company to do certain things with a copyrighted work, are widely used and can be exclusive or non-exclusive.¹⁵⁹ In this way, the Creative Commons provide a framework for the commons of information production and use that is not exactly a law which is imposed from above, but the system is still based on law and is not absolutely self-regulatory. However, this system is exactly something that helps to take the control back from the prevailing legal mechanisms into the hands of community choosing alternative mechanisms and makes this choice possible all over the world. Something that creates the space for the commons to exist in the first place. By this The Creative Commons seek to change social norms first and only then, possibly, change

¹⁵⁵ Armstrong, *Supra* note 50, pp. 406-410.

¹⁵⁶ The opinion that the “fair use” doctrine is not giving the expected flexibility of usage of creative works, since one never knows what is exactly the scope of it, is expressed by many. See e.g. L. Lessig, *Free Culture. How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*, (The Penguin Press 2004). Pp. 96-99.

¹⁵⁷ W. J. Gordon, “Discipline and Nourish: On constructing Commons”, 95:733 *Cornell Law Review*, (2010). pp. 736-738.

¹⁵⁸ *Ibid.*

¹⁵⁹ L. Bently, B. Sherman, *Intellectual Property Law*, 3rd edition, (Oxford University Press 2009). Pp.264-266.

the hard law.¹⁶⁰ Simply moral, unwritten rules are not enough in this case. It should be possible to enforce the rules of common use of a resource on someone whom you don't know and will probably not see in your life, it should be possible to have common or similar rules even without perfect participation designing them, since when there are so many participants such initiative would simply fail.

To address all these issues, we will now start looking into Creative Commons as into a framework for global community and analyze what are normative ties keeping it all together.

5.1.1 The normative infrastructure of the Creative Commons

As mentioned, the rules selected by and for the community will affect the level of participation, the willingness to share and build on others' works, the manner the participants interact and critically, the long term sustainability of the community.¹⁶¹

In any case, even while not being *stricto sensu* a self-regulatory system created by all resource sharing participants, the Creative Commons leaves a lot of choice for the authors in which way to shape their relationships with public. The genius of the Creative Commons lays in "disaggregating all the policy decisions in the pre-existing family of open-content licenses and permitting licensors to recombine them individually in whatever fashion best suited their intent".¹⁶² Author has to choose and "attach" the license to her work herself. As a first step, a choice on desired conditions for sharing has to be made. The principal conditions the author can decide upon are three:

- 1) Commercial and non-commercial use of the work.

¹⁶⁰ N. Elkin-Koren 'What Contracts Can't Do: The Limits of Private Ordering in Facilitating a Creative Commons', 74 Fordham Law Review, (2005), p. 26 <ssrn.com/abstract=760906>, visited 10 May, 2011.

¹⁶¹ N. Suzor, B. Fitzgerald, 'The Role of Open Content Licenses in Building Open Content Communities: Creative Commons, GFDL and Other Licences.', (2007). pp. 1-2. <http://eprints.qut.edu.au/6076/1/6076_1.pdf> visited 9 May, 2011.

¹⁶² T. K. Armstrong, *Supra* note 50, p. 383.

Author can either allow others to use her work with an aim of commercial advantage or private monetary compensation or prohibit such use. The symbol  “NonCommercial” represents the prohibitive choice

- 2) Allowed or prohibited production of derivative works.

Author can either allow others to create new works based on his work (or his work and other pre-existing works) such as adaptations, translations, arrangement of music or other alterations of work or can prohibit such actions. Prohibition is represented by the “NoDerivatives” symbol - .

- 3) If the production of derivatives is allowed, the question of licensing of subsequent works can be left to decide for the subsequent author or can be decided by the initial author.

The (initial) author can ask to apply the same license to all derivative works his work was used to create. If this condition is attached to the work, the symbol “ShareAlike”  indicates this.

Independently from the choice of the author, all licenses allow the user of the work to copy, distribute and publicly perform the work.¹⁶³ In addition, all licenses (except the “public domain” license which was introduced just very recently) require to attribute the author. Initially, author was also able to choose if he or she wants to have his or her name preserved on the copy of the work (when the work is distributed, reproduced or derivatives of it are made). But after the first years of operation collected data showed that 98% of all authors choose to keep the right of attribution when licensing their work, so this was made a compulsory condition in all licenses.¹⁶⁴ The requirement of attribution is marked by the “Attribution” sign .

After the conditions are chosen, a license combining all the preferred provisions is suggested to an author and instructions on how to attach the license notice (also containing the appropriate symbols indicating the

¹⁶³ All licenses contain these provisions in part 3 of the text of their Legal Code.

¹⁶⁴ M. V. Carroll, ‘Creative Commons as Conversational Copyright’, in P. K. Yu (ed.) *Intellectual Property and Information Wealth: Issues and Practices in the Digital Age Vol. 1*, (Praeger 2007), p. 449.

primary conditions of the license) to the work are provided. If author has a web page and wants to license its content, the procedure is quite simple – she just has to put certain text in her web page, but the procedure for off-line digital materials is little bit more complicated. In any case, in the end of the process, one of 6 standard licenses will be applied to the work.

- 1)  (CC-BY) - User can do anything for the work if she gives credit to the work author in all occasions.
- 2)  (CC-BY-NC) - User may not use the work for commercial purposes but may do anything else if author is attributed in every case.
- 3)  (CC-BY-ND) - User may not make derivative works but may use work in all other ways and has to give credit for the initial author.
- 4)  (CC-BY-SA) - User can use work in any desired way (observing the attribution rule), but if derivative works are made identical license has to be attached to all derivative works.
- 5)  (CC-NC-SA) - User can not use the work for commercial purposes and if derivative works are created they have to carry identical license.
- 6)  (CC-NC-ND) - User can only copy, distribute and perform the work for non-commercial purposes and has to attribute the author. No derivative works can be created.

These, however, are only “standard” licenses. The Creative Commons project has also developed some other licensing possibilities suitable for different needs.

One of them is the so called “**Sampling**” license family. The version 1.0 of this license has been retired¹⁶⁵ and is not recommended by the Creative Commons anymore. Now the Sampling Plus 1.0¹⁶⁶ is the tool to use if one wants to allow others to creatively transform his work. The license allows to sample, mash-up and otherwise creatively transform the

¹⁶⁵ <<https://creativecommons.org/retiredlicenses>> visited 6 April, 2011.

¹⁶⁶ <<http://creativecommons.org/licenses/sampling+/1.0/>>visited 6 April, 2011.

licensed work¹⁶⁷ and to perform publicly and display publicly and do whatever with your new work for commercial and non-commercial purposes. In addition, all derivative works have to be licensed under the same license.¹⁶⁸ The original work, besides creative transforming can be otherwise used only for non-commercial purposes.¹⁶⁹

Another license in the Sampling family is NC-Sampling+ 1.0.¹⁷⁰ This license is essentially the same as the previous Sampling license, just that the creatively transformed work can not be used for commercial purposes as well.

The difference between the license that simply allows derivative works is that the sampling license only allows derivative works that are either substantially different from the original, form an insubstantial part of the final derivative work or use only an insubstantial part of the original work (creative transformation).¹⁷¹

The other CC options are the **CC0** license and the **Public Domain Mark (PDM)**. They both are designed to mark the works, that are totally free from copyright. The CC0 is a license which an author, who wants to give up all his or her rights under the copyright, can use. As explained in the Creative Commons website: “A person using CC0 (called the “affirmer” in the legal code) dedicates a work to the public domain by waiving all of his or her copyright and neighboring and related rights in a work, to the fullest extent permitted by law”¹⁷² The CC0 license is marked with this symbol:



The PDM is a tag that anyone can attach to any work that is already free from any copyright restrictions and is already in the public domain for one reason or the other.¹⁷³ This sign  marks the work in this situation.

¹⁶⁷ Sampling+, Legal Code, para. a(i).

¹⁶⁸ *Ibid.* para. b

¹⁶⁹ *Ibid.* para. d

¹⁷⁰ <<http://creativecommons.org/licenses/nc-sampling+/1.0/>> visited 15 May, 2011.

¹⁷¹ The “legal code” of the Sampling Plus license, para. a(ii).

<<http://creativecommons.org/licenses/sampling+/1.0/legalcode>> visited 6 April, 2011.

¹⁷² “How does the CC0 work?”< http://wiki.creativecommons.org/CC0_FAQ> Visited 06 April, 2011.

¹⁷³ <http://wiki.creativecommons.org/PDM_FAQ> visited 6 April, 2011.

One more license which could still be mentioned despite the fact that it is also already retired is the **DevNations** license. It was retired because of some inherent flaws in the license itself, but the idea was to allow authors to license their work only for users in developing countries (The countries that are recognized to be developing by the World Bank).¹⁷⁴

New licensing projects are constantly proposed by the Creative Commons community.¹⁷⁵ The projects usually concentrate on giving more possibilities for an author to choose which groups of users should be allowed to use her work, or which groups should be prohibited to do this. For instance, the Green License project¹⁷⁶, prohibiting use of licensed information in ecologically destructive manner, and Human Rights License¹⁷⁷, which prohibits the use of information by specific groups or institutions that are violating human rights.

