COPYRIGHT, MASS USE AND EXCLUSIVITY
On The Industry Initiated Limitations to
Copyright Exclusivity, Especially Regarding
Sound Recording and Broadcasting

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Preface

This book was mainly written in 2003–2005 when I had the possibility to join the research project team in the IPR University Center, which originally operated in the Swedish Business School (Hanken) and later moved to the University of Helsinki. The project “IPR’s in Transition” was financed by the Academy of Finland.

Many thanks to many are in order. First of all, professor Niklas Bruun from Hanken (and now in the University of Helsinki) encouraged me to pursue this task and in many occasions gave ideas and suggested ways forward. Professors Kalle Määttä and Rainer Oesch gave their insights and many suggestions during examination. Professor Michael Landau from Georgia State University, Atlanta, agreed to become my opponent.

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It is also customary to thank the researcher’s family - in this case Sirpa, Hannele, Villeheikki and Roope - for patience and understanding. While doing that I must also confess that the career move from corporate legal to research community has not meant a decrease but an increase in the control of my personal time. As a token of this, I shall dedicate this book to Roope Einar, our youngest, who first saw daylight in the summer of 2004, when the first drafts of this book started to form.

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Summary

The study concentrates on the introduction and background motive of technology related change of copyright law as reflected mainly in the Berne Convention due to the technological and economic necessities experienced in the early 20th century. The purpose of this study is to understand a development which has led to the adaptation of licensing regimes that are not based on traditional exclusivity approach.

Voice recording, broadcasting, rebroadcasting, and photocopying serve as main examples of the development. Also the impact of internet and mobile technologies are discussed. The method is based on institutional theory of law, and makes broad use of both economic analysis and historical documentation.

The problem of the legislator’s choice on how to structure copyright law between the two alternatives, exclusive property or liability approach, has risen constantly throughout the 20th century. The main conflict of interest seems to be between the exclusive right of the copyright holder, and the interests of users, that is, both the commercial and end users. The secondary use of copyright material is a rapidly growing form of copyright use. This creates controversies arising in that particular field of commercial use.

Exclusivity is often regarded as the essence of copyright. However, the development of communication technology has allowed new forms of use that are not as well directly controllable by the relevant parties as was the publishing and sale of books. The new technology-enabled phenomenon is mass use in its different forms. Mass use means use of copyright protected works in large quantities in a manner that is either impossible or prohibitively costly to trace, identify and bill. This development which is common to practically all technological innovations of the 20th century questions the accuracy of the exclusivity approach to copyright.

This study explores technology related change of the copyright institution, and how copyright is developing from a system based on exclusivity towards a system of compensation increasingly adopting elements of compulsory - that is, involuntary - licensing and its variants. Secondly, on a more general level, the study attempts to formulate a conclusion concerning the impact of technological change on copyright.

Exclusivity remains the theoretical and logical starting point of copyright legislation and nearly any analysis of copyright, scientific or within legal practice. Anyhow, the 20th century development has introduced a new set of regulations attempting to limit overly powerful legal positions and thus to protect interests relating to development of new technologies and businesses. This has largely taken place by some form of compulsory licensing. The broad use of platform fees is an illustration of this development in its
extreme. The origin of this development is in the belief to scientific progress and innovation in the early 20th century (the development motive).

The study suggests that a more coherent approach towards copyright may be reached by studying copyright as a system of compensation, rather than a system of full control of the use of copyright protected matter. This also corresponds to the evolving set of beliefs of the copyright ideology. Exclusivity has not disappeared from the overall picture, but shall be reserved to those forms of use where it is applicable. That is, where copyright is directly controllable by the author or other copyright holder without prohibitive overall consequences as to other right holders, users, businesses, or the society.
Abbreviations

ADSL  Asymmetric Digital Subscriber Lines
AEG  Allgemeine Elektrizitäts-Gesellschaft
AIPPI  The International Association for the Protection of Industrial Property
ALAI  Association Littéraire et Artistique Internationale
API  Application Program Interface
ARPU  Average Revenue per Unit
Art., art.  Article
BBC  British Broadcasting Corporation
CD  Compact Disc
CISAC  International Confederation of the Societies of Authors and Composers
CTEA  The Copyright Term Extension Act 1998
DRM  Digital Rights Management
DVD  Digital Video Disk
EBU  European Broadcasting Organization
EC  European Community
ECHR  European Court of Human Rights
EDGE  Enhanced Data Rates for GSM Evolution
EEC  European Economic Community
EMI  Electric and Musical Industries (plc)
EU  European Union
FTP  File Transfer Protocol
GATT  General Agreement on Tariffs and Trade
GBP  Pound of Great Britain
GDP  Gross Domestic Production
GESAC  Groupement Europeen des Societes d’Auteurs et Compositeurs
GPRS  General Packet Radio Service
GSM  Global System of Mobile Communications
HDTV  High Definition Television
HSCSD  High Speed Circuit Switched Data
HTTP  Hypertext Transfer Protocol
HTV  Helsinki Televisio
IBM  International Business Machines (plc)
ICJ  International Court of Justice
IFPI  International Federation of Phonographic Industry
ILO  International Labor Organization
IPR, IPR’s  Intellectual Property Rights, Rights
ISP  Internet Service Provider
ITU  International Telecommunication Union
IVR  Interactive Voice Response
KHO  Korkein hallinto-oikeus; the Supreme Administrative Court of Finland
CHAPTER ONE: Theoretical Framework.

The Interaction of Law and Economic Activity in the Copyright Environment
I. 1. Introduction

There are several separate paths of copyright criticism that can be identified in the contemporary debate. According to a recent analysis by Paul David, firstly, there exists the reactive “free and open access” movement promoting alternative ventures and business models that make copyright less critical as a means of protecting intellectual investment. It is reactive being a response to the defensiveness of the printing and media industry against the rapid development of the Internet. The basic argumentation of this movement is illustrated in the works of Professor Lawrence Lessig from Stanford University. We could call this “fundamental criticism”.

Secondly, there is a “moderate” line of thinking that is troubled by the abuses of the copyright regime but sees the need for some form of intellectual property protection in modern society. Scholars belonging to this category argue for an alternative in the “legal liability” approach for the “absolute property rights” protection. This may be called “practical criticism”.

Thirdly, according to David, outside the academic schools, the media companies tend to emphasize secrecy and private contracting with the help of digital rights management technologies to meet their protection needs. This could be called the “technological approach”; it is not as much a line of academic argumentation but a straightforward way adapted by business companies to protect their investments to intellectual property.

This study concentrates on the introduction and background motive of technology related change of copyright law as reflected in the Berne Convention due to the technological and economic necessities experienced in the early 20th century. Although the focus is on the early 20th century, the recent development towards platform fees will also be discussed, along with the Northern European innovation, “extended collective licensing”. The problems and method of approach will place this study, within the categories identified by Paul David, closest to the second one, that is, in our words “practical criticism”. A distinction to the traditional line of copyright studies anyhow comes from the element of dynamism; the purpose of this study is to understand a development which has led to the adaptation of licensing regimes that are not based on traditional exclusivity approach.

The problem of the legislator’s choice on how to structure copyright law between the two alternatives, exclusive property or liability approach, has risen constantly throughout the 20th century. Even today, the main conflict of interest seems to be between the exclusive right of the copyright holder, and the interests of users, that is, both the commercial and end users. The secondary use of copyright material is a rapidly growing form of copyright use. This creates controversies arising in that
particular field of commercial use. Problems in this area arise mainly because of technological development, which provides us with the theme of the study, that is, how the international community has solved these technology related controversies in copyright legislation.

I. 1. The Research Question

Copyright is in the Berne Convention defined as the exclusive right of the author to decide on the various forms of use of the copyright protected work.\(^5\) The basic business model corresponding to this is the publishing of books, which may stay relatively well controlled by the author or the publisher provided that international measures for piracy exist.

In authoritative definitions, exclusivity is often regarded as the essence of copyright.\(^6\) However, the development of communication technology has allowed new forms of use that are not as well directly controllable by the relevant parties as was the publishing and sale of books. The new technology-enabled phenomenon is mass use in its different forms. By mass use is meant use of copyright protected works in large quantities in a manner that is either impossible or prohibitively costly to trace, identify and bill. This development which is common to practically all technological innovations of the 20\(^{th}\) century questions the accuracy of the exclusivity approach to copyright.

This study explores technology related change of copyright institution, and how copyright is developing from a system based on exclusivity towards a system of compensation increasingly adopting elements of compulsory licensing and its variants.\(^7\) WIPO Glossary defines compulsory licensing as “a special form of permission to be granted obligatorily, in most cases by competent authorities or also through authors’ organizations, under specific conditions for specific kinds of uses of works”.\(^8\) This definition includes the basic idea of allowing use of copyright protected work against payment without the need for permission from the author.

Secondly, on a more general level, the study attempts to formulate a conclusion concerning the impact of technological change on copyright.\(^9\)

The research question is defined in this introductory section. Some refinements to the research question and certain elements will be developed and added later, in particular with regard to the discussion concerning the copyright motives.
I.1.1. Understanding the Change of the Copyright Institution

Copyright law in its present form is a complicated entity comprising on the one hand national laws and on the other international conventions that have been developed over one hundred years to enable harmonization between national copyright systems. Already at first sight, the overall development seems largely influenced by technological development. Technological novelties have raised new economic and legal issues and challenged the conventional copyright doctrine that had developed over centuries and got its manifestation in the first Berne Convention text in 1886. The development of technology is however not as such the sole influencing factor, since other historical events have also contributed to the development of international copyright law. And even more importantly, no technology as such in its infancy seems to have had the necessary momentum to directly necessitate changes in international copyright conventions. New technology must first gain economic importance as a precondition for contributing to legal change. The technological interaction with copyright law is manifest in the compulsory licensing regimes. Therefore, the history and functions of the compulsory licensing is the main theme of this study.

Another important factor for understanding copyright is its ideological background. The judgment in the Magill –case, (EEC High Court 6 April 1995), illustrates the complexity of values in the copyright field (inserts and emphasis: MH):

“28. However, the Court of First Instance took the view that, while it was plain that the exercise of an exclusive right to reproduce a protected work was not itself an abuse, that did not apply when, in the light of the details of each individual case, it was apparent that the right was being exercised in such a ways and circumstances as in fact to pursue an aim manifestly contrary to the objectives of Article 86. In the event, the Court of First Instance continued, the copyright was no longer being exercised in a manner which correspond to its essential function, within the meaning of Article 36 of the Treaty, which was to protect the moral rights in the work and to ensure a reward for the creative effort, while respecting the aims of, in particular, Article 86.”

We can see that certain sections refer to conflicting interests that have to be weighed against each other. These include the protection of moral rights, ensuring reward for the creative effort, and yet adapting to the necessities of public interest and, in this case, the interest to maintain competition between companies in a certain market. The interpretation of this material requires an historical context in order to grasp the content of the conclusion. The copyright doctrine as reflected in the 1886 Berne text was created over centuries as the development of the trade and political circumstances required new elements to be added to the copyright legislation. This necessitates the understanding of how the copyright system has changed during its existence.
One of the main purposes of this study is to identify the main beliefs behind the traditional copyright doctrine and especially the exclusivity or property right nature of copyright as reflected in the early 1886 version of the Berne Convention. It is our purpose to investigate how technological changes have necessitated a change in the beliefs behind the traditional exclusivity doctrine towards a right to compensation and towards the introduction of the industry emphasized development motive.

A practical positivist approach to law – as a starting point – uses the method of literary criticism and tries to draw interpretational conclusions on the basis of the official material: statutory law, background materials such as committee preparations, major court cases, opinions of scholars, etc. The material is then interpreted and systematized. This method would not however say too much of the development of the international copyright protection in its totality, that is, the dynamic aspect of copyright development. Another possibility, not uncommon in copyright discussion, a natural law approach would require a normative or moral focus, and could likely lead to recommendations based on some moral judgment or conviction, whether open or “hidden” in the normative assertions. But even this would only lead us to the question, what are the moral convictions to choose from, and how to evaluate one over the other. This method could probably reveal more of the researcher than of the research object.

Traditional jurisprudential interpretation normally takes place through a legal examination of certain, isolated case or cases. Approaching a totality of norms that has developed during a lengthy period of time provides a challenge beyond the isolated interpretational interest. The question becomes, how can we better understand the development of the legal or institutional framework, and are we able to identify the background motivation or motivations of the changes of copyright law on a more general level. What happens and why when a new technology shakes the foundations of copyright.

The understanding of the development leading away from the traditional exclusivity doctrine of copyright necessitates a dynamic approach, that is, studying several relevant technologies that have had an impact to the change of copyright law during a lengthy period of time. This includes on the side of pure legal argumentation also economic and historical assertions. Even the philosophical background of copyright ideology – the “mutual beliefs” of the copyright system - must be reviewed in order to correctly form the “big picture” of copyright as a legal institution.

Approaching copyright legislation in an international framework provides an additional challenge from the viewpoint of political or legal philosophy. The foundations of a legal system have in those disciplines traditionally been anchored to a justifying factor – be it the basic norm, rule of recognition, sovereign, Leviathan, or a moral judgment based on natural law considerations, even divine revelations. These models
correspond to the national state circumstances, but less in international, convention based context. Models based on norm hierarchy also logically lead to the problem of infinite regress, which has inspired varying solutions. In an international setting, it becomes increasingly difficult to create sovereign-based theories on the legitimizing factor of international order. The international legal instruments are of a different nature than the traditional law of a national state: rather than being commands of a sovereign, the norm base increasingly seems to be arranged on a contractual basis, that is, conventions.

Approaching change in an international setting requires therefore a method that allows a more flexible and dynamic approach to legal research. It also requires a different concept of law in relation to either positive or normative theories.

These flexible and dynamic variations of legal theory have recently been developed by several scholars. I shall only name five, Kaarlo Tuori and Eerik Lagerspetz, Neil MacCormick together with Ota Weinberger, and Douglass C. North. Tuori’s theory on critical positivism contains a dynamic aspect seeing law as a field of interaction with several interactive layers of development. Tuori is influenced by Habermas’ theory of communicative action, and hermeneutics, which also takes into account the background motivation of legislation. Both Lagerspetz and North have contributed to the dynamic – not necessarily evolutionary – theories, the former in the area of political and legal theory, and the latter in the area of the history of economic activity. MacCormick and Weinberger have laid important elements for the foundations of the institutional theory of law.

Neither law as a command of a sovereign, nor law as a deductive result of a moral statement seem – intuitively - to provide a sufficient starting point to approach the problem of technology-oriented change in an international legal framework. For these reasons, the theories of institutions as developed by both Lagerspetz and North, have been chosen as an ontological basis for the analysis of the mechanisms of change in international copyright legislation.

Lagerspetz builds his theory of law as a conventional praxis on the basis of mutual beliefs. Mutual beliefs form conventional facts, which, in a legal framework, may become legal institutions. North operates, in his interpretation of the development of economy, with “mental models”, which create the constraints individuals have in their interaction with others – the institutions. It seems initially, that both approaches have very much in common. Both scientists use game-theoretical approaches, if in a slightly different setting.

From Lagerspetz’s analysis we may conclude that the method of understanding institutions becomes historical in nature, because mutual beliefs, conventional facts and institutions, develop through lengthy periods of time. - It becomes, not only
recommendable, but necessary, to understand the historical background of a legal instrument to correctly assess its nature as an institution.

I.1.2. The Impact of Technology on Copyright

Beside the basic theme, the development of compulsory licensing and its variants, this study also discusses a second theme, which admittedly is of a more hypothetical and speculative nature, that is, the impact of technology on copyright on a general level. In this field of research, the division carried out by North becomes crucial. North sees that there are basically two fields of force that affect the economic development as a whole: the institutional framework, and the development of technology. North has continued the work of Joseph A. Schumpeter in the analysis of the reasons of economic change. The framework of Schumpeter’s theory of economic development is however still relevant for illuminating the various problems relating to techno-economic interaction, and the role of the entrepreneur as an agent of economic change.

Having made the basic assumption of the nature of norms as institutions, the second research question, “the impact of technology on copyright”, becomes, how has the institutional framework of copyright interacted with technological development. This has very much to do with how the members of the society originally formed their beliefs concerning copyright.

This study attempts to show that the classic motives of copyright protection do not provide a one-sided or biased framework for the interpretation of copyright law as such, but rather a system of mutual beliefs that allows for the creation and maintenance of relatively balanced and flexible totality. Even other interested parties besides the right-holders - like both the commercial and private users of copyright protected works – are either protected in various ways, or may benefit from the system in some manner. The motives play a central role in the legal-economic argumentation that takes place in the copyright legislation. Our basic assumption on altruistic motives is rather skeptical; economic arguments seem more accurate, decisive and may challenge the existing doctrine and the balance of motives. The reason for adding balancing instruments into the copyright system – such as compulsory licensing – has not been initiated on the basis of the rights of users, but on the basis of the interest of the commercial use of the copyright protected material. This suggests that the interests of the end users may in several ways depend from the legal position of the commercial users.
I. 2. Methodology

According to Weinberger\textsuperscript{26}, because of the enduring influence of Kelsen’s “Pure Theory” of Law\textsuperscript{a}, some legal theorists firmly believe that the juristic approach to law involves only understanding and interpretation of valid law and that all reflections concerning the social circumstances in which the legal system operates fall outside the subject matter of jurisprudence and belong rather to other disciplines like sociology of law or legal history. This debate has its roots in the philosophical question of the relation of the “is” and the “ought”, where “is” represents a facts-based scientific approach familiar with the natural or physical sciences, whereas the study of law means discussing the normative side of human action, that is, what the member of society ought to do.\textsuperscript{27} The problem is raised partly because, according to Tuori, “concepts are not normatively innocent”\textsuperscript{b}; a lawyer cannot be logically impartial when observing the legal system.\textsuperscript{28}

Weinberger however rejects this Kelsenian “purity”. He strongly advocates the conviction, that every approach to the law which leads to greater understanding of the law and to the explanation of its essence and its social role, is “juristic”:\textsuperscript{29}

\begin{quote}
“Legal science without consideration of social reality – which corresponds to the existential aspect of the norm – is thus unthinkable.”
\end{quote}

According to North\textsuperscript{30},

\begin{quote}
“Writing history is constructing a coherent story of some facet of the human condition through time. Such a construction exists only in the human mind. We do not recreate the past; we construct stories about the past. But to be good history, the story must give a consistent, logical account and be constrained by the available evidence and the available theory.”
\end{quote}

Also Tuori finally rejects the logical “vicious circle”, suggesting “immanent critique” as an alternative, that is, critique from within the system.\textsuperscript{31} In the following study, the methodological “purity” is not necessarily the prime target, but to offer a “cross-analysis” of an important area of legal development and the legal-economic interaction in that field.\textsuperscript{32} Logical constraints originating from mathematical sciences should not block meaningful, coherent and consistent storytelling and identifying patterns of legal behavior.

Warren J. Samuels has described the institutionalist method of studying law and economics in the following manner:\textsuperscript{33}
“Our principal goal is quite simply to understand what is going on – to identify the instrumental variables and fundamental issues and processes – in the operation of legal institutions of economic significance, and to promote the development of skills with which to analyze and predict the performance consequences of alternative institutional designs.”

The method of this study is not inasmuch the systematization and interpretation of legal material in the traditional sense, and neither is it pure law and economics, but rather understanding a legal institution from different perspectives. This is a requirement for a proper institutional analysis of the essence of copyright. The perspectives include legal documents (laws, convention texts and their background documents, case law, legal commentary etc.) but also economic argumentation along with historic assertions. Even the mapping of the philosophical background of copyright is essential to cover the “mutual beliefs” connected to copyright law. The purpose, in the words of Weinberger, is to approach the law in a way that leads to greater understanding of it and its essence and social role. In short, to see “what is going on” concerning the development of copyright in the direction of a liability rule.

Then why not abandon legal argumentation and documents altogether? In studies on law, this is clearly not possible. Furthermore, the choice of legal documentation as the main source material reflects the author’s belief in the possibilities of practical criticism within the copyright system. To point out how law should be amended is the hard way that rarely leads to concrete results. But to point out how law can or even better, how it must be understood within the correct institutional frame is a more direct way to encourage change.

The research question is, firstly the development towards and the features of compulsory licensing, and secondly, what has been the impact of technology on copyright, or more precisely, how did the international framework of copyright interact with technological development when sound recording and broadcasting were introduced. Several steps have to be taken in order to expand the traditional “narrow” mode of legal methodology. Interpretation of copyright history is necessary for understanding the development of the copyright institutions. Both technological interaction with the economy and law’s interaction with the economy are likewise necessary elements of study reflecting the economic reality behind the study object. A study must also be based on a chosen concept of law, which in this study rests on the institutional approach. We must however be aware of the risks of seeing a predetermined logic in human or societal behavior.

First of all, we need a concept of law that corresponds with the needs to approach both international legislation and the dynamic aspect of technological development. This concept of law will be built on the idea of law as a conventional fact having its basis on the mutual beliefs (Lagerspetz) – or mental models (North) - of the actors.
Since the target is the interpretation of international copyright law, in which area the most important instrument is the Berne Convention, the approach to law as law being created to correspond mutual beliefs is *prima facie* appropriate.

Secondly, it is our firm belief and hypothesis based on experiences of the average course of events in the copyright arena, that the direction of development – so to speak – is rather from technological change towards changes in legislation, and only rarely in reverse.\(^{37}\) We need an understanding of the reasons behind economic development. We especially need to have a basic understanding, how technology shaped the economic development in relation to new media. It is not our intention to neglect the fact that law may encourage the development of technology in a certain direction, or facilitate innovation by creating the “rules of game”. The point is merely that a law cannot command or order a specific invention to happen, or even dictate the popularity of an innovation.\(^{38}\)

Thirdly, we need to understand the basic issues of legal-economic interaction, which includes some basic assumptions behind law and economics -discipline. The ideas of some of the classic writers of that discipline – Richard A. Posner, Ronald Coase, Milton Friedman – shall be approached in order to grasp an understanding of the problems of legal-economic interaction – why rights exist and why they matter in an economic setting. Or do they matter? The question of legal-economic interaction may also be seen as part of a larger framework, the question of institutional change in an economic setting.\(^{39}\) The starting point is that from a micro-economic viewpoint, copyright law is about regulating the negotiation positions of the parties. A right does not only facilitate transactions, but affects resource allocation.\(^{40}\)

Fourthly, and as a consequence of our chosen concept of law and as a tool for understanding technology-initiated changes in copyright, we need to define the most common values behind copyright. These are the main values, beliefs, or even “mental models” (the concept developed by Douglass C. North), behind the development of copyright law. These are called “copyright motives”, and may be seen as a system of mutual beliefs behind copyright. A belief may not be verifiable or falsifiable as such, but its existence in the copyright debate is a fact.

Having completed the discussion on the nature of copyright motives, we shall cover the development of the Berne Convention in order to evaluate the way technological development has changed the traditional and exclusivity-based copyright doctrine, and draw conclusions. This will also mean a slight return to legal interpretation as the basic tool for legal analysis: according to Tuori, legal dogmatics provides a necessary jurisprudential “preliminary understanding” of the research field, which enables us to discuss in terms of facts and the law.\(^{41}\) The Berne Convention and its background materials are read in light of the tools of interpretation. The discussions revealed in the General Reports are important, as well as the authoritative comments of scholars. Some
economic facts of the respective fields of communication are discussed to indicate that when reaching the Berne stage, the new businesses already had developed and gained economic gravity. This happened repeatedly both in the case of sound recording and broadcasting. In addition, the parallel and simultaneous development in the United States would suggest a pattern in legislation.42

As we shall see, international law is largely inspired by national solutions. This interface is however not examined broadly, as that would require a relatively large scope of national legislation to be covered along with the Berne Convention. The references to national legislation are therefore less systematic but are taken into account in such important events as the development of the author’s right during the pre-international era, and compulsory licensing. Some examples of national law are covered to illustrate that different legal systems have faced similar issues and attempted to solve them in ways resembling each other.

In this study, one of the purposes is to indicate a legal-economic pattern of legislative behavior.43 It is clear that this kind of invariance is not something that can be logically deducted from a set of documents. Neither is the intention to provide a pure law and economics analysis, as both the ideological and historical background are also vital in mapping the copyright as a legal institution. In short, we might call it a serious attempt at “what’s going on”; it is a “story about the past”, based on available evidence, attempting consistency and logical account.44 It is still necessary to be aware of the risks of any intention to see some predetermined logic in historical events that simply was not there at the time of the events.45

I.2.1. On Terminology

Unless otherwise expressly stated, the term “copyright” is used in this study as also comprising “the author’s right”, which means that generally no distinction between the Anglo-Saxon or European tradition is made on the concept of copyright. “Neighboring rights” are discussed in their context, historically the term appears first in the mid 20th century discussion. Out of sheer reluctance to always having to refer separately to “copyright” and “neighboring rights”, when discussing general issues of the intellectual property, the term “copyright” is sometimes used to refer to the entire problem area, including neighboring rights. It is however believed that this will not cause serious problems in understanding the basic line of argumentation of this study.46 – The term “copyright doctrine” is, unless otherwise indicated, referring to the strong author’s right exclusivity that is illustrated in the Berne Convention 1886 text and the preparatory documents.47

For the purpose of this study, the focus is on technologies assisting or enabling any relevant – that is, legally relevant - use of copyright protected material. The most
important examples are sound recording and broadcasting. The most common acts enabled by the development of media technology are fixation, reproduction, transmission, retransmission, making available of fixations, distribution, communication to the public, broadcasting, and public display.48

Since the development of the communication technology is a continuous process, the list will in practice never be exhaustive in relation to the future forms of uses enabled by technology. The technology may well be simple or complicated, high tech or low tech, digital or analogue. The essential point is, for the purpose of this study, whether the new technology has had practical consequences in enhancing the possible copying of copyright protected work.

I.3. Institutional Theories of Law

Institutions as devices for human interaction have been discussed both in legal and economic disciplines. In order to form a general understanding of the problem, we shall discuss and compare some institutional theorists, Douglass C. North concerning mainly the institutional interpretation of economic history, and Eerik Lagerspetz concerning the foundations of a legal system.49 As North emphasizes economic change, and asks why economic development chooses different paths, and why certain clearly inefficient institutions manage to survive for centuries, Lagerspetz approaches from a more static point of view discussing institutions in relation to the classical works of political and legal theory.

Although both theorists are important for the purposes of this study, their role is slightly different: As North covers the interaction of technology and economy – or the institutional framework – his work is essential in relation to technological and economic interaction. Lagerspetz focuses on the foundations of the legal system, which makes his theoretical framework important in legal-economic interaction. However, both are important when the choice of the definition of law and legal framework are made.

I.3.1. The Prisoner’s Dilemma

Lagerspetz has discussed the game-theoretical origin of concepts, institutional facts, and the law. The interest is in reducing the uncertainty involved in human interaction in a society. People do not often know what the preferences of others are, or, they do not know whether the others know their preferences.

The Prisoner’s Dilemma means a situation where two parties make choices that affect each other, but they do not have information of the other’s behavior or preferences, that is, they lack the opportunity to cooperate.50
<table>
<thead>
<tr>
<th>Player 1</th>
<th>Player 2</th>
</tr>
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<tr>
<td></td>
<td>denies</td>
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<tr>
<td>denies</td>
<td>2,2</td>
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<tr>
<td>admits</td>
<td>10,1</td>
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The numbers present the value of the players’ choices. For the sake of our example, we have chosen numbers to reflect years of imprisonment. In this situation, as the players do not have information about the others’ behavior, they will eventually choose the selfish choices and end up at a lower level of optimality.\(^{51}\)

The game is “played” in the following manner: players 1 and 2 are both suspects for a crime they have committed together.

If both players deny the charges, they will end up with the lowest punishment (2, 2). However, if player 1 denies the accusation, and player 2 admits it, player 1 risks being acquitted for 10 years as player 2 will end up with only 1 year’s imprisonment. And this naturally goes *vice versa*.

If they both would admit to the charges, they would end up at position (5, 5), which is the second best alternative. Uncertain of the other party’s denial, and facing the possible consequences of the other party admitting, they both end up admitting to the charge. This represents a lower level of optimality, that is, (5, 5) instead of (2, 2).

However, if the game is not one-off, that is, it may continue, and especially, if the players’ do not know if the game will continue, the players risk being “punished” for their selfish choices.\(^{52}\)

In the situations (coordination games), where cooperation would produce better results than individual, selfish choices, or where a selfish choice can later be punished, the players share a common interest in finding some commonly agreed solution and are usually content to follow any course of action as long as they know that it will be followed by others. Such common practices are conventions, that is, means for solving coordination problems. Conventions are practices followed mainly because there is the mutual belief that they are generally followed.\(^{53}\) Conventions form the basis of institutions such as language, money, and law.\(^{54}\)
1.3.2. Institutions

According to Douglass C. North, institutions are the rules of the game in a society, or, the humanly devised constraints shaping human interaction. They structure incentives in human exchange, whether political, social, or economic. Institutions reduce uncertainty by providing a structure to everyday life.\(^\text{55}\) This uncertainty arises due to incomplete information with respect to the behavior of other individuals in the process of human interaction.\(^\text{56}\)

Institutions define and limit the set of choices of individuals. Organizations also provide a framework for human interaction, but they must be separated from institutions.\(^\text{57}\) “If institutions are the rules of the game, organizations are the players.”\(^\text{58}\)

Concerning the assumptions related to individual behavior, North makes an interesting deviation from the neo-classic assumption of “\textit{homo economicus}” being a rational maximizer of self-interest. Making choices is not only dictated by rational self-interest, but also “shared mental models”:\(^\text{59}\)

“\textit{Individuals with common cultural backgrounds and experiences will share reasonably convergent mental models, ideologies and institutions and individuals with different learning experiences (both cultural and environmental) will have different theories (models, ideologies) to interpret the environment.}”

It is noteworthy that North’s definition of “shared mental models” bears a resemblance to Lagerspetz’s definition of “mutual beliefs” as a basis for conventional facts and institutions.

Organizations are agents of institutional change. The foundation for economic theory is laid on a theory of human behavior.\(^\text{60}\) – It is striking that Lagerspetz, without an economic approach at all, applies the same behavioral considerations of the foundations of a political and legal system.

According to North, and highlighting a central theme for our study, institutions, together with the technology employed, determine the transaction and transformation (production) costs that make up total costs.\(^\text{61}\) Developing the argumentation of Schumpeter, North sees entrepreneurs as the central agents of change.\(^\text{62}\)

“\textit{Incremental change comes from the perceptions of the entrepreneurs in political and economic organizations that they could do better by altering the existing institutional framework at some margin.”}

Change is path-dependent.\(^\text{63}\) Subsequent breakthroughs in one technology, unknown to the players originally, may result in monopolist domination.\(^\text{64}\) One of the important conclusions of North in his theory of institutional change is that technological change and institutional change are the basic keys to societal and economic evolution.\(^\text{65}\)
North asks whether a single model can account for both technological and institutional change. His answer is negative:66 “The perceptions of the actors play a more central role in institutional than in technological change because ideological beliefs influence the subjective construction of the models that determine choices.”

Concerning our second theme, the study on the impact of technology on copyright does not attempt to create a single model to describe the change, but for the purpose of this study, the areas of influence have been separated into two interfaces: technological-economic, and legal-economic. It is our belief that the influence of technological change on a legal framework can best be described in this manner. Eerik Lagerspetz also approaches the problem of institutional facts from a behavioral or game-theoretical aspect:67

“There are things which exist and facts which hold only if the relevant individuals believe that they exist or hold and act according to these beliefs.”

Lagerspetz does not claim that our concepts are just conventionally agreed ways of classifying our perceptual world. He claims that the entities themselves may have a merely conventional existence.68

The standard notion of mutual belief includes a series of reiterated beliefs ascending to infinity. Lagerspetz’ definition is the following:69

It is mutually believed in a population S that p iff (if and only if)

1. everyone in S believes that p
2. everyone in S believes that everyone in S believes that p
And so on ad infinitum

Mutual beliefs form the basis of conventional facts.70 As a general epistemic transparency in a society is impossible, our knowledge about the beliefs and actions of others is always a subject of substantial uncertainty. The role of conventions in life is to diminish this uncertainty.71 Game-theoretically, the situation that the members of society are trying to solve through mutual beliefs is the classical “Prisoner’s Dilemma”. Mutual beliefs enable the development of cooperative strategies in societal action.72

A rule is not necessarily a conventional fact. It can exist because it is defined as a rule by another rule. Since this however leads to the problem of infinite regress (there must be a higher norm to justify lower, and an even higher to justify the higher norm etc.), the ultimate rules, which define other rules, must exist conventionally.73
Concerning institutional research, Lagerspetz emphasizes, as North does, the historical method:

“My thesis is that this situation (i.e. the use of money) constitutes the social fact – the fact that the referred objects are money. If we want a further explanation, it must be a historical one. How did the members of the society originally form their beliefs?”

Therefore, applying this thought to copyright research, understanding copyright as an institution requires a study of historical development of it, or at least the study of the origins of the common beliefs regarding copyright.

Thus, from North we are able to see the division of two important forces affecting economic development, the institutional framework and the development of technology. Economic development is a product of the interaction between these two elements. From Lagerspetz we learn, that law and institution are based on mutual beliefs and conventional facts, and that a modern legal system – “unlike the primitive command – obedience – system described by Hobbes and Austin” contains reflexive and symmetrical relationships. To understand the essence of copyright institutions, a historical method is necessary.

I.4. Schumpeter on the Interaction of Technology and Economy

I.4.1. The Technology Drive and the Ability to Establish a Business

In order to approach the second research question, the impact of technology on copyright, and realizing the interrelations of legal and economic disciplines, we must first discuss the general effects of technological development on the economy. A useful tool for this approach is Joseph A. Schumpeter’s theory on economic development, as his focus is on the “entrepreneurial” change; not only the ability to create inventions, but also the ability to establish a business, that is, commercial innovation. This is the core issue regarding the pressure to change the law as a consequence of technological development – for example to change copyright law.

In his book “The Theory of Economic Development”, Joseph A. Schumpeter studied the difficult question of a scientific approach towards change, that is, economic change. A change as a subject of scientific study is a “moving target”, and requires several questions to be asked and answered. It is also interesting that regardless of
the possibility of a quantitative analysis of Schumpeter’s theory, it is firmly based on behavioral assumptions regarding the entrepreneur as an agent of change.

It must be noted that the common perception of Schumpeter’s views is largely based on “Capitalism, Socialism and Democracy”, whereas the focus of interest here lies in the earlier work “Theory of Economic Development” with a different emphasis.80

First of all, Schumpeter wants to draw a distinction between an empirical approach and “metaphysical” explanations; the latter being how he sees any attempt at searching for a “meaning” of history, or any kind of linear development of mankind.81 Two facts remain: historical change, and the “unsolved but not insoluble” problem of being unable to adequately explain a given historical state of things from the preceding state. Because of the fundamental dependence of the economic aspect of things on everything else, it is not possible to explain economic change by previous economic conditions alone.82

Later, in “Capitalism, Socialism and Democracy”, Schumpeter redefined “creative destruction”:83

“(…) the problem that is usually being visualized is how capitalism administers existing structures, whereas the relevant problem is how it creates and destroys them.”

The core problem of the second research question, that is, “impact of technology on copyright” could hardly be summarized better.

I.4.2. Identifying the Mechanism of Change

Schumpeter is not interested in the concrete factors of change, but in the method by which these work, that is, with the mechanism of change.84 The theory of an economic system’s tendency towards equilibrium provides the means of determining prices and quantities of goods.85 Schumpeter is however interested in the “revolutionary” change – “the problem of economic development in a very narrow and formal sense”:86

“By “development” therefore, we shall understand only such changes in economic life as are not forced upon it from without but arise by its own initiative, from within.(…) Development in our sense is a distinct phenomenon, entirely foreign to what may be observed in the circular flow or in the tendency towards equilibrium. It is spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing.”
Schumpeter does not believe, that customers are the driving force of economic change. On the contrary, the changes in the channel of the circular flow and the disturbances of the centre of equilibrium appear in the sphere of industrial and commercial life, not in the sphere of the wants of the consumers of final products. Innovations in the economic system do not as a rule take place in such a way that first new wants arise spontaneously in consumers, and then the productive apparatus swings around through their pressure. “It is however the producer who as a rule initiates economic change, and consumers are educated by him if necessary; they are, as it were, taught to want new things (...).”

Development means carrying out new combinations of productive means. New combinations are as a rule embodied in new firms that generally do not arise out of the old ones but start producing beside them. Development proceeds in five phases:

- the introduction of a new product
- the introduction of a new method of production
- the opening of a new market
- the conquest of a new source of supply or raw materials
- the carrying out of the new organisation (of any industry)

According to Schumpeter, the creation of new combinations of productive means primarily requires credit. And, “those who lend and borrow for industrial purposes do not appear early in history”.

Needless to say, Schumpeter’s description would suit almost any form of new media technology in its infancy. His description of a general course of events in economic change leaves little doubt as to the applicability of his ideas in relation to media and copyright industries.

I.4.3. Leadership

The social environment reacts negatively against the one who wishes to do something new. Using North’s definition of institutions, the existing institutions provide constraints that shape human action. Even a deviation from a social custom such as dress code or manners arouses opposition, let alone graver cases where money is involved. “In manners economic this resistance manifests itself first of all in the groups threatened by the innovation, then in the difficulty in finding necessary cooperation, then in the difficulty in winning over consumers.” Schumpeter concludes, as recognition of the importance of the entrepreneurial spirit, “there is leadership only for these reasons.”