5.1.2 Enforceability of CC licenses

No matter what are the benefits or the ideas, the utility and usability of the Creative Commons might be hindered if the fear of unenforceability would repel artists from using the licenses in the first place.¹⁷⁸ The tactics of the Creative Commons is to change the present social norms using contracts/licenses. But this can only be done if these contracts are enforceable.¹⁷⁹ In addition, this is also a requirement for sustainable commons – possibility to enforce the community rules and proper institutions for that.

The older licenses, such as GPL, have already proven to be more or less enforceable. *Jacobsen v. Katzer*, which will be described in the next

¹⁷⁴ <http://creativecommons.org/licenses/devnations/2.0/> visited 6 March, 2011.

¹⁷⁵ The catalogue of proposals <http://wiki.creativecommons.org/Category:Proposal> visited 6 April, 2011.

¹⁷⁶ http://wiki.creativecommons.org/Green_license visited 6 April, 2011.

¹⁷⁷ http://wiki.creativecommons.org/Human_rights_license visited 6 April, 2011.

¹⁷⁸ A. West 'Little victories: promoting artistic progress through the enforcement of Creative Commons attribution and share-alike licenses', 36:903 *Florida State University Law Review*, (2009). p. 905.

¹⁷⁹ N. Elkin-Koren 'What Contracts Can't Do: The Limits of Private Ordering in Facilitating a Creative Commons', 74 *Fordham Law Review*, (2005), p. 39 <ssrn.com/abstract=760906>, visited 10 May, 2011.

chapter, is the newest case (from 2008) that confirmed that open content licenses can be enforced. Similar case on enforcing the GPL license was also delivered in Germany in 2004 - *Welte v. Fortinet UK Ltd*¹⁸⁰. However, the more recent cases that addressed directly the Creative Commons are more confusing. For instance, the case which is considered to be the clearest (and first) example of possibility to enforce the CC license is *Curry v. Audax Publishing B.V.*¹⁸¹ from the Netherlands. Here, the claimant sued Dutch publishing company Audax for using his pictures in their daily magazine. The pictures were taken from the flickr.com website and were licensed under the CC BY-NC-SA license. Audax infringed this license by, first of all, using it in a commercial magazine, and, in addition, failing to observe the “Share-alike” provision for the derivative work – the magazine article. The Defendant claimed that they did not see the license and presumed that they had all rights to publish the pictures. The court found the license to be enforceable. It ruled, that a professional publisher has a more extensive duty of due diligence to conduct a thorough examination and make sure that it is not infringing any license connected to the content it publishes (the “some rights reserved” CC symbol was in the web page accompanying the pictures). However, the Dutch court has otherwise missed the point of the license at hand and misinterpreted most of its provisions.¹⁸² When assessing the damage suffered by the complainant it claimed that the condition of non-commercial use was violated but that the commercial value of the photos is limited since the pictures are already available for the broad public online. So the claimant was awarded nothing for that. In addition, the court said absolutely nothing about the share-alike condition and concluded that since the claimant was properly attributed, the other conditions of the CC license were not violated as well.

¹⁸⁰ *Welte v. Fortinet UK Ltd.*, District Court of Munich I, May 19, 2004, No.21 O6123/04, More can be read in J.B. Baker, ‘Contracting To Supplement Fair Use Doctrine’, 39 *University of Memphis Law Review* (2009).

¹⁸¹ Interim measure, Case no. 334492 / KG 06-176 SR, District Court of Amsterdam – March 9, 2006. Unofficial English Translation: <<http://mirrors.creativecommons.org/judgements/Curry-Audax-English.pdf>> visited 8 April 2011.

¹⁸² A. West ‘Little victories: promoting artistic progress through the enforcement of Creative Commons attribution and share-alike licenses’, 36:903 *Florida State University Law Review*, (2009). p. 917.

In a Spanish case *SGAE v. Luis*¹⁸³ the Spanish Provincial Court has dealt with a café owner who was claiming that he was playing only CC licensed music in his café and therefore has no duty to pay royalties for the Spanish collective administration society. In its decision the court did not plead in favour of the defendant (the café owner) since the “The document presented by the defendant-appellant as license of free musical use is nothing but a mere informative leaflet about the contents of the license and is lacking any signature; therefore it cannot be asserted any value”¹⁸⁴. This explanation of the court, of course, shows that it absolutely failed to understand the nature of the CC licenses. However, a year later another Spanish court has issued a slightly different decision in a similar case *SGAE v. Fernandez*¹⁸⁵ in 2006. Here the court did not go into the details of the licenses so much but ruled that the bar owner had to prove that he has personal and technical ability to obtain music which is not managed by the collecting society but is licensed under CC. Since he has proven this, there was no violation in this case.¹⁸⁶

The fact, that the other types of open content licenses are usually enforceable, gives hope, that courts will eventually decide the same for the CC licenses. The existing cases also show positive trends. Another argument for the enforcement of CC licenses could be an analogy with the cases where similar proprietary software licenses (so called shrink-wrap or click-wrap licenses) were found to be enforceable by courts.¹⁸⁷

As is obvious from the cases, currently, it is in principle possible to enforce your CC license (or someone’s else’s license), however, it’s not without problem. The general uncertainty about how would a case be decided in court remains. In addition, one more problem is that the Creative

¹⁸³ *SGAE v. Luis*, Spanish Provincial Court of Pontevedra, Nov. 29, 2005 (3008/2005) Unofficial English Translation: <http://europe.creativecommons.org/webfm_send/1> visited 8 April, 2011.

¹⁸⁴ *Ibid.*

¹⁸⁵ *SGAE v. Fernández*, Badajoz Sixth court of First instance, (15/2.006.) summary in H. Hietanen, ‘A License, or a Contract; Analyzing the Nature of the Creative Commons Licenses’. NIR, Nordic Intellectual Property Law Review, Forthcoming. pp. 5-6. Available at SSRN: <<http://ssrn.com/abstract=1029366>> visited 7 April, 2011.

¹⁸⁶ [http://wiki.creativecommons.org/SGAE v. Fernandez](http://wiki.creativecommons.org/SGAE_v._Fernandez) visited 8 April, 2011.

¹⁸⁷ A. K. Goss, ‘Codifying a commons: Copyright, Copyleft and the Creative Commons’, 82 *Chicago-Kent Law Review* (2007), pp. 984-987.

Commons licenses seem to contradict national laws of some countries and some general principles of copyright even in the U.S. where they were created. This raises further concerns about a possibility to enforce a CC license and the validity of it from the user's perspective.

For instance, a very important element of the CC licenses is their irrevocability. Without it no one could ever be sure if the license attached to work is still valid. However, the U.S. Copyright Act has provisions on termination on any copyright license in order to protect authors of the works that made a lot of money for the licensee and were licensed with unfair remuneration or other conditions for the licensor.¹⁸⁸ Creative Commons licenses offer no direct remuneration, so theoretically they can be revoked in most cases. And U.S. revocation provisions have been tested and are in practice enforceable.¹⁸⁹ Especially if we claim that the CC licenses are valid licenses under the copyright law, there is no reason to speculate, that these termination provisions might be inapplicable for them.¹⁹⁰ In this case, the provisions in the CC licenses about their irrevocability might be just unenforceable by a user trying to protect herself from a copyright lawsuit. Similar situation exists with the licenses dedicating a work to a public domain in U.S.¹⁹¹ In the European Union some concerns were raised about the contradictions between the copyleft or share-alike conditions of open content licenses and consumer protection legislation¹⁹² or the EU Competitions Law provisions.¹⁹³

In addition to all this, the recent case of *Jacobsen v. Katzer* has also reminded one more problem – the legal nature of open content licenses, which, because of its significance will be discussed separately.

¹⁸⁸ Copyright Law of the United States and Related Laws Contained in Title 17 of the United States Code, Circular 92, 2009, Section 203.

<http://www.copyright.gov/title17/circ92.pdf> visited 9 April 2011.

¹⁸⁹ Armstrong, *Supra* note 50, pp. 399-405.

¹⁹⁰ *Ibid.* p. 407.

¹⁹¹ *Ibid.* pp. 396-398.

¹⁹² A. G. Gonzalez 'Viral contracts or unenforceable documents? Contractual validity of copyleft licences', 26:8 European Intellectual Property Review (2004). pp. 337-339.

¹⁹³ *Ibid.* pp. 341-342.

5.1.3 The nature of the CC Licence

The Creative Commons license, as was said, is still a part of the legal copyright world. In order for it to work in the broadest possible scale it has to have certain connection with the legal world and has to be based on something more than just moral norms. However, being such a new phenomenon it always had certain theoretical controversy surrounding the question of its legal nature, which was recently reminded by a case in U.S.

Despite the fact that the Creative Commons licenses are called “licenses”, it is to this day unclear if they are really licenses in the sense of copyright (or property) law or if they are contracts in the sense of civil law. However irrelevant this may sound, the nature of the Creative Commons licenses has much to do with the possibilities to enforce them and the legal provisions that could be applicable to them, so it might have a big impact on the community using them and the way they are used.

Copyright and Property law (alike) give certain exclusive rights to the owner. These rights are there because the law is there. The breach of these rights is illegal under the law. A license is a way for the holder of these legal rights to allow others (revocably) to commit certain actions which otherwise only the right-holder could do.¹⁹⁴ Licensee is not required to agree to anything and has no reciprocal duties, he is only required to act within the scope of the license.¹⁹⁵

A contract is an agreement by two or more parties creating mutual obligations that are enforceable or otherwise recognized by law.¹⁹⁶ When signing an agreement, formalities, that are not required for a license, are compulsory for the parties. “There must be a bargain in which an offer for exchange is made and mutually accepted, and there must be some consideration or valuable exchange between the parties.”¹⁹⁷ It has to be also noted, that different jurisdictions may have different requirements for the contractual agreements, for instance, the countries with civil legal systems

¹⁹⁴ H. Hietanen, *Supra* note 185, pp. 5-6.

¹⁹⁵ *Ibid.*

¹⁹⁶ H. R. Reddy, ‘Jacobsen V. Katzer: The Federal Circuit Weighs In On The Enforceability Of Free And Open Source Software Licenses’, 24 *Berkley Technology Law Journal*, (2009), p. 307.

¹⁹⁷ *Ibid.*

usually have no requirement for “consideration”¹⁹⁸ (a requirement to give something of value for being given something valuable).

The problem about the distinction of these two groups in the case of Creative Commons is that when a license imposes direct obligations on the other party (and CC does impose obligations to use or not to use work in a certain manner), it is usually treated as a contract, since a license is only supposed to allow something¹⁹⁹ (although even a license can have conditions for its validity). Depending on which group the CC licenses would be allotted to, there would be big differences in who can be the beneficiary of the license (for instance, minors could not step into a contract independently), what would be the remedies accessible to an author (in the case of a license author can ask for remedies provided in copyright laws), who would be able to enforce the license (if it’s a contract it is only enforceable by the licensor, if it’s a license, it can be enforced by anyone else as well), who would be bound by the conditions of the license (if it’s a contract it can not put any obligations on the third party) and other things.²⁰⁰ The licensor would even have to prove all the elements of the contract if he’d want his license to be enforced. In addition, even if the CC license would be treated as a license under the copyright law, it is still unclear if this could cover the rights and requirements of the CC licenses that are not directly provided in the copyright laws, such as share-alike and moral rights in the countries where moral rights are not protected. In essence, these additional rights should be considered only enforceable by contract.²⁰¹

Actually, the prospect for the CC license to be treated as a contract is a very gloom one. It would be detrimental for the commons CC wants to create. The license would become a legal nightmare: costly to enforce and giving no legal certainty either for the authors or the users. The provisions of contract law vary more from country to country than the provisions of the copyright thereby making fragmentation of the Creative Commons community inevitable. Unfortunately, there is almost no case law giving

¹⁹⁸ Hietanen, *Supra* note 185, p. 7 .

¹⁹⁹ Reddy, *Supra* note 196, p. 307

²⁰⁰ Hietanen, *Supra* note 185, pp. 8-17.

²⁰¹ Elkin-Koren, *Supra* note 160, p. 44.

guidelines in this issue. The cases that were addressed above, seem to interpret the open content licenses as normal copyright licenses, however no explicit explanation about the nature of these license was found. In addition, the issues that would be the most problematic if open content license would be acknowledged to be a contract have not yet been addressed in the courts at all.

The only case which has directly addressed the question of the nature of the open licenses, although in connection with another open content license, is *Jacobsen v. Katzer*²⁰² from the US, and unfortunately, the results are not as clear, as many would like to. In this case, Mr. Jacobsen has created a certain software for model train enthusiasts and has released it under the “Artistic License” which contained the requirements of proper attribution for those building upon the work. Mr. Katzer has taken part of this software and incorporated it into his own commercial software without acknowledging this and without giving any references to the original author. In addition, he obtained a patent for his software and sued Mr. Jacobsen. Jacobsen claimed his rights under the copyright law and a copyright license in defense.

In the first instance the District Court²⁰³ interpreted the open content license to be a license that allows to act against the exclusive rights granted by the law and is a promise not to sue the licensee for the infringement of these rights. Any additional conditions that are attached to this license are only contractual requirements and the breach of them can only be claimed under the general contract law, the court said. Such situation would have required from Mr. Jacobsen to prove all the elements of a contract and the breach of it and would have required to prove irreparable damage in order to get preliminary injunction, which he was pursuing.²⁰⁴

²⁰² *Jacobsen v. Katzer*, 535 F.3d (Fed. Cir. 2008) – the case of U.S. Federal Circuit Court 2008.

<http://scholar.google.com/scholar_case?case=17776182574171214893&q=535+F.3d+1373&hl=en&as_sdt=100000002> visited 7 April, 2011.

²⁰³ The prehistory of the procedure in the Federal Circuit from. A. A. Earl, ‘Copyright Infringement And Open Source Public Licenses: *Jacobsen v. Katzer*, 535 F.3d 1373 (Fed. Cir. 2008)’, 77 *Cincinnati Law Review*, (2009).

²⁰⁴ *Ibid.* p. 1615.

Fortunately, the Federal Circuit, to which the case was appealed, looked at the language of the license and decided that the conditions of attribution were elements of conditional license under the copyright law and so if they were breached, the licensee can no longer claim to be entitled to exercise the rights provided in the license. In addition, the court also granted protection under the copyright law for the right of attribution, which is not economic in its essence (so not covered by copyright in U.S.). The Court reasoned that the open licensing movements have proven, that attribution has certain economic benefits and granted protection for it.²⁰⁵

After this case, it is likely, that the courts will acknowledge the CC licenses as licenses under the copyright law. However, there is still no definite answer. The problematic of the nature of the license in theory might raise future problems in practice.

Again, this example shows, that the prospects to have legal certainty about the possible legal consequences of a CC license either as an author or as a consumer are quite gloom. However, there are those, who think that even despite of lack of legal certainty the users and the creators have no reason to mistrust the system.²⁰⁶ Since it is still largely unclear if the license can be enforced at all, and it is still used widely, the CC could also be said to have more communal and quasi-legal nature.²⁰⁷ Some claim that this is the social pressure which prevents from litigating at least in the GPL world. As M. O’Sullivan stresses: “Much of the power of the GNU GPL lies in its moral force: no one wants to be seen to be stealing from a common pool, developed by hackers who have worked on the code in their spare time for many years.”²⁰⁸ So it can be argued you don’t really need strong legal regimes to enforce these rules. Even though, the moral norms might be too weak for the aims, of the Creative Commons, the requirements of existing sanctions, possibility to enforce the rules and other requirements formulated by E. Ostrom might as well be fulfilled with weak but trusted legal

²⁰⁵ Jacobsen v. Katzer, 535 F.3d (Fed. Cir. 2008)

²⁰⁶ West, *Supra* note 178, p. 921.

²⁰⁷ M. O’Sullivan, “The pluralistic, evolutionary, quasi legal role of the GNU General Public Licence in free/libre/open source software (FLOSS)” 26:8 *European intellectual Property Review*, (2004). p. 345.

²⁰⁸ *Ibid.*

instruments even in the environment where the members of community have no strong and direct ties. The trend to deal somehow with any problems in CC framework without litigation, given such a little number of cases, remains.

5.1.4 International legal trends

The Creative Commons was started and still exists as a private initiative. However, given the present legal problems and the variations in the different jurisdictions on the one hand and the popularity of the CC licenses and the idea of accessible information it brings, on the other, even the governments seem to be getting more involved in the idea of a design of international legal framework of commons for knowledge and culture. As it was discussed above, it's really the way it is supposed to be, since the governments are the ones that have human right obligations to find the right balance between the interests of creators and general public. In addition, according to the rules developed by E. Ostrom, the commons have to be at least to some extent acknowledged by governments to function sustainably.

First step the governments are making is a discussion (and some actions) on possible CC licensing of the public information (produced by different public institutions). According to the data of the Creative Commons, 30 governments of the world are already using the CC licenses for the information they produce.²⁰⁹ The list is also continued with such intergovernmental organizations as the UN, EU, European Cultural Foundation and Inter-American Development Bank.²¹⁰ Some other countries are already discussing the pros and cons of introducing the CC framework for their information as well.²¹¹ The framework brought in by the European

²⁰⁹ <http://wiki.creativecommons.org/Government_use_of_Creative_Commons> visited 10 April, 2011.

²¹⁰ *Id.*

²¹¹ See e.g. The report of the Institute of Information Law University of Amsterdam, as a study of licensing possibilities for Dutch public information: M. van Echoud, B. van der Wal 'Creative Commons Licensing for Public Sector Information Opportunities and Pitfalls', (2008) <http://learn.creativecommons.org/wp-content/uploads/2008/03/cc_publicsectorinformation_report_v3.pdf> visited 10 April, 2011.