Economic leadership must be distinguished from invention. As long as inventions are not put into practice, they are economically irrelevant. And to affect improvement is
an entirely different task from inventing it: “It is therefore, not advisable, and it may be
downright misleading, to stress the element of invention as much as many writers do.”
Innovation to have economic importance therefore requires not only the rights related
to it, but also to be established as a part of business.\textsuperscript{92}

Schumpeter’s main idea concerning the relationship of invention and innovation
seems to be that the former is an invention of primarily technical nature that in itself
contributes little to commercial success. What is crucial from the economy’s point of
view is the impact of the commercial “innovation”. Edison’s invention of the sound
recording device was naturally important, but the commercial innovation to use it for
voice archives was clearly unsuccessful. So, an invention needs to be properly adapted
into a business innovation, and then established as part of an economic reality.\textsuperscript{93}

For the purpose of this study, the recognition of the legal rights and status of record
producers, movie producers, broadcasting companies etc. in legislation, are seen
in the sense that Schumpeter described, as acts of establishment. They have taken
place under serious pressure, and have originally been opposed in the international
congresses modifying the Berne convention. Through successful implementation, their
business models have been established as part of the copyright law. According to
Schumpeter, “the appearance of one or a few entrepreneurs facilitates the appearance
of others, and these the appearance of more, in ever-increasing numbers”.\textsuperscript{94}

Schumpeter later expanded his theory into a broader analysis of economic development.
Rejecting some of Marx’s basic theoretical assumptions, such as the surplus value
theory,\textsuperscript{95} he anyhow shared Marx’s conviction of the economic interpretation of
history.\textsuperscript{96}

There are grounds to discuss “two Schumpeters”, the early one emphasizing
entrepreneurship, radical innovation, and creative destruction, whereas the later one
sees that certain conservative elements of economic activity are in fact productive
for enhancing and maintaining technological development.\textsuperscript{97} The ability to establish
a business is not enough: for the business to have longevity, a need to keep it alive
is also required. Inconsiderate exploitation of a monopolist position cannot endure in
capitalism, unless maintained by public authority. “Outside the field of public utilities,
the position of a single seller can in general be conquered – and retained for decades
– only on the condition that he does not behave like a monopolist.”\textsuperscript{98}

Although the theories and conclusions of Schumpeter have mainly stood the test
of time and contradictory arguments, the connection between innovations and the
need for large corporate size (monopoly powers) has been questioned and rejected
by modern science; the modern approach is more appropriately, a “subtle blend” of
competition and monopoly, (...) with the role of monopolistic elements diminishing
when rich technological opportunities exist.\textsuperscript{99}
I.4.4. The Mechanism of Change from Copyright Perspective

It is common that new technologies create opportunities for entrepreneurial businesses. The creation of these businesses will later lead to legal uncertainties if not conflicts, and will be finally solved at the legislative level. In copyright disputes, it is not at all difficult to identify the social and economic pressure for change, and both the interests of the entrepreneur and the encumbent – whether it is a company or an authors’ organization.

Gallagher has suggested, referring to the application of a dynamic approach to copyright:100

“Whenever new media technologies are invented, users are presented with alternative ways of copying existing copyright works and copyright law is challenged by an external shock resulting in a ‘user-biased’ copyright balance.”

Analyzing dynamic competition and positions of companies both in the sense of a lifecycle and market position offers a tool for grasping, “what’s going on”. Also, the entrepreneur’s ability to affect the legislation in a favorable manner is an essential part of the development of any communication industry. Schumpeter described the abilities that have been needed in creating modern media industries.

From copyright history, the main technological events have always challenged the existing doctrine. The phonogram industry opposed heavily the authors’ exclusive right concerning the recordings of their works, which led to the acceptance of national compulsory licenses in the 1908 Berlin revision of the Berne Convention. During the same period, another deviation was made due to technological pressure, as the authorship of cinematographic works was opened to corporate entities rather than just natural persons. This pattern of legislative action, especially concerning compulsory licensing, was the main solution concerning technologies such as broadcasting, photocopying, and cable and satellite. Almost all these events permanently changed the economies and competitiveness of media, and also, consequently, the legal doctrine of copyright exclusivity.

I.5. On Legal-Economic Interaction

The purpose of this section is to give a short overview of the relations of rights in the economy. The intention is to walk through some methodological assumption of law and economics, and then continue to discuss issues of legal-economic interaction. This will by no means offer a complete account of the vast spectrum of legal-economic studies but will rather seek to orientate towards the issues of legal-economic interaction in copyright environment.101
Economics and jurisprudence as separate disciplines have similarities: both can be seen as sciences studying society, and thus the social dimension of human behavior. Legal issues – as part of the institutional framework - are naturally vital to economic conditions. The basic concepts of how to approach human behavior have converged in recent decades: for example, both in a legal and economic framework, the institutional analysis has revealed the importance of “mental models” or “mutual beliefs” as a basis for these disciplines. In economics, the “homo economicus” is rather seen as an elimination of human qualities necessary for the purposes of quantitative analysis, rather than a full account of the human behavior with broad explanation power. Similarly, in jurisprudence, “the sovereign” seems rather to be a system of beliefs than a logical tool to justify the existence of binding norms.

I.5.1. General Remarks

The purpose of this study requires depicting the role of rights in an economic activity. As the methodological choice is rather based on the idea of broadening understanding of legal and economic interaction, this study is not per se devoted to the discipline of law and economics. As the most important works regarding legal-economic interaction have been written in that discipline, in the following some basic problems of law and economics are discussed.

The roots of the modern concept of the interaction of law and economics can be traced back to Adam Smith, who presented the first important analysis of the functioning of the markets. An important philosopher of legal-economic issues was Jeremy Bentham, who saw human nature as rational and motivated by self-interest. Of European thinkers, Max Weber was interested in the interaction between the economy and society. However, it is justified to say that the law and economics –school of thought is mainly North American.

The start of modern law and economics is mainly attributed to the works of Ronald H. Coase and Guido Calabresi. One of the most famous representatives of the economic analysis of law is Richard A. Posner, who is commonly regarded as a representative of the Chicago school. An important figure is also Milton Friedman, who is a strong critic of government intervention and has also adapted a strict methodological view concerning positive microeconomics. – Although in the Nordic countries Law and Economics –studies are a fairly recent phenomenon, the tradition of Scandinavian Realism was interested in the dichotomy of law and power. Some of those studies identified similar interaction in terms of law and power, as is discussed in terms of law and economics. Kalle Määttä, Pekka Timonen, Vesa Kannaiinen, Mikko Välimäki, and Max Oker-Blom have applied law and economics in various areas, such as environmental law, tax law, copyright, patent and criminal law, and innovation related regulations.
The school of law and economics has its origins in the 19th century American legal realism, which started by opposing the then dominating legal formalism. The realism school saw that law is not a self-sufficient logical science, and that scholars should not seek to be self-sufficient but to understand the social ends that the law necessarily serves. The realists had an instrumentalist view of the law and recognized the interaction of legal decisions and economic changes. The amendments in law are more often than not consequences of changes in economic conditions and thinking.

The law and economics school is often seen as polarized between the Chicago school and its alternatives – the main alternative being the institutionalist school. The Chicago school is described as representing “the mainstream law and economics”, with the intention of recognizing and analyzing the economic effects of legislation on the basis of the efficiency analysis of the economy. One of the core assumptions is that legislation has negative effects on economic efficiency if and when it obstructs the allocation of resources to the most efficient use, that is, to those who value these resources the most. Another core assumption is the supremacy of the free market economy, which assumption is based on the neo-classic economic science. The parties operating in the market are assumed to be rational, fully informed and equal, among which the interaction always leads to optimal results.

The Chicago approach might also be described as a straightforward application of microeconomic or price-theoretic analysis to the law. Individuals are rational maximizers of their satisfactions in their non-market as well as market behavior, individuals respond to price incentives in non-market as well as market behavior, and legal rules and legal outcomes can be assessed on the basic of their efficiency properties. According to Posner, economics is the study of rational behavior under the condition, that there exists a scarcity of resources in relation to demand. “Economics is a great simplifier of law.”

The institutionalist school has its roots in the German tradition of the economy as public economy, and emphasizes the importance of the role of the state rather than the “invisible hand” of the market. The research method typical of the institutionalists has been described by Warren J. Samuels in the previously quoted manner.

“What is going on” crystallizes the dynamic approach: what is the status right now is important in the traditional legal-economic analysis, but where we are coming from and whereto going, is the essence of a study of the dynamics of change. - If Chicago is for deduction, the prime argument being efficiency, the institutionalists are for induction. Chicago school looks for a good theory, and has to set limiting factors, whereas the institutionalists are looking for good descriptions, and not attempting to reveal the “laws of nature” with regard to the legal-economic sphere.
The Chicago school limits its studies as a rule to rational behavior, perfect competition and symmetric distribution of information between the parties, whereas the institutionalist school recognizes opportunistic behavior, imperfect competition and asymmetric distribution of information. The institutionalist might say, there is no way one can prove that efficiency is the most important let alone the sole value in legal-economic studies or decision-making. Rights do not exist because they are efficient or rational, or make sense, but because they are upheld by the government. Not only “price-taking”, but also “rights-taking” are important.116

Probably the most famous representative of the institutionalist approach, Douglass C. North, sees that the main difference of the method in comparison to neo-classical economics is to study actual – not hypothetical – behavior.117

“Put simply, what has been missing is an understanding of the nature of human coordination and cooperation.”

Domeij criticises the traditional model approach of the law and economics, and concludes that measuring individual gains against the community (or monopolistic) losses of the community is not comprehensible.118 In his study concerning pharmaceutical patents, Domeij has also chosen a different approach, studying the effects of possible alternative allocations of resources, and whether they are based on agreement or hierarchy.119

The neo-institutionalist school shares the basic assumption of the importance of the interaction between the legal system and the economy, but the belief in the ideal nature of the free market is not as widely shared as within the mainstream law and economics. Regulation is seen as necessary to ensure the functioning and security of the market. The efficiency analysis is just one tool to be used in the analysis, along with consideration of the parties’ interests and general arguments on justification and fairness. The goal is not only a search for the most efficient solution, but a broader analysis of the markets and the interdependencies of law and the economy.120

Mercuro and Medema see as the “building blocks” of the neo-institutionalist agenda, the following: first, the individuals are assumed to rationally pursue self-interest, subject to constraint. These include the definition (as well as existence) of property rights and transaction costs, as well as the recognition of the limited computational capacity of the human mind. The second building block is the idea of wealth maximization, the search for institutional structures that enhance society’s wealth-producing capacity.121

Public choice theory may be defined as the economic analysis of non-market decision-making, including political decision-making.122 Public choice –school is concentrating to the explanation and understanding of the legislation process and the choices of the legislator.123 The legislator, who could also be observed as “a politician”, is seen as a
rational maximizer of self-interest, whose primary goal is to ensure the continuation of his own position. To preserve the position, the politician must work for the goals and needs of his support- and reference group. Other participants in the legislation process share these same basic drives, position, power, and economic benefits. At the centre stage is also the rational ignorance of the voter.

The *homo economicus* – branch of public choice theory is also interested in examining the economic consequences of bureaucratic decision-making. Bureaucrat fills in the gaps of legislation. Public choice theory also looks at the interrelationship among the bureaus of the government, bureaucracy and the surrounding special interest groups, and bureaucracy and the legislature.

**I.5.2. Coase’s Concept of Rights**

In his ground-breaking article “The Problem of Social Cost” Coase discusses the actions of business firms that have harmful effects on others. According to Coase, the traditionally suggested courses of action - the company causing the harm compensating for the harm - usually lead to undesirable results. Coase argues, that in a situation where the transaction costs of the parties are assumed to be zero, the parties will reach the optimal result, which maximizes the value of production, independently of the legal positions.

Basically, the party causing the harm (A) will compensate the other (B) for the loss of production, or alternatively, B will pay for A to limit or cease the harmful activity. The result depends on the value of the activity to the parties. As a starting point, the one who values his activity most compensates the other – and this leads to a maximal utilization of the resource.

Coase is naturally discussing an “ideal” case, in which several assumptions and limitations are made, starting from zero transaction costs. These restrict the applicability of the ideas to practical circumstances. In this ideal case, arguably, the original organization of rights has no effect in relation to the optimal economic outcome. From these starting points he is able to claim, “the reasoning employed by the courts in determining legal rights will often seem strange to an economist because many of the factors on which the decision turns are, to an economist, irrelevant.”

**I.5.3. The Role of Rights in the Economic System**

If the economic optimum is not dependent on the rights’ position, are rights then irrelevant? If so, why are rights sought however, and companies and other interest parties are lobbying heavily to obtain new rights and stop competitors or counter parties from getting any? Why do states grant rights to some but not to others? What
do they represent in the economic context, other than exceptions to the otherwise sound economic theory?

According to Posner, the creation of individual property rights is a necessary rather than a sufficient condition for the efficient use of resources: the rights must also be transferable, since efficiency requires a mechanism by which a property can be transferred to more productive use. According to Domeij, via market exchanges, a decentralized form of coordination is achieved. “The combination of property rights and the opportunities to contract about those property rights reduces the need for a centralized authority coordinating activities”.

Property rights are usually described as containing three basic elements: exclusivity, transferability, and enforceability. A right means a right to do something with the property, and the right to stop others from doing something that infringes the property right. Self-evidently, a right does not require that the owner of the right has to use the right rationally. Should however this claimed irrationality bring about greater conflicts, as in the case of monopolistic behavior (misuse of dominant position), society is usually equipped with the means to enforce counterbalancing measures. Even property right as a human right may come second compared to the interests of free market competition. – Rahnasto bases his policy suggestions for limiting exclusivity on three conditions: lack of competition in licensing, non-negotiable allocation effects, and transaction costs combined with the irrationality of private behavior.

From a practical point of view – which admittedly is an unfair basis for criticism of Coase’s theoretical approach – it seems that Coase is an advocate of the transferability of rights, and sees the role of rights from this perspective: enhancing transactions. He seems to think – and this is one of the core arguments of his essay - that court decisions do not sufficiently take this possibility into account. This is however where individual immunity and economic efficiency conflict: nobody is under any obligation to sell his right in order to maintain efficient resource allocation.

This is why the conflicts may escalate into full-scale court cases. The parties do not accept efficient solutions for several reasons – emotion, principles, subjective valuation – and see a lower risk in a court case than in free handling, conditioned by the market. In the terminology of North, we could talk of “mental models”, which may be incorrect or not corresponding to the (economic) facts. A court case may even be a part of the negotiation process, to get a “benchmark” for the contemplated agreement.

Coase draws attention to the fact that although we speak of “owning land” and using it as a factor of production, the more precise analysis is that the land-owner in fact possesses the right to carry out a circumscribed list of actions. These rights are not unlimited. It may be possible to exclude some people from using his land, but not
necessarily all. The building right may be limited, or the choice of crops or drainage system:

“If factors of production are thought of as rights, it becomes easier to understand that the right to do something which has a harmful effect (such as the creation of smoke, noise, smells, etc.) is also a factor of production. (…) The cost of exercising a right (of using a factor of production) is always the loss which is suffered elsewhere in consequence of the exercise of that right – the inability to cross the land, to park a car, to build a house, to enjoy a view, to have peace and quiet or to breathe clean air.”

To conclude, it seems justified to say that rights are important in Coase’s analysis because a system of transactions necessarily requires the definition of rights in order to be an enforceable system and therefore to lay down the cornerstone of the market economy. The market mechanism is necessary for efficient resource allocation.

According to Demsetz, on a general level, it is impossible not to have a property rights system:

“Those who speak of abolishing the property rights system make no sense unless what they really mean is abolishing private property rights in favor of state property or vice versa (…)”

Concerning copyright, in particular, rights with their background nature on intrinsic values – like the moral rights in the international copyright system – provide a challenge to the market economy, due to their non-assignable nature. In copyright, the right of paternity may not normally be assigned, and the same largely applies to the right of respect. The market for the transaction of these rights may be formed, but will probably be a difficult and long process. Therefore, human rights as a whole provide a challenge to law and economics, due to their personal and non-assignable nature.

I.5.4. The Individual Parties’ Point of View in Coase’s Context

Critics of Coase have pointed out that the assumptions of transparent information, zero transaction costs, and the lack of strategic behavior in negotiations, are assumptions remote to the economic practice. This remark is both relevant and slightly unfair, as Coase does not attempt to discuss real circumstances. However, in this study we shall briefly evaluate the basic standing point of the Coase theorem from an additional (critical) point of view, that is, what is the role of rights in transactions from the parties’ game-theoretical point of view. First of all, it seems that the point Coase is making applies very well to a situation where a lesser economic interest is protected by law against a greater economic interest. The role of rights even in this situation is
not necessarily irrelevant, as the popular interpretation of the Coase theorem would suggest. But if the situation is the opposite, will the result be different?

Coase gives an indication of the problem in his article sections III (“The Pricing System with Liability for Damage”) and IV (“The Pricing System with No Liability for Damage”), discussing the damage issue of raising cattle and cultivating land. Coase argues that both cases (liability or no liability) provide the same ultimate result. The rationale of the former paragraph (liability of the rancher) is the following:

“I think it is clear that if the cattle-raiser is liable for damage caused and the pricing system works smoothly, the reduction in the value of production elsewhere (emphasis: MH) will be taken into account in computing the additional cost involved in the increasing of the size of the herd.”

In the second paragraph, there is, however, a reservation as to the symmetry of the situation (no liability for the rancher):

“(…) the farmer would only be willing to pay this sum if it did not reduce his earnings to a level that would cause him to abandon cultivation (emphasis: MH) of this particular tract of land.”

Therefore, it seems at least initially that the situations are different judging from the parties’ level: whereas in the first case the farmer is entitled to receive full compensation for the loss of production, in the latter case, he suffers either the additional cost of maintaining the production (paying the cattle herder to reduce his activity) or the loss of the production altogether. So, judging Coase’s text from the parties’ perspective, the situation is different in these cases.

As Posner points out, the initial assignment of rights may affect the relative wealth of the parties. This, however, does not undermine Coase’s conclusion that efficiency is unaffected by the initial assignment of rights if transaction costs are zero.

As the purpose of this study, however, requires an understanding of the functioning of legal rights in an economic environment, we are entitled to make yet another comparison of the economic outcomes of different legal positions.

I.5.4.1. Coase on Coase: A Critical Observation on the Coase Theorem

There are several versions and interpretations of the famous “Coase theorem” available. Although not introduced as such by Coase himself, the theorem is based on the aforementioned article “The Problem of Social Cost” in which Coase further developed some of the ideas already presented in his earlier works. The term
“Coase theorem” was apparently first used by Georg Stigler who defined it as follows: “…under perfect competition private and social costs will be equal.” The theorem has even given rise to quite wide interpretations as to whether legal rules have any function at all.

Coase himself has returned to the theme several times. In the introduction of the book “The Firm, the Market and the Law”, he once again explains the background idea in the following manner:

“I showed (…), that if transaction costs were assumed to be zero and the rights of the various parties well defined, the allocation of resources would be the same in both these situations.”

Coase continues to present the basic cases, which may be called Case 1 and Case 2:

Case 1:

“In my example, if the cattle-raiser had to pay to the crop-farmer the value of the damage caused by his cattle, he would obviously include this in his costs.”

Case 2:

“But if the cattle-raiser were not liable for damage, the crop-farmer would be willing to pay (up to) the value of the damage to induce the cattle-raiser to stop it (…)”

Coase continues the sentence to the following conclusion, which, however, is more complex than it may appear prima facie:

“(…) so that for the cattle-raiser to continue his operations and bring about this crop damage would mean foregoing this sum, which would therefore become a cost of continuing to raise cattle. The damage imposes the same cost on the cattle-raiser in both situations.” (italics: MH)

This conclusion calls for a critical analysis of the situation. Let us assume that the value of ranching that does not cause damage is A. The value of the part of the ranching that causes the damage is X. The value of farming is E. The ranching causes damage to the farmer worth Y.
Case 1: rancher is liable

In Case 1 the rancher must pay $Y$ to the farmer in compensation for the damage or stop the production $X$. Therefore, his production is worth $A+X-Y$.

There are basically three alternatives: a) $X>Y$ b) $X<Y$ or c) $X=Y$.

Case 1a: the value of ranching $X$ is greater than the damage to farming

In Case 1a, the rancher may compensate any amount up to $X$, and the compensation makes economic sense to the rancher in comparison to ceasing to produce $X$. In other words, against compensation of $Y$ and some amount up to $X-Y$, the rancher is able to produce $A+X-Y$. For the sake of clarity, this position is described here as $A+$. This is beneficial for the rancher, as the alternative – stopping $X$ – would cost more.

The farmer’s position will stay neutral or improve. The farmer receives $Y$ compensation for his loss $Y$, which equals 0. However, the compensation may exceed $Y$ by $(X-Y)$, that is, finally $E+(X-Y)=E+$. The farmer has in fact an opportunity to benefit from the surplus value of the rancher’s production $X$.

The expressions $A+$ and $E+$ essentially mean that the final outcome is dependent on the outcome of the negotiation between rancher and farmer.

Case 1b: the value of farming is greater than ranching $X$

In Case 1b, the rancher must pay $Y$ to the farmer which amount exceeds the value of the damage-causing production $X$. Therefore, either the rancher suffers this loss, or - as advisable - stops $X$, because the damage $Y$ caused by $X$ is more expensive.

The position of the rancher is that he will reduce his production to level $A$.

The position of the farmer will stay intact ($E$).

Case 1c: the values are equal

In Case 1c, the rancher compensates farmer by an amount that equals respectively damage $Y$ and the damage-causing production $X$, or alternatively, stops $X$.

The rancher’s production will therefore stay at level $A+X-Y = A$, since $X=Y$.

The farmer’s position will stay intact ($E$), in either of the alternative situations.
Case 2: the rancher is not liable

In Case 2, the value of the ranching would still be \( A \), the value of the damage-causing part \( X \), and the amount of damage \( Y \).

What happens if the rancher is not liable for the damage?

To answer this question requires, as with Case 1, the inspection of three separate cases: either a) \( X>Y \), b) \( X<Y \) or c) \( X=Y \).

Case 2a: the value of ranching \( X \) is greater than the damage to farming

First of all, in Case 2a (\( X>Y \)), the rancher could continue the production and continue to cause damage worth \( Y \) to the farmer, since the rancher has no liability concerning the damage \( Y \). Concerning the position of the farmer, it is not economically rational to offer a sufficient amount to the rancher in order to have him stop producing \( X \). Therefore, the rancher’s production value would remain at \( A+X \).

In Case 2a the farmer would suffer \( Y \), that is, end up at \( E-Y \).

Case 2b: the value of ranching is lower than farming

In Case 2b (\( X<Y \)), if the farmer wants to stop the rancher from causing damage \( Y \), the farmer will offer to pay the rancher an amount (up to) \( Y \). After this, the rancher agrees to reduce his production level and stop the production \( X \) that is causing the damage \( Y \).

The rancher reduces his production to the level of \( A-X \), but against \( Y \) compensation, which leaves him in the position \( (A-X)+Y \), or \( A+(Y-X) \).

Now, since in Case 2b the value of the particular damage-causing part of the ranching \( X \) is lower than the damage \( Y \), this means that \( Y-X>0 \). The rancher has no reason to accept anything else but to end up at a value of production \( A+ \).

The farmer’s loss is up to \( Y \) in comparison to the starting position, and he will end up at position \( E- \).

Case 2c: the values are the same

In Case 2c, the rancher will stop production \( X \) against equal compensation \( Y \). Therefore, he will end up at a level of \( A+X-X+Y = A + Y \).
The farmer is no longer harmed (Y), but he will have to compensate fully (X), which equals Y. His loss is therefore Y, and his final position E-Y. Alternatively, and leading to the same conclusion, he could allow the rancher to continue producing X and suffer the damage.

**Conclusions**

Following this logic, it is difficult to see how these two basic cases (liability – no liability) would be symmetric. The damages or gains to the parties are not the same in these different situations.

Looking at the most obvious cases, where the values of the damage and the production causing the damage are the same, that is, Cases 1c and 2c, first, if the rancher is liable, he will pay for the damage fully or stop the damage-causing production. Both parties will stay intact. If the rancher is not liable, the farmer will either suffer the damage or offer to fully compensate the rancher for stopping his damage-causing production. In this case, the farmer will clearly suffer Y either by damage or compensation equal to the damage, and the rancher benefits A+Y. But were not these Cases 1c and 2c supposed to be symmetrical?

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<tr>
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<th>Rancher</th>
<th>Farmer</th>
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<tr>
<td>Case 1a (X&gt;Y)</td>
<td>A+(X-Y)=A+</td>
<td>E+(X-Y)=E+</td>
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<tr>
<td>Rancher liable</td>
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<tr>
<td>Case 1b (X&lt;Y)</td>
<td>A</td>
<td>E</td>
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<td>Case 1c (X=Y)</td>
<td>A</td>
<td>E</td>
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<tr>
<td>Case 2a (X&gt;Y)</td>
<td>A+X</td>
<td>E-Y</td>
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<td>Rancher not liable</td>
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<td>Case 2b (X&lt;Y)</td>
<td>A+</td>
<td>E-</td>
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<tr>
<td>Case 2c (X=Y)</td>
<td>A+Y</td>
<td>E-Y</td>
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Comparing the other parities (Cases 1a and 2a, and Cases 1b and 2b respectively), we see the same pattern: liability changes the parties’ economic positions. Being under no liability to compensate for the damage improves the position of the damage-causing party, and weakens the position of the damage-suffering party. Comparing Cases 1a and 2a equally illustrates this, as does the comparison of Cases 1b and 2b.
This also indicates that a legal right not only has the character of enabling transactions, if clearly defined, but it may also act as a protective device against the threat of negative economic compromise, that is, ending up at a lower level of production value. The allocation of resources does not seem immune to the allocation of legal rights. Therefore, on the basis of this example – which however is rather thorough and initially offered by Coase - it is not possible to confirm the symmetry of the liability and non-liability cases.

Another point raised by this example is that the bargaining that Coase discussed in “The Problem of Social Cost”, evidently can only take place when the legal distribution of rights comparatively differs from the economic distribution of resources, that is, the initial position is not efficient (Case 1b). This is the case, where the law protects the lesser economic interest. If the law protects the more important or equal interest, there is basically no cause for bargaining, and the legal position can be said to be efficient.

Yet another question could be imposed on Case 1b. Is the outcome of bargaining really efficient? This problem is clearly illustrated in the example put forward by Cooter and Ulen. In their example, the activities of the rancher impose damage on the farmer. The rancher is liable for this. If the cost for building a fence would be 50 USD to farmer, and the rancher’s cost 75 USD, it is economic for the parties to agree that the rancher pays 62.50 USD to the farmer for building the fence, and thus, the surplus or gain is divided by the parties.151

But is this an efficient solution? The building of the fence costs optimally only 50 USD. The rancher ends up paying 12.50 USD extra simply because the farmer has a right and the economic position to demand this, not because this sum would somehow improve the overall productivity.

This is also a crucial point for the main themes of this study, as here the issue of compulsory licensing kicks in. If the farmer would be forced by a third party, that is, a public authority or arbitration board, to accept the compensation of 50 USD instead of the commercially negotiated 62.50 USD, the rancher would only pay the actual cost of the fence building. Compulsory licensing could therefore be used to fix the price at the economic optimum.

This is, however, not the only or even primary possibility in setting the price level in compulsory licensing. The compulsory licensing regime may offer the decision maker an ample amount of discretion as to whom it may target subsidies or whether, for example, only a cost-based remuneration scheme is allowed. Therefore, it offers the possibility or risk to provide economically both optimal and in-optimal solutions, depending on the point of view taken.152 The application of compulsory licensing reflects a general mistrust to the outcome of free negotiations due to the restrictions or inadequacies of
the markets or its participants. From the basis of our “party viewpoint” analysis, we are clearly able to claim, that legal rights may give ground for such behavior.

I.6. Copyright and Legal - Economic Interaction

The right to ownership of property is one of the most important cornerstones of the legal system, and has been widely studied by important classic works of legal and political philosophy. The debate is perpetual as the basis of economic production develops along with technology, and requires evaluation of the institutional framework of economic activity. According to Drahos, during the era of feudalism, the core property issue was land ownership, whereas in modern society, the core is the ownership of information.\textsuperscript{153}

The protection of property is closely related to the production of goods or added value in society. Initially, the means of producing added value and thus improving society's welfare will enjoy a high level of legal protection in any society. The development of legal norms may be interpreted and explained in various ways and from different angles. But whatever the chosen analytical approach to law is, if the relation of the legislative process to the production of economic values is overlooked, only half of the story will be told. This is why the interaction of law and economics plays a crucial role in studying the legal circumstances of any economic production.\textsuperscript{154}

As a rule, the development of information technology constantly provides easier methods for access to broader choice, and at lower price level. The ‘choke point’\textsuperscript{155} – or point of control – to protect the incumbents’ interests may be maintained legally to resist change for quite some time (e.g. broadcasting monopolies or programming quotas), but history seems to indicate that new technologies with broader choice will eventually break through. The ability of technology to constantly reduce the transaction costs especially related to transportation of goods, and transformation costs, has not and will not cease, and will continue to shape the economy and society.\textsuperscript{156} Although this “technology optimism” is not completely flawless and leaves room for criticism, it is, however, relatively clear that this mechanism of reducing transaction and transformation costs is the engine of technological development, and contributes to economic development. The institutional framework of course has an important effect on the possibilities of realizing the potential offered by technological development.\textsuperscript{157}

Any study on copyright will encounter and identify the historical argumentation that favors the strongest possible copyright protection based on an approach emphasizing the human rights aspects of copyright. A great deal of idealism based on altruism seems to have been related to the copyright legislation and the “mental models” behind it. The protection of the achievements of the human creative spirit is one of
the noblest of causes. However, when economic production of added value fuelled by emerging technological opportunities seeks new forms of legal protection, idealism may turn into a camouflage argument for the lobbyists.

Discussing the law, we necessarily discuss enforceable sanctions. It seems that the Internet reduces transaction costs related to the distribution of music, and as a side effect also enables piracy. Now, is the real problem in this situation the insufficiency of law? That is, should the music industry be entitled to reduce their own transaction and transformation costs by the aid of the Internet and yet maintain previous prices and thus make a higher margin? Or should the industry change course and let the customers benefit from the reduced transaction costs. Another point is system-related: a law that cannot be enforced should not be a law, because otherwise we are questioning the accountability and legitimacy of the legal system as a whole by maintaining inapplicable laws.

But there might also be a paradoxical problem in the opposite direction: let us assume, that the technical means of controlling copyright protected works are the strongest possible and as effective as conceivable. Then, what happens to fair use, or other related public policy tools? Fair use – or free private use in the European vocabulary - has intentionally been allowed by society, as part of its information policy, and also due to the consideration of efficiency as to what extent society sees a call for public control. But proprietary technical systems might deprive the legislator of the ability to control and allow for the free use of information in their jurisdictions.

As discussed before, technological success is mainly due to its ability to bring about reduced transportation and manufacturing costs, which enables the creation of new business opportunities and new activity in the information goods marketplace. The creation of well functioning licensing practices – as part of the institutional framework of copyright - has brought success to the content businesses. The Internet seems to bring about a new challenge, but is this challenge in fact much different from the earlier historical breakthroughs of new important information or copying technology?158 That is, are we only once more discussing the same issues, reduction of transaction and transformation costs, as when sound recording or radio came about, or when VCRs and cable and satellite distribution broke ground?

An important lesson in discussing the interaction of technology and the law is that one should not only try to understand the lessons of history, but also, on the basis of the analysis, make an effort towards the present and the future, and ask, “what is going on” – as Warren J. Samuels suggests – and make an attempt to see, what are the central trends in the current development. The power struggle of the information economy is global and perpetual, and must be studied critically. This is not possible by means of legal dogmatics alone, but requires an approach that takes into account the production structures of the information society.
I.6.1. The Players and the Game

According to Einhorn, no clear definition of a copyright market has ever been stated. For instance, market harm may be difficult to identify as the market is all the time evolving. Establishing standards for copyright market can be a “tall order”.¹⁵⁹

The approach to copyright market in this study is based on the idea of copyright as a pre-set negotiation position of the parties. The purpose of the copyright law is to affect the balance, either maintain or change, depending on the novelty or maturity of the business. Copyright affects through interfaces between the operators in the market.

At first sight, it seems justified to say that the main interests represented in the field of copyright are the following:

- the author’s/producer’s investment interest
- the public interest, as both the informational needs of the general public, and the controlling interest of the political establishment
- the enabling and encouraging of the development of copying technology
- the author’s right as a human right

On a broader scale one might also claim, that the history of copyright has been a battlefield of finding a proper balance in the copyright legislation of these partly colluding and partly colliding interests. It is not vastly exaggerated to claim that technology pushes forward copyright development. We may also use the language of Lagerspetz and North, and call these “the mutual beliefs” or “mental models” of the basic interests in the field of copyright. The history of international copyright protection indeed seems an endless chain of efforts to adjust the legislation to cope with the economic and societal issues raised by constantly emerging new copying technologies.¹⁶⁰

Gallagher divides the market into four elements: owners, secondary creative users, secondary productive users, and consumers.¹⁶¹ The division applied in this book however concentrates on the relation between copyright holders and productive users, which is the main interface for compulsory licensing.

The importance of the technological development to the history of copyright is highlighted by the continuous emerging of new technologies, which on the one hand have increased the possible usage of creative works, and on the other raised concerns on the sufficient protection of legitimate copyright interests. These stages or levels of technological breakthroughs may be listed as follows:

- initial stage: live performance, public display of a work, musical concert, theatre
- printing: reproduction of printed work
In the advent of every new form of communication, the international copyright conventions have needed amendments to address the changing reality of business practices and the bargaining positions of the relevant parties. It is our belief that the game that starts when copyright conventions are changed, fulfills the essential criteria of the “Prisoner’s Dilemma” situation\textsuperscript{162}, and is Pareto-optimal from the point of view of the players, that is, compulsory licensing from the author’s perspective is better than fair use.\textsuperscript{163}

This study concentrates on those changes and their technological impacts, which can be seen as the most important and profound concerning the changes of the scope and structure of international copyright legislation. These are: sound recordings, movies/cinema, broadcasting, and the Internet. Others are dealt with on a more general level. Mobile technology is discussed from the point of view of possible challenges to the existing system of international copyright protection. It is our claim that mobility in communications will become a great “integrator” of different, if not nearly all of the previous, forms of the use of copyright protected material.

\textbf{I.6.2. Some Notes on the General Importance of Technological Development in Cultural Industries}

It must be emphasized that since the research object is copyright this necessarily means studying from microeconomic rather than macroeconomic perspective, that is, focusing on the rights holder/user dichotomy. However, some notes on the macroeconomic side of copyright and technological development may give some light as to the magnitude of the problem area.

Bengt Domeij has in his thesis approached the question of the overall economic effects of technological development. Domeij refers to studies showing that 80 per cent of all economic growth between 1909 and 1949 (per an hour of work, agriculture excluded), resulted from technological development and not because of an increase in the use of capital. Another study has led to the conclusion that after the Second World War, research and development has increased the GNP by approximately one per cent.
per year, this being one half of the average annual economic growth. Studies indicate that out of the national economic growth 75 per cent is caused by technological development.\textsuperscript{164}

With regard to the cultural industries (broadcasting, publishing, music, movies\textsuperscript{165}) and computer programming, studies exist concerning the economic importance of those industries in the national economy.\textsuperscript{166} Evaluations on the general importance of technological development in these areas are rather meaningless, as most of these cultural industries may \textit{per se} be claimed to be, in fact, products of relatively late technological development.\textsuperscript{167}

According to Towse, the cultural industries are the products of technical developments of sound recording, movies, video, television and computers, which are, among other things, like the development opportunities of global trade, responsible for the “superstar phenomena”\textsuperscript{168}, that is, the huge incomes for the “top 100” pop stars in the world. This phenomenon has developed as a consequence of technological inventions, and their economic establishment in the business landscape. This is also a consequence of the globalization of modern media technology.\textsuperscript{169}

How the importance of technology can be approached as a separate phenomenon seems to have very much to do with the lapse of time and the perspective chosen. Printing was a technological breakthrough in the 15\textsuperscript{th} century, as well as sound recordings in the late 19\textsuperscript{th} century. From the contemporary view, they are however old technologies with established norms and business practices, and not as much regarded as modern technological innovations. Therefore, rather than trying to define what is new and what is old technology, it is more appropriate for the purposes of this study to discuss the technological breakthroughs of new innovations in their time enabling the creation of new business models and finally being transformed into legal-economic reality.

So, as an initial conclusion, it is quite clear that the importance of technological development has been and is immense in the copyright related areas, which stand in their present form mainly due to the development of new copying and distribution technologies and their interaction with the institutional legal framework of copyright.

As discussed earlier, Schumpeter does not see the pure technological invention as being of much importance without economic gravity that is gained by successful implementation. According to Schumpeter, the objective of technological production is determined by the economic system. Technology only develops productive methods for goods in demand. Economics is interested in existing needs and means, and may create them, whereas technology is interested in “the basic idea of methods”. Economic logic prevails over the technological.\textsuperscript{170} – A decade ago, neither the Internet nor mobile communications were mass successes, and if asked, no broad demand for
these products would likely have existed. We may assume that when new technology
brings about new means of production, the needs may be identified simultaneously in
the economic environment.

Schumpeter describes the mechanism of technological and economic interaction:

“The people who direct business firms only execute what is prescribed for them
by wants or demand and by the given means and methods of production.
Individuals have influence only in so far as they are consumers, only in so far
as they express demand. In this sense indeed every individual takes part in the
direction of production, not only the one to whom the role of director in a
business has fallen, but everyone, especially the worker in the narrowest sense.”

He goes even further to claim, in no other sense is there a personal direction of
production. The means of production and the productive process have in general no
real leader, or rather the real leader is the consumer.

When discussing the impact of technology on copyright, we therefore necessarily
do discuss a complex field of legal-economic interaction. The evolutionary path of the
legal-economic system is derivative of the legal-economic policy choices that are made
over time. These are, on the other hand, influenced by business interests. It seems
that as the technological change may challenge the legal doctrine (that is, established
market conditions and legal norms), it is the economic leadership that contributes to
the change of the legal doctrine.

I.6.3. Copyright and its Enforcement

To be meaningful, copyright must not only be transferable and enable excludability,
but also be enforceable. A right means something that one is able to do (or leave
undone), and others cannot stop it. Copyright means a negative right to stop others
from doing something:

“The production of a man’s brains may be protected if, and to the extent
that, the law will recognize that they are private property. A thing cannot be
described as property unless one has a legal right to stop others from using
it, either absolutely or (at any rate) on condition that a suitable payment is
made.”

On the other hand, for the purposes of this study, rights are not rights because they
are pre-existing in some metaphysical sense, or because of some moral conviction in
the line of “Natural Law” scholars. Rather, rights exist because they are protected
by the government.
In the early days of print, an individual author could himself to some degree effectively control his own copyright, that is, not let others copy his work. This was due to the initial investment needed, and the possibility of controlling the market. However, when technological development has enabled copies of printed work to be widely distributed, even globally and electronically, the direct control of copyright is lost. Technological development thus brings about the need for society to lay down proper sanctions for unauthorized copying or distribution of unauthorized copies, since it is beyond the author’s immediate control.