Union Directive 2003/98/EC²¹² on the re-use of public sector information places obligations on EU Member States as regards open sharing of this information. A report presented very recently by European PSI Platform²¹³ (A special project funded by European Commission to facilitate sharing of public sector information) has concluded that “Public sector information (PSI) is meant for wide re-use, but this information will only achieve maximum possible impact if users understand how they may use it. Creative Commons tools, which signify availability for re-use to users and require attribution to the releasing authority, are ideal tools for the sharing of public sector information.”²¹⁴ Such conclusions suggest that we will be seeing more and more European (and maybe other) countries using the Creative Commons for their public information.

Some developments related with open licensing can also be observed in another IGO – WIPO. This organization is the main forum for the intellectual property discussions in the world, and it’s also discussing the possibility to support Creative Commons, as a private project, in order to improve access to the public domain in the member states.²¹⁵ In fact, L. Lessig stresses that WIPO has the key role in building new infrastructure for the copyright in the digital age and should develop at least sensible guidelines for it.²¹⁶ This is not surprising, since the organization also has commitments to ensure better access to knowledge and culture enshrined in their 45 recommendations adopted under their Development Agenda.²¹⁷

²¹² Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information, O.J. L 345 , 31/12/2003 P. 0090 – 0096, <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0098:EN:HTML>> visited 10 April, 2011.

²¹³ <<http://www.epsiplus.net/>> visited 10 April, 2011.

²¹⁴ T. Vollmer, D. Peters, ‘Topic Report No. 23. Creative Commons and Public Sector Information: Flexible tools to support PSI creators and re-users’, (2011) <<http://digital-scholarship.org/digitalkoans/2011/02/13/creative-commons-and-public-sector-information-flexible-tools-to-support-psi-creators-and-re-users/>> visited 10 April, 2011.

²¹⁵ WIPO Committee on Development and Intellectual Property, ‘Scoping Study on Copyright and Related Rights and the Public Domain’, prepared by S. Dusollier, (2011). p. 66. <http://www.wipo.int/ip-development/en/agenda/news/2010/news_0007.html> visited 10 April, 2011.

²¹⁶ ‘Interview with Larry Lessig’, *WIPO Magazine*, February 2011. <http://www.wipo.int/wipo_magazine/en/2011/01/article_0002.html> visited 10 April, 2011.

²¹⁷ WIPO Development Agenda, 45 Recommendations <<http://www.wipo.int/ip-development/en/agenda/recommendations.html>> visited 10 May, 2011.

WIPO is also currently developing an international voluntary music registration system – The International Music Registry²¹⁸ which is expected to help the licensing initiatives as well, since it will become easier to find out who owns what music and what is the status of it, if it's licensed - what are the conditions of the license, etc. Although it has to be mentioned that the project itself was established to assist commercial licensing of music works in the digital environments.²¹⁹ Similar project, although aimed at simplified proprietary licensing as well, is currently being developed in the European Union²²⁰. The project is called Global Repertoire Database and despite its initial aim, it could still, arguably, be used to promote the culture of non-proprietary licensing.

The trends discussed above show, that the Creative Commons is not merely a tool used by some communities and individuals. It is, indeed, more and more recognized by state authorities and intergovernmental organizations. If these trends are sustained we could expect popularity of the CC to increase further since people exercising their creativity under this framework would feel more secure to use the systems that are recognised even by their governments.

* * *

The universal Creative Commons norms, that were discussed above, are merely a framework. Every community can use them, but every community must also have practical internal rules deciding the status of the members, the way contributions are accepted, etc. The legal norms are very important for international global framework and determine the main principles in the local communities, but to research the sustainability of the Creative Commons as a whole we still have to look into the inside of communities and to research what kind of communities do different frameworks encourage.

²¹⁸ < <http://www.internationalmusicregistry.org/portal/en/index.html> /> visited 10 April, 2011.

²¹⁹ *Ibid.*

²²⁰ < <http://www.globalrepertoiredatabase.com/index.html> > visited 10 April, 2011.

5.2 Sustainability of the Creative Commons – practical examples. Communities under different licensing frameworks.

We have so far discussed the phenomenon of the Creative Commons from many (more or less) theoretical perspectives. We have already started researching if the Creative Commons can be a sustainable system. Speaking practically about the sustainability of this regime, the obvious question to answer is “Is it likely to survive for long enough?”. As addressed in chapter 3, Creative Commons is only one part of the process of building the commons for knowledge. It is the newest one, and the one that gives most freedom for a participant. The systems that were conceived by societies before the Creative Commons are still functioning, albeit on relatively smaller scale. How are the Creative Commons different from the first commons and is it to better or to worse? Do we see the rise of the commons for knowledge globally or maybe we are observing the process of loosening of communities that will destroy the possibility to make one big common pool of information and we will have to go back to the roots and proclaim this kind of commons impossible?

These are all the questions I would like to have an answer to but the processes behind virtual information producing communities are often too complicated to give a definite answer. Even academic researchers that have spent many years on this admit that there are too many different variables to fully evaluate the theory behind one or the other example of functioning knowledge commons.²²¹ Despite that, I will now (try to) analyze some real examples of existing communities. The first example will be a community under the GPL framework, as the first functioning example of commons and the other – communities under the CC, as the most modern ones. I will try to compare their structure and processes in them. This does not promise any final answers about sustainability as well, but might allow us to identify the

²²¹ G.P. Macey, ‘Cooperative institutions in cultural commons’, *95:757 Cornell Law Review* (2011). p. 768.

features that could make communities, based on Creative Commons less or more sustainable.

To start with, the Open Source framework was the first of its type for building the commons for information production and dissemination. It was also the strictest. The most-used GPL license has very concrete conditions for openness, including strong copyleft requirements. The Creative Commons has many possible options only one of which (CC-BY-SA) is as open (to society) as GPL.

The Open Source projects and communities behind them have attracted lots of research and many have tried to summarize the rules by which the communities live. These communities are diverse (also because the Open Source licenses have become different with time) and can be classified by many features. Four groups of OS communities that have proven themselves more or less sustainable over time have been identified by T. Mikkonen and T. Vaden²²²:

1. Centralized, company-driven, small community (e.g. MySQL)
2. Large community, several companies, business work ethics (e.g. Eclipse)
3. Large community, several companies, hacker background (e.g. Linux kernel)
4. Volunteer, decentralized, large (e.g. Debian)

In here, the “hacker background” means that community is driven by ideological motivation, and “business work ethics” means that it is primarily business oriented²²³. These communities have different grounds for sustainability. The last two resemble the initial GNU GPL community and seem to fit the theory of the commons best. The first two seem to be sustainable because of strong involvement of business entities and their adaptation to standard market economy.

As for the Creative Commons, there is less research on these communities, although there are already many of them. When we speak

²²² T. Mikkonen, T. Vaden, ‘The Anatomy of Sustainable Open Source Community Building. The Cultural Point of View’, 2009, p.4, <http://uta-fi.academia.edu/TereVad%C3%A9n/Papers/281111/The_Anatomy_of_Sustainable_Open_Source_Community_Building_The_Cultural_Point_of_View> visited 26 April, 2011.

²²³ *Ibid.*

about Creative Commons communities, cases that can be discussed are diverse: from poem writers to designers, scientists etc. However, the Creative Commons communities do not produce such a clear and functional final product and are relatively new. This might explain the lack of literature and case studies. Two types of these communities will be presented in the work to explore how they are similar and different from strong copyleft based Open Source communities.

5.2.1 GNOME

GNOME is a community that belongs to the 3rd group of the above mentioned classification of Open Source communities. It is pretty big (according to the web site of the project around 3500 people have already contributed to it in the form of code development²²⁴). To keep their product open, GNOME uses the GPL license. In addition to that, it has several business companies supporting it and, despite this, manages to keep the product free and community independent.

The project was established in 1996 by a group of globally distributed and loosely connected enthusiasts.²²⁵ Two university students – Miguel Icaza and Federico Mena are presented as the main establishers in the project's website.²²⁶ Their objective was to create a desktop environment with a user interface, a set of applications that consisted of a spread sheet, word processor and other easy-to-use applications and a development framework consisting of libraries, tools and components for the environment.²²⁷ The community of the GNOME project mostly follows the classical 'bazaar' structure of Open Source communities (as opposed to the 'cathedral' type of isolated developers or small isolated developer

²²⁴ <<http://www.gnome.org/about/>> visited 27 April, 2011.

²²⁵ M. Sarma, J.P. Lamberont-Ford, E. Clark, 'Virtual Innovation Within a Hacker Community. An Empirical Study of Open Source Software Development', 2009, p. 18, <<http://www2.druid.dk/conferences/viewpaper.php?id=6021&cf=32>> visited 27 April, 2011.

²²⁶ <<http://www.gnome.org/about/>> visited 27 April, 2011.

²²⁷ Sarma, *Supra* note 225.

communities) which means “egalitarian network of developers free of hierarchical organization and centralized control”.²²⁸

The community consists, as usual, from people that have most likely never met each other in person and are scattered throughout the world. The contributors are almost all volunteers and commitment to devote their time for no remuneration shows their strong additional motivations. Although Open Source projects are always aimed at production of some software, the motivation of participants is very diverse. The motivation can be divided into intrinsic and extrinsic, the first meaning internal satisfaction, the second meaning motivation when the benefits received are believed to be greater than contribution costs.²²⁹ One of the extrinsic motivations which is very important is learning and improving programming skills. Some argue that this might be the most important motivation²³⁰. However, it has been also argued that the motivation to establish reputation and to gain approval is the strongest one.²³¹ Then there are other secondary motivations as a desire to help others (to help the community), fun, excitement, etc. Arguably, all these insights can be applicable to GNOME as well.

The communication between the members of GNOME is conducted through mailing lists, bug-tracking system (Bugzilla) and Version Control System (a software that allows contributions to the original source code following certain rules).²³² Although the concept of the egalitarian network is true, most of the Open Source communities, including GNOME, have a certain hierarchical structure which is designed by the community itself and is necessary to produce software together.

²²⁸ N. Doucheneaut, 'Socialization in an Open Source Software Community: A Socio-Technical Analysis', 14:323 *Computer Supported Cooperative Work*, 2005. p. 324.

²²⁹ S. Oreg. O. Nov, 'Exploring motivations to Contribute to Open Source Initiatives: The Roles of Contribution Contexts and Personal Values', 24 *Computers in Human Behaviour*, (2008). p. 2058.

²³⁰ Y. Ye, K. Kishida, 'Toward an Understanding of Motivation of Open Software Developers', Proceedings of 2003 International Conference on Software Engineering, 2003, <<http://citeseer.ist.psu.edu/viewdoc/download;jsessionid=522D4E5C02BA6712E2E6DCF D423BC79E?doi=10.1.1.12.3092&rep=rep1&type=pdf>> visited 3 May, 2011.

²³¹ *Ibid.*

²³² I. Herraiz, G. Robles, J.J. Amor, T. Romera, J. M. Gonzalez Barahoma, 'The Process of Joining in Global Distributed Software Projects, Proceedings of the 2006 international workshop on Global software development for the practitioner, 2006. <<http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.100.9960>> visited 27 April 2011.

In fact, the GNOME project, has a very complicated community system. It is very important for an Open Source project to stay open and attract new members constantly, to have someone to take over in case present developers will have to leave. GNOME, being a project depending on many differently motivated people is reported to be successful at being open and transparent to the public²³³ (any prospective contributor can access all mailing lists, introductory guides, gets certain amount of help from the community, etc.). However, it is considered generally, that the participant has a duty to find out how the community is functioning and to find her way inside it herself. This helps to ensure that only strongly motivated individuals become real members and that the software changes and fixes the member will propose will be accepted by the community, the support of which was earned through the process of team-building and socialization.²³⁴ This allows everyone to know everybody else, to participate in decision making, to know the system and customs in the community and makes it stronger. As for the GNOME community, the participant is not left totally by herself (there are mentions of some kind of mentoring for the 'newbies',²³⁵) and it seems that many tutorials and documents are accessible online for everyone, but even a small research shows, that there is a lot of information to get acquainted with independently by yourself.²³⁶ The project's webpage also warns the future contributors about going slowly, step-by step and taking time to find out their way inside the project.²³⁷

The classical Open Source community structure is said to resemble an onion – a structure with many layers. We have the core developers and contributors in the very center of it; the other layer is the bug fixers, that have no access to the main source code, but can fix small portions of it through the senior members; then there are peripheral contributors, who

²³³ B. Shibuya, T. Tamai, 'Understanding the Process of Participation in Open Source Communities', 2009 ICSE Workshop on Emerging Trends in Free/Libre/Open Source Software Research and Development, (2009).

²³⁴ Doucheneaut, *Supra* note 228, pp. 351-353.

²³⁵ Martinez, 'Learning Free Software Development from the Real-World Experience', Intelligent Networking and Collaborative Systems, 2009. INCOS '09. International Conference, (2009), p. 418.

²³⁶ <<http://live.gnome.org/GnomeLove>> visited 28 April, 2011.

²³⁷ <<http://live.gnome.org/GnomeLove/HowToStart%20En>> visited 28 April, 2011.

only participate in the discussions or suggest some ideas occasionally²³⁸. Finally, surrounding this structure are the users, that can become more related to the project with time (become contributors) or at least are reporting problems with the software they use²³⁹. There is also a theory, that a contributor starts with the outer layer and slowly moves in. However, this theory was found to be not completely accurate in the case of GNOME. It was concluded that there are members that go to the central layer very fast and have shorter integration process, especially when they are employees of one of the supporting companies.²⁴⁰ Often, however, the integration is made step by step and can take up to 30 months²⁴¹.

As for the actual structure of Gnome, first of all, on the top of the community is the GNOME Foundation which was created in 2000 to coordinate the project and act as an official voice for it, providing means of communication with the press, general public and commercial and non-commercial organizations.²⁴² The Foundation comprises of the Board of Directors, the Executive Director and the Advisory Board. The members – the GNOME contributors - can participate electing the first two groups of these officials and can be elected themselves.²⁴³ Advisory Board consists of representatives of the commercial companies that are interested in the GNOME project and has a role to help the Board of Directors to guide overall direction of GNOME.²⁴⁴ One more important body is GNOME Release Team, which coordinates the release of new versions of GNOME (every 6 months).²⁴⁵ There are other different bodies that seem to exist along with the main structure and which have some specific aims, e.g. GNOME Women²⁴⁶ – a group for women contributors, or regional GNOME contributor teams, such as GNOME Asia.²⁴⁷

²³⁸ Sarma, Lamberont-Ford, Clark, *Supra* note 225, pp 8-9.

²³⁹ Herraiz, Robles, Amor, Romera, Gonzalez Barahoma, *Supra* note 232, p. 28.

²⁴⁰ *Ibid.* pp. 31-32.

²⁴¹ *Ibid.* p. 32.

²⁴² <<http://foundation.gnome.org/>> visited 28 April, 2011

²⁴³ <<http://foundation.gnome.org/about/>> visited 28 April, 2011

²⁴⁴ <<http://foundation.gnome.org/about/advisoryboard/>> visited 28 April, 2011

²⁴⁵ <<http://live.gnome.org/ReleasePlanning>> visited 28 April, 2011

²⁴⁶ <<http://live.gnome.org/GnomeWomen>> visited 28 April, 2011

²⁴⁷ <<http://live.gnome.org/GnomeAsia>> visited 28 April, 2011

The main body of actual contributors is also very diverse. GNOME offers at least 11 different fields of contribution one can choose. Besides software development contributors are needed in testing, documentation, translation, accessibility (adopting software to the disabled), artistic content, marketing, journalism and other teams.²⁴⁸ Inside these teams there is, again, a specific hierarchy were, although everyone is equal, their roles are different depending on experience, qualifications and confidence shown by the community.

As we could experience GNOME has a substantially formalized and clear system, which still contains many flexibilities, especially in the contributors' level. The Contributors themselves can change, jump through the layers, take long breaks or leave the project completely without much restrictions, but the structure remains the same simply because it is the best agreed way to handle things²⁴⁹. Members participate in all processes directly and although integration is often quite complicated, the result is a strong, self-regulating and sustainable community.

5.2.2 CC Mixer

Remixing is a process that allows authors to build on each others works and create new cultural products. By putting works in some form of public domain, Creative Commons framework allows to remix and build communities around this form of cultural production. The idea of remix and the benefits of this culture is nicely discussed by the establisher of the Creative Commons – L. Lessig in his latest book.²⁵⁰ As mentioned above, the final product of such community is usually not clearly defined and the aim of participants is also rarely a production of a 'better' cultural product. In remixing, it is always hard to say, if the new product is better than the

²⁴⁸ <<http://live.gnome.org/JoinGnome> > visited 28 April, 2011

²⁴⁹ No community rules or similar document was found in the GNOME project, even after creating a developer's profile. However, an example can be taken from a Debian community that announces, that "*Debian Community Guidelines*, [is] a collection of what sane people are already doing everyday, written down so that we don't risk forgetting". - <<http://people.debian.org/~enrico/dcg/> > visited 28 April, 2011

²⁵⁰ Lessig. *Supra* note 85.

original one. So the creation of new products in these communities, according to G. Cheliotis and J. Yew²⁵¹ is motivated by special objectives:

- Personal expression through the creation of content
- Building social relationships through the creative process
- Furthering the practices of communities that revolve around creating and personalizing content through remixes and mash-ups.

As mentioned, the ccMixer is a community that uses the possibilities of remix given by the Creative Commons. ccMixer has some options of CC licenses for a contributor. Obviously all of them have to allow derivative works, but the rest of the conditions can be chosen by the author. The community is in general very sensitive to the copyright issues and has a policy to take down infringing works immediately.²⁵²

In fact, the ccMixer community is known to be the first to use the Creative Commons. It was started shortly after the “Wired” magazine has published a CD with one of its issues containing CC licensed music and has invited people to remix it legally (in 2004). The creators of ccMixer wanted to gather a community to make new works from these materials but also to further reuse music and develop more similar ideas.²⁵³ On their web site ccMixer describes itself as simply “a community music remixing site featuring remixes and samples licensed under Creative Commons licenses”²⁵⁴.