According to Ricketson:

“Collective management will not usually be relevant at the point at which rights are initially exploited by an author, for example, at the time the initial publishing contract for a book is signed or the initial agreement to commission a work of music or art is made.”

It is justified to point out that this – that is, the possibility of immediate control - was beginning to falter before the Berne Convention was created in 1886 due to cross-border piracy. But the actual mass use issues brought about by technological development were only to emerge during the 20th century.

I.6.4. The Choke Point

When the technology for producing copies is expensive, as in the case of printing, recording, or broadcasting, a natural “choke point” – that is, a point of control or exclusion - exists: since the investor/producer controls the investment, and it is not easy to introduce competition, there is at least an initial reasonable certainty that copyright is effective. The creation of a choke point can either take place through technology or enforceable legislation. This becomes the main issue in the execution of copyright. “The choke point” is also an essential precondition for the actual enforceability of copyright, and provides a bargaining position for the rights holder.

The choke point can be created in basically two ways that do not rule out each other: either you control the means of production in a way that allows you to keep a natural strong control over your work (“broad shoulders” either a technical or other de facto control), or the legislation grants you a certain enforceable right to your intellectual property, and sufficient means for the execution of the rights.

When the threshold for the access to the copying technology is low and the price for copying is also low, the choke point is lost, and copyright becomes difficult to enforce or even totally unenforceable. The development of the copying technology has, for the past half a century, followed this path, introducing cassette copying, photocopying
and later – and most importantly - digital copying. It could be claimed that from a technological point of view, the control of the use of the copying technology has since shifted towards the user, as if the user in fact today is the investor for copying technology in the form of computers and software. The copyright institutional framework has had to adjust to this and introduce mass use licensing (e.g. compulsory licensing) and platform fees. These innovations are already far from the original idea of copyright exclusivity. Also in comparison to the 19th century, the investment required for copying technology is today very modest.

I.6.5. Public Good and the Neighborhood Effect

Economists have described the key aspects of public good in a variety of ways, including “non-rival”, “supply jointness”, and “undepletability/non-excludable”, each referring to the phenomenon that the good may be consumed by any number of users without an additional user’s consumption depleting the supply or prejudicing another user’s consumption. Copyright subject matter possesses this undepletability and thus contains some public good characteristics. Once a work of authorship is created, the cost to the author of one person’s consumption of that copyright good is zero.

In earlier economic theory, public goods have been defined also as non-excludable, but modern theory divides public goods into excludable and non-excludable. All public goods share an undepletable quality, but some are more amenable to exclusion than others. In some areas, the costs of exclusion are high, such as national defense or clean air. In others, practical, technical, legal, or other means may, although giving rise to costs, enable either the effective exclusion from the benefits of the public good or the enforceability of payment for use.

According to Ordover and Baumol:

“Knowledge (information) is quite unlike any other productive asset because of its public good character, with all the well-known problems of such goods. Low diffusion costs for the knowledge asset suggests that public policy should encourage its widespread use, and hence suggest that there should be a minimal amount of property right in the asset. But if the owner of the knowledge asset has only minimal property rights, she may not be able to appropriate the initial investment costs. As a result, the initial investment may not be undertaken. This argues for public policies that make inclusion cheap, to the detriment of diffusion.”

The public good character of information thus illustrates the dichotomy between investment incentive, and the interest for the widest possible use or access of the information.
Concerning public good characteristics, the role of government regulation is important, as the government may try to tackle the recouping of investment versus free access dilemma. Milton Friedman has compared different types of highways and public parks in a manner that is interesting also from a copyright point of view. According to him, covering the costs of general access roads, involving many points of entry and exit, would be extremely expensive if a charge were to be made for the specific services received by each individual. This high cost would be due to the necessity of establishing tollbooths or the equivalent at all entrances.\(^{187}\)

It is important to compare this line of thinking to the dichotomy of the platform levy and digital rights management discussion. The solution applied, for example, in the EU Infosoc Directive\(^ {188}\) is to accept the principle of fair use in case a levy mechanism is implemented, but the availability of the DRM (Digital Rights Management) alternative has to be taken into account. Economically, the crucial question in the future will be the cost of these alternative systems. This is clearly a comparable case to Friedman’s.\(^ {189}\)

If Milton Friedman’s analysis were ‘translated’ into Lester Thurow’s terminology, we might start with the notion, that the efficient copyright control requires a choke point. Too many choke points however make the cost of control prohibitive, making bargaining impossible. In a similar situation, concerning highways, Friedman suggests a gasoline tax instead of road tolls, although this method does not allow the payment to be identified in relation to the particular use. The lack of the ability to correctly allocate taxation provides the following theoretical problem: if taxed gasoline is used on roads with a separate payment, the tax should be refundable for this part.\(^ {190}\)

However, in the case of the long-distance turnpikes with a high density of traffic and limited access, the situation is different; the cost of collection is small, and because of alternative routes, there is no serious monopoly problem.\(^ {191}\) Therefore, as Friedman says, no reason exists why these should not be privately owned and operated.\(^ {192}\) This would provide an analogy to the copyright legislation in the early era, that is, printing.

According to Friedman, both monopoly and the neighborhood effect – someone imposing obligations on others or using their investments – may produce a situation where the market does not operate optimally and government intervention may be needed to “enforce the rules of the game”.

It seems justified to say that the problem of the “choke point” emerges when the technology concerning the dissemination\(^ {193}\) of copyright protected works enables a wide amount of untraceable individual use and does not allow economically efficient means for tracing the use, that is, when the cost of tracing becomes prohibitive. In this situation, using Friedman’s example, the government (legislator) is likely to intervene and create an arrangement simulating taxation: either compulsory licensing or a
platform levy. We shall later see that under certain technology-related conditions, this is exactly what has happened.

Footnotes

2 See Lessig. Välimäki II pp. 40-49 on the idea of creating intellectual property without the necessity of proprietary rights.
3 Much of the mainstream copyright research may be classified in this respect. As examples of works with this approach could be mentioned e.g. Beier, Brennan, Cate, Einhorn, Heinemann, Merges, Peukert and Senftleben.
4 David p. 8.
5 Berne Convention Act of Stockholm of July 14, 1967, Art. 2bis (3) (right to make collections of works), Art. 8 (translations), Art. 9(1) (reproduction), Art. 11 (public performance, communication to the public), Art. 11bis(1) (broadcasting, rebroadcasting), Art. 11ter (public recitation), Art. 12 (adaptations, alterations of works), and Art. 14 (cinematographic adaptation). – The reference to exclusivity doctrine refers to the early formulation of the 1886 Berne Convention, especially in relation to the important provision concerning translations. As the Berne Convention was created in the late 19th century to correspond to the requirements of the increasing foreign trade between nations, the exclusive right to translations was a central element of the convention.
6 See the “Copyright” definition in the WIPO Glossary of Terms of the Law of Copyright and Neighbouring Rights, p. 59: “Generally considered to be the exclusive right granted by law to the author of a work to disclose as his own creation, to reproduce it and to distribute or disseminate it to the public in any manner or by any means, and also to authorize others to use the work in specified ways.”
7 Compulsory licensing and its features shall be discussed at length in the third chapter.
8 WIPO Glossary p. 50.
9 The research question itself puts the national law into a secondary category. Therefore, for clarity, it is emphasized that this study is not about Finnish copyright law in particular. Material from national legislation is used merely in order to give examples of the implementation of copyright conventions or development of copyright principles in historical context.
10 Kalle Määttä divides innovation process models into two main categories: the Schumpeterian, or cascade, model of the innovation process, and the Arrowian, or incremental, model. Määttä II pp. 40-. Määttä criticizes the Schumpeterian model for overlooking the innovative potential of small and medium sized companies (p. 42), whereas the Arrowian approach, emphasizing the creative potential of smaller companies and competition through incremental development may be criticized for “competition optimism” (p. 41). – Schumpeter is discussed relatively broadly in this study, but since the emphasis is on the young Schumpeter, that is, the book “Theory of Economic Development” (originally published in 1911), the “large company approach” usually associated with Schumpeter is not applied here. Moreover, the difference between young Schumpeter and Arrow seems to be that young Schumpeter discussed revolutionary innovations, whereas incremental innovations do not as a rule have such devastating effects as discussed in this study, that is, like the innovations of sound recording and broadcasting.
11 On discussion on weighing or balancing copyright interests in relation to the human rights system, see later discussion on human rights and copyright, especially Eldred v. Ashcroft. A recent statement in Finland from Parliament’s Constitutional Law Committee, PeV 7/2005.
12 Legal practice may however provide the means for preliminary understanding of jurisprudence, and is therefore a vital element of legal interpretation, see e.g. Tuori p. 161. – On the need for dynamic aspects in law and economics, see Määttä II p. 11.
13 See Tuori e.g. p. 310: The legal concepts chosen are not normatively “innocent”.
14 On dynamism in IPR studies see e.g. Menell p. 134.
15 See Lagerspetz and the discussion below. E.g. Drahos and Braithwaite refer to the lack of “shared understandings” in relation the TRIPS process, Drahos-Braithwaite, p. 368.
16 See Tuori. In e.g. pp. 28-29, Tuori identifies some of the present problems of modern law in the following division: either jurisprudence must abandon the strict is/ought division (Hart), or assume a hypothetical norm (Kelsen) as a justifying factor. Tuori rejects both alternatives, and offers a program of critical positivism based on immanent and non-arbitrary criticism, that is, criticize from within rather than outside the system. Immanency of criticism is also linked to the problem of the observer being part of the observed practice, pp. 326-327. –Siltala II, on internal and external perspectives to law. - In this study, copyright is seen as a system itself, but also in interaction with the economy and technology. By the use of the Berne Convention documentation, the intention however is towards systemic or immanent criticism. - See also MacCormick – Weinberger on a coherent interpretation of law, pp. 51-52, and Niemi pp. 89-90.

17 On the logical problems of infinite regress and the solutions for it, see Tuori e.g. p. 21, p. 283, Lagerspetz p. 6.

18 The development in this direction is also recognized at the level of national states. The “welfare state” reflects a development from coercion to “reciprocal insurance” (Tuori p. 73). Tuori on Habermas, pp. 89 – 136, on hermeneutic interpretation p. 313. – On hermeneutics, Minkkinen pp. 120-, Niemi pp. 91-92.

19 These notions, like very little in the history of philosophy, are completely new. Several scholars contemplating legal theory have used comparable concepts in the same context, e.g. Max Weber (Tuori p. 51), Francois Ewald (Tuori p. 64), even Habermas’ communicative theory and the ideal discourse targeting a common (mutual) understanding may reflect a similar idea (Tuori p. 73, 91, 113). – Going further back in the history of philosophy, we may find the notion of “mutual needs” as a basis of human society in Plato’s “The Republic”. It has been claimed that Plato has less emphasis on sovereign than contractual-based ideas on the foundations of the state, see Plato p. 104.

20 Both Schumpeter and North have paid their tributes to Karl Marx. In this study, in a sense following Schumpeter and North, the “direction” of the impact of technology is largely seen from economy to law. – On the Marxian concept of law as a superstructure determined by economics, see Harris p. 251. - However, e.g. Tuori (p. vii) has warned of “economism” that is closely related to the Marxian assumption of the organic dependence between the economy and society’s superstructure. - Due to the unpredictable nature of the technological development, this study mainly sees law as a consequence rather than a guiding instrument. Still, several other argumentative aspects of the impact of technology are discussed as law is largely seen as a system of “mutual beliefs”. – On teleological or goal-oriented approach to law see Tuori II. -

21 Määttä II, p. 27-, illustrates the “flip side of the coin”, that is, the regulatory impact on innovation. This is however a much wider problem than the one discussed in this study, which concentrates on the technological innovations and their repercussions in copyright law.

22 MacCormick – Weinberger pp. 44-45. See e.g. discussion on John Searle’s “proof” that normative statements can be derived from factual premises, and MacCormick’s and Weinberger’s criticism of it, pp. 21-24. – Tuori e.g. p. 7. - From economic discipline, Friedman I divides economics into three categories based on the “is/ought” division: positive (“is”), normative (“ought”), and additionally, “arts”, that is, practice of economic knowledge and abilities. Friedman’s program for economics as a science to develop further towards higher scientific accountability is to separate positive and normative elements of economic discipline. Both are necessary but serve a different function. – Concerning the “insider” problem, Friedman tracks its philosophical routes to Gödel’s theorem.

23 Tuori p. 310, 315-316.


25 North p. 131.

26 Tuori, e.g. pp. 326-327.
See Kuoppamäki p. 12 on “eclectic” method.
33 Mercuro - Medema, p. 111.
34 For a short description of the “two-interfaced” interaction model (technology-economy, economy-law), see Huuskonen III.
35 Examples of Finnish studies of history from an economic perspective are Määttä – Pihlajamäki and Ylikangas.
36 Schumpeter, see Schumpeter II, was aware of the difficulties in trying to study human and social behavior by scientific means, p. 57: “Closely connected with the metaphysical preconception – more precisely with the ideas which grow out of metaphysical roots and become preconceptions if, neglecting unbridgeable gulfs, we make them do the work of empirical science – even if not itself such a metaphysical preconception, is every search for a “meaning” of history.” (...) “The same is true of the postulate that a nation, a civilisation, or even the whole of mankind, must show some kind of uniform unilinear development (...)” – In this study the intention is to show patterns of behavior, or invariance (see Aarnio I p. 28), in the legal field, but at the same time realizing the nature of such knowledge. It is not a question of the deduction of necessary ‘laws of nature’, but rather the target is to identify in a realistic and explanatory manner a pattern of a series of legislative actions.
37 See e.g. Menell p. 132, in discussing Pigou. Inventing is spontaneous and cannot as such be regulated, whereas law may channel the activity to useful ends. – Määttä II p. 11, p. 27-, has a more interactive approach, that is, the interaction of regulation and innovations.
38 Tuori (on Max Weber) p. 54: The legislator operates according to a “finalistic” program, and regards norms of law as a means of achieving goals set by the technological and economic development.” – The 1990s attempt of the European Union to regulate high-definition television as a technological path may serve as an example of failed attempts to reverse the logic of the establishment of innovations by legislative means.
39 Tuori (on Habermas) p. 113: communicative action targets a common understanding, whereas strategic action into affecting (or coercing) others. – This basic line of thinking seems to have a parallel in game theory, that is, the prisoner’s dilemma and its solutions (see Lagerspetz on Prisoner’s Dilemma pp. 39-43).
40 This conclusion is presented below in the context of Coase.
41 Tuori, pp. 321-322.
42 Rose-Ackerman p. 200: “(...) I ask, whether plausible justifications can be given for some frequently observed legal patterns.”
43 An example of a behavioral approach see Jolls – Sunstein – Thaler, e.g. p. 6: “The task of behavioral law and economics, simply stated, is to explore the implications of actual (not hypothesized) human behavior for the law. (...) People can be said to display bounded rationality, bounded willpower, and bounded self-interest.”
44 North p. 131.
45 see e.g. Schumpeter II on the difficulties in trying to study human and social behavior by scientific means, p. 57.
46 See “copyright” defined in “WIPO Glossary of Terms of the Law of Copyright and Neighbouring Rights”, p. 59: “Generally considered to be the exclusive right granted by law to the author of a work to disclose as his own creation, to reproduce it and to distribute or disseminate it to the public in any manner or by any means, and also to authorize others to use the work in specified ways. Most copyright laws distinguish between economic and moral rights, which together constitute copyright. (...) In accordance with international usage, the traditional term “copyright” is sometimes replaced in modern English by the more adequate expression “author’s rights””. Landes – Posner II, p. 1 emphasize that “intellectual property” has an existence separable from a unique physical embodiment.
47 E.g. Landes – Posner II categorize the copyright doctrines in a different manner: copying versus re-creation, idea versus expression, facts versus expression, derivative works, and fair use, pp. 85 – 123.
48 The list is from the European Community and Its Member States’ proposal to the rights of the broadcasting organizations, Standing Committee on Copyright and Related Rights, Tenth Session Geneva, Nov 3-5-, 2003, p. 29-30, with broadcast and public display added.
49 The important work of MacCormick – Weinberger is not separately discussed due to many similarities with the theories of both North and Lagerspetz, but also because the latter have
developed the idea of the core source of legal development being the “mutual beliefs” or “mental models”, which behavioral trait of study was only emerging when MacCormick and Weinberger developed their theory. – Helin II approaches copyright with a touch of institutional assessment, regarding the object of copyright as a mental construction for the aid of legal evaluation, rather than having empirical content. - On criticism of Lagerspetz’s theory from the basis of the difference on individual versus collective intentions, see Siltala pp. 226-228. 
50 Lagerspetz p. 39, the example quoted from Niemi p. 166. – For a broader analysis, see e.g. Palgrave, vol. Three, p. 89.
51 The Prisoners’ Dilemma seems to have a resemblance to the division between communicative and strategic action, as described by Tuori p. 113.
52 Lagerspetz p. 42, Niemi p. 167, cooperation in the longer-term provides better results in the game.
53 Lagerspetz pp. 44-45. The concept “conventions” does not refer to a legal concept, that is, convention in the sense of e.g. Berne Convention.
54 Lagerspetz seems quite reserved concerning the deduction of institutions from conventions or conventional facts, so the sentence in the text is a straight-forward interpretation of the connection, Lagerspetz p. 50: “The idea that language, money, and law are paradigmatic types of institutions is shared e.g. by Talcott Parsons, Jürgen Habermas, and by Neo-Austrian economists”.
55 North p. 3.
56 ibid. p. 25.
57 ibid. p. 4
58 North II, p. 3.
59 North I.
60 North p. 5.
61 ibid. pp. 5-6.
63 On path dependency, see Palgrave, volume Three, pp. 18-19. North’s use of the concept resembles both the “third degree” path dependency described in Palgrave (“You would rather buy a house away from the sewage plant, and so would your friends, but you and your friends are somehow unable to coordinate your actions.”), or Mark Roe’s “strong-from path dependency”: “path dependence as highly inefficient structures that society cannot eliminate.” (ibid. p. 19).
64 ibid. pp. 92-94. The issue of technological change is discussed more thoroughly in the context of Schumpeter.
65 ibid. p. 103.
66 ibid. p. 103.
67 Lagerspetz p. 6
68 ibid. p. 8
69 ibid. p. 10
70 ibid. p. 13. See also MacCormick – Weinberger p. 51, the definition of institutional fact: “(...) a proposition whose truth depends not merely upon the occurrence of acts or events in the world, but also upon the application of rules to such acts or events, is a proposition of institutional fact. (…) Lurking in some Platonic cave behind the institutional fact lies the institution itself.” pp. 51-52: (…) concepts such as those I have listed are essential to the enterprise of analyzing legal systems into coherent sets of interrelated rules.”
71 ibid. p. 17.
72 ibid. p. 39-43. See also Riis, pp. 30-36, on the connection of game theory to economic efficiency and Kaldor-Hicks –optimality as a co-operative strategy or enforced by a third party.
73 ibid. p. 19. The problem of endless regress of logical foundations of a system is also discussed from economic point of view in Friedman I. Friedman makes a reference to mathematician Gödel’s theorem, which states in plain form that a system cannot be proven logically valid within that system.
75 ibid. p. 158
76 See discussion on North and Lagerspetz earlier, emphasizing the need of historical method in institutional study.
A note on Joseph A. Schumpeter (1883-1950): A citizen of the Austro-Hungarian Empire, Schumpeter rejoined academia in 1909. While teaching at Czernowitz (now in the Ukraine) he wrote *The Theory of Economic Development* (1911), where he first outlined his famous theory of entrepreneurship. After WW1, Schumpeter joined the German Socialization Committee in Berlin - which then was composed of several Marxian scholars. In 1919, Schumpeter became the Austrian Minister of Finance - unfortunately, presiding over the hyperinflation of the period, and thus was dismissed later that year. After teaching at Graz, Schumpeter migrated in 1921 to the private sector and became the president of a small Viennese banking house. His bank collapsed in 1924. In 1932, Schumpeter took up a position at Harvard University, succeeding the Marshallian F.W. Taussig. Schumpeter completed three more books while at Harvard: *Business Cycles* (1939), his popular *Capitalism, Socialism and Democracy* (1942) - in which he famously predicted the downfall of capitalism in the hands of intellectuals – and (posthumous) *History of Economic Analysis* (1954). In the first two, he expanded upon his theory of entrepreneurship and theory of growth into a wider theory of the development of capitalism, integrating it into a business cycle theory and a theory socio-economic evolution. Schumpeter’s main achievements are in founding evolutionary economics, given his concern with economic change brought about by the interaction between individuals and the economy as a whole.


- Kuoppamäki has emphasized Schumpeter’s importance in relation to the discussion of what is the most suitable market structure for the encouragement of technological development. Kuoppamäki interprets Schumpeter as stating that technological development is only possible in a world of large business corporates. However, Schumpeter’s *Theory of Economic Development*, does not always seem to confirm this assumption, as innovation takes largely place outside large corporations. On the other hand, in *Capitalism, Socialism and Democracy* (8th impression, London 1959, p. 106), there is a shift in this direction, as Schumpeter sees the “large-scale establishment or unit of control” acceptable as a “necessary evil” inseparable from economic progress. See Kuoppamäki, pp. 151-152. – On Schumpeter as one of the founders of evolutionary economics, see e.g. Lahti. Gary Hamel is often mentioned as one of the most important neo-Schumpeterians. See also Menell p. 134 on Schumpeter. – Criticism on Schumpeter, e.g. Määttä ll p. 41.

77 Määttä II p. 17.
78 Määttä II p. 17.
79 Schumpeter II.
80 The common perception of “older” Schumpeter is reflected in e.g. Määttä II p. 41 and Välimäki II p. 71.
81 ibid., p. 57.
82 ibid., p. 58.
83 Schumpeter I, p. 84.
85 ibid. p. 62.
86 ibid. pp. 63-64.
87 ibid. p. 65.
88 ibid. p. 66.
89 ibid., p. 70.
90 See North p. 3.
91 ibid., p. 87. – As an example of “neo-Schumpeterian” studies of entrepreneurial innovation, see Lahti.
92 Schumpeter II, pp. 88-89. - We may see certain parallels of this thought in the works of certain writers quoted above, discussing the dual nature of copyright: the right is not enough without the enforcement (establishment). Lester Thurow’s concept “the choke point”, illustrates that rights alone without the ability to enforce them are not enough. Drahos and Braithwaite use the dual concepts “social lock” of copyright and “electric lock” of electronic access controlling devices used to enforce copyright. Warren J. Samuels has used the dual concept also in talking about the necessity of “price-taking” and “rights-taking”.
-the innovation process may be seen to have three levels: invention, innovation, and the act of establishment. It is important to distinguish between invention and innovation, as the first
refers to a purely technical “gadget”, which needs a commercial innovation to be successful economically.

-Domeij has made a distinction between technology-push and demand-pull (pp. 27-28). Technology-push is created by technology-directed activities within companies (research and development), whereas demand-pull is, according to Domeij decisive. Domeij however realizes Schumpeter’s point concerning business’ central role in “educating” the consumers (ibid. p. 34).

Some of the difficulties concerning the early business models of technological breakthroughs illustrate the point: a businessman from Pittsburgh, Jesse Lippincott, bought in 1888 the phonogram patents of both Thomas Alva Edison (“phonograf”) and the inventors Charles Sumner Tainter and Chichester Bell (“grafophon”), cousin of the inventor of the telephone, Alexander Bell. Lippincott solved a situation that was supposed to become the patent trial of the century, but sadly misunderstood the possibilities of the phonogram: he started to market the innovation to offices and business companies as a new generation dicta-phone that could be used for replacing part of the paperwork. Lippincott lost his investment and died broke in 1891. Edison bought back his patent with only a fraction of the sum he originally received from Lippincott. The phonograph was used in different purposes until the trial on recording music in 1889 lead to the discovery of the commercial possibilities of musical reproduction. See Gronow, p. 25. – One might add, that in the previous example, the invention was important, but the innovation related to its commercial use was not successful.

Edison’s statement to the press in 1877 concerning his innovation to copy voice, “the phonograf”, included his vision of the potential future uses of the innovation: writing letters and dictating without assistance, family archive for deceased family members’ voices, music boxes and toys, clocks that would “say” what time it was and when to go home from work etc., documentation of the correct pronunciation of languages, “speaking books” for the blind, remote teaching, receiving spoken messages. After more than one century, it is highly interesting to see that many of the features then anticipated are commonly used today, although sometimes the path of development has not been straightforward. Gronow, pp. 19-20.

Schumpeter I, p. 228.

Marx’s theory of surplus value is basically faulty regarding explaining the price of a product on the basis of the production costs, whereas modern marginal utility theory sees that the price of a product is adjusted in the marketplace by customer preference, p. 24: “It was perfectly absurd for Marxists to question the validity of the marginal utility theory of value”. - Since the exploitation theory is based on the theory of surplus value (p. 27), it is subject to severe criticism on the same basis. - The theory of accumulation is confronted with the fact that capitalist economy is not stationary and merely expanding (p. 31), but dynamic.

- The theory of concentration – the tendency of the capitalist process to increase the size both of industrial plants and of units of control – does not, according to Schumpeter, deal with such economic phenomena as monopoly or oligopoly (p. 33). The theory of immiseration, as well as other aforementioned theories, suffer according to Schumpeter from the fact that Marx had no theory of the business cycle (p. 41). Schumpeter does not accept the tendency of “rich growing richer, poor growing poorer” (p. 65). – Schumpeter however largely accepted Marx’s result that capitalist evolution will destroy the foundations of capitalist society (p. 42), but offered his own explanations for this development. Economic progress becomes depersonalized and automated, bureaus replacing individual action (p. 133). The concept of ownership becomes alienated (p. 142). A central element in this is Schumpeter’s theory of vanishing investment opportunity (pp. 111-120).

Schumpeter I, p. 11.

It is not at all inconceivable that Schumpeter’s own experiences between these two important books – two World Wars, hyperinflation, bankruptcy – may have led him to emphasize the importance of stabilizing factors in economy.

Schumpeter I, p. 99.

A conclusion of Menell, p. 135. On criticism of Schumpeter, see Määttä II p. 41.

Gallagher p. 90

This chapter partly reflects the idea of Pöyhönen (see e.g. Pöyhönen II p. 535). Pöyhönen suggests that legal decision-making should not only focus on the analysis of the legal positions of the parties, but a “legal-economic totality” (“taloudellis-oikeudellinen kokonaisjärjestely”). – This idea is also “implicit” in Coase. – Mähönen on “pragmatism” in legal decision-making taking into account economic considerations, p. 56.
A broad account of this area is offered in both North and Lagerspetz.

Concerning Adam Smith, see Schumpeter II, p. 60 footnote: "Division of labor, the origin of private property in land, increasing control over nature, economic freedom, and legal security – these are the most important elements constituting the "economic sociology" of Adam Smith." - In the early history, most likely no such legislation existed that would not have discussed economic interests at some level. Even the ancient Law of Moses regulated cattle and agriculture, and the animal and crop sacrifice also had an important economic function, as the priests could keep a portion of the sacrifice for their own nutrition.


- An overview of especially the institutionalists is broadly discussed in Mercuro – Medema. Jukka Mähönen emphasizes the effect that law and economics has on the traditional approach regarding sources of law. According to Mähönen (citing Ugo Mattei), the sources of law do not form a static or formalistic hierarchical system, but are competing in the same manner as national legislative systems are competing (forum shopping). This means that law and economics will have a position to provide arguments to legal decision-making in competition with other sources of law. Kanniainen-Määttä II pp. 19-21.

Friedman I.

Helin interprets Alf Ross in the following manner: legal compulsion, as opposed to “raw” compulsion, is legitimate compulsion. Helin p. 144. Ross also divides human behavior into selfish (sanction-fearing) and altruistic (law-abiding) behavior. Helin p. 147. This division would ultimately put the behavior of homo economicus in the former category. – See later the discussion on Posner’s example.

Of Määttä’s studies may here be mentioned “Environmental Taxes” and “Rikoksen hinta” (the price of a crime) together with Heikki Pihlajamäki. Määttä has also applied law and economics on legal theory. - See references to Kanniainen, Timonen and Oker-Blom in “sources”.

ibid.: Timonen is using as examples the autonomy of law, legal positivism, legal formalism, and legal doctrinalism. As regards the institutionalist school of law and economics, the roots may be traced back to the German historic school (Wilhelm Roscher, Gustav von Schmoller, American pragmatism (Peirce, James, Dewey), and to Thorstein Veblen’s idea of evolutionary economic development, see Mercuro - Medema pp. 102-104.

Mercuro-Medema, p. 105.

T Timonen p. 107-109. See also Reinikainen, p. 151, adding to the important schools of law and economics the Evolutionary Economics school and Austrian Economics school.


T Timonen, pp. 102-104. - For an interesting example of deductive analysis, see Coase, and e.g. Coase III pp. 4-5. Even if he does not provide concrete empirical evidence to back his claims on human choices for inductive reasoning, it is not possible to meaningfully disagree with his thinking.


North p. 103. In the final chapter North discusses future research in this direction.

Domeij, p. 35. Domeij also rejects the applicability of the marginal analysis for his study.

ibid., p. 36. Domeij’s division agreement/hierarchy originates from Coase’s early studies on company structure.

T Timonen II, p. 110.

Mercuro - Medema, p. 130. – It could be claimed, without going into a deeper analysis, that neo-institutionalism seems to indicate “a third way” between Chicago and the institutionalists.

– Institutions as constraints for human action, see North.

Mercuro - Medema, p. 84.
The homo economicus branch of public choice theory attempts to develop a logical, positive, consistent theory linking individual behavior to collective action. It seeks to explain how political processes (…) actually work.

With respect to the political processes, the primary insights of public choice theory reflect the analysis of how and why the outcomes of the political process are often inefficient.

Coase. It is not specified in the article whether Coase means “other companies” or any other third party. The examples given in the article seem to suggest a broad interpretation.

Undesirable for whom, by which standards, and calculated by whom are not expressly stated, but the general argument is that the most desirable solution is the one providing the highest efficiency in the use/allocation of resources in society and thus minimizing the social costs (neighborhood effect/externalities).

ibid., p. 2.

ibid., p. 15.

ibid., p. 2.

ibid., p.99: a formula on calculating the difference between the costs of third party solution and negotiations.

See e.g Kanniainen - Määttä, p. 25.

See Posner, p. 62. – Posner tries to circumvent the irrationality argument concerning the doctrine of eminent domain by stating that subjective valuations of property (different from market value) are consistent with economic efficiency calculus. However, the recognition of subjective valuations does not in our understanding contribute to the scientific nature of the economic analysis.

The Constitutional Law Committee of Finnish Parliament has e.g. agreed to set obligations for telecom companies to rent network capacity to their competitors, even though this means a restriction on their ownership right. This is motivated by competitive interests. See PeV 61/2002, 8/2002, 34/2000.

Rahnasto p. 114. – Mähönen p. 57 sees the primary function of property rights to enhance market efficiency.

North, Shared Mental Models p. 1.

Coase p. 44.

N.B.: this idea – although from a different perspective - is not too remote to e.g. Peter Drahos’ assumption that in the modern production, immaterial rights become more essential than tangible property.

Coase p. 8. See also Domeij, p. 25, a reference to Bruun on the foundations of the patent right: the essential purpose of the patent system is to guarantee an exclusive right, and therefore a character of assignable property, on the basis of innovation, which right further enables commerce in society’s interest.

Demsetz p. 145.

TRIPS excludes moral rights, see discussion later. See Rose-Ackermann, an attempt to analyse moral rights from an economic perspective.

See e.g. Riis pp. 37-38. Landes – Posner III p. 34, from a game-theoretical point of view: “The problem is that there is never a single price: it is always a range, and each party is eager to engross as much as possible of the range for himself.” The concept “transaction costs” was introduced in Coase’s early article from the year 1937 “The Nature of the Firm” (Coase IV).

Riis p. 37. Einhorn p. 14. Criticism on Coase, see Cooter-Ulen pp. 90-91, who categorize the issues of Coase theorem into four mainstreams: the “long run” argument, the “invariance” argument (the use of resources is not necessarily invariant in relation to the allocation of rights), the endowment effects (evidence suggests that people may demand a higher price to sell a right than they would to buy a right), and social norms (that is, bargaining may not be the proper approach socially).

Coase pp. 2-10.

Coase p. 8: “(…) the ultimate result (which maximizes the value of production) is independent of the legal position if the pricing system is assumed to work without cost.”

Landes – Posner III, p. 35: “Therefore we do not say that the allocation of resources is unaffected by whom the property right is assigned to; such assignment will have wealth effects
that could feed back into prices and so affect the resource allocation. But efficiency as defined in 
(...) will not be affected."

146 Posner, p. 56.

147 Coase pp. 1-44.


149 Einhorn p. 14: "(...) disputants could be trusted to efficiently resolve commercial disputes 
through multilateral bargaining without the need for legal structure."

150 Coase III p. 13

151 Cooter-Ulen pp. 85-88.

152 Calabresi-Melamed p. 1089: reflections on the party viewpoint concerning the problem of 
"entitlement": "(...) the fundamental thing that law does is to decide which of the conflicting 
parties will be entitled to survive."

153 Drahos, pp. 349-350.

154 Holyoak – Torremans pp. 12-13: "Through property rights externalities can be internalized; in 
other words, the subject of the right is brought under the control of the owner of the property 
right. These rights will only develop when the cost of this internalization is smaller than the gains 
of it."

155 Thurov; "Choke point" is a point of control of the use of copyright protected material 
necessary for the functioning of the copyright system.

156 The terms “transaction costs” and “transformation costs” are used in the sense defined in 
North, pp. 5-6, that is, respectively, exchange and production costs.

157 North has discussed widely the problem of persistent inefficient institutions and 
technologies, see e.g. North, pp. 132-133: "The traditional historian’s focus on the Industrial 
Revolution and technological change as the key utopia is (...) deficient because much of the 
world has failed to realize the potential benefits of technology."(…) "What was left out of 
the analysis was why the potential was not reached, and why there is such an enormous gap 
between the rich countries and the poor countries when the technology is, for the most part, 
available to everyone."

158 Hugenholtz – Guibault - van Geffen, p. 10: "It is safe to say that the advent of the sound and 
video recording equipment had (...) the same impact on the protection of copyrighted works as 
the advent of the Internet today."

159 Einhorn p. 19, 21.

160 Koktvedgaard p. 48.

161 Gallagher pp. 87-88.

162 Prisoner’s Dilemma is the core concept of game theory, illustrating the problem of insufficient 
information and a one-off situation. The players would be better off if they would cooperate, 
but having no certainty of the other party’s benevolence towards cooperating, the players will 
choose to minimize their risk and act independently out of self-interest. On Prisoner’s Dilemma, 
see e.g. Lagerspetz pp. 39-.

163 Cassler p. 251.

164 Domeij p. 25, Menell p. 134.

165 Towse, p. 25. According to Towse the term ‘cultural industry’ was introduced by Horkheimer 
and Adorno in "Dialektik der Aufklärung" in 1947, to suggest the erosion of the arts by mass 
culture. This concept was later taken up in a more pragmatic manner as part of the UNESCO 
vocabulary concerning the inclusion of the cultural industries in cultural policy in 1972. A 
unifying feature of the cultural industries is that at their core is creativity protected by copyright, ibid. p. 35.

166 Citigroup Smith Barney, "Piracy in the Entertainment Industry", estimates the global movie 
and music industry turnover ( Citigroup p. 4): In 2003, the total worldwide demand of movies is 
estimated at 56,091 MUSD, out of which 3,523 MUSD illegal. Total worldwide demand of music 
is estimated at 51,621 MUSD, out of which illegal sales is 20,070 MUSD. The US sales represent 
appr. 40 per cent of the global sales of music, and appr. 60 per cent of the global sales of 
movies. - For comparison, the net annual sales of Nokia Corporation were 37,104 MUSD in 2003 
(Form 20-F, SEC file number 1-13202 p. 8), and the net annual revenue of Microsoft in 2003 
(year ended 30\textsuperscript{th} June) was 32,187 MUSD. – Other statistics concerning the development of the industries are discussed in their respective chapters.
As illustrated earlier, the nature of this study is rather the microeconomic aspect of copyright, i.e. the relations of copyright owners and users than the broader macroeconomic viewpoint. For studies on macroeconomics, see e.g. "The Contribution of Copyright and Related Rights to the European Economy", Final Report 20 Oct 2003, prepared for European Commission.

The example of Towse relates to the risk of over-simplification of copyright as if the copyright itself was the both the market maker and the creator of the market value of the copyright good. The relationship is much more complicated, and shall in this study be discussed in terms of “interaction” between economic (market) power and a legal (copy)right. - See also Landes – Posner II, who see a tendency in copyright literature to reduce the copyright problem to the trade-off between “incentive” and “access”.


ibid., pp. 21-22.

Mercuro - Medema, p. 114.

Laddie, p. 1. Landes – Posner p. 12: “A property right is legally enforceable power to exclude others from using a resource (...).”; Their comment on p. 20: “Charging a price for a public good reduces access to it (a social cost), making it artificially scarce, but increases the incentive to create it in the first place”, may however invite a counter-question, will copyright make unwanted songs sell? – Calabresi – Melamed p. 1089: “Having made its initial choice (on entitlement), society must enforce that choice.”

On Natural Law, see e.g. Lagerspetz pp. 115 (“Hobbes’ logic and Natural Law Theories”). Kant’s theory as a version of Natural Law, p. 120.

Mercuro - Medema, p. 116. – On a “natural law” type of exclusivity approach, see e.g. Sorvari.

Barlow, p. 531: “Copyright worked well because (...) it was hard to make a book (...) the rights of invention and authorship adhered to activities in the physical world.(...) In other words, the bottle was protected, not the wine.”

As we shall see in the example of the early Venetian printers in the late 15th century, the over-supply of the market could however develop rapidly.

Concerning direct control versus collective management, see Ricketson II, p. 31.

Thurow, p. 185. – See also Brennan, p. 110: the choke point as a tangible platform of the copyright protected work, and a de facto exclusion device.

Calabresi – Melamed p. 1091, speak of “large Marshall” and “small Taney” to illustrate the need for regulating human action in order to avoid the unfair dominance of physical force.

Drahos - Braithwaite, p. 184, discuss a closely similar question: copyright as a social lock, technical protection as an electronic lock.

Thurow, p. 185.