However, the structure of the community and relations in it is little bit more complex. Users can submit their own music or musical compositions, they can remix the raw materials, they can remix the remixes (if this right is granted), they can review others’ works and have their works reviewed.

²⁵¹ G. Cheliotis, J. Yew, ‘An Analysis of the Social Structure of Remix Culture’, *C&T '09 Proceedings of the fourth international conference on Communities and technologies*, 2009. <<http://www.iisi.de/fileadmin/IISI/upload/2009/p165.pdf>> visited 1 May, 2011.

²⁵² The web site of ccMixer refers to the DMCA (Notice and Take Down) procedure (<https://creativecommons.org/dmca>). This observation is also made in M. Ferrario, B. Herman, R. Housewright, I. Tam, B. Wilson, ‘Open Media Remixing and Sharing’, pp. 3-4. <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.122.3832&rep=rep1&type=pdf>> visited 1 May, 2011.

²⁵³ Cheliotis, Yew, *Supra* note 251, p. 166.

²⁵⁴ <<http://ccmixter.org/about>> visited 1 May, 2011.

Users can also listen to samples and use a special tagging system.²⁵⁵ In addition, the community has certain slightly hierarchical structure which was described in detail by G. Cheliotis and J. Yew²⁵⁶. The structure was found to be quite different from the Open Source 'onion'. ccMixer community has a strongly connected core, a group of authors uploading music (IN Group), remixing group or authors (OUT group), tendrils of authors not connected to the core and tubes, that connect the IN and OUT clusters without being in the core themselves.²⁵⁷ As of December 2010 there were 26770 users registered on ccMixer.²⁵⁸ According to data gathered by the authors of the report, about 12% of the contributors in ccMixer are actively sharing works with each other and remixing each others content – they form the core of the project. 17% of authors belong to the IN group and only upload works that are used by the core and do not remix the works of the core contributors themselves. 20% of community are in the OUT cluster, which means that they are using the works of the core contributors but their works are never used by the core. Around 50% of contributors belong to tendrils and that means that they are only connected (in one way or the other) with the IN and OUT groups, but have no connections to the core. Some percent of the contributors form separate islands, that are not connected to neither core, nor the IN and OUT groups. However, this structure has absolutely no formal ground. Any user can become part of any group instantly, except maybe the core, where you have to be good/popular enough to have your works remixed by the most active contributors.

In addition to that, there is some formal structure - at least 12 contributors from the core form a rotating group of editors. "Editors have the role of making regular "picks," which spotlight particularly interesting or high-quality remixes made by active users. The picks are collected in a special high-profile and easily-accessible section of the website in order to

²⁵⁵ M. Ferrario, B. Herman, R. Housewright, I. Tam, B. Wilson, 'Open Media Remixing and Sharing', <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.122.3832&rep=rep1&type=pdf>> visited 1 May, 2011.

²⁵⁶ Cheliotis, Yew, *Supra* note 251.

²⁵⁷ *Ibid.* p. 169.

²⁵⁸ <http://sites.wiki.ubc.ca/dlc/Online_Communities_of_Practice:_A_Case_Study_of_ccMixer> visited 1 May, 2011.

showcase the finest work that ccMixer has to offer”.²⁵⁹ Then there are administrators, who do the technical maintenance, moderate forums, etc. However, there was no data found on how exactly are these two formal groups allotted to their roles and what is the level of participation of the community in this process.

The production of creative content in the community is not only directly motivated by standard participation, but also by periodical contests, where everyone is asked to remix music donated by some famous authors. Even though only a minority of contest participants stay and contribute to the community after the contest is over, this attracts new members to the community and gives a spike in it’s activity.²⁶⁰

The community is also affiliated with a record label “Magnatune” which has a special business model. It offers consumers to listen to all the music and decide if they want to download it. If they do, they can choose the price they want to pay (in certain limits) themselves. Then the revenues are shared 50/50 with the artist.²⁶¹ It also promotes CC-NC-SA license for all their artists and uses ccMixer as a place to advertise their musicians.²⁶² The ccMixer project is now also supported by similarly mined “Artistech”.²⁶³

In general, ccMixer seems to be a very diverse community with many different clusters, which still remains attractive for creators and produces quite a lot of musical content – as for May 2011, ccMixer had 23290 uploads and 14190 remixes.²⁶⁴

5.2.3 Jamendo

As we saw above, the Creative Commons can encourage to create new information (cultural products) by forming a special communities of authors building on each other’s works somewhat similarly to the Open Source

²⁵⁹ *Ibid.*

²⁶⁰ Cheliotis, *Supra* note 251, p 173.

²⁶¹ <http://magnatune.com/info/faq_download#downget > visited 1 May, 2011.

²⁶² <<http://magnatune.com/info/terms>> visited 1 May, 2011.

²⁶³ <<http://tunetrack.net/artistech/#/> > visited 1 May, 2011.

²⁶⁴ <<http://ccmixter.org/view/media/extras/stats>> visited 1 May, 2011.

movement. However, it seems, that Creative Commons can also encourage production using a larger scale – global community scale. There are projects that persuade artists to share their works with everyone without intermediaries, because Internet itself is a community that will use and react to the work and give other kinds of incentives.

For an example of this kind of project, a music distribution platform will be selected again. There are examples of similar projects in movie industry, for instance²⁶⁵, but it seems that the music projects under Creative Commons are for now the biggest and most active. Maybe this is also influenced by the simplicity of the consumption, production and dissemination of music through Internet and popularity of it, in comparison to movies or other media.

Jamendo is a platform established in 2004 by three enthusiasts in Luxembourg²⁶⁶. This is, in fact, a business model, which has only a quite loose local community attached to it (similarly as in model 1 of presumably sustainable Open Source communities). However, this is exactly why it can be said to be one of the elements for building a global community since, a person does not even need to be a ‘real’ member to be able to access the ‘free and legal’ music in Jamendo.

The business plan of Jamendo is simple – music is hosted in their site for free, anyone can listen to it for free, musicians are encouraged to promote their music and Jamendo (where the music is located) as much as they can and money are made from third-party advertisement in Jamendo site. The more hits the site has, the more will the advertisement cost. The revenues are shared 50/50 with artists.²⁶⁷ The site also provides different ways for a musician to earn directly by selling exclusive additional tracks or collecting donations from fans.²⁶⁸ Artists can also agree to additional commercial exploitation (commercial programs) of their works and earn

²⁶⁵ <<http://filmannex.com/>> visited 2 May, 2011

²⁶⁶ <http://wiki.creativecommons.org/Case_Studies/Jamendo> visited 2 May, 2011.

²⁶⁷ *Ibid.*

²⁶⁸ <<http://www.jamendo.com/en/faq#artist>> visited 2 May, 2011.

more.²⁶⁹ But most importantly, Jamendo offers author a connection with local and global community.

As for local community, registered members are able to comment, review send messages to each other, join groups, speak in forum etc. Artists can also communicate with their fans inside the Jamendo system. In addition, authors are ranked according to the amount of listeners (from inside and outside the communities). Anyone, even non-members, can donate a chosen amount of money to an author, share information about an author, etc. In this way, authors can get feedback and share their music throughout the world. In Jamendo the core administration tasks are conducted by a company and members (local and global) interact with each other basically in two ways – listeners consume music the artists have uploaded and subsequently give feedback and donations (two sided relationship)

Jamendo uses music licensed by different Creative Commons licenses.²⁷⁰ The license limits what is a consumer able to do with the music after downloading it. According to the data from the website, Jamendo now has 47546 albums available to download online for free. 1986 (around 4%) of them are licensed under CC-BY, 9313 (19,5%) under CC-BY-SA, 24475 (51,5 %) under CC-NC-SA, 507 (1%) under CC-BY-NC, 1217 (2,5%) under CC-BY-ND and 9543 (20%) under CC-NC-ND. The rest of the albums are licensed under other type of licenses (CC Sampling etc.).

This analysis shows that not only is the site very popular among musicians, it also introduces a general atmosphere of sharing community. A fifth of authors still choose the most restrictive Creative Commons license, but at the same time, around 75% of authors allow anyone to make derivative works and vast majority of them use the copyleft (Share Alike) requirement.

Jamendo maybe couldn't be called real 'community' in the sense E. Ostrom uses this word (it has no real self-governing mechanisms and participation in the adoption of the rules by which community has to live is

²⁶⁹ *Ibid.*

²⁷⁰ <<http://www.jamendo.com/en/creativecommons>> visited 10 May, 2011.

weak to non-existent, etc.), but it is certainly some kind of community that encourages artists to give away their works and gives us a promise of global common pool of information.

* * *

For this practical analysis of Creative Commons to be complete, a case study of a community that produces educational materials and similar non-fictional texts should be carried out. However, due to the lack of space, and lesser popularity of such communities this part will be left out. Suffice it to say, that the structure of these communities is likely to be somewhat special, since the community has to ensure the quality and relevance of scientific materials they are producing. However, in essence, it should be quite similar to the ccMixer example.

5.2.4 Analysis of the similarities and the differences

All presented communities (and platforms) are quite different and have significantly differing community structures. Similar among them is the common aim which makes them into communities. In case of Open Source, despite different additional motivations, the main common aim is to produce functional software even though the personal motivations of participants are different. The community of ccMixer is a community that is united by an objective of open sharing and reuse of music in the Internet.²⁷¹ Similar aim seems to unite the people who get involved in Jamendo (although the motivation of authors and music consumers is, once again, different). In both cases reputation in the community and social ties seem to be very important, communities have certain moral rules and have a strong push towards open sharing and cooperation. All the communities have certain more formal inside rules and can, to some extent, participate in the norm setting. There are at least some kind of nested structures to ensure conformity with community rules. The mechanisms for dispute settlement seem to exist as well, since all the communities have a higher authority to

²⁷¹ Cheliotis, Yew, *Supra* note 251, p. 174.

bring a complaint against other member to (administrators, senior members, etc.).

However, it is also obvious, that in the case of Creative Commons, communities seem to be much looser. Participation in the norm setting and self-governance are much more restricted. The structure of communities is less complex, standards for joining and participation lower, choices for the participants more diverse. Even within one single community, many sub-communities using different CC licenses can be observed. The strength of the social norms as well as the ties among individual participants in these communities seem to be weaker.

Not all the differences between the discussed examples mean the change in the idea of the commons or show some kind of improvement or decay. Many of them are there because software and cultural products are very different. First of all, software is a product to complete some kind of task. It can compete with some other software that does the same task simpler or faster. Cultural products are not aimed at solving anything, and there almost never can be such thing as a finished artistic product. A song consists of melody and words, but even words alone are good enough for a poem, a fictional novel can be started with a small essay and never finished by the same author. Actually, the less developed the initial work is, the more participation and remixing it can encourage. So the Creative Commons community can be quite disorganized and still be engaging, attractive and produce different useful products. Unless, maybe we can criticize the remix culture as being amateurish and of poor quality, but this will not be a discussion in this thesis. Software, on the other hand, has to be functional and competitive, so there is a need of clear system that would allow to check for mistakes in the code, protect the final product from under-experienced contributors, abuse, etc.

In addition, as for software, the product that OS communities are creating is very complex and grows more complex with time as well. Therefore the communities of programmers need to constantly engage new people and ensure that there will always be someone who knows enough about the project to take over. However, at the same time, community can

not afford to have people who are not enough motivated or don't have enough skills to continue the work. This is why it is much harder to get into such community and to improve your position inside it. For these reasons the size of community matters as well – the bigger it is, the more potential contributors there are.²⁷² So the OS projects have to be bigger and have to set stricter rules than in the case of artistic production.

In addition, the user group surrounding the contributors is also different. In case of OS software, this can theoretically be anyone, but it is not so in most cases. A user of certain software, especially if it is still in the stage of development, is often an experienced programmer. This means, that the relationship with this kind of user is different and the relationships with inexperienced users are almost non-existent. The circle of people that can even think of joining the project is very narrow, the usually describe themselves as a part of some programmer group already. In the case of Creative Commons, the end product is much more accessible, so anyone can consume it. In addition, even a non-professional and non-educated user is able to start contributing very easily. This again influences the rules for joining the community, but also explains why Open Source communities have, seemingly, better defined membership clearer clear identity and stronger community ties. On the other hand, with the Creative Commons we can truly see emergence of a global community which is much more dynamic and engaging than the open software ones.

One more difference which is connected to the nature of the resource which is produced is the stricter standards of openness in GPL and the Creative Commons and the amount of different choices in the former. The GPL is concerned with making the source code open and with prohibiting its future enclosure. Without this, all the communities and collaborative projects would loose any sense and building upon existing software would be impossible. In case of Creative Commons, the artefact (music, movie or a book) is the source code in itself.²⁷³ It is always possible to build on existing work and experiment with it privately and receive a permission afterwards,

²⁷² Doucheneaut, *Supra* note 228, p. 326.

²⁷³ Ferrario, Herman, Housewright, Tam, Wilson, *Supra* note 255, p. 13

for instance, if the remixer sees that the thing he has done is successful and will decide to share his work with a general public. In addition, there is also data that the derivative works of next generations are remixed much rarer than the initial works,²⁷⁴ so the share alike provision is not that topical.

Apparently, we see many differences, but some of them are there because the resource in question is different. No conclusions on sustainability or change of the perception of the commons can be made from the above analysis, except, maybe, that the global community is introducing more regimes that are more adapted to different practical realities. This is a process E. Ostrom has also described – the rules are being adopted to the needs of local communities.

However, comparing the features of communities, that depend on the type of the framework (license) that was chosen, (either more restrictive Open Source licenses or the Creative Commons), there are differences that could be harmful to the CC communities. The license does play important role in the way community functions, and the more restrictive nature of GPL might be indeed a key to sustainability of the whole community. The GNOME project lists in its website the goals they were aiming at when designing their copyright policy:

- to make sure no one organization dominates GNOME.
- to ensure that all contributors to GNOME, corporate and individual, are on equal footing, which helps avoid conflicts and disagreements between contributors.
- to grant both commercial and non-commercial users and developers equal rights and privileges to copy, modify, and redistribute the software.
- to provide individuals the assurance that their code will be propagated in line with the spirit of the copyleft.
- to provide transparency and openness in the development process, in order to create trust in the licensing framework of GNOME.²⁷⁵

The first challenge these open communities face and that can be deduced from the list above is the involvement of private companies. Community has

²⁷⁴ Cheliotis, Yew, *Supra* note 251, p. 168.

<<http://www.iisi.de/fileadmin/IISI/upload/2009/p165.pdf>> visited 1 May, 2011.

²⁷⁵ <<http://live.gnome.org/CopyrightAssignment>> visited 26 April, 2011.

to feel (and be) in charge of the resource they are creating. If we put a much stronger commercial entity inside the community and allow the commercial exploitation of the resource and don't ask it to share the improvements it has made, we will see more and more enclosure of the initial resource. As A. Chander and M. Sunder observe in their essay "The Romance of The Public Domain"²⁷⁶, the commons might be benefiting the traditional property owners more than the commoners. Companies get free raw materials for their businesses and are limited by no further duties.

In addition, the same problem occurs with companies and self-governance.²⁷⁷ The Open Source and Creative Commons projects often need monetary and non-monetary support from companies. It would be hard to keep the community self-governing and equal if companies would have a way to increase their influence in the decision making. With strictly open licensing model, there is even no need to seek for more influence. The product is beyond traditional business interest. All corporations and private individuals have the same rights towards the software. The looser communities with more business-favourable licensing options have a risk of business trying to "take over" and to enclose the commons or disrupting the community in other ways.

Closely connected to this is the issue of contributor motivation. One of the most important motivations in the Open Source communities, as noted above, is reputation and recognition in the community. In the CC communities social relationships and community-building as well as reputation are very important to the participants. As noted by J. Yew, individual acts like a performer on a stage in a community (local or global, as observed in the practical examples).²⁷⁸ The feedback and evaluation as well as wide dissemination of the result are very important. Such people may, first of all, refuse to contribute if the faith or openness of the project is uncertain. GPL helps to make it certain and to ensure maximum

²⁷⁶ A. Chander, M. Sunder 'The Romance of the Public domain', 92 *California Law Review* (2004) <<http://ssrn.com/abstract=562301>> visited 3 May 2011.

²⁷⁷ Mikkonen, Vaden, *Supra* note 222, p.6

²⁷⁸ J. Yew, 'Social Performances: Understanding Open Sharing and Remix Culture', (2009), <http://research.microsoft.com/en-us/um/redmond/groups/connect/csw_10/docs/p517.pdf> visited 20 May, 2011.

dissemination. In addition, since the Creative Commons communities by their nature (as discussed) do not need to be that organized, the relationship between community members is much looser, and one of the main incentives to participate becomes, accordingly, weaker. Weaker ties not only decrease motivation but introduces bigger probability of abuse as well.²⁷⁹ Even though this last observation is also connected with the nature of the resource the community produces, the GPL license has in itself the requirement of reciprocity and helps to establish stronger ties in any community. The Creative Commons are much weaker in this sense and paired with the non-result-oriented resource they are aimed at this makes the CC communities even weaker.

One more observation could be made in connection to motivation in these types of communities: As stated above, they are all based on the idea of “gift economy”. Even L. Lessig speaks a lot about it in connection to the CC licensing system.²⁸⁰ The GPL and similar non-monetary egalitarian and open licenses seem to illustrate this phenomenon well. The participants share ideas in exchange to ideas and personal help. In the world of Creative Commons we can see enough space for money too. It was observed, that when monetary incentives were introduced in one of the Open Source communities (Debian) it ended disturbing the whole community, because the relationship was essentially non-monetary.²⁸¹ Money introduce different kind of incentive that make members personally detached from the community they are only joining for money, and this, accordingly makes the ties looser and the community less participatory.