Palgrave, vol. Three, pp. 100-101: non-excludable good: access to it cannot be reserved to those who pay. However, every good is excludable at some cost. -Non-rivalrous: consumption of it did not deprive anyone else of any potential consumption. “However, some goods may be non-rivalrous over some range, becomin progressively more rivalrous, ‘crowded’, as that range is passed either because the number of consumers increases or the scale of provision decreases.” - http://en.wikipedia.org/wiki/Public_good: a definition of “Public Good”: “In economics, a public good is a good that is hard or even impossible to produce for private profit, because the market fails to account for its large beneficial externalities. By definition, a public good possesses two properties: -Non-rivalrous — its benefits fail to exhibit consumption scarcity; once it has been produced, everyone can benefit from it without diminishing other’s enjoyment.—Non-excludable — once it has been created, it is very difficult to impossible to prevent access to the good.

Brennan pp. 100-102. Välimäki II p. 51 (on computer programming): “The starting point for analysis is the economic theory of information. The assumption is that software can be described as a good, which is initially costly to produce but then cheap to reproduce. This means that the production of software implies what economics call the economics of scale.”


Concerning terminology, “neighborhood effect” (Friedman), “social cost” (Coase), and “externality” (among others Rahnasto) seem to be rather similar concepts covering the same phenomena; negative effects of economic activity to third parties (society).

On the same problem, see also Calabresi.


Cost efficiency is crucial, but the European Commission Report “The Management of Copyright and Related Rights in the Internal Market”, p. 10, brings an additional perspective concerning the public policy goals for private use: “Arguably, the widespread deployment of DRM’s as a mode of fair compensation may eventually render existing remuneration schemes (such as levies to compensate for private copies) redundant, thereby justifying their phasing down or even out. At the same time, DRM’s do not present a policy solution for ensuring the appropriate balance (italics: MH) between the interests involved be they the interests of the authors and other rightholders or those of legitimate users, consumers and other third parties involved (libraries, service providers, content creators…)(…).”

ibid.


ibid., p. 203. – Posner’s example on US water utilities is similar, although places emphasis on profit motive rather than practicalities (Posner, p. 40): “In the eastern states, where water is plentiful, water rights are communIALIZED to a significant extent, the basic rule being that riparian owners (that is, the owners of the shore of a body of water) are each entitled to make reasonable use of the water – a use that does not interfere unduly with the uses of other riparians. In the western states, where water is scarce, exclusive rights can be obtained by appropriation (use)”.

“Dissemination” is here used out of the copyright law context, meaning any relevant use of copyright protected works.
CHAPTER TWO:

The Justification Of Copyright And The Copyright Motives
II.1. The Justification of Copyright

Copyright justification has two important legal elements, the economic and the human rights element. The latter emerged during the Era of the Enlightenment as part of a greater philosophical mainstream, and represents the interest to protect the work of a human spirit. The economic element is based on the idea of profit motive as an incentive for creative work. The profit motive has its roots in the philosophy of property and links copyright to the tradition of political philosophy.194

Discussing the origins of property right, Richard A. Posner gives an example of a dynamic analysis of the plausible cause of the birth of property rights: A farmer plants corn, fertilizes it, and erects scarecrows, but when the corn is ripe his neighbors reap it and deprive him of its use. The problem according to Posner is that the farmer has no legal remedy against his neighbors’ conduct since he owns neither the land that he sowed nor the crop. Unless there exists a defense, the cultivation of land will be abandoned as useless and other ways of subsistence will be chosen, such as hunting. The example suggests that legal protection of property rights creates incentives to exploit resources efficiently195:

“without property rights there is no incentive to incur these (investment) costs because there is no reasonably assured reward for incurring them”.

Here we approach the legal-economic interface; several questions concerning the actual affect of a legal right in relation to market power will arise. Should we assume that were the farmer an exceptionally strong individual, or belonged to a family enjoying respect in the community, would he still need a property right? Or would he rely merely on either his physical power or social status, without the need for a legal rule to back up his position? If his “property” were to have no economic importance, that is, market power, or any expectation of such, would anyone care a jot for his property rights whether they existed or not?

When we later discuss the role of rights in economic activity, we realize that both the enforcement and the fact that the right has to have factual –economic or other - importance belong to the essence of a right. A right cannot be irrelevant. Concerning piracy in its many forms, we realize that a right without means to enforce it is insufficient to restore a balance. Therefore, the dynamic view of law must be complemented by the element of enforcing power. A powerful man can sell TV formats even without legal backing.

The study of copyright may rely on several basic assumptions as to the nature of copyright. Copyright may be seen as having justification based on natural law, utilitarian principles, or economic (efficiency) evaluation.196
The natural law justification is commonly perceived as inherited from the Enlightenment and especially the philosophical work of John Locke, and his idea of private property, in particular. The utilitarian tradition is related to Jeremy Bentham. The justification based on economic effects has also a long tradition of advocates and is nowadays mostly related to the school of law and economics.  

A typical natural law argumentation with a strong human rights undertone might be seen in the words of the great Victor Hugo, who may be regarded as one of the founders of international copyright protection:

“You feel the importance and necessity of defending property today. Well, begin by recognizing the first and most sacred of all properties, the one which is neither a transmission nor an acquisition but a creation, namely, literal property... reconcile the artists with society by means of property.”

Utilitarian justification is based on the assumption that intellectual property rights are afforded in order to encourage private creativity. This assumption is based on the economic theory that any investment requires structural safeguards to protect the investment against changing circumstances and against the attack of new products and technologies. A common view is that “(...) inventors and authors produce at socially inoptimal level if there is no protection and it is socially desirable to strengthen protection in order to increase the supply of works and inventions.”

Economic justifications are based on cost-benefit theories. The basic question is, whether the benefit from allowing or condemning a particular practice would exceed the social costs caused by the same practice. The goal of the cost-benefit theories is the most effective allocation of resources. The difference to the utilitarian approach might be characterized as the difference of the angle: as in the utilitarian theory, economic incentive is seen to support individual creativity and thus society, the cost-benefit theory adopts a “value-chain” perspective, that is, which part of the chain should be encouraged for an optimal result from society’s point of view. This approach bears some similarity to competition law, that is, opening the bottlenecks of the economic value chain.

Economic efficiency is arguably a difficult concept, and the attitude towards economic approach may vary greatly even among famous representatives of the law and economics school. Landes and Posner state optimistically that “throughout (...) we shall be examining cases, doctrines, and principles from the standpoint of whether they are efficient in an economic sense, and, if not, how they might be changed to make them efficient”. This would indicate that such a task is far from being impossible or even difficult. Calabresi has however a more modest approach: in his list of the “myths” regarding tort law and the costs of accidents, he adds the belief that there is “an inexorable economic law that dictates the “right” way to allocate accident losses.”
Building the Mont Blanc tunnel is not efficient in an economic sense, whereas banning prostitution would probably from a strictly economic viewpoint be an inefficient solution:

“Just as economic theory cannot decide for us whether we want to save the life of a trapped miner, so it cannot tell us how far we want to go to save lives and reduce accident costs”.

Although copyright is not about saving lives, it is an area where the balancing of different societal interests is necessary. The economic argumentation is an important element of this totality, but not necessarily the only criteria.

The analysis of property as an institution will bring about the game-theoretical analysis: it is of importance that the game has rules for facilitating predictable behavior. Lagerspetz has described a game-theoretical example, where the coordination provides the best results and the players know it. Lagerspetz shows in a form of a calculus, under what conditions the players would be likely to choose a third-party solution, basically to avoid transaction costs.

This study carries with it some ‘copyright scepticism’ since, rather surprisingly, it seems that not much empirical knowledge of the actual value-adding economic effects of copyright exists. The value of the copyright protected product is created in the market. A product can have a zero market value or a huge market value and enjoy similar copyright protection. To judge the value of copyright we should be able to investigate, what would be the value of the production without copyright protection. Ruth Towse, who has discussed the phenomenon from a legal-economic point of view, is critical of the rather common utilitarian assumption:

“We still cannot say with any conviction that intellectual property in general, and copyright law is particular, stimulates creativity (...) and we still know very little about its empirical effects.”

In fact, the “superstar phenomenon” suggests that copyright has little to do with the success of an artist, in comparison to the other elements creating market value. “But though much is made of the role of copyright in ensuring royalty earnings for artists, the majority of them again earn little from these sources.” It is an industry where “twenty fail for one that succeeds.”

Towse states: “It is expected that these (performer’s) rights are valuable to performers but the question of “what are they worth?” is an empirical one that no one has attempted to answer.” Considering the amount of intense debate concerning practically any change in the copyright law, this is a rather embarrassing finding. Copyright, however, seems to represent at least a symbolic value to the right-holders, especially authors
and performers, creating a status that indicates recognition in society. Continuing our discussion on the example given by Posner, an author becomes a member of the copyright family when having copyright. The copyright family on the other hand enjoys respect in the community.

However, from a game-theoretical point of view, if the creation of the copyright market as such is an achievement of the copyright law, then the positive effect is evident.

From the point of view of law and the economy, the law provides an institutional framework for the market transactions, although does not in itself regulate the levels of payment. The intention of the protection is to improve the right-holders’ bargaining power. As copyright embodies the power to alter the balance between what is private and what is public, what must be paid for and what is freely available, the economic approach of copyright analysis would be, who gains or loses financially from changes in the law. - We believe that the situation might be even more complex than that, since the changes do not often have a direct effect on the economic distribution between different interest parties, but through the shifts of balance in the negotiation positions, which have to be “played out”. Therefore, copyright is largely not about allocating resources at the level of law, but “pre-negotiating” the legal positions of the parties. Whether the result will lead to a different allocation is not directly a matter regulated by law, but the reallocation may or may not take place in negotiations concerning the actual market power and licensing of the product.

II.1.1. Challenges to Classic Justifications: the Fundamental Criticism

The mainstream of the fundamental criticism of copyright questions the necessity of copyright as an institution, and has a philosophical background in the tradition of the general ideas of property rights and also the criticism against private ownership of property. As in practical criticism, the idea of balancing legal positions in the field of copyright is necessary for this line of argumentation. However, when practical criticism concentrates on the economic and business interests, the fundamental criticism has a strong human rights tendency:

“A system that requires the violation of other property rights, for example, the right to determine the peaceful use in one’s own home of one’s own videocassette recorder or to purchase blank tapes without paying royalties to a third party, is no system of rights at all.”

The basic justifications of copyright as a system of incentive to creation were challenged in the US Supreme Court case Eldred v. Ashcroft, which concerned the “Sonny Bono Act”, that is, the prolonging of the copyright protection period from 50 to 70 years.
The argument of the plaintiff, represented by Professor Lawrence Lessig, challenged Congress’ constitutional mandate to prolong the copyright protection on several grounds, but mainly concentrating on the issue whether prolonging it encourages or discourages the development of creative arts and sciences.218

The plaintiff’s case was supported by a line of first-class academics and economic scientists claiming that prolonging it did in practice not provide additional incentive for creativity due to a calculation of the present value of the added income. The academics also took up the issue of derivative works, saying that the market of derivative works was harmed by prolonging the copyright protection period. By derivative works the academics meant works based on earlier works, whose copyright protection was about to expire but would be prolonged due to the legislative change.219

Although the issue regarded the prolonging of the copyright protection period, the decision has inspired a wider discussion on a general level, whether copyright serves as an incentive in the first place, or whether the effects are mostly detrimental. The fundamental criticism is often associated with the “open-source” or “free software” schools, and is not building on the traditional copyright of literary and artistic works, but rather on the programming community regarding mainly the appropriateness of copyright protection for software.

Mikko Välimäki has in his recent thesis questioned intellectual property protection from the basis of open-source licensing. Open-source has, according to Välimäki, its roots deep in the academic world and stems from the academic practice of sharing information without the necessity to cling to proprietary rights.220

II.1.2. Practical Criticism: Compulsory Licensing as a Challenge to Exclusivity

Copyright as a property rights system has, however, several variations as to what extent, certain activity is within the author’s sole control (exclusive right), whether the arrangement of the use is allowed through limitation or exceptions221 (e.g. compulsory licensing), or whether copyright contains an element of “intrinsic value” (moral rights). This division into three elements of copyright is one of the leading themes of this study.

In tort law, a similar division has been applied to laws on economic rights. Although in tort law, the starting point is different from copyright, that is, the wrongdoing of a party222, a comparison can be made to the distinction of the different types of legal rules. This could be illustrated by the three alternatives (property rule, liability rule, inalienability) of regulation described by Calabresi and Melamed.223
“An entitlement is protected by a property rule to the extent that someone who wishes to remove the entitlement from its holder must buy it from him in a voluntary transaction in which the value of the entitlement is agreed upon by the seller (MH: copyright exclusivity). (...) Whenever someone may destroy the initial entitlement if he is willing to pay an objectively determined value for it, an entitlement is protected by a liability rule (MH: compulsory licensing). (...) An entitlement is inalienable to the extent that its transfer is not permitted between a willing buyer and a willing seller (MH: moral rights).”

In evaluating the system further, we will encounter the basic logical difference of property and liability rules as stated by Landes and Posner:

“(…) property rights are efficient when transaction costs are low, and liability rules are efficient when such costs are high.”

This division is reflected in the logical structure of the copyright system:

“Rights management can be done either individually or collectively. Exclusive rights (MH: “property rights”) are traditionally managed individually by rightholders themselves, who license them to commercial users such as publishers or producers, or intermediaries, such as publishers, producers or distributors. (...) Remuneration rights (MH: “liability rights”) are usually managed by collecting societies that function as rightholders’ trustees.”

One of the main areas of interest from the “practical criticism” standpoint is compulsory licensing and related issues. As a practical way of seeking a proper balance of interests within the copyright regime, compulsory licensing has been seen as an answer or at least an intermediate solution for tackling market inefficiencies arising from too strong an emphasis and probable misuse of property rights.

Closely related to the problem of compulsory licensing is the more academic discussion on whether it would be more appropriate, depending on the respective circumstances, that copyright should rather be seen as a liability than a property rule.

II.1.3. The Justification of Copyright in the Nordic Tradition

Although the scope of the study is international, and the issues discussed bear no connection to any particular national legal system, it is relevant to note some distinctive features of the Nordic copyright thought. The broad Nordic cooperation in preparing copyright laws has had a positive impact on the development of a more or less distinct Nordic tradition in copyright jurisprudence. The basis of this brief discussion on Nordic tradition is Mogens Koktvedgaard’s influential “Immaterialretspositioner”
(Copenhagen 1965), which studies exclusive rights granted in legislation, and their relation to competition law.228

First of all, the Nordic tradition is based on strong exclusivity, although the copyright acts in the Nordic countries – prepared in cooperation – recognize compulsory licensing in certain cases. The exclusivity principle is especially important concerning moral rights.229

According to Koktvedgaard, the interests behind intellectual property legislation may be divided into two main categories: firstly, protection of personal, creative effort. The motivation of this is twofold: it has a societal bearing, and an element of fairness: an effort must be rewarded.230

Secondly, intellectual property rights protect the possession of a customer-base, or another type of commercial position. When protection of an intellectual property right is introduced into law, the formulation of the right takes place in close relationship with the nature of the interest and with society’s overall values.231

Koktvedgaard makes a distinction between collective and individual intellectual property. The latter represents values (copyright, moral rights) other than commercial, while the former is more subject to competition law scrutiny (trademark law).232

As for copyright, and especially the protection of literary and artistic work, the foundation is esthetic, “the human experience of the esthetic phenomena as particulars”.233 Therefore, in Koktvedgaard’s system, copyright belongs to the (mainly) non-economic sphere of intellectual property interest.234

This also illustrates in a broader sense the sentiment present in the Nordic discussion, which tends to emphasize the human rights motive of copyright.235 - In the case of Koktvedgaard, it is however important to note that he did not study the actual human rights linkage to copyright.

II.1.3.1. A Note on the Finnish Copyright Studies

In the Finnish tradition of copyright, the first thorough study is T.M. Kivimäki’s “Tekijänoikeus” (1948), which contains broad reference to the contemporary German copyright studies.236 Kivimäki, like the Finnish legal system on the whole in the 1920s and 1930s, was deeply influenced by German jurisprudence, which had a strong emphasis on conceptualism.237

However, shortly after the Second World War, Finnish legal scholars became more influenced by the Scandinavian Realism School, the famous representatives of which
were Axel Hägerström, Vilhelm Lundstedt, Karl Olivecrona and, concerning especially the basic concepts of copyright, Alf Ross.\textsuperscript{238} The strong Scandinavian influence led also to joint preparation of copyright legislation in the Nordic countries.\textsuperscript{239} An example of the turn towards increasing Nordic interaction in legal science is Hans Saxén’s “Förlagsavtalet” (1955), although it still had considerable German influence.\textsuperscript{240}

The studies of copyright law in the Finnish tradition have lately been concentrating on some – usually one – new or otherwise important technological phenomenon, and its legal environment. The increasingly globalizing setting of copyright has had an important influence. For the latest Finnish theses with a copyright theme the following scholars must be mentioned\textsuperscript{241}: Rainer Oesch (thesis on the protection of photograph, 1993), Marjut Salokannel (thesis on protection of audio-visual products, 1997), and Brita Herler (Internet marketing, 2001; Herler’s main discipline is economics). Ilkka Rahnasto (2001) had however a different approach, applying competition law in the analysis of copyright and patent law. At present, several young researchers are preparing theses on copyright or copyright related issues, such as database rights\textsuperscript{242}, digital rights management (DRM), and copyright versus patent or competition law. Perttu Virtanen, Katariina Sorvari and Mikko Välimäki published their doctoral dissertations in 2005.\textsuperscript{243}

It has so far been characteristic of the copyright studies in the Finnish tradition that they have mainly studied the legal environment of one particular means of production of copyright goods. The studies describe the technological phenomena and its copyright interpretations, implications, and relations to history and economy.

The intention of the present study is however to explore, \textit{inter alia}, whether common patterns exist when the international community adapts new technology to the copyright framework. Thus, the nature of the study is not so much concentrating on one technological breakthrough, as going through the history of all major changes and drawing conclusions from the development in general.\textsuperscript{244}

\textbf{II.2. The Copyright Motives: The Ideological Background of Copyright}

When technology and its impact on copyright are discussed in this study on a more general level, the approach is to point out a typical pattern of legislative behavior.\textsuperscript{245} It is not the intention to claim that the actions of the legislator would be predetermined, nor that they could be forecast with much precision. It is not the belief of the writer that the result of the legislation process can be deduced from a fixed set of premises. But there are certain tendencies in the power-struggle of legislation that can be pointed out that are present during the discussion on the formulation of the law, and
which may be identified from the legislative documentation: the Berne Convention, the conference documents (especially the general reports), and legal commentary. For the purposes of this study, the “behavioral” tendencies are called “motives”. This categorization is done in order to enable an analysis of what has happened and why at the level of law, when new technological means of information production develop into business models. The purpose is to discuss, in Schumpeter’s words, the mechanism of change.\textsuperscript{246}

Lawyers interpret the law, and rarely study a development of a legal institution from a dynamic aspect. To make a leap from the legal perspective – interpretation and systematization – to a quest of possible invariance concerning the development of copyright law, that is, patterns of legislation, is a difficult task and the results may easily be proven less contradictory or inadequate.\textsuperscript{247} The attempt to try to point out a typical pattern of legislative behavior is however possible, at least if certain preconditions are taken into consideration.\textsuperscript{248} First of all, it is worth repeating that it is not the intention to claim that the actions of the lawmakers would be predetermined.\textsuperscript{249} Secondly, it is clear that the results of a legislation process can hardly ever be deduced from a fixed set of premises. But we do believe that there are certain tendencies or patterns in legislation that can be pointed out. These patterns are present in the formulation of the law, and they may be identified from the legislative documentation. These patterns of argumentation could be called “mental models” or “mutual beliefs”, but for the purposes of this study, we have chosen the word “motive”.\textsuperscript{250} The motives are simplified categories of most common copyright arguments, that is, they represent the mainstream of copyright argumentation.

To formulate a “motives –based” approach to law, one needs two basic elements: firstly, there has to be a basic assumption of the core motives of human behavior in the first place, that is, a preliminary understanding of the actions of people in society. Secondly, on the basis of the first assumptions, a division of the copyright main motives is created. This is also largely based on a preliminary understanding of the core copyright issues developed during the research process of this study, i.e. the experience that the main categories or copyright motives are useful in mapping and understanding the copyright environment. The method in this sense could be called hermeneutic.\textsuperscript{251}

\textbf{II.2.1. Bertrand Russell on Motives of Human Action}

Concerning the mental models of copyright, a short introduction on the general questions of the motivation of human action is appropriate. As the theory of institutions as conventional practices suggests, very much of the analysis of legal-economic patterns is also an analysis of human behavior under certain circumstances. Bertrand Russell discussed the motives of human action in the article “The Springs of Human
His starting point, although hypothetical, is the following, displaying an idea of "scientification" of political science:

“If politics is to become scientific, and if the event is not to be constantly surprising, it is imperative that our political thinking should penetrate more deeply into the springs of human action. All human activity is prompted by desire. There is a wholly fallacious theory advanced by earnest moralists to the effect that it is possible to resist desire in the interests of duty and moral principle. I say this is fallacious, not because no man ever acts from a sense of duty, but because duty has no hold on him unless he desires to be dutiful. If you wish to know what men will do, you must know not only, or principally, their material circumstances, but rather the whole system of their desires with their relative strengths.”

Russell divides desires into politically unimportant, and politically important. The latter are divided into primary and secondary. “In the primary group come the necessities of life: food and shelter and clothing. When these become very scarce, there is no limit to the efforts that men will make, or to the violence that they will display, in the hope of securing them.”

Russell continues by stating, that man has certain desires which are infinite and can never be satisfied, “and would keep him restless even in Paradise”. These can be labeled acquisitiveness, rivalry, vanity, and love of power.

Acquisitiveness is a motive that has its origins, as supposed by Russell, in a combination of fear and the desire for necessities. Russell gives many examples of this and concludes: “But whatever may be the psychoanalysis of acquisitiveness, no one can deny that it is one of the great motives – especially among the powerful (...). However much you may acquire, you will always wish to acquire more; satiety is a dream which will always elude you”.

Russell sees acquisitiveness as the mainspring of the capitalist system. It is however not the most powerful motive after hunger. Much stronger is rivalry.253 “Over and over again in Mohammedan history, dynasties have come to grief because the sons of a sultan by different mothers could not agree, and in the resulting civil war universal ruin resulted. The same sort of things happens in modern Europe. The world would be a happier place than it is if acquisitiveness were always stronger than rivalry”.

Vanity is a motive of immense potency. “Look at me”, is one of the most fundamental desires of the human heart. Russell offers an example of an Italian renaissance princelinguem, who on his deathbed was asked whether he had any regrets in his life. He remembered a simultaneous visit of the Emperor and the Pope to visit his tower. On
that occasion, “I neglected the opportunity to throw them both down, which would have given me immortal fame.”

Vanity grows with what it feeds on. “It is scarcely possible to exaggerate the influence of vanity throughout the range of human life, from the child of three to the potentate at whose frown the world trembles. Mankind have even committed the impiety of attributing similar desires to the Deity, whom they imagine avid for continual praise.”

There is however one motive, which outweighs them all. That is the “love of power”. Love of power is closely related to vanity, but is not the same. Vanity is satisfied with glory: it is easy to have glory without power. “The people who enjoy the greatest glory in the United States are film stars; but they can be put in their place by the Committee on Un-American Activities, which enjoys no glory whatever”. Power, like vanity, is insatiable. “And as it is especially the vice of energetic men, the casual efficacy of love of power is out of all proportion to its frequency. It is, indeed, by far the strongest motive in the lives of important men.”

Russell contributes some positive achievements on love of power. Pursuit of knowledge, advances in scientific technique, and political reforms, may all be motivated by love of power. “A great general may, like Alcibiades, be quite indifferent as to which side he fights on, but most generals have preferred to fight for their own country.”

Other, less important (secondary) motives according to Russell are the love of excitement –for example, pleasure of gambling or alcohol - fear and hate, and altruism. Concerning ideologies, Russell states “(...) the ideologies are merely a way of grouping people, and that the passions involved are merely those which always arise between rival groups.”

Concerning altruism as a motive, first of all, Russell does not deny that altruism may exist. Sympathy may be a genuine motive. “We do not approve of treating orphans as they are treated in Oliver Twist”. He is however of the opinion that other motives, inspired by self-interest in different forms, are more powerful.

On the whole, Russell sees that politics is more concerned with herds than individuals. Passions that are important are those that may be felt by the members of the herd alike. “The broad instinctive mechanism upon which political edifices have to be built on is one of co-operation within the herd and hostility towards other herds. (...) If men were actuated by self-interest, which they are not – except in the case of a few saints – the whole human race would co-operate.”

However, Russell sees that there are only few occasions, where men can rise above selfishness, and many cases where men fall below “enlightened self-interest”. “And among these occasions on which people fall below self-interest are most of the
occasions on which they are convinced that they are acting from idealistic motives. Much that passes as idealism is disguised hatred or disguised love of power.”

Concerning the general patterns of legislation, it is important to remember Russell’s view on political decision-making:

“When you see large masses of men swayed by what appear to be noble motives, it is well to look below the surface and ask yourself what it is that makes these motives effective.”

It is easy to be taken by the facade of nobility. Russell ends his “psychological query” by emphasizing the need of intelligence for making the world happy.

II.2.2. The Motives of Copyright

For the purposes of this study, some conclusions may be drawn from Bertrand Russell’s essay.

First of all, love of power is an important motive behind all legislation. Also vanity is an important part of rights taking, as it informs society of the importance and status of the rights-holder. We may regard vanity as an important social factor and, in relation to copyright, vanity as a motive is close to Ruth Towse’s aforementioned view of the copyright functions. However, as love of power and vanity are rather general motives by nature, and applicable to all walks of life, we shall not discuss them further. Instead, a particular connection to copyright may be observed concerning the following motives.

As a basis for the capitalist economy, and thus also concerning copyright, acquisitiveness plays an important role as a key motive for copyright legislation. We may call this in a more straightforward manner “the profit motive” of copyright. The profit motive, first of all, works in favor of the rights-holder.

Rivalry may be seen in the context of Joseph Schumpeter’s theory on economic development. Competition is a strong force and motive for the entrepreneur. Rivalry may, in the case of oligopolist competition, even override acquisitiveness when rivalry leads to the death-struggle of an industry. Rivalry is, as suggested by Schumpeter’s theory on economic development, the key factor of economic development, and also a perpetual source of debate in copyright legislation concerning the future of various copyright industries. Society (or international community) may decide to favor the commercial user of copyright and thus increase competition. This means that the legislator’s power is used to create incentive for the copyright user’s business, not only for the author. This we can call the development motive.
Altruism is a suspicious motive: according to Russell, it either rarely exists or alternatively, is used as camouflage for other, self-centred motives. Altruistic motives can be reduced to economic market failures. However, in some areas of copyright legislation there seems to be a genuine discussion concerning fundamental human rights or intrinsic values. In this discussion, altruism may occasionally work as an undercover argument to, for example, profit motive, but contain also elements that may not easily be reduced to self-interest. Examples of these are the moral rights. Intrinsic values are also displayed in the discussion concerning the rights of the individuals of the greater public in relation to copyright protected work. The important question of whether "fair use" is a right, illustrates this element. We might call this "the human rights motive" of copyright.

Discussion on the copyright users’ (human) rights has developed during the latter part of the 20th century, and has currently been especially vocal in the works of Professor Lawrence Lessig. We may call this the public interest motive, as a closely related motive to the human rights motive, but with an opposite end-user perspective.

From the previous brief analysis, we may recognize some basic elements that are vital for the purposes of this study.

Judging based on the historical documents and thoughts of copyright scholars that form the roots of modern copyright thinking and international legislation, it seems justified to say that the copyright legislation is affected by several basic motives. The motives represent mutual beliefs among the copyright society of the factors that are important in relation to copyright legislation. They may also be described as the mainstream of argumentation in copyright legislation.

Copyright motives are debated whenever amendments to the legal copyright instruments are made. The main motives of copyright are the following:

- the profit motive: the protection of investment, and the author's financial interest
- the development motive: the encouragement of the development of new technologies
- the human rights motive: the protection of the author, especially moral rights
- the public interest motive: the adjustment of the rights of others (education, freedom of speech, rights of minorities, etc.) to balance the public interests within copyright legislation

There may be many equally justifiable ways of approaching this problem area, but this division is to the writer's understanding a reasonably broad yet compact way of having defined the basic guidelines of the forces behind the development of the copyright legislation. The division of motives is also needed in the latter part of the
study when conclusions and suggestions related to the development of copyright are made.

The quote from the Magill case could thus, as a hypothesis, be complemented in the following manner (the Magill case, EEC High Court 6 April 1995) (inserts and emphasis: MH):

“28. However, the Court of First Instance took the view that, while it was plain that the exercise of an exclusive right to reproduce a protected work was not itself an abuse, that did not apply when, in the light of the details of each individual case, it was apparent that the right was being exercised in such a ways and circumstances as in fact to pursue an aim manifestly contrary to the objectives of Article 86 (the idea of balancing representing public interest motive). In the event, the Court of First Instance continued, the copyright was no longer being exercised in a manner which correspond to its essential function, within the meaning of Article 36 of the Treaty, which was to protect the moral rights in the work (the human rights motive) and to ensure a reward for the creative effort (the profit motive), while respecting the aims of, in particular, Article 86 (the development motive).”

As incomplete and subject to criticism as this example may be, the ideas of moral rights, reward for creative effort, competition, and the overall concept of balancing different motives in the public interest, seem to illustrate the core motives of copyright, and indicate the applicability of the motives framework as a basic tool for further study of the development of copyright protection. Although derived on the basis of assumptions, the outcome is relatively clear and even practical.

**II.2.3. The Profit Motive – Protection of Investment and Incentive to Creativity**

The profit motive is an important part of the Western democratic and economic system and has been discussed by many leading Western thinkers. The profit motive in its purest form may be seen as both an interest and incentive to make money legitimately.

If we share the Marxist assumption that production is the foundation of society’s superstructure, including legislation, we are quite likely also to believe, like Drahos, that in the information society, intellectual property becomes the prime resource. The intellectual property rights, as rights for the exploitation of information, increase the control and trade of information.
The profit motive protects economic interests: either the current income or the prospect of future income. The profit motive was central in affording the printing privileges, which were given in order to protect the investments of the printers by controlling entry into the printing business.

As a logical basis for the profit motive, we might regard the basic assumption of Posner that without the protection of investment in a certain activity, the investment will not be made in that activity, but will be used in some other area. If a crop is not protected, the farmer will turn to hunting. Another assumption behind the profit motive is the tendency towards economic efficiency, which is an essential component of rational choice.263

The profit motive is also important concerning the need for legal protection of certain forms of intellectual activity. One may consider the difference between computer software and photography.264 It is not at all self-evident that computer programming would easily and logically fit into the copyright system, the problem being similar with photography. Both raise similar issues, how to differentiate between, what is processed by man’s intellect and what by machine, and the general applicability of the copyright framework as a source of protection. As a rule, computer programming is not made for any purpose other than controlling and enabling the operations of a computer, and thus not primarily from intellectual inspiration, but from a specific order. Computer programming made however a quick entrance into the legal copyright system, due to its economic importance, whereas the debate concerning photography took decades despite the admitted “artistic” nature of the activity.

It is undoubtedly a “matter of immense significance to the economies of many countries”265 that paved the way for the protection of computer programming in the copyright sphere, whereas it is equally clear that the economic importance of photography does not raise important international trade-policy issues.

As an example, the profit motive is present also in the 1996 WIPO Copyright Treaty’s preamble, which states that the contracting parties recognize the outstanding significance of copyright protection as an incentive for literary and artistic creation.266

Finally, it is worth noting that unlike the human rights elements, the economic rights as a rule are assignable.

II.2.4. The Development Motive: Protecting the Commercial User’s Business Opportunities

The development motive reflects the need to allow new forms of communications and media to develop and prosper in the interest of the media business and thus, the
community. This interest may be contradictory to some other interests, such as the author’s exclusivity or protection of the markets of some other, older technology. This element is however identifiable in the context of the technological development of communication and copying means. Usually, the way to ensure that new technologies are being widely used, as well as their development, is the active creation of market conditions that will boost competition. So, the development motive also represents pro-competition.

The core of this development motive might well correspond to the words of Schumpeter:

“We have (...) seen that, both as a fact and a threat, the impact of new things – new technologies, for instance – on the existing structure of an industry considerably reduces the long-run scope and importance of practices that aim, through restricting output, at conserving established positions and at maximizing the profits accruing from them. (...) But in the process of creative destruction, restrictive practices may do much to steady the ship and to alleviate temporary difficulties.”

Hardly any legislator would admit to having as a goal the maintenance of restrictive practices, but rather, the encouragement of the development of new technologies. In the Berne system, the development motive was formulated in the 1928 Rome conference in the following manner:

“The proposal by the Austrian Delegation thus submits to the Conference for consideration the system of “compulsory licensing” or “legal licensing” in connection with the application of a musical work to mechanical instruments. Three arguments are put forward in support of the proposal: (...) the second is of a more restricted nature, being based on the supposition that the exclusive right of the author to agree to mechanical-musical applications could be a threat to or a restriction on the development of the phonomechanical industries, in which so many economic and financial interests are involved.

Although the discussion has its roots in the Berlin Conference 1908, the development motive received an important place in the language of the 1928 sub-committee report.

II.2.4.1. Creative Destruction

Some of the works of Joseph A. Schumpeter seem to crystallize the essence of the development motive. Schumpeter’s well-known theory describes the “creative
destruction” of capitalism. Schumpeter sees the technological innovator as the driving force of economic development.

Being an entrepreneur is however “not a profession” and as a rule not a lasting condition. The entrepreneur is an outsider, without the data for his decisions and the rules of conduct that are very accurately known to those within. “In the breast of one who wishes to do something new, the forces of habit rise up and bear witness against the embryonic project. A new and another kind of effort of will is therefore necessary in order to wrest (...).” There will be a reaction of the social environment against one who wishes to do something new.

Needless to say, this description is well-suited to the game of legislative change, where the interested parties very often represent either those who may benefit from new technology or those who may lose.

As discussed earlier, Schumpeter makes a very important distinction between this economic leadership – that is, the endurance of outer resistance for the establishment of a commercial innovation – and carrying out a mere technical invention.

“As long as they (inventions) are not carried into practice, inventions are economically irrelevant. And to carry improvement into effect is a task entirely different from the inventing of, and a task, moreover, requiring entirely different kinds of aptitudes.”

To conclude, invention is one thing but to establish a business is from an economic point of view (which is Schumpeter’s) far more important. Using the terminology of North, technology provides a challenge for the existing institutional framework. We see regulation as a necessary, although not sufficient, element for establishing the transaction rules for a new business. The Schumpeterian ability to create and establish a business, on the basis of new technological innovation, and to have an impact on the content of the regulation, is often accepted by legislators. This represents the development motive.

II.2.4.2. The Control of Competition

It is clear that the early printing privileges were more targeted towards controlling competition and creating barriers to entry, than liberalizing the industry in the name of competition. Concerning, for example, the Stationers’ Company in 17th and 18th century England, the role of the Company was that of a trade union of booksellers, who were mainly situated in London. It was by then more or less natural that they enjoyed a monopoly of printing. The trade was organized into guilds which in practice, and also by force of legislation and town regulations, could discipline members and
keep out newcomers unless they served a long apprenticeship with an established master. - The Statute of Queen Anne 1709 however meant that the privileges were to be abolished and the position of the Stationers’ Company was threatened.

In relation to the Berne Convention one might see the first signs of competitive argumentation in the context of the 1908 Berlin Revision, when new technology – voice recording – had emerged and created the need to fit the new way of mechanical reproduction into the international copyright system. The arguments in the conference in favor of the record industry were very much based on pro-competitive argumentation. One of the basic assumptions of this study is that competition issues are likely to arise in the context of the emergence of new technologies. Therefore, the development motive always plays an important role when new technologies are discussed.276

One could see reflections of the development motive in the WIPO 1996 Copyright Treaty’s Preamble stating that the contracting parties recognize the profound impact of the development and convergence of information and communication technologies on the creation and use of literary and artistic works.277

Ricketson has pointed out concerning the Berne Convention that the middle period from Rome to Brussels introduced the impact of the technological development and the emergence of new interest groups.278 Clearly, the 20th century early on discussed the effect of competition in the copyright field.

Why “the development motive”, why not “the competition motive”? The basic starting point of competition law is the prohibition or control of the misuse of a dominant market position and cartels. According to modern competition doctrine, the holder of an exclusive right, if in a dominant position in the market, must either procure protected products at reasonable prices, or grant licenses to third parties.279 The interpretation of the development motive in this study is that the legislator intends beforehand to dissolve monopoly positions (in the form of flexible licensing practices) that otherwise could harm the development of new forms of usage of copyright protected works. That is, the development motive works ex ante, whereas competition evaluation is ex post.

II.2.5. The Human Rights Motive

Copyright is usually divided into economic and moral rights. Concerning the economic rights, there is a rather clear connection to the ownership rights in relation to the international human rights instrument. In international agreements, national legislation, and legal practice, however, the element of exclusivity is very often regarded as less important in relation to the general economic rights, that is, a right to remuneration. As an initial remark, we might assume that this might suggest a differentiation of these
two elements, although not at the level of the international human rights instruments. Concerning moral rights (the right of respect and the paternity right), the connection to the human rights system is less clear, and mainly based on interpretation offered in different scientific articles but identifiable.280

Remembering the reservation on altruism made by Bertrand Russell, we may however note that according to Drahos, human rights guide the development of copyright.281 Like the profit motive, the human rights motive also contains two elements, which may also be, if not in conflict, at least in a “restrained relationship” with each other282: the perspective of the copyright holder, and the perspective of society/the rights of others. – It is worth noting that intellectual property law has not been thought of systematically in relation to the human rights norms.283 Also, the work done by some scientists in this area is probably more introductory by nature than conclusive. This is a new area and thus new questions have to be asked, even though we realize that clear or even satisfactory answers are not yet available.284

The first element of the human rights motive is closely related to the “droit d’auteur” as described that is, in the early drafts of the convention texts, which were later to become the Berne Convention, and the development of the moral rights, which took place subsequently with the general development of the rights and limitations of the Convention.285

The Berne Convention 1886 Article 4 has a broad definition of copyright protected works, which represent the “droit d’auteur” at its purest form. One might say with reasonable justification, that the original Berne Convention of 1886 was very much influenced by the human rights motive.

The roots of this motive are in the philosophical writings and legislation of the Enlightenment, which emphasized the importance of the protection of the artistic work of the human genius.286 Legally, the foundation of this is the constitution granting usually both a right to property, of which intellectual property is one form of property, and a right to the fruits of an individual’s intellectual work. In modern jurisprudence, copyright has sometimes been regarded as an indication or extension of one’s personality. This theoretical approach relies on the assumption that property as such is a part of one’s personality.287

This motive is closer at hand in the arguments of the copyright organizations and any organization representing the individual artists’ interests. Respectively, the more we discuss the investments or the industrial importance of the rights, the less we usually discuss in terms of the human rights motive.

The human rights motive also has important consequences in relation to the moral rights. These are very much related to the respect of an individual work of inspiration
in the exact form and manner it was originally intended by the author. According to Stig Strömholm, the “droit moral des auteurs” did not appear as a separate legal concept before the 19th century. By 1880, the French law already allowed such distinctions.

Concerning the emerging mass media, the Berne Convention revision in Rome 1928 established the moral rights of the author to claim authorship of the work, and to object to any distortion, mutilation, or any other modification of the work that would be prejudicial to the honour or reputation of the author. The right was limited to the lifetime of the author.

The Rome Conference 1928 decisions concerning the moral rights display the human rights motive. There was some opposition to the general proposal from the common law countries, whose copyright laws did not directly protect such rights, but did so indirectly through other legal remedies such as the law of defamation.

A compromise was settled: the protection of the two basic moral rights was granted (authorship and objection of any distortion etc.), but the determination of the conditions under which these rights were to be exercised and enforced was left to the domestic laws of each Union country. This gave the member countries some flexibility in their choice of the manner of protection, and the Article did not make it mandatory that this be done through their copyright laws. Under the Paris Convention (1971) text, the author or his personal representatives are entitled to enforce his moral rights throughout the copyright period and even after he has parted with the copyright.

Even the human rights issue has a “dualistic nature”, which will be discussed later. Not only the copyright holders’ human rights have to be respected, but also the users’ human rights. The element comes from society’s point of view, or the rights of the individuals who form society. Immaterial property rights are rights concerning the exploitation of information. According to Drahos, the intellectual property rights are becoming the prime resource in modern economic life. Property in expression conflicts with freedom of expression. Intellectual property rights are used by states to secure marketplace objectives, which may conflict with the information policies and rights in a society. This element shall be however differentiated and discussed further in the context of “the public interest motive”.

Throughout this study, the human rights motive is seen as a moral or natural right principle, as “good in itself”. This institutional origin of the human rights motive must be differentiated from the practical use of copyright, as the collecting societies, protecting the droit d’auteur, have had their share of criticism concerning the sometimes rather straightforward adaptation of the profit motive. It is also evident that the position of the ‘ailing artist/author’ has been used in alliance with other interests – the publishers in the early 18th century England in the context of the creation of the
Statute of Queen Anne, the collusion of publisher and author interests in the creation of the Berne Convention during the 1880s, and the alliance of performers and record producers in the debate preceding the 1961 Rome Convention.

However, the relation of copyright to the international protection of human rights is more complicated. There seems to be at least four distinct rights elements that enjoy protection in some sense, and which bear a relationship to the human rights:

- copyright exclusivity (as a property right)
- right to remuneration (as a liability right)
- right of paternity (as an inalienable right)
- right of respect (as an inalienable right)

As the first one – exclusivity – is in some cases not respected, that is, in cases of compulsory licensing, (or extended collective licensing), the absence of the right to remuneration is a rare case, and there are basically very few exceptions concerning the latter two.

Human rights remain a controversial issue in international copyright protection. Since the human rights tradition in general is rather remote to the US system of copyright, in the TRIPS agreement, moral rights were expressly excluded. This raises the question of the role of moral rights in the present international system. However, it must be stressed that the nature of the TRIPS agreement is commercial and therefore may not provide broad justification for the exclusion of the moral rights from the copyright system altogether. Copyright and the international human rights system are discussed later in more detail.

In the 1996 WIPO Copyright Treaty’s preamble, the human rights motive is represented by the contracting parties’ desire to develop and maintain the protection of the rights of authors (italics: MH) in their literary and artistic works in a manner as effective and uniform as possible. This is however not part of TRIPS.

For the purpose of our study, it is finally worth noticing that unlike economic rights, human rights are as a rule non-assignable.

II.2.5.1. Copyright in the International Human Rights Treaties

The role of international human rights protection becomes increasingly topical regarding copyright, since technological change globalizes communications, and there is a need for common global justification for the legislation relating, for example, to freedom of speech. The documents of most substance in relation to copyright are the United Nation’s Declaration of Human Rights, and the European Convention
on Human Rights. Since the European Convention in its preamble refers to the UN Declaration, the Declaration may be seen as a prime source of the norms with the European Convention offering supplemental elements.\textsuperscript{301}

\textbf{II.2.5.1.1. The United Nation’s Declaration of Human Rights}

In general, the preamble of the UN Declaration explains the basis of human rights protection, which is an essential instrument in order to avoid the atrocities of the World Wars in the future by creating institutions of international control under the protection of the United Nations. Therefore, it has to be understood that the basic problems the Declaration is meant to address are much larger than the aspects of copyright, and thus too far fetched conclusions must be avoided.

The General Assembly agreed on the Declaration to be a common standard of human rights to all nations.\textsuperscript{302}

\textbf{II.2.5.1.1.1. The Economic Right}

Everyone has the right to own property alone as well as in association with others.\textsuperscript{303} No one shall be arbitrarily deprived of his property. Copyright is clearly a property right, and the protection of copyright at the human rights level may be seen as stemming from this Article of the Declaration.

Additional protection is provided in Article 27 (2), stating everyone’s right to the protection of the moral and material interests resulting from any scientific, literary, or artistic production of which he is the author.

The right to set limitations on the different elements of copyright is very important in relation to the copyright legislation. Article 18 of the U.N. Declaration states that restrictions permitted under the Convention to the rights and freedoms shall not be applied for any purpose other than those for which they have been prescribed. Basically, this would suggest a relatively high threshold for any limitations especially concerning the interpretation in courts. Article 29 (2) sets an additional requirement: “In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.” Additionally, Article 29 (3) requires the United Nations’ purposes and principles be respected.\textsuperscript{304}

As stated previously, a brief study of the history of the Berne Convention suggests several cases where economic rights have been upheld as a right to remuneration, whereas the exclusivity has been overlooked in the form of allowing the national implementation of compulsory licenses for the signatory states.
II.2.5.1.1.2. The Moral Rights

In the preamble of the Declaration, among others, the faith in fundamental human
rights and in the dignity and worth of the individual is expressed.\textsuperscript{305} It is probably
slightly far fetched to refer to Article 12, but according to its wording, certain elements
might make sense in the context of the moral aspects of copyright, for example, attacks
upon honor or reputation.\textsuperscript{306}

A reference to the moral rights is made in Article 27 (2), according to which also the
protection of the moral interests resulting from scientific, literary, or artistic production
is a human right.\textsuperscript{307}

This illustrates the many-faceted nature of copyright, containing historical components
of both an economic and human rights nature.

II.2.5.1.1.3. Potentially Colliding Rights

One of the most important questions of the regulation of copyright is, to what extent
different elements of copyright might collide with other human rights, and how should
these collisions be resolved.

Probably the most debated collision may take place with freedom of speech.\textsuperscript{308} This
was the argument in the U.S. Supreme Court case discussed below. Whether such a
collision exists or not the solution in favor of some other human right would take the
form of a restriction or limitation of copyright in some manner. Article 19 protects
freedom of “opinion and expression”, and further includes the freedom to seek,
receive, and impart “information and ideas”. Opinions, information, or ideas may not
as such be subject to copyright protection, but whether “expression” would also hold
the form of expression protected by copyright, is debatable. However, in that case,
we would not be discussing anyone’s right to receive certain forms of expression, but
rather someone’s (unilateral) freedom to express himself.

Freedom of expression is a classical negative right\textsuperscript{309}, where the core content of the right
is the individual’s immunity against the state in the use of that right. Right to access on
the other hand is a positive right, which may require government intervention.

Important human rights, which become important public policy goals also in the
context of copyright legislation, are represented in Article 21 (1)\textsuperscript{310} (right of equal
access to public service), Article 22\textsuperscript{311} (cultural rights, among others), Article 26 (1)
(right to education)\textsuperscript{312}, and Article 27 (1) (right to enjoy the arts and share scientific
advancement).\textsuperscript{313} Article 29 (3) contains a general rule of interpretation of the scope of
rights, stating that the purposes and principles of the United Nations must be applied
in the exercise of the rights.
II.2.5.1.2. The European Convention on Human Rights

The European Convention on Human Rights is basically an instrument of international law on an individual’s political freedom, not so much economic rights like property rights, which are not mentioned in the Convention text. In the preamble, the Convention refers to the UN Declaration.

Everyone has the right to respect for his private and family life, his home and his correspondence. Whether unpublished works would amount to “correspondence” is unclear, however, it should be relatively certain that they otherwise belong within the protection of private life.

Everyone has the (unilateral, MH) right to freedom of expression. This right shall include freedom to hold opinions and receive and impart information and ideas without interference by public authorities and regardless of frontiers (emphasis MH). The scope of freedoms seems to be of a similar breadth as the UN Declaration, and therefore, the freedom to receive information and ideas does not in itself mean a right to receive material with copyright protection, as copyright does not protect information and ideas as such.

An important set of criteria for the limitations of these freedoms is given in Art. 10 (2): “The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or the rights of others (emphasis MH), for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.”

Restrictions may be set on the basis of the protection of the rights of others. They have to be prescribed by law and be necessary in a democratic society. The difficulty here is though that in the absence of any clear right relating to copyright, no exact legal collision may be theoretically examined.

II.2.5.2. Copyright and Freedom of Expression in Europe

According to Hugenholtz, there are a number of explanations for the late development of European interest in the potential copyright/free speech conflict. There are no European Court of Human Rights decisions. Rather than the “utilitarian” copyright law of the US, the European droit d'auteur is an essentially unrestricted natural right reflecting the ‘sacred’ bond between the author and his personal creation. Another explanatory factor is a certain reluctance on the part of the European national courts and scholars to apply fundamental rights and freedoms in ‘horizontal’ relationships,
that is, conflicts between citizens - with the exception of the Bundesverfassungsgericht in Germany.320

The European Convention on Human Rights does not recognize copyright or intellectual property as human rights. On a national level, only in Sweden does the constitution expressly recognize copyright. In Germany, doctrine and case law connect copyright to the constitution, where the protection of moral rights and economic rights are separated.321 Article 14 (2) of the German Constitution recognizes that property serves a social function, which provides the basis for limiting too broad copyright protection, for example, for public good.322 Elsewhere in Europe, the protection of copyright as a human right is thought to be implicit in constitutional provisions that guarantee private property, rights of privacy and personality, artistic freedoms, and so forth.323 In Finland, the Constitutional Law Committee of the Finnish Parliament has, in a recent statement, emphasized the need to maintain a balance of human rights interests within the copyright system.324

Concerning the legal doctrine, according to Hugenholtz, there are several arguments against the conflict of freedom of speech and copyright. Firstly, copyright does not limit the use of information, as copyright does not monopolize ideas. Copyright and freedom of expression are consistent because they both promote speech. Copyright already reflects a balance between free speech and property rights, thus ‘internalizing’ the conflict within the frame of the copyright law. For this argument, support can be offered from the idea/expression dichotomy, the limits to the economic rights, the limited term of protection, and the various other limitations and exceptions of copyright.325

In Europe, economic rights are generally drafted in flexible and ‘open’ terms, whereas limitations on copyright will tend to be rigorously defined and ‘closed’. In the US, the copyright owner’s economic rights are narrowly defined, and the exception for fair use leaves a wide scope for unauthorized uses.326 Many of the limitations found in European laws are inspired by the concern over freedom of expression and information. Most countries allow copying for personal use, news reporting, quotation and criticism, scientific uses, archival purposes, library and museum uses, and for access to government information.327

As a concluding analysis, Hugenholtz puts commercial messages and political speech in different categories, where the latter enjoys the higher protection of Article 10 of the European Convention on Human Rights. Although “artistic speech” enjoys a higher level of protection than “commercial speech”, there is no exceptio artis allowing artists immunity from restrictions. The freedom of the press is well protected. Public interest, substantiality of the restrictions, the aim of the regulation, and the level of European consensus are important with regard to the “necessity in a democratic society” test. Where norms tend to diverge nationally, the Court will allow a wide “margin of
appreciation”. In sum, freedom of expression arguments are likely to succeed against copyright claims aimed at preventing political discourse, curtailing journalistic or artistic freedoms, suppressing publication of government-produced information, or impeding other forms of public speech.³²⁸

The European Commission of Human Rights seems reluctant to accept freedom of expression arguments in cases where property rights in information are merely exercised to ensure remuneration, and the flow of information to the public is not unreasonably impeded: “As long as licenses are made available under reasonable conditions, or statutory licenses apply, the European Court is unlikely to find that copyright and Article 10 collide.”³²⁹

Of the latest development, it is worth recognizing Article 17 (2) of the Charter of Fundamental Rights of the European Union, accepted at the Nice summit on 18 Dec 2000 (2000/C 364/01): “Intellectual property shall be protected”. Although this study will not interpret the Charter any further it is important to realize that IPR’s status as human rights is quite clear within the European legal framework.

To conclude, it seems difficult to deny the at least partial human rights status of copyright. Although the legal interaction between copyright and other human rights is unclear, we can however without hesitation conclude that the human rights system bears an important relation to copyright legislation, and that it is justified to speak of a human rights motive behind the copyright legislation.

I.2.5.3. The U.S. Supreme Court on the Potential Collision between Copyright and Freedom of Speech

The U.S. Supreme Court discussed in the recent Eldred v. Ashcroft case the potential collision between copyright and freedom of speech. The argument came about in a case brought against the state claiming that Congress had exceeded its constitutional powers in prolonging the duration of copyright from 50 to 70 years.³³⁰

The petitioners argued, among other things, that the 1998 Copyright Term Extension Act (CTEA) was a content-neutral regulation of speech that failed inspection under the heightened judicial scrutiny appropriate for such regulations, that is, in relation to the First Amendment (freedom of speech) of the U.S. Bill of Rights. The District Court stated that no collision exists between copyright and freedom of speech, since there are no First Amendment rights to use the copyrighted works of others.

By establishing a marketable right to the use of one’s expression, copyright supplies the economic incentive to create and disseminate ideas.³³¹ In addition to spurring
the creation and publication of new expression, copyright law contains built-in First Amendment accommodations.\textsuperscript{332}

First, it distinguishes between ideas and expression and makes only the latter eligible for copyright protection. The Supreme Court referred to 17 U.S.C. § 102 (b): “In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”\textsuperscript{333}

The Supreme Court cited the case Harper v Row, 471 U.S. at 556: “The idea/expression dichotomy (emphasis MH) strike(s) a definitional balance between the First Amendment and the Copyright Act by permitting free communication of facts while still protecting an author’s expression.”\textsuperscript{334}

Second, the “fair use” defense allows the public to use not only facts and ideas contained in a copyrighted work, but also expression itself in certain circumstances. The fair use defense affords considerable “latitude for scholarship and comment\textsuperscript{335}, and even parody.\textsuperscript{336}

According to the Supreme Court, the CTEA itself supplements these traditional First Amendment safeguards: 1) library etc. exception for the last 20 years of the protection period 2) title II of the CTEA (Fairness in Music Licensing Act of 1998) exempts small businesses, restaurants, and like entities from having to pay performance royalties on music played from licensed radio, television, and similar facilities. 3) CTEA does not oblige anyone to reproduce another’s speech against the carrier’s will. The First Amendment securely protects the freedom to make – or decline to make – one’s own speech.\textsuperscript{337} The Supreme Court affirmed the judgment of the Court of Appeals.

According to Samuelson, in some respects concerning the circumstances, Eldred v. Ashcroft was over-determined for two reasons: Congress has already extended the copyright terms many times before, and life plus seventy years is however a limited time.\textsuperscript{338}

Judging from a formal point of view, it seems that the US Supreme Court adopted a systematic approach concerning the potential conflict or “restrained relationship” between copyright and freedom of speech as interpreting the copyright legislation to represent a balance of the different interests.\textsuperscript{339} Whether the balance is set correctly or not, is another and highly important issue, but the systematic approach resembles the point of view of this study and the motives framework.
II.2.6. The Public Interest Motive

It has long been recognized that restrictions or limitations upon authors, and related rights may be justified in particular cases. The public interest motive is a counterpart of the human rights motive as it displays almost all “third-party”-related interests in the area of copyright. The public interest works mainly not for the author’s benefit, but to balance or rebalance the effects of copyright in order not to harm essential societal interests.

On the other hand, in the early days of print, the government had an interest, not only to protect the investment of the printer, but also the political interest to control the content that was printed. It has even been said with clear justification that the authorities in the early days of printing were in fact against the liberty of the press. Another angle is society’s interest in maintaining certain operations that are important elements of a free society, like the freedom of the press and news reporting. For example, society’s interest concerning important news was discussed in International News Service v. Associated Press:

“But the news element – the information respecting current events contained in the literary production – is not the creation of the writer, but is a report of matters that ordinarily are publici juris, it is the history of the day. It is not to be supposed that the framers of the Constitution, when they empowered Congress ‘to promote the science and useful arts’ intended to confer upon one who might happen to be the first to report a historic event the exclusive right for any period to spread the knowledge of it.”

But there have been other public policy goals involved in copyright legislation. Copyright law has never been just concerned with the protection and fostering of the single creative individual, but other themes have also been significant in its development, one of them the educational mission. Even the preamble of the 1710 Statute of Queen Anne started with the words, “An Act for the Encouragement of Learning (...).”

One could see that the public interest represents the basic need of the community to restrict copyright protection, or the excessive use of it, in the name of a legitimate society interest. The public interest today has little in common with the censorship ideas of the early print privileges, but is more vocally concerned about the importance of the free flow of information and the press’ ability to use different copyright protected sources in their news work. In relation to the potential collision of different human rights, discussed in the relation of the human rights motive, the human rights of others represent one element of the public interest motive, that is, the users’ right.

It is therefore important to realize that unlike other motives discussed, the public interest motive in the sense described above has changed emphasis during the evolution of
copyright: from government-centered censorship interest towards interest on the users’ right.

In the Preamble of the WIPO 1996 Copyright Treaty, the public interest aspect is visible: on the one hand, the contracting parties recognize the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural, and technological developments. On the other, they also recognize the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research, and access to information, as reflected in the Berne Convention.346

The interests of the authors versus public interest were discussed at length in the Stockholm Conference in 1967, when the three-step test was introduced into the Berne Convention. The working documents make a reference to the practical difficulty of defining a proper balance between the right of reproduction and exceptions to that right. “This is probably associated too with the considerable difficulty of finding a formula capable of safeguarding the legitimate interests of the author while leaving a sufficient margin of freedom to the national legislation to satisfy important social or cultural needs”.347

Public interest has also been discussed in relation to the “minor exceptions doctrine”, which is based on the statement by Rapporteur-General Marcel Plaisant in the General Report of the 1948 Berne Revision Conference. According to Brennan, this statement was not made in a personal capacity but was regarded as an “agreement” between Berne Union members in the sense used in the Vienna Convention:348

“Your Rapporteur-General has been entrusted with making an express mention of the possibility available to national legislation to make what are commonly called minor reservations. The Delegates of Norway, Sweden, Denmark and Finland, the Delegate of Switzerland and the Delegate of Hungary, have all mentioned these limited exceptions allowed for religious ceremonies, military bands and the needs of the child and adult education. These exceptional measures apply to Articles 11bis, 11ter, 13 and 14. You will understand that these references are just lightly pencilled in here, in order to avoid damaging the principle of right.”

The minor exceptions doctrine reflects the public interest motive in allowing exceptions under certain circumstances, not on the basis of economic or development interest, but on the basis of human rights related public interest.

Human rights protect the basic freedoms of individuals in a modern society. Copyright is protected, in that it contains human rights elements, from two perspectives: on the
one hand, as a property right, on the other, containing moral rights. It is also apparent that copyright may serve freedom of speech against “chilling affects”.

Since the freedom of expression protects an individual’s right to receive information and ideas, it does not as a rule protect anyone’s interest in certain forms of expression protected by copyright (the idea/expression dichotomy). One may with a high degree of confidence say that no general right for receiving copyright protected works is included in the human rights instruments.

However, one of the central arguments of the fundamental criticism has been, that the right/limitation –relation should be reversed; one should rather see the right to receive and distribute information as the primary right, to which copyright may form an exception under certain circumstances. The current logic of the legal system may anyhow not be claimed to follow this logic at present stage.

It seems also clear, judging not only from the basis of the human rights instruments, but also based on the historical development of the international copyright protection, that not all elements of copyright enjoy equal status as intrinsic values: it has been often stated in the Berne Convention that exclusivity might be overlooked by allowing compulsory licensing, if the right-holders are granted monetary compensation. In the EU’s Information Society Directive, fair use by private citizens is acceptable, if only the right-holders’ compensation is safeguarded by a levy system. The criteria widely used and accepted in the copyright limitations is the three-step test: at least initially, it is possible to draw comparisons between the three-step test and the criteria developed for human rights restrictions in the international human rights instruments.

Moral rights, as rights per se, without the direct instrumental economic effect, are likely to be regarded as intrinsic values, and thus less likely to be adjusted by policy needs.

Without hesitation we may say, even with Russell’s reservation in mind that both the human rights motive and the public interest motives are central “mutual beliefs” of copyright, and it is not meaningful to discuss copyright only from a perspective excluding these, for example, from the basis of the economic efficiency calculus alone.

II.2.7. The Motives and the Purpose of Them in This Study

The motives introduced above may not always be logically “pure”, in a sense that there necessarily are overlapping areas: for instance, one might point out that the author’s interest has not only a strong human rights element emphasizing human dignity, but is also of an economic nature. On the other hand, there maybe conflicting positions: competition is very much in the public interest, and also in the interest of the profit
motive of the entrant, but less so with the incumbent. As much as we appreciate the human rights aspect of copyright, freedom of speech and equal access to information have to be respected as important societal values with deep human rights interest. In numerous cases, the settling of conflicting interests has required compromises and the member countries of the Berne Convention have been afforded the liberty to set the power balance of the different motives in their national legislation.

As an important example of this, the three-step test for exceptions restricting the reproduction right (special case/normal exploitation/reasonable) concerning the reproduction right illustrates conflicting interests:

"It shall be a matter for the legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author."

Under these circumstances, the reproduction rights might be limited, for example, with compulsory or extended collective licensing.

However, the motives in the sense defined for the purpose of this study intend to reflect the emphasis or the main tendency of a chosen line of argumentation in the copyright legislation. It is justified to say, that the ‘American’ way of copyright argumentation tends to follow the profit motive, whereas the French tradition tends to follow the human rights motive.

We could also illustrate this difference of the traditions with Coase’s requirement for assignable rights: economic rights as a rule are assignable, whereas human rights are not. This reflects also a basic understanding of the role and functions of copyright in these respective societies.

The media and copyright industries tend to be divided concerning the interest positions: some argue for the protection of investments, while some favor the encouragement of new forms of distribution and the competitive impact of new entrants without the burden of too restrictive legislation. Every time a new distribution or copying technology takes root, we may see the industry representatives divided: those who have their business interests in the old technology and old institutional framework are worried that the new technology does not share the same copyright burden as the old one, while the new technology lobbyists might say exemptions are needed to get the new business running: the reward will come to the right-holders later on. The profit motive and the development motive might therefore be in conflict and the legislator will have to decide, whether to encourage the new development or protect the old investments. In a Schumpeterian sense, the choice is between maintaining status quo or enabling “creative destruction”.
Public interest/censorship has played a very important role in the past, and is once again topical concerning the problems of control in the Internet. However, the public interest motive seems to be more vocal, for example, in relation to the rights of the minorities and the opportunities of the weaker members of societies, as well as the developing countries, to have equal access to information and arts.

It is important to note that the rights discussed in relation to the profit motive are assignable economic rights, whereas the human rights as a rule are not assignable.

We might illustrate our motives initially in the following manner:

<table>
<thead>
<tr>
<th>Person related</th>
<th>Corporate Related</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Originator</strong></td>
<td><strong>Corporate Related</strong></td>
</tr>
<tr>
<td>human rights motive</td>
<td>profit motive</td>
</tr>
<tr>
<td>(the author’s right)</td>
<td>(encouragement of creative investment)</td>
</tr>
<tr>
<td><strong>User</strong></td>
<td>development motive</td>
</tr>
<tr>
<td>public interest motive</td>
<td>(encouragement of competition and technological development)</td>
</tr>
<tr>
<td>(the users’ human rights)</td>
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Besides being explanatory devices for the “mental models” or “mutual beliefs” in copyright, the motives have another important role especially in the lobbying situation: they represent copyright stories, that is, the parties’ opinions on the recommendable direction of the legislation. A lobbyist has to have a good story. The parties tend to express their perspectives using more or less exaggerated argumentation along the lines of these motives. The best story gets the legislator’s interest. From the parties’ point of view, the legislation game is essentially one-off and therefore represents a Prisoners’ Dilemma situation. Society, or the legislation community, has to decide how to organize the environment.357
Footnotes

194 Koktvedgaard p. 25: Concerning intellectual property rights in general, the background interests of copyright legislation belong into two main groups, that is, the protection of personal creative effort, and the protection of “customer-base” or other type of commercial position.

– Olsson p. 21: The policy reasons behind copyright are that exclusive rights stimulate creativity, and moral reasons (“ideella intressen”). Later, economic interest has gained in importance.

– Koktvedgaard–Levin p. 60-61: The “aesthetic” origins of copyright have developed towards more distinctive and “legal” criteria. – See Menell on division between utilitarian (economic incentive based) and non-utilitarian (lockian) justifications.

195 Posner, p. 36.

196 Guibault pp. 7-14, Rahnasto pp. 54–

197 See Rahnasto, pp. 54-59, Menell, Goldstein p. 7: Samuel Johnson’s remark during the preparation of the Statute of Queen Anne: “No man but a blockhead ever wrote except for money.”

198 A quote from Edelman, p. 41: Hugo to the Conseil d’Etat, 30 September 1849. N.B., Edelman refers to the element of labor in relation to the justification of copyright, as “labor itself does none other than objectify the essence of man, that is, property”.

199 Rahnasto, pp. 56-57, see also a reference to Schumpeter.

200 Guibault, p. 12: economic analysis is derived from utilitarian approach.

201 Rahnasto, p. 67.


203 Calabresi II pp. 17-18.

204 See however Landes – Posner III, p. 8: “Although this literature (...) is in the realist tradition in treating law as a manifestation of social policy, it does not have the skeptical cast of the older legal realism; it accepts the existence, validity and importance of legal doctrine, although it seeks to explain it in economic terms.”

205 See North, e.g. p. 3, institutions as rules of the game.


207 Towse, p. 21.

208 Towse, p. 80. The development of media technology increases the economy of the supply side, and users have more opportunities to utilize the products. On the other hand, the imperfect substitutability of a (superstar) performer increases costs on the demand side. Michael Jackson may not be a substitute for Bruce Springsteen although both are popular, and not a lesser talent. This is why superstars earn huge amounts of money, while most artists do not.

209 Towse, p. 22.

210 A quote from Smith, book 1, chapter 10:28: Smith regarded copyright compensation however more as damages for personal degradation: “There are some very agreeable and beautiful talents of which the possession commands a certain sort of admiration, but of which the exercise for the sake of gain is considered, whether from reason or prejudice, as a sort of public prostitution”. - This would hardly be the present view of the matter.

211 Towse, p. 94. – See also Pöyhönen II on the need of evaluating the “legal-economic totality” rather than only the legal positions.

212 Ibid. The example given by Posner could be continued from the point of view of social status. An author becomes a member of the ‘copyright family’ when being afforded copyright. The ‘copyright family’ enjoys respect in society.

213 Some tax cases in e.g. the UK and Finland illustrate the difficulty evaluating copyright as such. Lord Denning in the case concerning taxation for property taken to the use of oneself and involving the writer Hammond Innes, provided the following reasoning (Mason v. Innes, (1967) 44 TC 326): “Suppose an artist paints a picture of his mother and gives it to her. He does not receive a penny for it. Is he to pay tax on the value of it? It is unthinkable. Suppose he paints a picture which he does not like when he has finished it and destroys it. Is he liable to pay tax on the value of it? Clearly not.” – The Finnish Supreme Administrative Court ruled the property of a famous author non-taxable in inheritance taxation as far as 45 publishing contracts were concerned, due to difficulties in evaluation and the “specific nature” of copyright (KHO 2004:55).
101

214 Towse, p. 94.
215 ibid., p. 37, 94.
216 Välimäki II, pp. 40-49, the chapter “The Social and Policy Dimension of Open Source”.
217 palmer p. 194
220 Välimäki II pp. 40-49.
221 Guibault p. 15: “(...) all copyright regimes share a number of inherent limits that are
designed to promote the dissemination of new works and to ensure the preservation of a
vigorous public domain.”
222 However, Smith, I.10.28, concerning performing artists, uses tort law–type argumentation,
which was apparently typical of the moral notions of his era: “(...) recompence, therefore, of
those who exercise them (skills; MH) in this manner, must be sufficient, not only to pay for
the time, labour, and expence of acquiring the talents, but for the discredit which attends the
employment of them as the means of subsistence.”
223 Calabresi – Melamed pp. 1092-1093, p. 1119 (on pollution costs): “(...) we are likely to turn
to liability rules whenever we are uncertain whether the polluter or the pollutees can most
cheaply avoid the cost of pollution”. See also Landes – Posner III pp. 29 – on property and
liability rules, especially p. 30: “The practical way to distinguish between a property right and a
liability rule is by reference to the legal remedy available to the prospective or actual victim of an
injury. One who has a right to enjoin the injury-causing conduct or to obtain punitive damages
has a property right (...). But if the owner has a right just to compensatory damages, then he is
protected only by a liability rule (...).” – However, Brennan T. sees that certain “universal service
policies reflect a kind of ‘fair use’ or ‘compulsory license’ for access to particular communications
facilities that does not require us to reject the idea that such facilities can be regarded as
property.” Brennan T. p. 699 – Whether and in which context a right to compensation may be
seen as a property right is a matter of definition rather than having a clear-cut criterion.
224 Landes-Posner III, p. 25. The division is also similar to the problem discussed in Friedman II.
For different ways of making copyright divisions, see e.g. Beier, p. 254: “(...) the exclusive right
of the author provides the basis not only for his or her moral rights, but also for the exploitation
of the work.”
Related Rights in the Internal Market”, p. 6. – See also Hugenholtz III p. 295 on copyright levies:
“(...) what you see here is a right to remuneration that replaces an exclusive right.” Copyright
infringements may naturally provide cause for damages. This is however a separate issue from
the one explained in the text, which attempts to show an analogy between tort law concepts
and copyright. On actual infringement issues, see e.g. Oesch IV concerning Finnish domestic
practice.
226 Rose-Ackerman, p. 203: inalienability rules approached from transaction cost and imperfect
information viewpoint, in order to search a “third way” between strict economic interpretation
and “paternalistic moralism”.
227 See e.g. SOU 1990:30 p.73, a reference to the interests of Nordic legal institutions.
228 Koktvedgaard. See also e.g. Rosen, p. 9, on the influence of Nordic realism to the copyright
doctrine. On the importance of Nordic copyright tradition, see Olsson III p. 12: the Nordic
countries’ influence on the development of international copyright protection has been greater
than their size per se would indicate.
229 Koktvedgaard, p. 9, 11.
230 Koktvedgaard p. 25.
231 ibid: “Når beskyttelsen skal udføres i den positive ret, hænger utformningen nøje sammen
med intressens art og med den herskende samfundstilling i øvrigt.”
232 Koktvedgaard p. 39. See also English summary p. 440.
233 ibid. p. 91, p. 443.
234 See also Ross: the object of copyright is merely an abstract, logical construction used for
practical reasons, rather than physical reality.
235 The recent enthusiastic discussion especially in Finland concerning the human rights element
from the users’ point of view reflects the “flip side of the coin”: the public debate is very easily
drawn to the dichotomy between authors and users, rather than trying to grasp the rather complicated and networked totality of copyright protected content production and distribution.

236 See Kivimäki.
237 See Helin, p. 264, 267, 315.
238 For a thorough history on Scandinavian Realism, and on the affect of Scandinavian realism to Finnish jurisprudence, see Helin.
239 See reference to Olsson III p. 12 above.
240 Saxén. A study of a printing agreement.
241 See table of sources for details.
242 See Virtanen.
243 Välimäki II, Sorvari.
244 Lagerspetz p. 4: “When we try to explain or describe something in institutional terms, we should also try to develop a model which is formulated in individualistic terms, and which could help us to know the typical actions, attitudes and properties of the individuals which make the institutional description possible. Thus, if we say that the State does something, we should, as social theorists, try to understand the nature of and motives behind the actions performed by individuals who are occupying the relevant positions in the state machinery.”
245 Behavioral approach to the structure or legal institutions is probably a less novel approach than would appear on the surface: even in the dialogue of Plato’s “Republic”, the forms of government are derived from the qualities of the human character, e.g. p. 224: “We shall probably find that there are as many types of character as there are types and forms of political constitution.”
246 Concerning the identification of the motives, the method may be called “hermeneutic” in a sense that it approaches the motives through iteration, that is, revising the basic assumptions during the reading of the legal material. On hermeneutics, see Minkkinen pp. 120-122 and pp. 129-130 (interpretation as a story of the purpose), Niemi pp. 91-92.
247 Schumpeter II, p. 57 warns of deductive simplifications. Schumpeter in his theory of economic development emphasized that he was not interested in the concrete factors of economic change, but with the method by which these work, “with the mechanism of change. The entrepreneur is merely the bearer of the mechanism of change”. We believe, along these lines that it is possible to identify certain patterns in the development of international copyright. The reference to the methodological thoughts of Douglass C. North may be repeated here (see North p. 131).
248 Rose-Ackerman p. 199.
249 On the impossibility of “predicting” human action, see convincing argumentation in Lagerspetz pp. 33-.
250 For a broader discussion on mental models as guiding institutional development see North, Shared Mental Models. In this working paper North preliminarily defines the issue in the following manner: “(…) ideologies are the shared framework of mental models that groups of individuals possess that provide both an interpretation of the environment and a prescription as to how the environment should be structured.”
251 See Aarnio, Minkkinen, Niemi.
252 Bertrand Russell: “The Springs of Human Action”, in the book: “Voice of the People; Readings in Public Opinion and Propaganda”, edited by Reo M. Christenson and Robert O. Williams, McGraw-Hill US 1962, pp. 73-81. Originally published in The Atlantic Monthly, vol. 189, pp. 27-31, March 1952. The “behavioral” approach to law and government can be identified in the history of philosophical thinking even as early as in the texts of Plato. Plato categorizes the motives into three: reason, desire (or appetite), and a (third) category of different motives: pugnacity, enterprise, ambition, indignation, which are often found in conflict with unthinking impulse. See Plato p. 207. – Plato p. 224 (or Sokrates) also draws conclusions regarding governmental structure from the basis of human nature: “We shall probably find that there are as many types of character as there are types and forms of political constitution.”
253 Russell’s description of the results of extreme rivalry are not too remote from Schumpeter’s description of the disruptive effects of oligopolistic competition.
254 In modern literature, altruism has been put back on the map, see e.g. North p. 14 p. 20, and Lagerspetz (games of coordination) pp. 43-. Altruism is reflected in the human rights motive.
Whether and to what extent is e.g. the open-source programming motivated by such motives shall not be discussed here. It has been claimed that e.g. fame would be a leading motive in creating something without monetary compensation. On the philosophical background of open-source, see Välimäki II.

Rose-Ackerman 1998, an attempt to find a “third way” between strict economic or moralistic approaches.

In the case of the Statute of Queen Anne in 1709, the origin of the Berne Convention in 1886, and the Rome Convention in 1961, we see a pattern where – as a lobbying strategy - the industry discovers the “ailing artist” and his needs for protection.

See Lessig.

“Mutual belief” as a phenomenon constituting institutional facts, see Lagerspetz, p.13.

Ricketson II, p. 2: “Yet (...) copyright law has never been just concerned with the protection and fostering of the single creative individual, although this has been a very important function of that law. Other themes have also been significant in its development, not the least of these being the “encouragement of learning” and the protection of investment in information creation and processing enterprises. (...) Prof. Jane Ginsburg has argued convincingly that the protection of both creation and commercial value lie together at the heart of modern copyright law and that both can be complementary, rather than conflicting, objects of protection” (see reference).

See Laddie, p. 56: the elements existing in the last quarter of the 18th century copyright were: 1. an exclusive right to multiple copies of literary, dramatic, or musical works 2. limited in time with the object of balancing the interests of producers and consumers 3. with provision for control of abuse of monopoly 4. the right treated as assignable property. – See also Renman Claesson, pp. 97-124: She describes the recent development of copyright as a division into two distinct systems: one for an industrial copyright as investors’ protection (requiring investment), and the other as personal protection of the author’s original creativity. – Patterson divides the main traditions into statutory and natural law copyright.

Donaldson p. 131: “The pursuit of profit and the existence of private property are said by some economists to be the foundations of a free society.” See e.g. Locke, pp. 150-155. Smith, pp. 155-159: “It is not from the benevolence of the butcher, the brewer, the baker, that we expect our dinner, but from their regard to their own interest.”

Drahos, p. 350

Posner, Chapter 1. See also Landes - Posner, arguing that “over-protection” of copyright may restrict creation of new works.


Ibid., p. 26. Ricketson was very critical of the proposal: “The issue of rights for software authors, however, goes right to the heart of the Convention, and it would be a pity if a new international norm were pursued and ratified simply because the law of authors’ rights provided the easiest pigeon-hole into which to place these creations.” - When profit motive talks, argument relating to the inner logic of the copyright system walks.

WIPO 1996 Copyright Treaty


Schumpeter defines economic development as distinct from the circular flow or the tendency toward equilibrium, which are the main cornerstones of modern economic theory. “Development in our sense is a distinct phenomenon (...) It is spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium, which forever alters and displaces the equilibrium state previously existing.” Although Schumpeter essentially is writing about the Second Industrial Revolution (the first being the invention of cultivation), his thoughts are also quite applicable to the development of media technology in the 20th century, and the effects it had on the international copyright system. Schumpeter II, p. 64.