In addition, there are also a lot of concerns that Creative Commons is not a tool for creating something common since it stresses too much on the private property and denies the very idea of community property or public domain.²⁸² This criticism can be applied to Open Source licensing as well,

²⁷⁹ E. Korin, “Exploring Creative Commons: A Skeptical View Of A Worthy Pursuit”, p. 19, in L. Guibault, P. Bernt Hugenholtz (eds.) *The future of the public domain : identifying the commons in information law* (Kluwer Law International 2006).

²⁸⁰ Lessig, *Supra* note 85.

²⁸¹ M. Shuttleworth, ‘Funding Free Software Projects’, 2009.

<<http://www.markshuttleworth.com/archives/4>> visited 4 May, 2011. in Anatomy..

²⁸² S. Dussolier, ‘Master’s Tolls v. The Master’s House: Creative Commons v. Copyright’, 29:271 *Columbia Journal of Law and Arts*, 2006; Korin, *Supra* note 279, etc.

however, the nature of the product that is created in OS and the strict license they choose makes the community to come as close as possible to a feeling that no single individual owns anything there. Whereas in Creative Commons communities, the private ownership is stressed explicitly, the choice of license depends on author. When we speak about community which overemphasizes the role of individual, probably right are those who say, that this is some kind of hypocrisy which can not be sustainable.

A strong community and atmosphere of unconditional sharing creates a special connection between the ones engaged in it. This is what OS have. This was also observed in the very core of ccMixter where authors share and consumer each other's works mutually.²⁸³ GPL seems to be more suited to create such mutual relations because of its copyleft content.

Finally, the whole Open Source network uses rather similar licenses. All of them have to be certified by the Free Software foundation and the most popular to use is the GPL anyway²⁸⁴. In the Creative Commons, even the same project can be using many different licenses as illustrated by both CC examples discussed above. Derivative works can only be licensed under the same, equivalent or more restrictive license than the original work. By no means can it be less restrictive, since this would infringe the will of the original author.²⁸⁵ The real problems are faced when remix is done using more than one work. It is a hassle to decide what license to choose (although in ccMixter this is automatically suggested for the author of the remix). In addition, some licenses are simply incompatible and some works can never be remixed into one.²⁸⁶ There are also scholars who claim, this problem might also distort the balance of different licenses in the CC knowledge pool in the long term.²⁸⁷

²⁸³ Cheliotis, Yew, *Supra* note 251, p. 172

²⁸⁴ See chapter 2.2.1

²⁸⁵ G. Cheliotis, 'Remix culture: Empirical Analysis of Creative Reuse and the Licensing of Digital Media in Online Communities', 2007.
<http://icommons.pentabarf.org/programme/iSummit08/attachments/14_IRWFC%20submission%20-%20Giorgos%20Cheliotis.pdf> visited 4 May, 2011.

²⁸⁶ A question in FAQ "If I use a Creative Commons-licensed work to create a new work (ie a derivative work or adaptation), which Creative Commons license can I use for my new work?" <<http://wiki.creativecommons.org/FAQ>> visited 6 April, 2011.

²⁸⁷ Z. Katz, "Pitfalls of Open Licensing: An Analysis of Creative Commons Licensing", 46 *The Intellectual Property Law Review*, (2006). pp. 400-410.

This is not only problematic because it creates additional inconveniences for authors, it also means, that Creative Commons will have a hard time in building a single network – global community. It might be, that groups and artists that are using creative commons are just bound to stay fragmented and can not form a single sustainable body.

6 Conclusions and Recommendations

We have now glimpsed beyond the Creative Commons framework for production and dissemination of information. We have discussed the theory behind it and the processes and signs that can tell us something about the efficiency, equity and sustainability of this instrument.

As observed, the Creative Commons framework can be called an efficient framework for production and dissemination of information. Information is a very special resource, which is governed by slightly different economic laws than the traditional property. In addition, the creativity and the process of production of different kinds of information are very specific as well and special conditions are needed to fully exploit their potential. The Creative Commons seem to offer an effective way to employ the possibilities given by the idea of the common production and dissemination of information.

As for the equity – the rights of all the members of an information producing and consuming community, the Creative Commons, as well, are giving a lot of promises of universal participation and access. The rights of the creative part of the community are protected too. The only problem could be the material interests of an author, necessary to ensure her an adequate standard of living, since the Creative Commons framework does not allow direct remuneration from the other members, author is sharing the resource with. However, the framework of the commons has other types of remuneration to offer, and in addition, new open business models are already starting to adopt to the community-style production and dissemination of knowledge. Until there are plausible options for an author to get remuneration through the community system, the Creative Commons model does not have to be the only framework for information. Traditional intellectual property rights can also exist simultaneously.

The sustainability of the Creative Commons regime, however, has more problems. First of all, we see that situation is still unclear with the legal norms that constitute the Creative Commons framework itself. Any

commoner can't be still sure if the rights, freedoms and restrictions set by the Creative Commons can be legally enforced and protected if the need arises. We still have to wait for more cases in the courts of different countries to get a clear picture on what is the extent the Creative Commons can be integrated into the standard legal framework of intellectual property and to what extent the CC will be able to change it. Speaking about the relationships and local norms in the communities, that are created under the framework of the Creative Commons, we also see problems, that can mean lack of sustainability of such communities. Creative Commons communities seem to have less organization, looser structures, therefore less motivation for the participants and less protection from possible negative consequences of the activities of their members.

Consequently summarizing all this, we can say, that the Creative Commons has a very good potential in theory, but, arguably, fails to deliver all its promises in practice in some occasions. There is no tragedy in the communal production and dissemination of knowledge under the CC framework, but those small but significant practical problems might lead to weakening of the efficiency and equity in those communities in the long term. Even worse, this could increase disappointment with alternative mechanisms and give a stronger stand for those, who claim that, for instance, the traditional IP regime is the only way to ensure rights of the author and sufficient incentives for new informational goods.

In any case, there is a positive note in this conclusion. We now live in the time, when downloading someone's artistic or scientific works is still considered a crime, although everyone does it. We have now an 'epidemic of piracy', which essentially means an epidemic of mismatch between the needs and expectations of general public and the legal protection of the rights of the author. One can not change the world in one night, but one can try and take small steps, one at a time. Creative Commons is such a step. It is just one of the first ones in the long way of understanding and using the possibilities of communities for production and dissemination of information. It is just one small step towards the promise of global collaboration, equality and access. There are those, who say, that it might be

a step back, but I don't think so. The research of my thesis also showed that the space created by the Creative Commons is not left empty. Communities are building there, and more often than not, authors of different works use one of the least restrictive/most open Creative Commons licenses²⁸⁸. Creative Commons is an alternative to start creating a world that would give us more freedom and more rights.

Therefore, to answer the research question which was presented in the introduction: yes, the Creative Commons is in many ways a suitable alternative framework for production and dissemination of information. However, on my opinion, there some recommendations that would make the framework of the Creative Commons and the communities under it stronger could be still made:

1. The argument of efficiency is a strong one, especially to encourage authors to share more. It is necessary to have more studies on the efficiency of alternative open business models available to authors (this could be a task for WIPO, which is for now only including information on traditional business models in the publications for authors). In addition, more economic studies have to be carried out on the phenomenon of gift economy and motivations behind it.
2. The Creative Commons should adopt the human rights based approach to make their network stronger and to remain conscious about the human rights problems, especially for the authors, that could arise using the CC licenses. The gifts made by the authors should not be depreciated, and communities and society has to feel morally responsible for the rights of the people whose profession is to produce the ideas and works they're using. This can be reached by mainstreaming the human rights approach into the Creative Commons framework.
3. There is no way to strengthen the legal framework of the Creative Commons, we just can wait for the courts to their make decisions. However, the human rights based approach and more attention to the

²⁸⁸ <http://wiki.creativecommons.org/Metrics/License_statistics> visited 20 May, 2011.

identity and moral aims of the Creative Commons framework could make the social norms stronger and litigation less likely in general.

4. The Creative Commons should give more attention to the example of the Open Source framework, especially on the strength of communities. Since communities are building themselves and the CC has no active role in it, first step to do that would be introducing stronger moral stand in the ideology of the organization. This, of course, would be easiest by decreasing the number of the licenses available and concentrating more on openness. However, logically we shouldn't also refuse the possibility for the authors to share their work if they only want to share it with very strict conditions, therefore an option of splitting the CC framework would be advisable. Since the present framework is, in any case, very fragmented and lacks single moral stand and aim, splitting it into at least two parts (even if only formally) could help to create strong communities with different levels of openness which would be at some extent compatible with each other, but at the same time would have separate identities. Alternatively, the Creative Commons could become more active in the establishment of stronger communities and create some kind of 'constructed commons' at least in some cases.

Hopefully this would be enough to build robust framework and encourage establishment of organized and strong communities and would make the alternative of common production and dissemination of information a plausible one.

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