Schumpeter II p. 65: “Yet, innovations in the economic system do not as a rule take place in such a way that first new wants arise spontaneously in consumers and then the productive apparatus swings around through their pressure. (...) It is, however, the producer who as a rule initiates economic change, and consumers are educated by him if necessary; they are, as it were, taught to want new things (...)”

Schumpeter II, p. 78.

Ibid. pp. 84-85.
In matters economic this resistance manifests itself first of all in the groups threatened by the innovation, then in the difficulty in finding the necessary cooperation, then in the difficulty in winning over consumers. (...) There is leadership only for these reasons.

It is revealing to read articles and comments concerning certain area of copyright business that date from an era immediately before the technological breakthrough. For example, the liberalization of broadcasting and telecommunications have been the results of the “combined efforts” of new technological possibilities and, very often, governmental efforts to liberalize the area. Often, the affects of new technologies are initially opposed by governmental regulations, providing a great deal of convincing argumentation against the new technology - until the doctrine changes. This was quite clear e.g. in the Nordic countries in the policy discussion concerning satellite and cable distribution in the 1980s, compared to the present, liberal attitude.

Concerning especially the European status, it is important to mention, that in “The Charter of Fundamental Rights of the European Union”, (2000/C 364/01) Article 17(2), simply states, “Intellectual property shall be protected”.

This term (in Finnish) has been used by Professor Kaarlo Tuori in seminar discussions on the matter (e.g. Lammi February 2004).

Drahos, p. 367. However, the air is slightly different in Drahos - Braithwaite, p. 32, where the authors state rather bluntly concerning the birth of the Berne Convention, that “there was a lot of rhetoric, especially from the French, about the immutable rights of authors, the need to protect works of genius and so on (...”). And further on p. 36, very much in the sense described by Russell: “One could attend the various revisions of the Paris and Berne conventions, participate in the cosmopolitan moral dialogue about the need to protect the fruits of authorial labor and inventive genius, and make fine speeches condemning piracy, knowing all the while that one’s domestic intellectual property system was a handy protectionist weapon.”

This term (in Finnish) has been used by Professor Kaarlo Tuori in seminar discussions on the matter (e.g. Lammi February 2004).

See e.g. Mylly, Välimäki, Oesch V.

Porter, p. 10, on the differences of the basic concept of copyright between the European and the common law system: “(...) common law legislations, which are primarily concerned to protect owners of intellectual property, rather than the rights of natural authors, also afford protection as original right owners to legal persons, such as publishers, movie producers, record companies or broadcasting organizations. This wider definition of the term ‘author’ casts quite a different complexion on the nature of the corporatist bargain between the intellectual laborer and the employer, than that which exists in those countries which define the term ‘author’ more narrowly. In these countries, the author’s right is considered to be a human right (italics: MH), which protects the intellectual labors of the individual.” The dual dimension of copyright is also reflected in the UN Declaration of Human Rights: it is customary that a common law lawyer refers to the rights of property when intellectual property is concerned (Art. 17), whereas a European lawyer is likely to point out the general right to the benefits of one’s intellectual work in Art. 27 (2).

Drahos’ skepticism is in our interpretation based on the early censorship drive of the public administration. According to him, however the status of the rights of property is uncontroversial in international law, p. 359. Drahos refers to Schermers stating that most property rights cannot be included in the category of fundamental human rights, and concerning IPRs, these would only be “the need-based personal property rights”, p. 360.
See Garsek on copyright from personality perspective. Garsek draws relatively far-reaching conclusions from the personality approach, p. 213: “Napster deprives an artist of control over the dissemination of her personal property, hindering the artist’s ability to develop as a person. Thus by providing an infrastructure that encourages the unauthorized distribution of an artist’s copyrighted works, her personal property, Napster deprives that individual of the ability to fully experience personhood.”


Strömholm, p. 150. Later, before the 1880s, in French law, the right to communication to the public, the right against unauthorized modification, and paternity right formed a distinctive totality: “La jurisprudence ayant rapport aux trois prérogatives principales – le droit de communiquer l’œuvre au public, le droit au respect et le droit à la paternité – constitue déjà, dans cette période, un corpus assez important pour permettre des conclusions bien fondées.”

Porter, p. 5. Ricketson I, pp. 102-103: Ricketson seems to have a slightly different interpretation (p. 103): “The article was (...) silent on the question of the continuance of these rights after the author’s death, but a resolution in favor of this was passed by the Conference. There was no decision by the latter, on whether there could be contractual renunciation of moral rights.”

Ricketson I, p. 102.


Several writers in Finland have discussed the problem recently, e.g. Koillinen - Lavapuro, arguing that copyright must not be unilaterally seen as a property right without taking into consideration other human rights and the need to balance conflicts with other human rights, especially freedom of speech. The writers replace the “laissez faire” freedom as the core of copyright with the obligations and freedoms of the human rights system. The writers also argue that copyright and its limitations may be reversed in constitutional scrutiny, where fair use might become the basic rule and copyright its exception (this would reflect the basic difference of the US approach versus European, see below “Copyright and Freedom of Expression in Europe”). – The article is part of the debate concerning the expansion of copyright in the digital environment and is written from the viewpoint of the expansion of exclusive copyright. Therefore the article does not discuss the potentially rebalancing effect of neighboring rights, compulsory license, extended collective licensing or platform levy (the terms platform fees or copyright levies are also used in literature) arrangements. Also, the US Supreme Court decision Eldred et al v. Ashcroft came after the article was published. Tuomas Pöysti has written on the constitutional aspect of the technical protection of copyright protected material, “Tekijänoikeuksien teknisten suojakeinojen perusoikeusjännitteistä”, November 2002, available on the Internet (IPR University Center), discussing among other things the possible contradiction between proprietary protection and fair use. - Juha Pöyhönen has suggested, as a token of the constitutional interpretation of the copyright system, that “Mein Kampf” should not enjoy copyright due to its nature opposing equality (Pöyhönen, pp. 98-99).

Drahos, p. 350.

Drahos sees the human rights in relation to Thomist political theory, according to which the validity of positive law is judged by natural law, see Drahos, pp. 350-351.

Porter, p. 6, concerning the Australian and New Zealand’s criticism on performing rights societies, “which seemed to have a stranglehold over the terms under which their works could be performed, and extracted excessive royalties from any body which attempted to use them”.

Brennan, p. 70. – However, the United States Code title 17 Copyright, contains moral rights provisions for visual art (§106A).

WIPO 1996 Copyright Treaty, Preamble

See e.g. Stoner, p. 11: “The future will be based upon universal notions of human rights, for the digital age eliminates all national boundaries with the decentralized nature of the Internet”. – Tuomas Mylly has also proposed that copyright legislation must be evaluated within the human rights system, Mylly p. 251. See also Koillinen – Lavapuro. The following text is shortened and updated based on Huuskonen II.

The Treaty Establishing a Constitution for Europe contains an immaterial property clause, Art. II-77(2), stating simply: “Intellectual property shall be protected.”
302. The General Assembly proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction. Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. (UN Declaration of Human Rights, preamble).

303. Article 17 of the UN Declaration

304. Article 29 (3): “These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations.” See also discussion relating to the “core” of the human right, as elements outside “the core” being less rigid for regulation and limitation.

305. U.N. Declaration of Human Rights, preamble: “Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom” (emphasis MH)

306. Article 12 of the U.N. Declaration of Human Rights: “No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.”

307. Article 27 (2) of the U.N. Declaration of Human Rights: “Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.”

308. Article 19: “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.” Elements of freedom of expression are also included in the freedom of religion, Article 18: “Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.”

309. Drahos, p. 361

310. Article 21 (1): “Everyone has the right of equal access to public service in his country.”

311. Article 22: “Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.”

312. Article 26 (1): “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.”

313. Article 27 (1): “Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.”

314. However, ‘property clause’ is included in the First Protocol to the European Convention on Human Rights, Paris, 2 March 1952, Article 1: “Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law. The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or secure the payment of taxes or other contributions or penalties.”

315. Art 8.

316. Art. 8 (2): There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.
Art. 10.

Elements of freedom of expression as also related to religious freedom, Article 9: “Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief, in worship, teaching, practice and observance. Freedom to manifest one’s religion or beliefs shall be subject only to such limitations as are prescribed by law and are necessary in a democratic society in the interests of public safety, for the protection of public order, health or morals, or the protection of the rights and freedoms of others.”

Hugenholtz, The page number references are to the Internet version available at www.ivir.nl. – See also Karnell III, a large number of national cases studied but with conclusions not deviating from Hugenholtz’s as to the lack of a milestone case, p. 533: “When human rights arguments have had their day in court, as in Austria in a number of cases, it has been in support of interpretation of copyright law or in support of political discourse (...), where the author’s professional interests were unaffected.”

Hugenholtz, pp. 1-2.

ibid., pp. 3-4.

ibid., p. 4.

ibid.


ibid., p. 6-7.

ibid., p. 8.

ibid., p. 9. Most of these forms will continue to be allowed under the EU Infosoc directive of 2001, subject to statutory licenses requiring compensation.

Hugenholtz, pp. 14-15. Whether the situations described in Hugenholtz’s conclusions are likely or not remains to be seen, but so far the most important conflicts of copyright and freedom of expression could be described as commercial rather than political, and the freedom of speech has apparently been put in the argumentation toolbox as a last resort (MH).

Hugenholtz, pp. 15-16. A small reservation must be made, since Hugenholtz is basically trying to foresee in abstracto, what could be the reasoning of a future European Court decision.

- N.B.: After Hugenholtz’s article was published, European Commission of Human Rights gave in 2002 a decision where, at first sight, the issue anticipated by Hugenholtz, the collision between copyright and the freedom of speech would have been discussed. However, although a collision between copyright law and freedom of speech existed, the legal issue was that of right to privacy rather than copyright. In Austria, a newspaper was not allowed to print a picture of a politician on, among other things, the grounds of copyright legislation. Austrian courts decided for the plaintiff, but European Court of Human Rights reversed the decision. However the problem with any broader conclusions is the wording of the Austrian Copyright Act, Section 78 (1): “Images of persons shall neither be explicitly public, nor in any way made accessible to the public, where injury would be caused to the legitimate interests of the persons concerned, or, in the event that they have died without having authorized or ordered publication, those of a close relative”. As we see, the issue in this section is privacy, not copyright. The appearance of this norm in the context of copyright law seems a national specialty. Therefore, no definite ECHR decision on the relation of copyright and freedom of speech is yet available. Concerning Finland, the Constitutional Law Committee gave a recent statement concerning the relation of copyright to constitutional rights, see PeV 7/2005.

Eldred et al. v. Ashcroft on January 15th, 2003 (618). The case was mainly based on the interpretation of the authority of the Congress to grant copyright protection for a “limited time”. Another argument concerned the collision between copyright and freedom of speech, which is discussed here. Page numbers are a reference to the version available on the Internet.


Eldred et al. v. Ashcroft on 15 January 2003 (618), p. 14. It is worth mentioning that in this respect, the UN Declaration or the European Convention on Human Rights lead to similar conclusions.
337 Eldred et al. v. Ashcroft on 15 January 2003 (618), p. 14. The Supreme Court states, that the D.C. Circuit spoke too broadly when it declared copyrights “categorically immune from challenges under the First Amendment”, but in “this case” Congress has not altered the traditional contours of copyright protection. This basically leaves the question open, what might be the circumstances under which a collision might appear.
338 Samuelson p. 25.
339 This point of view may easily be questioned from different perspectives of the interested parties, but the aforementioned is merely targeted at showing the systemic interpretation of copyright norms in relation to the human rights.
340 WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment, web publication 5 April 2003, prepared by Sam Ricketson p. 3. “Thus, at the outset of the negotiations that led to the formation of the Berne Convention in 1884, the distinguished Swiss delegate Numa Droz stated that it should be remembered that “limits to absolute protection are rightly set by the public interest” ”. Ricketson identifies three categories of exception and limitations to copyright: 1. Provisions that include, or allow for the exclusion of, protection for particular categories of works or material. 2. Provisions that allow for giving immunity from infringement proceedings for particular uses, e.g. where this is for the purposes of news reporting or education, or where particular conditions are satisfied. 3. Provisions that allow a particular use of copyright material, subject to the payment of compensation to the copyright owner. ibid. pp. 3-4.
341 Berne Convention Centenary, p. 105, minutes of the sixth meeting 1884 conference, includes a formulation corresponding of the public interest motive of copyright by President Numa Droz: “Consideration also has to be given to the fact that limitations on absolute protection are dictated, rightly in my opinion, by the public interest.” Stoner, p. 4: “Copyright law ensures only a degree of protection for intellectual property while balancing public interests”.
342 Laddie gives a vivid picture of this historical phase, p. 54: “(...) In the 16th and 17th centuries the authorities, far from opposing (the) London cartel, welcomed its activities (that is, discipline the members and keep out newcomers, MH). This is easily explained when one appreciates the authorities’ motives. They were against the liberty of the press; they feared it would spread dangerous ideas, such as Protestantism, or Roman Catholicism, or Royalism, depending on the political and religious exigencies of the day. The simplest method of controlling this dangerous engine was to make printing illegal save for a small band of licentiates whose activities would be easy to watch.”
343 Stoner, p. 5.
344 Ricketson II, p. 2.
345 ibid., p. 4.
346 WIPO 1996 Copyright Treaty, Preamble
349 It has also been pointed out, that freedom of speech is protected by copyright doctrine. See e.g. Stoner, p. 4: “The (Supreme) Court (of the U.S.) has held in copyright cases that the promotion of the "sciences and useful arts" and the marketplace of ideas are very important to a democracy. Thus, the court has protected speech through copyright doctrine". – Human rights in relation to constitutionalism provides an interesting connection between the theories of North and Lagerspetz; whereas North (e.g. p. 110) sees the third world countries suffering from lack of efficient and reliable institutional framework, Lagerspetz (p. 212) places his hopes on the rise of constitutionalism in the Third World countries. This could suggest an interesting link between constitutional freedoms and a functioning market, that is, a link between human rights and an efficient market.
350 See e.g. Mylly. Lessig applies frequently this approach, see Lessig.
351 See also an interesting quote in Stoner, “Digital Horizons of the Copyright Frontier: Copyright and the Internet”, p. 4, a reference to Justice Brandeis in International News Service v. Associated Press: “The plaintiff has no absolute right to the protection of his production; he
has merely the qualified right to be protected against the defendant’s acts (of infringement)”. *Ibid* further: “Copyright law ensures only a degree of protection for intellectual property while balancing public interests”.

352 Berne Convention, Art 9 (2) of the Paris Act: “It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases (first step: MH), provided that such reproduction does not conflict with a normal exploitation of the work (second step) and does not unreasonably prejudice the legitimate interests of the author (third step)”.

353 The comparison was brought up by legal counsel Kristiina Harenko in a seminar presentation at Helsinki University on 11 Dec 2003, concerning human rights and copyright. - Concerning the precondition for the limitations of constitutional rights, see Veli-Pekka Välijärvi, “Perusoikeustaitojen rajoitusedellytys”, Vantaa 2001. - The limitation preconditions are described by the Constitutional Law Committee of the Finnish Parliament in the following manner: (PeVM 25/94 vp, p. 5; Hidén p. 1171):

- the limitations of the constitutional rights must be based on a parliament act. This also implies that it is forbidden to allow a lower hierarchical level for limitations of constitutional rights.
- the limitations must be “clear-cut” (tarkkarajaisia) and sufficiently clearly formulated. The essential content of the limitations must be clear in the text of the law.
- the reasons for the limitations must be acceptable. Limitation must be subject to a pressing need in the society (painava yhteiskunnallinen tarve). The interpretation of the European Convention on Human Rights may have importance (under certain circumstances).
- limitations to the core content of a constitutional right may not be carried out by an ordinary act of parliament
- the limitations must be proportionate, and necessary for the achievement of the purpose (...).
- in relation to the limitations, sufficient legal protection must be guaranteed (e.g. an appeals court)
- the limitations may not be contradictory to the international human rights obligations of Finland.

354 Human rights discussion, although topical recently, is not at all new to copyright, as we have seen the historical context of the author’s right. The change of emphasis concerning the role of the international documents was illustrated in the opening words of the first plenary meeting of the Rome Convention on the 10th Oct 1961. The representative of Unesco, Mr. Saba, stated: “(...) a change had taken place in the nature and role of international conventions. Whereas, in the past, their purpose had generally been to specify the reciprocal rights and obligations of governments, of late they were tending more and more to enforce observance of human rights and to define the moral and social standards which any State belonging to the world community must perforce embody in its domestic legislation.” (Rome Convention Records) – Discussion concerning the balance of interests see in the Berne Convention, see e.g. Berne Convention Centenary p. 105, 156, 165-166, 181 and 197.

355 Berne Convention, Paris Act 1971 Art. 9 (2).

356 See Patterson on this division. Whether these differences between the two main legal systems actually lead to a very different practical conclusion is an important and interesting question, which is however not within the scope of this study. It would however be interesting to discuss the case of a ‘bad’ song: regardless of the level of protection or under which legal regime we are operating, the composer of a ‘bad’ song always has the lower hand, as the merchandise has no market value. On the other hand, both legal systems are likewise capable of recognizing ‘good’ songs and preparing successful products for the market. See discussion on the ideas of Ruth Towse above, the superstar –phenomenon. This language becomes improper when the intrinsic value elements of copyright are discussed.

357 See Calabresi-Melamed. During the finalization of these words, the Copyright Act of Finland was passed. The event raised a remarkably lively debate on the legality of private copying and the circumvention of technical protection of digital material. Hundreds of people demonstrated in front of the Parliament building in favor of users’ rights.
CHAPTER THREE:

The Development of International Copyright Protection Towards a Right to Remuneration
In order to further extract the consequences of technological development regarding copyright, it is necessary to walk through the main changes of the copyright regime and evaluate the content and causes of change.

The following chapter will deal with the main development, that is, the invention of printing technology and its immediate consequences, the advent of the author’s right, the era of bilateral international copyright protection, and the development and amendments of the Berne Convention as the prime source of international copyright law. The emphasis remains on sound recording, broadcasting, and re-broadcasting. Later, in the final chapter, some contemporary issues on the Internet (WIPO 1996) and mobile technology will be briefly discussed as potential sources of present and future anomalies to the copyright system.

The amendments of the Berne Convention have been largely inspired by the content and structure of national laws of the most important member countries. However, because of the intensive globalization of communication and trade, the necessity of an international harmonization instrument is a requirement for coherent copyright protection. According to Stamatoudi, for example, any attempt to introduce national intellectual property solutions severely disregards the new reality and loses sight of the precise scope of the emerging problems. Therefore, the interpretational drive and attempt in the following is not first and foremost national, but international, or even global.

III.1. The Development of Copyright before the Berne Convention

III.1.1. The Origin of Copyright

Copyright or author’s right as such did not have an institutional form in the Roman legal system. Art and writings were copied and sold in bookstores, but as property, the results of spiritual work were seen as “res extra commercium”, that is, common or public property. Artists were supported by wealthy aristocrats. Roman law however recognized the criminal act of plagiarism, publicizing somebody else’s work under one’s own name. This was severely punished and also loathed by public opinion, as this was seen as a wrong against someone’s person or personality.

In the Middle Ages, the modern concept of “author” had not yet developed. The works were either identified by their performer (e.g. the singer of poems), or as a
composition of many unidentified authors (The Bible). The art of writing was not art of creating, but of imitating the past masters.\textsuperscript{361}

Concerning the development of copyright legislation, it has been claimed that the invention of printing technology in the 1450s was the first time it became meaningful to distinguish between an original work and a copy.\textsuperscript{362} In 1455, Johannes Gutenberg was the first Western (the Chinese used it 400 years earlier) printer to use movable type.\textsuperscript{363} Soon after the introduction of printing in Europe in the fifteenth and early sixteenth century, national authorities started granting exclusive printing rights or privileges to printers and publishers. The first printing privileges were accorded in 1469 in Venice, and 1476 in England. This is widely seen as the origin of copyright.\textsuperscript{364} The reasons for such grants of protection were also basically similar in the respective countries.\textsuperscript{365}

At first, it could be claimed with justification that printing privileges were instrumental in the governmental interest to maintain control (censorship) over the content of printed works. The new media was "full of promise and danger to the established order".\textsuperscript{366} Hand-copying was rather slow for the purposes of quick distribution of, for example, revolutionary information, and therefore, also relatively easy for the governmental officials to control.

In England, the stationers, who may be regarded as the forefathers of modern publishers, were the "chief proponents" of exclusive rights against copiers. They created guilds against the "outsiders", and soon found an ally in the Crown.\textsuperscript{367} The protection against importation of foreign books was regulated in 1534, and the Stationers’ Company charter in 1556. The right to enter the market was confined to company members:\textsuperscript{368}

"The system of control was equally satisfying to Elizabeth and her Stuart successors, who supervised it through the Star Chamber and the heads of the Established Church”.

Secondly, it was apparent that the privileges from society’s point of view created stable conditions for the industry to operate. The privileges served to encourage a new industry. They created “the rules of the game”, which could, from a later perspective, be criticized, but which were highly instrumental and necessary for the development of the industry.

Thirdly, and perhaps most importantly, the printing privileges served the self-interests of printers and publishers. Unfettered competition was a threat to the printer who had invested in the industry, which was in many cases exposed to intense competition with all its negative consequences from individual printer’s point of view.
Historically the birth of patent law coincided with the initiation of the printing privilege system. The first patent statute was enacted by the Venetian Senate in 1474, providing the maker of “any ingenious device (…) reduced to perfection so that it can be used and operated” an exclusive license of 10 years to use the invention.369

A preliminary conclusion is that both profit and public interest motives were behind the early organization of the printing industry. Public interest must however be understood as a censorship interest, rather than the modern “users’ rights” approach which was to develop much later. Whether we may see a development motive in the modern sense is also questionable, because the interest was to control the competition and this interest was stemming from within the industry. The human rights motive, which developed later along with the author’s right, played no role in the early phase of copyright.

Initially the object of protection was not the printing activity as such, but a work or certain works.370 The commercial risk in the activity was precisely that another print shop would print a certain work after it was already agreed it would be printed by another. The privileges were therefore targeted against both piracy and probably poor coordination of work within the trade. Later the privileges developed into general privileges, although special privileges concerning only certain works could also be granted.371

Concerning the basic themes of the study, it seems quite evident that the necessity to create legal instruments to control the activity do not emerge as direct consequences of the technological phenomenon as such, but because of the economic market disturbances created by the use of the new innovation that is, in the case of the printing industry, the losses made by the industry due to too many new entrants.372 In Venice alone, there were more than 200 print shops in the beginning of the 16th century, which created the need to control the entry.373 This was possible with the help of the government, which also had a censorship interest.

At this stage, the interest concerning the role and status of the author was minimal. Some documents of that era list all the participants of the printing of a work in the same category of handcraft.374 One reason for this might be that in the early stages of the printing industry, most of the books printed were old, classical texts. Another reason might be that this was the age of patronage, in which the authors received their chief remuneration and recognition from wealthy, aristocratic patrons rather than through the sale of their work.375 For example, because authors could not (in England) be members of the printers’ guild, there is no evidence that the company was concerned with how a printer acquired a manuscript, although eventually the practice of paying the author for the manuscript became the custom.376
Although both in Italy and Germany, the condition for according privileges was that the author had given his consent, the position of the author was still to develop into its present importance during the 18th and 19th century.

III.1.2. The Emergence of the Author’s Right

The first country to expressly recognize the author’s right was the United Kingdom, in the Act of 1710 (The “Statute of Queen Anne”, originally “An Act for the Encouragement of Learning”). The Statute of Queen Anne granted to authors and their assignees a short period (two terms of 14 years each) of statutory protection for their printed books. Concerning the basic theme of this study, it is important to note that the change on this occasion was not first and foremost a technological, but economic or, in a broader sense, institutional. The solution stemmed from the controversy between the Stationers’ Company and the Crown.

III.1.2.1. The Stationers’ Company

During the preparation of the Statute, The London Company of Stationers (publishers) was concerned to revive the protection which its members had received previously, but which the Company might lose. The legal status of the printers was arranged by the Statute of Monopolies in 1624.

In lobbying for the Statute of Queen Anne, the publishers were using the claims of the authors for recognition as a vehicle for advancing their own interests. Although the statute vested the copyright in the author initially, this was an illusory benefit because the author had to assign the copyright to a bookseller in order to get the work published.

There were two underlying reasons for the enactment of the Statute of Queen Anne: First of all, the members of the Stationers’ Company had developed the concept of copyright as a private-law copyright, with a limited function, that is, to protect the members from publishing works that another member had the right to publish through registering the title in the Stationers’ Register Book. The right was perpetual, that is, with no time limit. The Statute of Queen Anne was targeted at “destroying” the Stationers’ monopoly. The model of organization and the basic underlying interest bear a close resemblance to the description of the Venetian model.

Secondly, the Licensing Act of 1662, which was the censorship statute in England, protected the stationers’ copyright by making the publication of a book in violation of copyright an offense. Censorship was ended in England in 1694, and the
Statute of Queen Anne illustrated a way to regulate copyright without the censorship element.³⁸⁵

According to Patterson, the development reflects the two traditions of copyright, which are still relevant to modern copyright: the natural law copyright, and the statutory copyright. The former reflects the self-interest of the property owner, whereas the latter provides limitations to the use of copyright in the public interest, that is, encouragement of learning and dissemination of information.³⁸⁶ In the terminology of this study, Patterson describes the main dichotomy as being between profit and public interest motives. The Stationers’ copyright represents natural law copyright, whereas The Statute of Queen Anne is the prime example of statutory copyright.

The classic cases Millar v. Taylor in 1769 and Donaldson v. Beckett in 1774 provided subsequent but controversial turns in this development. In Millar, the decision was a success in the stationers’ attempt to restore a perpetual common law copyright for unpublished works, which right could later be assigned to the publisher and maintained. However, Donaldson limited the common law copyright until the publication took place, when the common law copyright ceases, and thereafter, only statutory copyright prevails.³⁸⁷

III.1.2.2. The Institutional Expansion of the Author’s Right

It seems evident, that the philosophical works of John Locke concerning the human right to property did provide arguments in the copyright legislation. The idea of “droit de l’auteur” goes hand in hand with the human rights tendency of the Enlightenment. According to Locke’s thinking, the author had obtained ownership of his work by investing his creative abilities in the work.³⁸⁸

The position of authors was changing in British cultural life and they were becoming more independent of patronage. The development was similar in other parts of Europe.³⁸⁹ According to Yrjö Varpio, the attitude concerning the author – the creator of literal works – changed radically from the end of the 18th century in throughout Europe. The role of the artist had started to develop from a servant creating short poems for varying practical occasions like birthdays or other celebrations, to a free poet creating individual and distinctive works of art. The artist had become an owner of immaterial capital created by himself.³⁹⁰

The French Revolutionary Laws of 13-19 January 1791 and of 19 July 1793 represent the first recognition of the rights of authors, dramatists, composers, and artists. The first law accorded an exclusive performing right to authors of dramatic and musical works for a period lasting until five years after their death. The second dealt with reproduction right.³⁹¹
The “Lex Beaumarchais” in the context of the 1791 copyright law for the first time granted a creator of a dramatic work an exclusive right to the public performance during his lifetime and five years after.\footnote{392}

Both these French laws placed author’s rights on a more elevated basis than the Statute of Queen Anne had done. There was a conscious philosophical basis to the French law that saw the rights protected as being embodied in the natural law. The law of 1793 referred to the exclusive right as being the “property” of the author, composer, or artist.\footnote{393}

In England, the Statute of Queen Anne was extended to sheet music already in 1777 (\textit{Bach v. Longman}), and in 1833, the performance right was given to dramatic works in England, and extended to musical works in 1842. Engravers had already been added in 1734 and 1766, and in 1798 and 1814, sculptures were protected, and the Fine Arts Copyright Act 1862 brought in paintings, drawings, and photographs.\footnote{394}

Ricketson has pointed out\footnote{395} that the distinction between common law and the continental European system may not be as clear-cut as the common typologies suggest: although common law and civil law traditions may appear to have widely diverging concepts of copyright and author’s rights, the origins of these concepts have much in common and may easily approach in the present day.\footnote{396}

During the Enlightenment, the profit motive was followed by the human rights motive as a central element of the ideological background of copyright. Since the human rights motive may be misrepresented as a sign of altruism in the sense described by Russell, it must be stressed that self-interest elements were behind many of the changes. The egoistic motives of the printers provided inspiration for the creation of the author’s right, since at the verge of losing their printing privileges, the printers needed an alternative form of protection. The author’s right came in handy for this purpose, because the authors were more or less dependent on the printers, and certainly in London on printers that were members of the Stationers’ Company.\footnote{397}

Laddie \textit{et.al.}\footnote{397} have pointed out that many elements of the modern copyright system were already present in the English system of copyright in the last quarter of the 18\textsuperscript{th} century. These included:

- an exclusive right to multiple copies of literary, dramatic, or musical works,
- limited in time with the object of balancing the interests of producers and consumers
- with provision for control of abuse of monopoly
- the right treated as assignable property
The basic framework of copyright motives was emerging, as profit, public interest, and the human rights motives were already present at this stage. The development motive would later be encountered in light of the early 20th century technologies.

### III.1.3. The Expansion of Statutory Copyright Protection

Originally, the printers’ copyright was an institutional solution to the changed circumstances in the technological opportunities to produce copied works. However, there is no clear technological reason for the introduction of the author’s right or its expansion to other fields of intellectual creativity during the 18th century.

The introduction of the author’s right seems to be a consequence of a relatively pure institutional crisis related mainly to the strong position of the Stationers’ Company as the Crown’s ally. The original purpose of Parliament was to “destroy” the privileges afforded by the Crown, and among them the position of the Company. The Stationers were however at least partially successful in their defensive strategy. The creation of the author’s right gave the Company an instrument to maintain a strong position because of the dependency of authors on publishing contracts with members of the Company. Author’s right, therefore, seems to be a product of the publishers’ innovative defense in a situation where the risk of losing the present monopoly position seemed evident. Still, as a purely tactical instrument, it probably would not have succeeded throughout the centuries without other justifiable reasons that were emerging in society from an ideological basis (Locke). The Stationers’ Company was – looking back almost 300 years – able to use an idea that had already been discussed in philosophical circles, and which enjoyed the benevolence of the law-makers. In this way, the change resembled modern decision-making: how can a politician oppose the idea of the protection of an ailing artist? The author’s right justification, which was later developed into a strong human rights tendency, also created a path-dependency in copyright legislation.398

The introduction of the author’s right into the copyright system seems to be a major change for no compelling technological reason. It is a clear reminder that technological innovation, although admittedly important if not the prime mover of economic and institutional development for the past two centuries, is not necessarily the only force that may bring about institutional and legal change. Although technological development seems to be behind most of the amendments to the international copyright system, and indeed behind the introduction of the first printing privileges, we shall later see that the introduction of the neighboring rights – especially the performer’s right – bears a distinct resemblance in this manner to the events before the passing of the 1710 Statute of Queen Anne. Similarly, the introduction of moral rights into the Berne system may not only have a technology-based explanation.
III.1.4. The Era of Bilateral Agreements for International Copyright Protection

The 19th century saw the Industrial Revolution shape the economy and society. One of the most important consequences was the rapid increase of international trade due to improved transportation. Concerning copyright protected works, this relatively soon brought about the issue of cross-border piracy, which required international measures for creating and enforcing protection.

The international copyright protection was first achieved by reciprocity agreements. Despite the lack of a broader international agreement, most states were prepared to grant protection to foreign works on condition of reciprocity, that is, that their works received protection in the country of origin of the foreign work.399 Although the publishing business was basically controllable - printing itself requiring investments and the author having control over the publishing agreement – geographically Europe was a continent of relatively small nations close to one another, which enabled the cross-border piracy of books.

There were two approaches: either country A accorded protection to works from country B, if the latter gave substantially equivalent protection to works from country A (material reciprocity), or, country A accorded protection to works from country B in the same way as it protected the works of its own authors (formal reciprocity).400

The system of bilateral agreements made the task of ascertaining an author’s entitlement to protection in a country other than his own difficult and complicated401, which stressed the need for an international arrangement.

III.2. Towards the Berne Convention

International copyright protection became an issue in the 19th century due to increased foreign trade. The most important reason in the background for this was the rapid development in transportation technology, which reduced the transaction costs of importing copyright protected material. The period between 1800 and the First World War saw an unprecedented increase in internationalization:402

“The West adopted the steamship, the railroad, and the motor car, all of which replaced travel by coach or slow ship. International trade, investment, and migration grew rapidly.”

As a percentage of the world economy, international trade grew during that period from 3 to 33 per cent. World trade, as a share of world output, did not return to its
1913 levels until in the 1970s. The result of the development of the technological environment triggered not only the dissemination of ideas worldwide, but also the need to seek protection for undue use of copyright protected material.

III.2.1. The Need for an International Convention

The early 19th century copyright law was essentially national by nature. However, the printed word, musical composition or artistic creation did not, even then, recognize national boundaries. As a consequence, unauthorized reproduction and use of foreign works were for a long time established features of European cultural and social life.

The attitude of most countries towards this practice was anomalous: on the one hand, they were protecting the works of their own national authors, yet on the other not regarding the exploitation of foreign works as unfair or immoral. Countries with high levels of literary and artistic output were clearly most at risk, particularly with closely neighboring countries or countries sharing the same language.

We may conclude that the attempt to prevent international piracy in printing was the principal reason for the gradual development of international copyright relations in the 19th century. Even the foundation of Association Littéraire et Artistique Internationale (ALAI) was inspired by the world fair of 1878 in Paris, where many nations boycotted the event due to piracy fears.

III.2.2. The Basic Elements of International Copyright Protection

The International Conference arranged in Berne 10-17th September 1883 by the initiative of ALAI discussed five draft propositions derived from the work of the French national commission. These formed the essence of the convention.

In the first proposal, national treatment without formality was granted for the authors of literary or artistic works appearing or performed in one of the contracting states. The proposal includes a wide list of literary and artistic works subject to protection: “(...) any production whatsoever (emphasis: MH) in the literary or artistic domain which may be published by any method of printing or reproduction”. – It is easy to conclude that in practice, almost any literary or artistic creation was to be protected. The intention was quite likely to create formulations that could as far as possible stand the test of time by incorporating the possibility of changes in technological means of use or the creation of new art forms.
With regard to the international trade, the exclusive right concerning especially translations was central. This early version of the basic ideas of international copyright protection represents in plain form the “exclusivity doctrine”, and will henceforth be referred to as such in the text.

a) Exclusive right on printing and public performance
The fundamental provision was that the authors of literary and artistic works appearing or performed in one of the contracting states would enjoy in other contracting states of the Union, irrespective of their nationality, the same rights as nationals.\textsuperscript{411} The basic issue was therefore not to include domestic regulation within the scope of the convention.\textsuperscript{412} The protection would take place on the basis of formal reciprocity.

From the point of view of economic efficiency in the Coasian sense, this was an act enabling the creation of a functioning and legitimate international market for the copyright protected works, which is a precondition for efficient resource allocation. Sharing Towse’s view of the importance of copyright as providing as a societal status for copyright owners\textsuperscript{413}, we might also see that the convention enabled the members to inform and emphasize internationally the importance of copyright to the users of copyright protected works, including the illicit nature of international piracy.

b) Exclusive right to translation
The second proposal was the most radical one, guaranteeing an exclusive right to authorize translation, and stating that an unauthorized publication of a translation was an infringement of copyright, thus making translation comparable to reproduction.\textsuperscript{414} This would also be among the most important tools in fighting cross-border piracy, because in the European multi-lingual circumstances, translation was very often the precondition for piracy.

c) Legal enforcement
The third proposal obliged the contract parties to arrange legal enforcement and settling of damages in case of copyright infringements. Seen from the perspective of Thurow’s “choke point”\textsuperscript{415}, this was an essential practical tool for facilitating the control of international copyright protection. Practice in relation to the Berne Convention has shown that the actual enforcement was difficult and did not gain momentum until the introduction of the TRIPS agreement.

d) An early form of the reproduction right
The fourth proposal distinguishes between ownership of an object and reproduction right.\textsuperscript{416} This along with the right to translation were important elements in the international counter-piracy measures.

e) International supervision of the Treaty
The fifth proposal concerned the establishment of a central international office to deposit the copies of all copyright laws of the contracting states, and to publish a regular overview in French to offer relevant documentation and other information.\textsuperscript{417} This provision was central in establishing fixed operational forms for international copyright protection.

The result of the Conference was a draft convention of ten Articles, most of which became the basis of the final clauses of the Berne Convention in 1886.\textsuperscript{418}

In 1885 a group of French and German authors’ and publishers’ associations\textsuperscript{419} decided at the international congress of the ALAI to attempt to set up a union to provide international protection for their interests. So, it is justified to say that from the very beginning of the era of international copyright protection agreements, the authors and publishers recognized their common interests, as was the case with the Statute of Queen Anne.\textsuperscript{420} The parallel interest positions that emerged during the enactment of the 1710 Statute of Queen Anne had not changed but remained an important background factor in the legislative process. Both the profit motive as an incentive to creativity and the human rights related spirit of natural law copyright were present. The associations were successful nationally in having their agenda leveraged on a national – that is, state – level. Both the development and the public interest motive were to appear later during the revisions of the Berne Convention.

The Berne Convention was formally created in several official conferences organized by the Swiss government in 1883-1886 under the chairmanship of minister of the Swiss government Numa Droz.\textsuperscript{421} The final three texts\textsuperscript{422} were signed by nine countries, seven of which were European.\textsuperscript{423} The Roman Catholic countries France, Italy, and Spain represented a strong human rights sentiment. They saw the author’s right as a human right. The author of the work was not merely entitled to an economic remuneration for the work, but was also entitled to:\textsuperscript{424}

- an inalienable moral right which required the author’s name always to be on the work
- the work to be reproduced in a complete form every time it was used
- to receive a financial benefit every time the work was resold

The purpose of the Convention was “to protect, in as effective and uniform manner as possible, the rights of authors in their literary and artistic works”.\textsuperscript{425} Although the basic purpose was to protect the interests of authors, it is equally clear that the wider interests of printing trade and commerce were also playing a role in the three successive diplomatic conferences that drafted and adopted the final Convention text between 1884 and 1886.\textsuperscript{426} Not only was the rights perspective important, but also the creation of an international copyright market by laying down the ground rules of international protection.
The Berne Convention was first signed in 1886, and has since been renewed in Paris 1896, Berlin 1908, Rome 1928, Brussels 1948, Stockholm 1967, and Paris 1971. Since any amendment to the Convention has proven difficult, in 1996, the WIPO copyright treaty was signed to continue to adapt international copyright protection to match the development of the new technology (the Internet).

The Berne Convention was originally signed by only a few countries, which however represented substantial international market power due to their colonial interests. Regardless of the number of initial signatories, the Convention had a great geographical scope of influence. Out of the nine countries signing, six of the European countries (Belgium, France, Germany, Great Britain, Italy, and Spain) were colonial powers and extended copyright protection also in their colonies, creating a global scope for the Convention. The other signatories were Switzerland, Tunis, and Haiti. Concerning the position each of the countries had, it is justified to say that although they represented an important portion of the global production of copyright protected goods, they were mostly net importers in the international copyright market. This was to change late in the 20th century, when the world’s most important net exporter of copyright protected works, the United States of America, joined the Berne Convention on 1 March 1989.

### III.2.3. A Note on the Interpretation of the Berne Convention

Concerning the interpretation of an international treaty, and especially the Berne Convention, the rules of interpretation are to be found in the customary public international law. This study does not offer us the opportunity to investigate it any deeper. The main rules of interpretation might however be illustrated by the rules contained in the Vienna Convention of the Law of the Treaties.

The main interpretational guideline concerning international treaties is in art. 31 (1): “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” The interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes, any agreement or instrument in relation to the treaty that was made between all the parties in connection with the conclusion of the treaty. Any subsequent agreement or practice between the parties shall be taken into account in the interpretation. Preparatory work of the treaty and the circumstances of its conclusions may be taken into account, for the purposes of confirming the meaning or determining the meaning in case it is ambiguous or obscure, or leads to a result which is manifestly absurd or unreasonable.

Although this is a study in legal discipline from an economic perspective, the purpose of this study is not so much the interpretation of the Berne Convention as such, but
rather the study of the technology-initiated development of international copyright protection in light of the Berne Convention.

In order to understand the main development of the international copyright protection, the reports of the Berne conferences, giving light to the motives of technology-oriented amendments, are widely discussed. In addition, other international instruments will be briefly discussed. These are in particular the Rome Convention, TRIPS and the WIPO treaties 1996. These documents are not so much discussed as a means to interpret the Berne Convention, because they do not fulfill the formal criteria – not all Berne parties have signed the other documents – but rather in order to see how the international copyright system has developed further.

III.2.4. The Basic Principles of International Copyright Protection

The basic principles of international copyright protection are national treatment and minimum protection. It is important to bear in mind that the conventions do not intend to regulate the domestic relationships of a state to its own citizens but rather the international relationship of a country to the nationals of other contracting countries. Naturally, despite this, the conventions have in practice a harmonizing effect on member states’ legislation which can at least be contributed to sharing information on different national solutions.

III.2.4.1. The National Treatment

The original text of the Berne Convention, Article 2 stated the basic principle of national treatment: “Authors who are nationals of one of the countries of the Union, or their successors in title, shall enjoy in the other countries for their works, whether published in one of those countries or unpublished, the rights which their respective laws do now or may hereafter grant to their nationals.”

This is the basic requirement for global copyright protection. In order to be efficient in economic practice, this however requires the participation of all or at least the major countries, which are important users of copyright protected material, to agree and sign to this principle. The existence of copyright havens may still challenge this principle. They may dilute the “choke point”.

This principle is clearly in line with the profit motive, because effective enforcement is the essence of copyright. Without international protection of copyright in the early 19th century, the print industry experienced problems in the form of cross-border counterfeiting, and this led to the first international convention on copyright.
The principle also serves the human rights motive, because respect for *droit d'auteur* as a human right might be better enforced through an international agreement with an obligation for sanctions at national level. International trade may be said as a rule to reduce the opportunities to maintain censorship – the early version of the public interest motive. Since efficient international copyright protection increased the cross-border distribution of copyright protected material, the national states could no longer impose such excessive control on their information industry compared to the age of national printing privileges.

The principle of national treatment serves the development motive, since a controlled international environment with predictable and similar behavior of the authorities provides a large market for copyright protected products, and thus creates an incentive to invest. International harmonization creates an institutional framework of transparent information concerning the rules of the game, and thus – on a game theoretic level - provides a tool to avoid the negative consequences of the “prisoner’s dilemma” situation that otherwise would reign.

Some critiques of the copyright regime could argue that copyright havens should be seen as incubators of new and revolutionary technologies for dissemination of information and entertainment, as the new innovators have nothing to lose in the “old technology market”. However, after some initial success in the free market, even the revolutionaries start to require protection for their own activities and need protection to secure their investment in the new technology on the long-term basis. Any business company would eventually face the challenge of establishing its activities and the position in the market, as Schumpeter illustrates.

### III.2.4.1.1. Reciprocity

As discussed before, there are two types of reciprocity, the material and formal (see above, The Era of Bilateral Agreements). The Berne Convention is based on formal reciprocity, although the commitment of the member states to the terms of the convention is intended to ensure a high level of material reciprocity. The formal reciprocity essentially means, as stated earlier, that country A will offer the same protection to works from country B as to works from country A, on the condition that B will protect works from country A in a similar manner as it does works from country B.

Reciprocity is embedded in the principle of national treatment and is instrumental in supporting the same motives as the national treatment.
III.2.4.2. Minimum Protection

Minimum level of protection might be described as the “lowest common denominator”, to which the member countries are committed. Both the profit motive and human rights motive may justify this.

The founders of the international copyright system were quite generous in their definitions of the scope of the initial state of the international copyright protection:

“The expression “literary and artistic works” shall include books, pamphlets, and all other writings; dramatic or dramatico-musical works, musical compositions with or without words; works of drawing, painting, sculpture and engraving; lithographs, illustrations, geographical charts; plans, sketches, and plastic works relative to geography, topography, architecture, or science in general; in fact, every production whatsoever in the literary, scientific, or artistic domain which can be published by any mode of impression or reproduction. (emphasis: MH)”

The intention clearly was to have as forward-looking definitions as possible. The intention seems to have been to contain also new and developing forms of art in whichever new form of usage. As the history of the Berne Convention clearly shows, this assumed intention was not entirely successful. Normally the emergence of any new technology for the exploitation of copyright protected works has required thorough debates and long negotiations on suitable amendments.

III.2.4.3. A Path Dependency to Maximal Protection?

From the author’s rights’ point of view, the idea of broadest possible copyright introduced in the Berne Convention also protects his or her investment in education and acquiring the artistic talent. Looking at the very first formulations of the scope of copyright, it clearly was the intention of the “founding fathers” of the international copyright system that copyright protection must be as broad and forward-looking as possible to express and conceive. The protection should also cover as broadly as possible the developing future forms of works and new ways of use. There was yet no sign of a compulsory licensing element or interest. This indicates a “path dependency”, since regardless of the development of alternative licensing forms, the idea of the exclusive nature of copyright has proven persistent.

Public interest understood as the rights of the users might conflict with the principle of broadest possible copyright protection in, for example, the case of granting access to libraries, allowing handicapped people an affordable access to copyright protected material, etc. This was however clearly not an issue in 1886.

Although it is clear that the intention of the Berne Convention was to also offer the broadest possible copyright protection, the public interest factor was already
recognized. Later, especially concerning the advent of compulsory licensing, new forms of free use and, for example, the three-step test, it is quite clear that the principle of the broadest possible copyright protection needed to be adjusted to the prevailing reality of society and the economy.

The well-intended but usually disappointing attempt at copyright definitions to cover all possible future uses and technological developments is symptomatic even of the later development. One could ask whether this underlying but not very much debated tendency creates a path dependency to copyright regulation to automatically develop towards higher levels of protection? The Stationers’ Company in 17th century England realized very well that if a right was tied to the author’s person it enjoyed higher legitimacy and could not easily be taken away. So, instead of evaluating case-by-case the need for copyright protection in a new technological environment, copyright as a human right persists as a natural law element and does not have to be created in new circumstances, but found through interpretation. This may establish a strong path dependency: once rights have been given, they cannot easily be removed without major constitutional constraints. The institutional expansion of copyright is thus a “one-way-street”.

It is however apparent that this all-embracing intention to cover all future circumstances in copyright definitions has not worked without friction in practical situations, because the applicability of old rules is always questioned in relation to new technology. Even though the international community might agree that the old formulation also covers new forms of uses, the courts having to decide a case on a national level will only apply the national criminal code and in case of ambiguity will decide in favor of the defendant. Criminal cases cannot be decided on the basis of analogy to former technologies and forms of use of copyright protected material.

In context of the TRIPS adaptation of the Berne Convention with the exclusion of moral rights, it has been asked whether this will lead to trade-emphasized interpretations of the Berne Articles, and thus lead to a “maximalist” reading from an economic perspective. This would lead to a reading where copyright owners’ economic rights were given utmost protection and exceptions to those rights were strictly confined.

III.2.4.4. The Most Favored Nation Treatment

Importantly, the Agreement on Trade-Related Aspects of Intellectual Property Rights introduced a new element, the most favored nation treatment:

“With regard to the protection of intellectual property, any advantage, favour, privilege or immunity granted by Member to the nationals of any other country shall be accorded immediately and unconditionally to the national of all other Members.”
Exemptions to this obligation may be allowed if based on another international obligation listed in the Article.

According to Gervais, Article 4 introduces a new element in the intellectual property framework. The rule originates from multilateral trade agreements, where its purpose is to ensure uniformity, that is, against bilateral arrangements. As the condition only applies to agreements after the signing of the WTO Treaty, its initial application will most likely be minimal. The agreements must further be notified and constitute arbitrary or unjustifiable discrimination.  

III.3. The Conferences to Amend the Berne Convention

The Amendments of the Berne Convention during the 20th century were greatly influenced by the issues raised by technological development in the areas of sound recording, movies, and broadcasting industries. Photocopying and later digital copying challenged the system. In the following, the amendments of the Berne Convention are first briefly listed, and later analyzed in more depth. Also the parallel development in neighboring rights is discussed, as well as the post-Berne documents of the contemporary era.

The Berne Convention has been revised and completed several times. As the starting point is that the TRIPS incorporation of the Berne Convention concerned the acquis of the convention, the historical events bear importance even in light of modern interpretation. In addition, returning to our theoretical framework, law as representing conventional facts requires a historical method as one necessary tool for more complete interpretation.

III.3.1. The 1896 Paris Completion

In order to preserve the dynamic character of the Berne Convention, the member countries decided that a date for an early revision should be set to maintain momentum. However, at the first revision conference several countries expressed their reluctance to accept any major changes to the convention. The amendments were therefore of a limited nature, among the most important being the definition of “publish” in Art. 2 amended in the form “published for the first time”. Another amendment of importance concerned Art. 5, where the ten year limit for the exclusive right to authorize translations was amended to “the term of their right in the original work”. 

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III.3.2. The 1908 Berlin Revision: Mechanical Reproduction Right, Movies Right

The main purpose of the Berlin revision of the Berne Convention in 1908 was to provide additional protection for authors when their works were reproduced by the new mechanical recording technologies of photography, sound recording, and cinematography.\textsuperscript{444}

Concerning Article 2, architectural works, choreographic works, and pantomimes were included. Translations, adaptations, arrangements of music, and other reproductions in altered form of a literary or artistic work, as well as collections of different works, were to be protected as original works without prejudice to the rights of the author of the original work. Photographic works were granted protection in a limited sense.\textsuperscript{445}

Granting of exclusive rights concerning mechanical reproduction was recognized in Art. 13, but might be subject to national restrictions such as compulsory license.\textsuperscript{446} The right to cinematographic works was embodied in Art. 14, provided it had an original character.\textsuperscript{447}

III.3.3. The 1914 Berne Completion: Additional Protocol

The 1896 act allowed authors from non-Union countries the benefits of the Convention, if their work was first published in a Union country. This caused problems especially in Canada, which had a long border with an important non-Union country, the US. The UK had earlier proposed “bona fide resident” limitation. Finally, a protocol was accepted which allowed a member country to restrict protection in the case of non-Union countries that failed to protect the authors from the Union country in an adequate manner.\textsuperscript{448}

III.3.4. The 1928 Rome Revision: Moral Rights, Broadcasting Right

The two most important issues of the Rome Conference in 1928 were the moral rights and the introduction of the broadcasting rights. They both reflected the issues that were rising because of the technological development of the mass media.\textsuperscript{449} A number of other changes were made to the Convention, among others an inclusion of protection of oral works.\textsuperscript{450}
III.3.5. The 1948 Brussels Revision Conference: Other Lobbying Groups Emerge

In Brussels it was decided, that a claim for protection could be based directly on the Convention itself, thus enabling the national courts to enforce the rights regardless of the member country’s possible negligence to include the Berne provisions into its domestic law.451 Some significant changes were made concerning the recording, broadcasting, and movie rights of authors. Recording right was defined as a separate right, instead of the earlier definition of recording as an adaptation. No right for the sound recording itself was granted. The definition of broadcasting was broadened to include television. The authorship of cinema works was debated, but was finally left to national decisions.452

Cinema and photographic works received “list status” in the primary list of works protected under Article 2.453 While the Brussels Conference made many changes to the Rome text, there were no fundamental changes to the authors’ rights, but the rights were rather maintained to adapt to the latest development in technology.454

According to Ricketson, the new technological developments had spawned a number of powerful interests concerned with their exploitation, and the aims of these groups were generally “anti-ethical” to those of authors. The diverse pressures meant that authors were seen as one interested party facing demands of fairness from broadcasting interests, interests concerning education, and the developing countries, rather than being the sole dominating party requiring more unilateral protection.455

This observation enables us to maintain that the traditional copyright motives were accompanied by a strong development interest.


The conference program indicated the complex environment of copyright legislation:456

“[...] The Programme of the Conference is based on the conception that improvements of this nature should include not only the enlargement of the protection granted to authors by the creation of new rights or by the extension of rights which are already recognised, but also the general development of copyright by reforms intended to make the rules relating to it easier to apply and to adopt them to the social, technical and economic conditions of contemporary.”
The Stockholm Revision Conference of the Berne Convention therefore had to negotiate two major sets of problems. The first was to revise the Berne Convention to accommodate new technological developments, the second to reconcile the demands and needs of the First and Third Worlds. In the first area, the results were partially successful, in the latter no solution was reached. The protocol of the Stockholm Revision Conference never came into force due to insufficient ratification, which required a new conference that was held in Paris 1971. The changes to the substantive provision of the Convention that were finally adopted were of a fairly limited nature.

However, as an indication of the institutional development with a natural law tendency, ten new rights were afforded to authors, but the nature of these changes was rather that of a redefinition of an existing right than introducing new, revolutionary rights. It is however worth mentioning that among other changes, due to the development of the copying technology, the reproduction right to the work was defined, also introducing the “three-step test”.

Concerning the development of the Berne Convention as a whole, Ricketson has described its development in the following manner: “During the initial period from Berne to Berlin, the Euro-centric doctrine of authors’ rights advanced; the middle period from Rome to Brussels introduced the impact of the technological development and the emergence of new interest groups, and a later period where the interests of the users, particularly those from the developing countries, radically changed the terms of debate about international copyright protection”.

Following Ricketson’s comment, the rapid development of digital technology and computer programming has brought about a new set of problems not least of which is the ease of digital copying. These were dealt with in a diplomatic conference of 1996 in Geneva.

The Berne Convention is administered by the World Intellectual Property Organization (WIPO) founded in 1967.

III.3.7. The Industry Initiated Limitations in the Berne Convention

The technology related development led to adapting compulsory licensing schemes within the Berne framework. Finally, the industry-initiated related exceptions allowing compulsory licensing by the Berne Convention resulted in the following amendments in conclusion.
-Article 9(2): reproduction of literary and artistic works, the three-step test:

“It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.”

-Article 11bis(2): broadcasting, rebroadcasting or communication by wire, public communication by loudspeaker or analogous instrument:

“It shall be a matter for legislation in the countries of the Union to determine the conditions under which the rights mentioned in the preceding paragraphs may be exercised, but these conditions shall apply only in the countries where they have been prescribed. They shall not in any circumstances be prejudicial to the moral rights of the author, not to his right to obtain equitable remuneration which, in the absence of agreement, shall be fixed by competent authority.”

-similarly in 11bis(3) concerning ephemeral recordings

-Article 13(1) (recording of musical works)

“Each country of the Union may impose itself reservations and conditions on the exclusive right granted to the author of a musical work and to the author of any words, the recording of which together with the musical work has already been authorized by the latter, to authorize the sound recording of that musical work, together with such words, if any; but all such reservations and conditions shall apply only in the countries which have imposed them and shall not, in any circumstances, be prejudicial to the rights of these authors to obtain equitable remuneration which, in the absence of agreement, shall be fixed by competent authority.”

To the same category could be added Article 14bis (2)(b) (ownership of cinematographic works):

“(…) in countries of the Union which, by legislation, include among the owners of copyright in a cinematographic work authors who have brought contributions to the making of the work, such authors, if they have undertaken to bring such contributions, may not, in the absence of any contrary or special stipulation, object to the reproduction, distribution, public performance, communication to the public by wire, broadcasting or any other communication to the public, or to the subtitling or dubbing of texts, of the work.”
III.4. Compulsory Licensing

As a starting point, compulsory license permits an individual to use someone else’s copyright against payment. The term “statutory license” is sometimes used in the same sense, and it probably better illustrates the core idea of state intervention to the licensing procedures. But most of the literature uses the term “compulsory license” and this is also the choice in this study for clarity.

Payment refers to a fee set either by a state organ, as in the case of the US cable television compulsory license, or in arbitration. The compensation for the use of the copyright protected material may be set in various ways. A common concept used to illustrate a two-way approach is “equitable remuneration”; this originally derived from the German patent law concept “angemessene Vergütung”. According to Brennan, equitable remuneration represents a value or price, which is fair to both rights holder and licensee by creating an equitable sharing of the benefits derived from the use of the rights in question.

III.4.1. The Origin of Compulsory Licensing in the Berne System

A great deal of debate has occurred lately among the Finnish copyright researchers upon the proper breadth of copyright, and the detrimental effects of its expansion. Our opinion is that the question can be reduced to an issue of the scope of the right and its limitations. This leads to seeking a balance of the various motives interacting in the copyright arena.

According to Senftleben, the interest to limit copyright may be related to several conflicting interests:

- freedom of expression and information
- the dissemination of information
- the right to privacy
- the enhancement of democracy

In addition, limits are moreover set to authors’ rights in order to regulate industry practice and competition. As examples of this type of regulation, Senftleben offers the exemption of ephemeral recordings made by broadcasting organizations, and compulsory licenses concerning broadcasting rights and recordings of musical works.

David J. Brennan has studied the origins of compulsory (statutory) licensing in the Berne Convention. As an explanation of the adaptation of compulsory licensing, he
seems to indicate that a decisive factor was the erroneous conception of the character of sound recordings in relation to the earlier musical boxes. The major difference was that in sound recordings, unlike the music boxes, the musical performance was not fixed with the machine. However, for competition purposes in the print industry, compulsory licensing had already been widely debated in England in the early 19th century.472

The French Court of Cassation held in 1862 that the manufacture of a musical box, which embodied a musical work in which copyright subsisted, was an infringement of copyright as that manufacture occurred without the consent of the work’s author. Accordingly, the French customs authorities prevented the importation of all musical boxes from Switzerland, where most manufacturers were.473

Because of the importance of the trade to the Swiss, a suggestion was made by them to agree to a “final protocol” attached to an 1864 bilateral copyright Convention.474 The protocol required the parties to exempt the manufacture of musical boxes from copyright infringement. France amended the copyright law in 1866 accordingly.

The expression “instruments serving to reproduce mechanically musical airs” was understood to mean integrated mechanical devices that rendered musical performances. These included musical boxes, bird organs, chiming clocks and snuffboxes. The quality of the mechanical performance was quite limited. Copyright owners had not objected to this manufacture because they felt that the devices would not be profitable or harmful to the sales of printed music.475

In the Berne Convention 1886 (Protocol Three), it was decided to remove “arrangement of music” from the list of protected works, and the right to make arrangements of musical works was treated as one of the recognized exclusive rights of a musical work copyright owner.476 In the final protocol, the text was altered as follows:477

“It is understood that the manufacture and sale of instruments for the mechanical reproduction of musical works in which copyright subsists shall not be considered as constituting an infringement of musical copyright.”

Thus, the manufacture and sale of musical boxes were excluded from the operation of the Berne Convention. Brennan claims that outside France, Germany, and Switzerland, mechanical musical instruments were little known, and the delegates to the initial Berne Conferences were not fully aware of the significance of the provision.478

By the time of the Paris revision in 1896 the position had altered. New technology had produced a range of mechanical devices that performed, with improved fidelity, musical works embodied in removable media, such as perforated cards, cylinders,
paper rolls, and finally, disks. In the 1890s the manufacture of both this equipment and its associated media began to emerge as a major and profitable industry. Brennan claims, that the new industry was able to flourish untroubled by the Berne Convention by virtue of Protocol Three. Copyright owners perceived this to be doubly unfair: the popularity of the new technology meant that their sales of printed music began to decrease, and they received no share of the profits generated by the use of their copyright in the new technology. This argument will later be discussed in context of Ricketson’s similar argument concerning the development of the recording industry. It is however worth noting the following. As the prime argument of economic and institutional theory tends to emphasize the importance of legal framework as “rules of the game” and thus facilitating the market economy, the argumentation of Brennan and Ricketson is interestingly contradictory to this “prisoners’ dilemma” assumption of the functions of law. Their claim essentially is that the rapid development of the recording industry took place because of the lack of legal norms.

In the Paris Conference of 1896, Protocol Three was a subject of intense debate. France, supported by Belgium, Italy, and Monaco, sought for a distinction between mechanical devices that are integrated with the musical performance (musical boxes), and devices to which the musical performance is sold separately. Germany, supported by Great Britain, Norway, Spain, and Switzerland, attacked the French proposal.

The main French response was: “The industry in question – which is thriving, it would seem – will not die due to the fact that authors’ rights are better respected. It will be possible for it to dip into the public domain or come to terms with authors who, in most cases, will be content with a modest fee.” The reform proposal was eventually defeated.

In the Berlin conference of 1908, unanimous support for the amelioration of the exception contained in Protocol Three existed save for Switzerland. The discussion contained an important controversy, also in relation to the development motive of copyright (the Report of the Drafting Committee):

“The right of the author and the right of the inventor of instruments must not be weighed against each other: the latter may have achieved wonders, shown true genius, but his right stops at that of others; he cannot appropriate a raw material which does not belong to him and, in this case, the raw material is precisely the musical expression. It matters little what method is used and how difficult it may or may not be to read the disk or the cylinder, the musical expression is nonetheless incorporated in that desk or cylinder.”

Here, for the first time in the context of the Berne Convention, the development motive is discussed. Although the intention was to avoid striking a balance between
the human rights based natural law copyright and the further development of the inventions of the Second Industrial Revolution, this was a problem that had to be solved.

Berne Article 13 was amended to provide authors of musical works with the exclusive rights of authorizing “the adaptation of those works to instruments which can reproduce them mechanically.”

However, the fact was that the status quo had been a free exception. The French delegation was in favor of the grant of an exclusive right to authors and let the market find a solution. However, the countries whose interests were more closely aligned with the phonograph manufacturers required some limit upon the scope of the newly recognized exclusive right. Germany proposed that “once the author has used his work or has permitted its use under the aforementioned conditions, any third party shall be able to claim the rights (...) by offering equitable compensation”. If an agreement could not be reached, each country’s legislation would provide a mechanism for the manner in which the amount would be determined.

Germany explained this provision from the point of view of protecting the small phonograph manufacturers against the high costs they could face as a result of excessive license fees sought by the authors, and against the establishment of monopolies by larger phonograph manufacturers. This was the first time a provision on compulsory licensing was suggested to the Berne Convention. The proposal was rejected but in the convention text, the option for national exceptions was granted. It is important to note the express existence of the development motive in this question:

“(...) the German authorities were seeking to safeguard the interests of small manufacturers (of sound recordings, MH) by protecting them both against the too heavy costs they could face as a result of excessive estimates on the part of authors and publishers and against the danger of the establishment of monopolies in favor of some manufacturers with large amount of capital at their disposal.”

Copyright was not seen entirely as from either the profit motive of human right aspect protecting the author, but in the context of a broader business environment – although the tone of the discussion was partly disapproving.

The proposal – compulsory license with equitable remuneration – re-appeared in 1928 as the qualification placed upon the rights of broadcasting, and in 1948 upon the retransmission right. The Final Report of the drafting committee explained that the German suggestion was based upon the system of compulsory licenses existing in the German patent legislation, and which still exists.
According to Brennan, it may well be that equitable remuneration represents a value or price which is fair to both rights holder and licensee by creating an equitable sharing of the benefits derived from the use of the rights in question. This means a reasonable return to the rights holder and a cost burden upon the rights user that permits the latter to conduct its business profitably.499

However, as noted before, the German proposal was rejected. The British delegation formulated a provision that became an acceptable compromise:490

“Reservations and conditions relating to the application of this article (13) may be determined by the legislation of each country in so far as it is concerned; but all such reservations and conditions shall apply only in the countries which impose them.”

It was therefore accepted that under this provision a country could in its national legislation make rules “in the manufacturers’ favor, (permitting) them to reproduce tunes under conditions which were very mild for the manufacturers and very harsh for the authors”. Article 13 was finally accepted. The authors received no minimum right to fair payments in return for mechanical reproductions of their musical works under a statutory license in national law.491

Although the initial and possible misunderstanding of the difference between musical boxes and phonographs may have contributed to the events, it is not likely that the form of legislation would entirely be a result of events of accidental nature. Rather, it is natural to conclude that the legislator’s express intent was to favor a new form of media in both the business and the society’s interest. Or to put it more bluntly: the legislator (the Berne Union) was neither willing nor able to confront the national application of compulsory licensing in Germany.492

The solution also reflects mistrust of the outcomes of free negotiations in case the right-holders misuse their position. The solution rather reflects fears that a strong position of the right-holders would amount to negative consequences in the market. This solution paved the way to the mass use issues that were confronted later in Berne Revision Conferences.493

From an economic point of view, compulsory licensing with equitable remuneration should put the rights holder in the same position, as would happen through a market based transaction. The rights holder should receive a market price, although he is not entitled to refuse the transaction. In Coase’s example, the transaction takes place because it is economically rational. As stated earlier, no one is under an obligation to contract because it would be economically rational. The compulsory licensing scheme changes this, and in ways to be discussed later, is able to simulate rational market behavior.
III.4.2. Industry Initiated Compulsory Licensing in Other International Copyright Instruments

Since the purpose of the study is not a thorough examination of the international copyright system as such, the other international agreements besides the Berne Convention and also the basic elements of the EU legislation will only be briefly discussed. The main principles are however based on the Berne Convention, which is therefore a primary source in order to understand the basic development of the international copyright system. The neighboring rights issue – the Rome Convention of 1961 – will be more thoroughly discussed later in relation to the development of the record producers’ legal position.

As a general comment regarding the international copyright protection system, there are two different approaches to the national implementation of the treaties. The Geneva Convention for Phonograms and the Universal Copyright Convention are based on an obligation of the members to regulate domestic law accordingly, whereas the Berne Convention and Articles 10, 13 and 14 of the Rome Convention created rights directly after accession (convention law). 494

The other conventions besides the Berne Convention as a general feature contain relatively lengthy provisions allowing for the contracting states varying formal requirements as preconditions for protection.

III.4.2.1. Universal Copyright Convention: US Participation

The United Stated did not sign the Berne Convention until 1 March 1989. In order to have US participation in the international copyright protection, the Universal Copyright Convention was created in 1952. 495 A notable difference between the Berne Convention and the US system is the US requirement for registration as a precondition for copyright protection, which was contradictory to the requirement of informality in the Berne Convention.

The Universal Copyright Convention was built on the principles of national treatment and minimum protection, but the level of the requirements for the minimum protection is lower than in the Berne Convention. The intention was to create as broad international agreement as possible in order to make the level of protection obtainable to countries other than those with a tradition for high-level copyright protection. The time for protection is 25 years after the year of death of the author. A formal requirement for copyright protection is allowed. Developing countries were allowed exceptions from the main copyright protection clauses. 496
The material regulation is limited in the Universal Copyright Convention. In fact the only paragraph with any broader material substance concerns the compulsory licensing of a translation. If, after seven years from the first publication, no translation of the book has been published in the Contracting State, any national of such State may obtain a non-exclusive license from a competent authority of that State. A just compensation conforming to international standards must be made to the right-holders.497

III.4.2.2. The Rome Convention 1961: The Neighboring Rights

The award of the broadcasting right to authors of literary and artistic works at the Rome Conference 1928 started the discussion whether or not performing artists should have a right in their performances, analogous to that which was awarded to authors.498

After several decades of preparation, the Rome Convention was created in 1961, combining the so-called “neighboring rights”, the performers’, record producers’ and broadcasting organizations’ rights.

According to Porter, concerning the performers’ rights, the convention is essentially a compromise between the interests of the performers and those of their employers, be they movie producers, record producers, or broadcasting organizations.499 The rights granted to the record producers were broader: they were granted the right to prohibit or authorize the direct or indirect reproduction of their sound recordings. However, unlike movie producers, the record producers were not entitled to prevent a record from being broadcast or communicated to the public, but were only entitled to a single equitable remuneration:500

“If a phonogram published for commercial purposes, or a reproduction of such phonogram, is used directly for broadcasting or for any communication to the public, a single equitable remuneration shall be paid by the user to the performers, or to the producers of the phonograms, or both.”

It is however not completely correct to see this as an indication of compulsory licensing, as the right originally does not expand to exclusivity, but is limited to being of a “liability rule” nature. However, the Geneva Convention uses the term “compulsory license” in similar circumstances.501

Concerning the broadcasting organizations, the Rome Convention gave them extensive rights to authorize or prohibit the re-broadcasting of their broadcasts, the fixation of their broadcasts, and the reproduction of any fixation made without their consent.502
III.4.2.2.1. The Background of the Rome Convention

The protection of artists, record producers, and broadcasting companies had for a long time been debated in the conferences for the revision of the Berne Convention. In those discussions, it was finally proposed\(^{503}\) that these issues might be subject to another international instrument. It was on the one hand inevitable that new instruments were needed, as on the other it was clear that sufficient agreement could not be reached within the Berne Convention.\(^{504}\)

III.4.2.2.2. Preparations and the Power Balance

Experts from 16 countries were invited to the conference of experts, which took place at the Hague from 9 to 21 May 1960. Some interest groups were also entitled to send observers with a right to speak but not vote. The main group of experts was composed of government officials and scientists, as well as representatives for artists, broadcasting companies, and authors. The record industry had no representation, but used the observers to express the industry’s views.\(^{505}\)

According to Bergström, the power balance within the experts’ group was as follows: There was a centre-group with most influence, and two side-groups.\(^{506}\) The centre-group was the most influential and was composed of Western European experts aiming to strike a balance between the two side-groups. The first side-group was composed of Eastern countries’ experts and the Western countries’ experts representing the performers’ interests. The second side-group was gathered around a North American proposal, which gave a relatively low level of protection. The intention of this proposition was to ensure as many countries as possible could accept the resolution.\(^{507}\)

The connection between copyright and neighboring right was created in the definition of member states; it was agreed to propose that the convention should be applicable between countries that were either members of the Berne Convention or the Universal Copyright Convention of 1952.\(^{508}\)

The principles of minimum protection and national treatment were agreed.\(^{509}\) Although the supremacy of the author’s right was recognized, since the act of using a copyright protected work usually bears both copyright and neighboring right, it was concluded as self-evidently practical to create as close a resemblance as possible.\(^{510}\)

An important conflict of interest concerned the performer’s right, whether it should be an exclusive right or whether it should be restricted to a right for remuneration. This question was of great interest especially to continental European broadcasting organizations, which were afraid of becoming overly dependent on the artists’ organizations. The right was proposed, but with a reference to the member countries’ national legislations.\(^{511}\)
III.4.2.2.3. The Performers’ Right

The authors’ rights organizations were not at all in favor of the Rome Convention. The representative of the authors’ organizations was quoted:\textsuperscript{512}

“Authors considered that an international convention in that field was not necessary, as the ordinary law – particularly the law relating to contracts – was adequate to ensure the protection of the legitimate interests involved.”

It is hardly conceivable that the authors saw this as a general recommendable model for solving regulatory problems in the intellectual property right field.

The discussions in the Conference reflected the need to draw a distinction between copyright and neighboring right:\textsuperscript{513}

“Although creations of the mind owed much to technique, which had made it possible to disseminate them more widely and had also led to the emergence of new forms of creation, it entailed risks for them: it sometimes tended to obscure or alter the concept of intellectual creation to the point where the work was completely lost to sight behind the material means permitting its dissemination (...). For it was from the sources of literary or artistic creation that organizers of plays and concerts, as well as producers of phonograms and broadcasting organizations, drew their material.”

Another important question concerned the secondary use of sound recordings: this was as a rule subject to remuneration. The payment was subject to direct use in a radio program, or another separate public performance in, for example, a restaurant. The underlying idea was to separate such broadcasting activities that only relayed the original signal, from the original broadcast. There should be only one payment from the broadcasting company, which then would be allocated by the record producers and the artists’ organizations.\textsuperscript{514}

III.4.2.2.4. Basic Principles of the Protection Offered by the Rome Convention

As a rule, the right-holders of neighboring rights perform, record, and broadcast copyright protected works of authors. There are few exceptions. The Rome Convention protects the supporting functions of intellectual creation. The neighboring rights do not affect the author’s rights, but the intention of the Convention is that the neighboring rights protection allows the interpretation, record manufacture, and broadcasting to expand and prosper as further exploitations of intellectual work.\textsuperscript{515}
The protection is based on two corollary principles: Firstly, the legal status of the author’s right is not affected in any way. Secondly, no member country will allow protection for the performance without protecting the underlying work.\textsuperscript{516}

The development of the neighboring rights in general reflects the technological development in several respects: the most important aspect in relation to this study is that they represent the category “liability rule” in the tort law classification of Calabresi-Melamed, rather than property right. This fact seems to stem, not only from the history of sound recording as such, but also from the “hierarchical” comparison to the author’s right that enjoys a higher level of both legal protection and – as could be added in the spirit of Towse – societal status.

Adapting some of Schumpeter’s main ideas on economic development, we could conclude that the initial period of sound recording was a period of “invention”, whereas the “innovation” was the idea to use sound recording in particular as a tool for the music distribution business. The definition of the legal protection of a sound recording was crucial in “establishing” the sound recording business as part of the economic production. This took place mainly during a period from 1908 to 1961.

\textbf{III.4.2.3. The Geneva Convention}

The Geneva Convention was created in 1971 for the protection of the record producers. The main concern of the Geneva Convention was piracy, against which several measures were agreed upon.\textsuperscript{517} Thus the name, “Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms”.

The Geneva Convention does not create substantive rights in the protection of sound recordings. The mode of protection is left to domestic law, whether it is carried out in copyright, unfair competition, or penal law, as long as some protection exists.\textsuperscript{518}

The Geneva Convention, Article 6, contains provisions allowing national limitations to the producers of sound recordings. However, it also contains relatively strict language concerning compulsory licensing:

\begin{quote}
\textbf{“(…) no compulsory licenses may be permitted unless all of the following conditions are met:}

\begin{itemize}
\item[(a)] the duplication is for use solely for the purpose of teaching or scientific research
\item[(b)] the license shall be valid for duplication only within the territory of the Contracting State whose competent authority has granted the license and shall not extend to the export of duplicates;
\end{itemize}
\end{quote}
(c) the duplication made under the license gives rise to an equitable remuneration fixed by the said authority taking into account, inter alia, the number of duplicates which will be made.”

III.4.2.4. The Brussels Satellite Convention

The Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite (Brussels Convention) was created in 1974 to cover the protection of broadcasting satellite signals. The Convention obliges the member states to take certain measures if broadcasting satellite signals are rebroadcast without proper authorization.\textsuperscript{519}

The reason for the creation of the Brussels Convention was the inadequacy of the provisions of the Universal Copyright Convention and the Berne Convention on satellite transmissions. Both cover broadcasting, but whether satellite broadcasting was covered was uncertain. The Convention creates no new rights. It focuses on the unauthorized distribution of the satellite signal, for example, through cable-systems, rather than unauthorized reception of the signals, that is, private reception of the signals does not violate the Convention. The signal is the object of protection, not the content.\textsuperscript{520}

However, Article 8(3)(a) allows for a notice procedure concerning the possible national limitations to the protection of the Satellite Convention.\textsuperscript{521}

III.4.2.5. The EU Legislation

The Rome Treaty of the European Union does not contain express provisions on copyright. In the first decades of the European Economic Community, it was even discussed, whether EC legislation had any effect on the right-holders’ position. In the 1960s the European Court of Justice issued several decisions on trademark and patent rights, which cleared the aforementioned position. It was nevertheless not until the 1980s when the first decisions on copyright were given.\textsuperscript{522} The question of the EU’s mandate on intellectual property rights remained an issue until the 1990s.\textsuperscript{523} Rosas sees that the relation of the European Union to intellectual property matters has developed in three “waves”: firstly, the effect of the Rome Treaty, secondly the harmonization of national legislation, and thirdly the introduction of new rights.\textsuperscript{524}

The Commission of the European Communities issued its first important legislative document on the development of the EC copyright in 1988 (“The Green Paper on Copyright and the Challenge of Technology”). The focus was on the importance of the copyright legislation to industry and trade. The Commission was mostly concerned
with the protection of computer programs, copying of audiovisual works, the lending right, piracy, and protection of data bases.\textsuperscript{525}

In 1990 the Commission published a document “Follow-Up to the Green Paper: Working Program of the Commission in the Field of Copyright and Neighboring Rights”. On the basis of that program, the EU gave five Directives during 1991-96.\textsuperscript{526} In 1995, a Green Paper on Copyright and Related Rights in the Information Society was given, which led to the preparation of the Infosoc Directive.\textsuperscript{527} The debate on the resale rights led also to a Directive in 2001, and the Enforcement Directive in 2004.\textsuperscript{528}

The European Court of Justice has given several important decisions on copyright. An interesting distinction is made between the existence of a copyright and the use of the right; the Court has ruled that the Rome Treaty \textit{per se} does not affect the existence of a copyright. On the other hand, the Treaty and other relevant documents of the EU legislation may have an effect on the use of the said right. The Court has also developed a doctrine of the “core content” of copyright: according to this doctrine, the holder of an exclusive right may, in order to protect the core content of the exclusive right, limit the free movement of goods in the Community. The Court has also given some important rulings concerning the position of the national copyright organizations, which usually are able to exploit a monopoly or dominant position in their dealing.\textsuperscript{529}

All member states of the European Union are parties to the Berne Convention. The national treatment obligation of the Berne Convention requires the member states to afford the high level of protection to the other member countries of the EU, which obligation is also embedded in the Rome Treaty.\textsuperscript{530}

The EU legislation provides several mandates for compulsory licensing:

- The Rental Directive Article 10 (2) (limitations to rights in Chapter II, “Rights Related to Copyright”):\textsuperscript{531}

  “(…) any Member State may provide for the same kinds of limitation with regard to the protection of performers, producers of phonograms, broadcasting organizations and of producers of the first fixations of films, as it provides for in connection with the protection of copyright in literary and artistic works. However, compulsory licences may be provided for only to the extent to which they are compatible with the Rome Convention.”

The Infosoc Directive Article 5 (Exceptions and Limitations) stipulates on compulsory licensing against fair compensation (Art. 5(2)). The Member States may provide for exceptions and limitations to the reproduction rights in the following cases (non-compensation cases excluded here).\textsuperscript{532}
(a) reproductions on paper or any similar, effected by the use of any kind of photographic technique or by some other process having similar effects, with the exception of sheet music, provided that the rightholders receive fair compensation;

(b) in respect of reproduction on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the rightholders receive fair compensation which takes account of the application or non-application of technological measures (that is, the DRM option, MH);

(e) in respect of reproductions of broadcasts made by social institutions pursuing non-commercial purposes, such as hospitals or prisons, on condition that the rightholders receive fair compensation

Art. 5(5) repeats the principle of the “three-step test”.

Interestingly, the Satellite and Cable Directive applies a broad Scandinavian-type “extended collective licensing” scheme, with only a short time-limit for possible compulsory licensing regimes (Art 8(2)). According to Article 3, Members States shall ensure that the authorization of the broadcasting right may be acquired only by agreement.

A Member State may provide that a collective agreement between a collective society and a broadcasting organization concerning a given category of works may be extended to right-holders of the same category who are not represented by the collective organization. The requirements for this provision are that the satellite signal is a simulcast of a terrestrial broadcast by the same broadcaster. Moreover, the unrepresented rights holder shall, at any time, have the possibility of excluding the extension of the collective agreement to his works and of exercising his rights either individually or collectively.

Similar provisions concern the cable retransmission right (Art 8(1): Member States shall ensure that when programs from other Member States are retransmitted by cable in their territory the applicable copyright and related rights are observed and that such retransmission takes place on the basis of individual or collective contractual agreements between copyright owners, holders of related rights and cable operators. Members States shall further ensure (Art. 9(1)) that the right of copyright owners and holders of related rights to grant or refuse authorization to a cable operator for a cable retransmission may be exercised only through a collecting society. A similar regulation concerning the position of the “extended” collective license concerning the satellite broadcasting right, is given in Art. 9(2).
The solution attempts to solve the contradictions very often experienced in relation to compulsory licensing, and at the same time maintain the exclusivity doctrine of copyright. The European solution may be regarded as a copyright organization model, because the opportunity to negotiate fully for all right-holders, whether given an individual mandate or not, gives an extremely strong negotiating position for the copyright collective organization.

III.4.2.6. The TRIPS agreement: Berne Inclusion

Since the international development within the Berne Convention frame had proven less than satisfactory during the 1980s, copyright and related rights protection was taken up in the GATT (General Agreement on Tariffs and Trade) negotiations. During the Uruguay round, the TRIPS agreement (an Agreement on Trade-Related Aspect of Intellectual Property) concerning immaterial rights was created. The World Trade Organization (WTO) was founded to administer the agreed conventions.

TRIPS is based on national treatment, as well as on most favored nation treatment, which means that the country has to offer to the nationals of the member states the best benefits offered to the nationals of any member state.

The TRIPS obliges the member states to offer the same level of protection as the Berne Convention, with an exception on moral rights. The TRIPS contains a provision on the obligation to damages and penal sanctions, and provisions concerning arbitration in case a member state does not comply with the provisions.

The intention of the parties was not to adopt the bare text of the Berne Convention, but the acquis of Berne. The term refers to the body of legislation to which the member states are bound, rather than the plain text. This fact emphasizes the importance of the interpretation of the Berne Convention.

III.4.2.6.1. Relationship to GATT

After the Second World War, the General Agreement on Tariffs and Trade (GATT) was reached between 25 nations. The object was to promote an expansion in production, exchange, and consumption, by reducing the barriers to the international trade in goods. From the 1970s, the US, Japan, and countries of Western Europe began to move away from an emphasis upon trade in the exchange of tangible goods. This was to maximize for a country its appropriation of value arising from its comparative economic advantage over other nations. It was decided that a new round of trade negotiations should focus upon harmonizing intellectual property rules between trading nations.
Finally, the Berne Convention was incorporated into GATT. The final agreement concluded in 1994 was in force from the beginning of 1995. Now, a proven failure to comply with those norms by a member state may lead to a WTO judicial process culminating in WTO-authorized trade sanctions.541

Violations against the Berne Convention were to be handled by the International Court of Justice. However, this was not an efficient mechanism judging by the number of settlements.542

### III.4.2.6.2. Berne Convention in TRIPS – Exclusion of Moral Rights

However, during the negotiations it became clear that the moral rights were not acceptable to the US – who preferred the insertion of the term “economic rights”. Article 9(1) of TRIPS requires contracting parties to comply with Articles 1 to 21 of Berne, but expressly excludes the need to comply with Article 6bis of Berne. The exclusion of moral rights from TRIPS extends to rights derived from Article 6bis. TRIPS also contains a “three-step test”.

It has been debated, whether TRIPS, especially in relation to the exclusion of moral rights, will solicit a new trade-related interpretation of the Berne Articles and emphasise the economic aspect leading to “maximalist” interpretation.543 Needless to say, this also would indicate a dominance of the profit motive over the human rights motive (assignable over non-assignable right).544

### III.4.2.7. The 1996 WIPO Copyright Treaty: Right of Communication to the Public

The WIPO Copyright Treaty was adopted in 20 December 1996, together with WIPO Performances and Phonograms Treaty. The Treaty is an agreement within the meaning of the Berne Convention Art. 20, “Special Agreements Among Countries of the Union”, according to which the governments of the countries of the Union reserve the right to enter into special agreements among themselves, insofar as such agreements grant to authors more extensive rights than those granted by the Convention, or contain provisions not contrary to the Convention.545

The ratification required signatures of 30 member countries.546 The Treaty entered into force on 6 March 2002.547

The basic intention of the treaties was to protect the interests of the authors and right-holders in the digital environment, provided that a balance of interests with the larger public interest was maintained.548 A new right was introduced, a right of communication
to the public, in order to provide protection for authors and right-holders in the digital (net) environment. The key of the new definition was the accessibility of copyright protected material from a place and time individually chosen by the user.549

The conference debated on the exclusion of transient copies from copyright liability. The matter was finally left to be settled through the three-step test.550

The treaties are not part of TRIPS.551

III.4.2.8. The Compulsory Licensing Scheme in the U.S.

The first compulsory license in U.S. law was the mechanical license created by Copyright Act of 1909. The license was regulation was carried over to 1976 Act with certain changes and clarifications, and has been amended several times since.552

In the case of nondramatic musical works, the exclusive rights to make and to distribute phonorecords of (copyrightable) works are subject to compulsory licensing under certain conditions.553 When phonorecords of a nondramatic musical work have been distributed to the public in the United States under the authority of the copyright owner, any other person, including those who make phonorecords or digital phonorecord deliveries, may obtain a compulsory license to make and distribute phonorecords of the work.554

In its original form, the mechanical license permitted anyone to record a new version of any recorded and publicly distributed song on a phonorecord (piano roll, record, reel-to-reel tape, cartridge, audio cassette, compact disc), and to distribute the new version to the public so long as the mechanical royalty rate was paid to the proper copyright owners. Exact copying of the first recording was not allowed.555

According to the present wording, a person may obtain a compulsory license only if his or her primary purpose in making phonorecords is to distribute them to the public for private use, including by means of a digital phonorecord delivery. The requirement is that the original fixation took place lawfully.556 Statutory licensing may be applied in certain digital audio transmissions, if not, for example, part of an interactive service.557

A statutory license is applied to the rental, lease, or lending of phonorecords.558

The mechanical license was the sole compulsory license in U.S. law until the Copyright Act of 1976 which introduced three more: cable, jukebox, and public broadcasting compulsory licenses.559 Later, the record rental and satellite compulsory licenses were added.
The secondary transmissions to the public by a cable system of a performance or display of a work embodied in a primary transmission made by a broadcast station licensed by the Federal Communications Commission or by an appropriate authority of Canada or Mexico shall be subject to statutory (that is, compulsory) licensing. A statutory license is applied for the transmitting organizations for the reproduction of one phonorecord of a sound recording (ephemeral recordings).

The secondary transmission of a performance or display of a work embodied in a primary transmission is not an infringement of copyright if the secondary transmission is made by a satellite carrier for private home viewing pursuant to a statutory license under §119.

The jukebox compulsory license originally authorized jukebox operators to perform publicly non-dramatic musical compositions on their jukeboxes as long as the royalty rate was paid. The current regime however is based on contractual agreement, with an arbitration option.

The secondary transmission of certain broadcasts may be subject to compulsory licensing, if the secondary transmission is made by a satellite carrier to the public for private home viewing. The remuneration concerning some non-commercial broadcasting may be subject to arbitration.

III.5. Economic Issues of Copyright Limitations

After this brief overview of the development of the international copyright protection, in the following chapter, we shall study in more detail the technology related amendments to the right-holders and users’ positions. Although the nature of discussion is a comment on historical events, we shall also briefly probe the present challenges.

III.5.1. The Initiation of Voice Recording and Radio Business

Because the central theme of this study requires a general understanding of the stage of development of the industries during the period when the major legal framework was set, our main interest concerns the record, radio, and movie industries as examples of the impact of technology. A short look at their early industry statistics illustrates the phase of the activity when the Berne Convention amendments were under discussion.
The term “sound recording” is generally understood to mean the embodiment of all kinds of sound in some enduring material carrier thus permitting them to be repeatedly played back, reproduced, broadcast, or otherwise communicated for aural perception. A sound recording of the performance of a work amounts to the reproduction of both the performance and the work. The exclusively aural fixation of the sound of a performance or of other sounds is called a “phonogram” and the natural or legal person first fixing the sound is generally referred to as “producer of phonograms”. These may be duplicated in the form of discs or tapes of various technological characteristics.567

The origins of producing sound recordings date back to the last decades of the 19th century. The first record of sound vibrations that could be played back for aural perception was invented by Thomas Edison 1877. The first lateral recording of sounds in a spiral groove on a flat disc was invented by Emile Berliner in the 1880s.568 The first phonograms were made in 1889 under Berliner’s license.569 In the Berlin conference 1908, the impact of the rising record industry was already recognized:570

“Since 1896 the manufacture of mechanical musical instruments has undergone an unexpected development; substantial industries have formed in various countries, and thousands of copies of pieces of music in ever-increasing numbers have been reproduced.”

Very early statistics of the record and movie industry are difficult to find, and it may be questioned whether they have survived.571 The main source used here in this respect is “The Knowledge Industry in the United States 1960-1980”572, which, in addition to the years mentioned in the name of the book, offers some information from the earlier phases. Since the information of the book relies on quite broad statistical material, and the study group has apparently left no stones unturned, the gaps in information regarding the early years of development are today most likely impossible to fill.

As we are however more interested in the general development of the relevant industries rather than particular details, the US statistics may provide an example or an indication of the broader global development. Although the US was not a member of the Berne Convention at the time, the intention of this chapter is to show that both the record and movie industries were already well developed when the international legislative solutions were adopted. The US statistics provide a sufficient example.

In the US, the business structure of the sound recording industry began to develop at the beginning of the 20th century. A division between majors and minors soon developed.573 By the 1930s, Radio Corporation of America (RCA; its major shareholders included General Electric and AT&T) dominated the US market, Decca and EMI had the British Empire market, Pathé-Marconi had control over the French market (including the colonies) and Philips presided over the Northern and Central European markets.574
A statistic on record retail sales shows\textsuperscript{575} that in 1921, the annual sales was 105.6 million USD, but gradually decreased to 46.2 million USD in 1930. The Depression hit the industry and during 1931-1937 the sales levels were less than 20 million USD. During World War II, the sales levels started to approach the 100 million USD mark, and by 1946 the sales were 198 million USD. After that, the development was rather steady until the late 1950s, when the sales grew steadily to 1980 (2,450 million USD).

It seems that during the Depression, radio broadcasting started to grow and quite probably received a market share from the ailing record sales.\textsuperscript{576} In 1921, there were no households reported with radio sets, but in 1929 there were already over 10 million US households with a radio. By 1942, this figure was 30,600,000, and in 1980, 79,100,000. By 1940, out of the total expenditure on advertising in the US (2,088 million USD), radio’s share was already over 10 per cent (216 million USD).

From the point of view of our main study, it is however clear that the record business was already wide and important in the early 1920s. Other documentation and the descriptions of the history of phonograms indicate that this was already the case in the second decade of the 20th century. Stories of the sales of, for example, Caruso’s early recordings further indicate that sales were already wide by 1910.\textsuperscript{577} Similarly, by 1930s, radio had become an important media.

When the compulsory licensing for recordings became an optional part of the Berne Convention in 1928, this only meant the acceptance at the level of law of what had already been established at the level of the economy. Already in 1908, when the problem was widely debated, and national exceptions to the exclusivity rule were accepted, the industry had gained economic momentum.

The first radio broadcast ever was made on 24 December 1906 in Massachusetts.\textsuperscript{578} Although this initiation had a broadcasting element of copyright relevance – singing songs etc – it was unclear whether broadcasting would just be established as a new form of telegraphy rather than an independent phenomenon\textsuperscript{579}. Ronald Coase has an interesting and revealing quotation from the early pioneers of broadcasting in his study on the British broadcasting monopoly, concerning how this new technology could or could not be used. Broadcasting was originally called “wireless telephony”, a term that was to receive a totally new meaning more than fifty years later:

\textit{“The possible fields in which wireless telephony may be utilized are many and diverse, but those in which its commercial application is probable are relatively few. One reason at least for this statement is to be found in the competition of the old-established wire telephone and in the much greater secrecy of wire communication over wireless. As a well-known writer has recently aptly put it: ‘A wireless telephone talk is a talk upon the housetops with the whole world for an audience’. (…) Wireless telephony’s most important field is consequently...”}
In November 1918, attention had however been brought to the possibility of distribution of news by means of broadcasting.

The Berne solutions concerning radio broadcasting also took place after the operation had already had a successful start, and the legislation was not supposed to change the subtle balance already established concerning copyright.

It is quite clear that during the creation of the Rome Convention in 1961, the industries concerned were already rather well established with a relatively long industry tradition.

### III.5.2. From Physical Transportation to Electronic Distribution

The development of technology and lately particularly the digital technology has had a fundamental effect on the recording industry. The industry has developed from Edison's cylinder recordings to shellac 78 rpms (revolutions per minute), long-play and single 45 rpms and long-play 33 1/3 rpms, to 8-track tapes and cassettes, to compact discs (CDs) and DVD. However, this is not the only fundamental effect of new technology, as recording studios are relying increasingly on synthesizers, drum machines, and digital equipment for recording, engineering, and mixing. New methods are also being developed to identify performance and mechanical rights with greater accuracy.

According to a press release of International Federation of the Phonographic Industry (IFPI), although global music sales have continued to fall, and have fallen by 1.9% during the first half of 2005, digital sales have tripled to 6% of the industry's revenue. The retail value of the industry's sales was 13.4 billion USD in the first half of 2004, compared to 13.2 billion USD in the first half of 2005.

This development may make it difficult in the long run to discuss the recording industry totally separate from the development of the Internet. However, as long as the industry is mainly concentrating its activities around selling physical copies of recordings (CDs) it is meaningful to see the industry as separate from the Internet. In ten years time, the analysis might be totally different.

It has been said that thanks to the earlier technological development as radio, television, video, satellite broadcasting, LPs, and CDs, the music industry has “danced all the way to the bank with its profits”. The worldwide impact of technology rewarded many music industry participants with profit growth figures for many years.
copyright solution of applying compulsory licensing was intended to establish the chosen business model and quite clearly was successful in this intent.

However, the sales of pirated music has been estimated to grow rapidly: of estimated total sales of music products, in 2003 35 per cent has been estimated as illegal sales, and in 2005 40 per cent.586 Out of this, two-thirds are estimated as sales of pirated physical CDs, and one-third illegal downloads.587

One could probably say that to a large extent the industry’s current problems are due to its own reluctance to change. A recent survey, when discussing the Universal Music Group’s price cuts by 25-30 per cent, reaches the following conclusion:588

“We believe it was this refusal to adapt, as well as the reluctance to acknowledge or prevent and punish the growing problem, that led the music industry into dire straits”.

It is very clear that the electronic distribution of such goods as music will and should reduce radically the cost structure – mainly transportation but also production - of the music industry that has for a century built its business model on the basis of the physical distribution of sound recordings. The reluctance to realize the technological change, but attempt to unilaterally benefit from it, has led the industry quite apparently to assume that the improvement in their cost structure will turn into increased profits.

The reaction of the large audience seems to suggest that the benefits of the increased possibilities and ease of copying and the benefits of electronic distribution will not, at the end of the day, remain with the record companies, but will have to become cheaper products for the customers. One could, with some justification, speculate that the record industry may have intended to keep the high ‘transaction’ cost level for the consumer regardless of the clear cost benefits of electronic distribution. This is a strategy that apparently is not working and needs to be changed.

The record industry as such may go through a major change from the physical distributor to electronic distributor, but its role as a producer of entertainment and music products is quite likely intact. Somebody has to arrange for the recording, produce the final product, arrange the sales, take the financial risk, arrange for advertising and promoting, and so on. These functions will not change and are as important as ever. Competitive advantage will most probably be built on similar qualities as before, with the important exception of, who is able to create a well-functioning electronic distribution. This could even be someone that approaches the business area from a totally different angle, like Apple or any of the potentially successful followers of the Napster business model, modified to fit in the legal framework.
III.5.3. Piracy as the Crisis of the Physical Sales Doctrine

The pursuit of profit and the existence of private property are said to be the foundations of a free society. John Locke argued that each person has a natural right to own property, and the right is based on “labor” as an individual effort. As we saw in the beginning of this study, these ideas also play a significant role in modern copyright thinking. Yet, it is apparent that the pursuit of profit and private property in their extreme forms can cause several detrimental consequences and conflicting interests, like monopolist behavior or excessive demands for compensation. These consequences require counterbalancing measures, including anti-trust laws (development interest) and the protection of human rights of other parties (human rights interest). As discussed in the context of the motives, and the balancing of the motives, it is relatively clear that the profit motive in itself does not alone provide a justified basis for copyright legislation.

In relation to the modern media technology that developed during the 20th century, there are two kinds of “labors” entitling to property or profit: firstly, the individual, intellectual creation of an artist or inventor. Secondly, the technological achievements, a combination of innovation and investment, which are undeniably important and also require fair treatment in copyright legislation. Mere “invention” is not a sufficient guarantee for an economic breakthrough, since there has to be a commercial “innovation” in order to facilitate economic establishment. So, the development motive emerged in the interest of making sure that the potential of the technological innovations and investments were also recognized in the copyright system.

In this “modern” situation, the nature of copyright and the principles of justice applied to the copyright wealth distribution – including both economics and morality – became crucial issues. What would be the just distribution of wealth, resources, and opportunities in the digital world? Or would the attempt of the government to insure fairness by interfering with the free accumulation of wealth, and redistributing wealth, resources, or opportunities result in fundamental injustice by violating the liberty of those who have freely earned their position?

This problem is very clearly present when discussing the piracy issues of three major entertainment industries: 1) record production 2) movie industry 3) the electronic game industry. Piracy may be defined as unauthorized copying for commercial gain. Piracy as a phenomenon has been enabled and encouraged by three elements:

1. digital formats of content (for quick quality copies)
2. compression technology (to store and transfer files)
3. online penetration, particularly broadband (for access and distribution)

The estimated turnover of these three entertainment industries, worth 92 billion USD in 2003, could be up to one third higher without piracy. The industry that is losing the
most, music industry is estimated to lose 20 billion USD in 2003, against legitimate sales of 32 billion USD. In 2005, the situation is even worse, as the legal sales are estimated to decrease to 30 million USD. A reservation must however be made in relation to these numbers, as they are only intended as an estimation of a phenomenon of which no public records exist.

The movie industry is managing better, since out of the total demand of movie consumption, 94 per cent, equal to 53 billion USD, are expected to be gathered by the legitimate industry. By 2005, the estimated piracy could rise closer to 10 per cent of the industry’s total turnover, which is expected to be 62 billion USD.

Unlike the record and movie industries, it seems that the video game industry has managed to keep the piracy problem under control, since nearly 100 per cent of the estimated total revenue of video games is earned by the legitimate content owners. However, it seems that this otherwise positive situation is subject to some opportunity cost, because the industry in general has avoided countries with significant piracy problems.

Scholars have debated the detrimental effect of the Internet on the copyright system and the copyright economy. This is a justified concern from the record industry’s point of view, since the music (or record) industry is suffering – regardless of whether we agree with the estimations presented concerning piracy – from a rapid decline of the CD sales, still largely because of physical piracy, but increasingly because of Internet piracy. In similar fashion, media companies are facing the difficult task of developing sound business models to compete with free distribution of information. The movie industry and video game industry risk facing the similar concerns along with the development of the memory capacity of the computers, unless they are able to learn from the music industry’s experiences.

And yet was it not a more or less similar puzzle that led to the creation of the Berne Convention? Much of this effect is in fact a symptom of the industry’s inner crisis or “path dependence” to the business model of distribution of physical copies. Should the industry benefit from the decreasing costs of transportation when moving towards electronic distribution? This is the boundary at which one must evaluate, to what extent the society of the global community is willing to participate in the cost of maintaining sanctioned physical distribution when a dramatically cheaper means is available.

As online games move to subscription models with added benefits (e.g. tournament play, prizes or awards), there will be increased incentives to pay for legal game units and acquire unique registration rights. Such a technology advancement may also benefit filmed entertainment in the future, as high-definition televisions increasingly get networked with home PCs or advanced set-top boxes, and the industry can move
toward a model under which only registered users may receive updated and fresh content. This will lead to the strengthening of the “social lock”.

According to Stamatoudi, some of the essential trends in relation to multimedia production which will have an effect on the development of copyright in the future are the changing concept of authorship from a sole author to industrial activity, the increasing role of adaptations and reconstructions of works in comparison to original material, the increasing role of the industrial incentive rather than artistic desire to create, and the dematerialization of the notion of a work. This development also relates to the problem of the smallest protected unit.

III.6. Controversies of Compulsory Licensing

Although the traditional basis of copyright lies in the profit motive, the human rights motive became more important during the 19th century. In the following century, the impact of the Second Industrial Revolution was beginning to show in full force. The development of new media forms both in the interest of society and business (the development motive, the public interest motive) emerged as an important factor in the adaptation of compulsory licensing. The early 20th century saw a rise of media industries that, unlike the traditional printing industry, were not in a rights holder position. This required balancing measures within the copyright system. The technological development created a new media economy, which required a new institutional balance of interests.

When we discuss copyright as both an object of regulation and a vehicle for policy making and organizing the market of information business, there are basically three stages the legislative may choose from: the copyright exclusivity, the limitations to that exclusivity, or a total exemption from liability. Without going into detail as to how the international instruments regulate exclusivity and its limitations, we shall rely on the definition of limitations as suggested by Martin Senftleben: limitation of copyright means permission to use a work without payment (“fair use”), or via a statutory or compulsory license (against payment). Further, we shall not discuss separately statutory (or legal) and compulsory license but use the term ‘compulsory license’ when discussing non-voluntary licensing. A distinction to extended collective license is made, although it is seen as a model developed from the basis of compulsory licensing and thus represents a limitation to copyright in a systematic sense.

Regarding the reasons behind compulsory licensing, Senftleben lists several of them, out of which the industry-related are of most importance for the purpose of this study.
“Limits are moreover set to authors’ rights in order to regulate industry practice and competition. The exemption of ephemeral recordings made by broadcasting organizations and compulsory licenses concerning broadcasting rights and recordings of musical works can be perceived as examples of this type of limitation.”

Concerning Senftleben’s definition of compulsory licensing, for the purpose of this study, neighboring rights are seen as a form of compulsory licensing. This is an approach that is consistent with our distinction of the essential copyright elements:605

- exclusivity (“property right”)
- economic compensation (“liability right”)
- moral rights: paternity, respect (“inalienability”)

In order to discuss the impact of technology on Berne at an institutional level, a brief look at the contradictory nature and history of compulsory licensing is necessary to understand the nature of the arrangement.

Compulsory licensing reflects several contradictions related to copyright:

- the non-recovery of sunk costs and the problem of free riding606
- a right to remuneration as a surrogate for the right to exclude607
- the control of a monopoly power not to use its power against the public interest608
- impracticality, burdensome nature of negotiations609
- the need to subsidize an infant industry against strong right-holders610
- the incentive/access balance611

In the following these contradictions are discussed in order to develop an understanding of the basic functions of compulsory licensing. The discussion also illustrates features that may be contributed to the development motive.

III.6.1. Non-Recovery of Sunk Costs and the Free Rider Problem

The non-recovery of sunk costs and free-rider problem of compulsory licensing were recently discussed in the context of the Microsoft case in the EU Commission.612 In the view of the Commission, Microsoft had abused a dominant position by creating interoperability between its product, the Windows desktop operating system, and rival products (server operating systems such as Novell’s Netware and the Linux Server), and refusing to give the rivals full access to the Windows application program interfaces (API). The Commission ordered Microsoft to license the APIs to competitors.613
Microsoft had mainly two arguments against the proposed solution: first of all, creating the APIs had required heavy investments in research and development, and was protected not only by copyright but many patents. If the APIs were free to others, Microsoft would not be able to recover the sunk cost for the development of the APIs.\textsuperscript{614}

Second, Microsoft argued that compulsory licensing would encourage free riders, who would not innovate, but rather wait for other firms to innovate first, and then require the necessary licenses for others’ work.\textsuperscript{615}

According to a study by Le, the compulsory license in similar circumstances is justified \textit{per se}. But in order to adjust the terms of the compulsory license to be more efficient, it would be recommendable to allow the incumbent to organize bidding for the APIs, allow joint R&D with the entrant regarding the API’s development, and furthermore, the law should allow the incumbent to set a minimum threshold for the access fee.

### III.6.2. A Right to Compensation as a Surrogate for the Rights to Exclude

Brennan has compared the compulsory licensing of retransmissions to the classic example of lighthouses as described by R.H. Coase. His conclusion is that the cases are comparable in a sense that in both cases the actual exclusion of outsiders from the use of the service is difficult or impossible. Therefore, in both cases a right to remuneration serves as a surrogate for the right to actually exclude.\textsuperscript{616}

The loss or non-existence of a choke point would be replaced by a right to remuneration, as in the example of Friedman, the non-existence of a choke point may advocate the public funding of the service.

In the United States, during the enactment of the cable television compulsory licensing provision, the following question was asked. Because the Constitution says that Congress may grant authors the exclusive right to their writings, is it unconstitutional for Congress to create compulsory licenses which render the author’s copyright less than exclusive by taking away from authors the right to deny potential users the use of their copyrighted works? The question has never been litigated. In 1909, during the enactment of the sound recording compulsory licensing, on the other hand, the songwriters feared that if they successfully challenged the mechanical compulsory license, they might be left with no protection whatsoever against mechanical reproduction of their songs, that is, the issue would fall under the fair use regime.\textsuperscript{617}
III.6.3. The Public Interest and Control of Monopoly Powers

The public interest view has been supported on many occasions. For instance, the US and Australian examples indicate a broad application of the public interest argument with regard to compulsory licensing.

During the creation of the broadcasting amendments to the Berne Convention, the public interest especially in contradiction to the monopoly power of the right-holders’ organizations was expressed on several occasions.

III.6.4. Impracticality

The mass use of copyright protected works makes the problems of exclusivity-based copyright fairly clear. Consider a cable TV system with a capacity of, say, 50 television channels. Every channel provides programs 24 hours a day seven days a week approximately two programs an hour.

Every program contains at least ten to twenty right-holders, but some major productions may contain hundreds or even thousands of cooperators earning some level of authorship to some creative element of the program, the average being assumed as one hundred. Let us further assume that the licenses for cable retransmissions were to be negotiated individually, and the amount of right-holders were 100. A simple calculation reveals that during the course of one day, this would amount to agreeing on 50 x 24 x 2 x 100 = 240,000 licenses. This is clearly not only impractical, but impossible.

The impracticality argument was used during the preparations of the US 1976 Copyright Act by the Congress, because it was stated that it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system.

III.6.5. The Need to Subsidize an Infant Industry

The argument in favor of a new and innovative industry has been raised several times in copyright history. For example, in the discussions concerning the amendment of the Berne Convention to include the compulsory licensing exemption for phonorecords, the point of view of a new industry was raised.

In the US, the “emerging industry” argument has been widely used especially in relation to cable television. The argument is that a developing industry needs the protection of a reliable and reasonable compulsory license to make planned growth possible.
III.6.6. Adjusting the Incentive/Access Balance

Compulsory licensing may offer an alternative incentive/access balance within the copyright system, if applied between copyright holder and the productive user. Underutilization concerns in the consumer market would be met by new entrants producing perfect substitutes and forcing down prices.\(^{624}\)

The incentive/access balance may however prove an equation with certain instabilities. According to Gallagher, the compulsory license for mechanical recordings of musical works “must estimate the benefits of interwork competition in the market for musical works versus the benefits of intrawork competition in the derivative work market for sound recordings”.\(^{625}\) However, Gallagher sees the compulsory licensing scheme as problematic, because one of the core functions of copyright is maintaining a private and independent creative and productive sector. State interventions to this mechanism are contrary to this end.\(^{626}\)

Cassler has pointed out, interestingly, that authors do not always seek exclusivity as the prime solution for the maximal incentive. In 1909, songwriters feared that if they successfully challenged the mechanical license, they might be left with no protection whatsoever against mechanical reproduction of their songs.\(^{627}\) This is because the likely political alternative would not have been the establishment of exclusivity, but fair use.

On the other hand, where there is uncontrolled copying, the copyright owners are no longer against compulsory licensing, but actually look into it in order to improve the otherwise difficult situation.\(^{628}\)

III.7. The Route to “Droits Voisins”

III.7.1. The Compulsory License Debate in Berlin 1908: Business Perspectives

During the 1908 Berlin Revision Conference, a sub-commission was appointed to consider the question of mechanical reproduction of musical works.\(^{629}\) At the Berlin Conference, for the first time in the brief history of the Berne Convention, big business interests began to conflict.\(^{630}\)

Mechanical reproduction as a form of adaptation was extensively discussed, including phonograph recordings and piano rolls. The Closing Protocol of the 1886 had declared that mechanical reproduction was not to be an infringement of copyright because
such devices were not that time very widespread. This position was left unchanged by the 1896 Conference.\textsuperscript{631} We can here see the initial effect of the \textit{invention} of the phonogram being not yet relevant either to the regulative or business interests. As a principle issue, phonograms are discussed, but since no pressing economic need exists for resolving the matter, no action is taken.

Some years later, a large industry specializing in the manufacture of phonograph recordings had emerged. The phonogram industry had developed from \textit{invention} to \textit{innovation}.

According to Ricketson, one of the factors contributing to the rapid growth of the recording industry was the \textit{lack of enforceable rights} by copyright owners. The copyright owners had initiated campaigns at both national and international levels for the recognition of these rights, arguing that phonographic recordings were just another form of reproduction.\textsuperscript{632} The recording industry argued that the recognition of these rights would mean the ruin of their industry, which had been built in good faith, in the absence of legal restrictions.\textsuperscript{633}

Ricketson’s comment illustrates an interesting shift in the argumentation concerning copyright and economic development. Traditionally, copyright has been seen from the profit motive’s point of view, a vehicle for encouraging creativity. If we consider closely Ricketson’s argument, we realize that he attributes – like Brennan (see earlier) - the rapid growth of the phonogram industry to the lack of enforceable rights. We might even turn his argument upside down and ask that if society is willing to encourage the development of a technological phenomenon, should it in fact consider, instead of granting rights, \textit{not} granting rights.

If we put the words of Ricketson in Coase’s context, we may face a puzzle. If the economic overall optimum is reached regardless of the allocation of rights - assuming the parties operate rationally and no transaction costs are taken into account – then how is it conceivable that the non-existence of rights would in fact have contributed to the positive economic development of a business? Theoretically, this should not be the case. The effect that rights however have on economic activity is the balance of power \textit{within} that economic activity, that is, the allocation of rights pre-sets the negotiation positions of the parties. Twisting Ricketson’s words a little bit, if the exclusive right to control the recording of a work would have been established early on, the development of the industry might not have been as quick and broad as it was.\textsuperscript{634} We will not go as far as claiming that Ricketson would have seen the development of the recording industry as a negative trend, rather he illustrates the position of the industrial entrepreneur who seizes an opportunity knowing that legislation lags behind.

Going back to the “party-analysis” of Posner’s example discussed earlier, the rights affect the monetary outcome of the parties within certain economic activity. Therefore,
if the other party is not compensated for the production factor that it provides, this enables the other party to use this production factor without cost, and further invest into and develop the exploiting business. Therefore, the allocation of rights in this sense affects the industry’s development prospects. Leaving the industry free to exploit the production factors will certainly benefit the industry and facilitate its development. But this may also be the result of a conscious and intended legislative motive, that is, the development motive.

The protection afforded to literary and artistic works by the Convention in its original form gave the authors not only the right to equitable remuneration when their works were used, but also the exclusive right to authorize the use of their works, and therefore prevent others from using them.635 The music publishers (sheet music) had traditionally adopted the same business model in use in the publishing industry, namely acquiring from the authors the exclusive rights to the published works.636

The record industry especially in the US and the UK considered it important however to allow competition to flourish in this new industry through allowing competing record companies to produce sound recordings based on the same music and lyrics.637 It is conceivable that the industry had “landed” in this production model through trial and error. It is also quite likely that the respect of the author’s right was never high in the Schumpeterian entrepreneurs’ agenda. The entrepreneur is simply reacting on the basis of his commercial opportunities, and will not in the first instance hire lawyers to find out what is wrong with his business concept.

Naturally, as Ricketson has explained, this led to legal conflict that had to be resolved. The Berlin Conference was finally persuaded to compromise: Article 13 expressly recognized the exclusive rights of musical copyright owners in relation to the adaptation of their works to instruments capable of reproducing them mechanically, as well as the public performance of those works by means of these instruments.638 However, the application of the Article was left subject to such reservations and conditions as might be determined by the domestic legislation of each country. This meant, in favor of the recording industry’s interests, that the system of compulsory licensing could be enforced. Germany had already introduced compulsory licensing, with the United States and the UK following. On the other hand, nothing compelled the member countries to adopt the formula.639

In the record industry, competitive advantage had to be secured by exclusive contracts with performers (not authors) and by making better recordings or better marketing of a given work. Unlike the solution adopted concerning the movie rights, the record producer could not block competition by acquiring exclusive rights from the composer of a song.640
III.7.2. The Development of the Record Producer’s Right at the International Level

If the printed book was the main fixed platform of creative works in the first era of copyright, the sound recording, in its increasingly varied forms, has been the foremost subject of the second, increasingly electronic era. Similar to the printing piracy in the 15th century, in the early 20th century an increasing number of producers started to select for reproduction such records that had already proven successful on the market. Unlike publishers, who finally had the benefit of the printing privileges, as a legal establishment of their business, phonogram producers could not obtain exclusive rights from the authors to reproduce and distribute the latter’s works in the form of sound recordings. This could have provided them with at least some indirect protection against unauthorized copying of their sound recordings. The problem of the investor’s protection, the legal establishment of the business, had to be resolved due to the pressures created by the industry. This was no longer a matter of developing a new commercial innovation, but the establishment phase, where existing business interests had to be legally protected.

According to Boytha, the commercialization of the sound recordings has gone through two main phases: during the first phase, it was mainly important to control the use of the recordings that were put out by the initial producer. During the second phase, the control of reproduction has become equally important. We could say that the present day’s piracy issue is a clear indication of the second phase. The producer however needs an ally in this process. As the publishers joined with the authors in late 17th century England, on the eve of losing their privileges, so did the producers join with the performing artists to enable the legal establishment of the recording business.

At the diplomatic conference in Rome in 1928, the Italian Government together with the Berne Union first proposed that “when a musical work has been adapted to a mechanical instrument by the contribution of performing artists these latter should also benefit from the protection granted to that adaptation”. Phonograms were considered to be derivative works, that is, adaptations by performing artists of the works fixed therein. The Italian Government was not so much worried about the exclusive right itself, but about the benefit, that is, monetary compensation. Contrary to the common doctrine of copyright, it seems that exclusivity does not enjoy the highest priority, but economic compensation.

No agreement was reached in Rome. The Norwegian delegate pointed out that the problem exceeded the scope of the Berne Convention and asked whether it would not suffice to make the protection in question the subject of a special convention. The question was taken up by the International Confederation of the Societies of Authors and Composers (CISAC) in 1932. In this occasion, the term “neighbouring right” was
used for the first time in public.\textsuperscript{646} It is quite evident that the authors had not only doctrinal concerns but also an economic interest to make a distinction between the primary rights – copyright – in relation to other rights.

In the Brussels Diplomatic Conference in 1948, the Belgian Government and the Berne Union again proposed a new Article (11 quater), according to which the performance of any work, protected or not, should have been protected under the conditions to be determined by the domestic legislation in each country of the Union. However, the majority of the delegations were of the view that the protection of performers should be secured in a framework other than the Berne Convention. The Conference adopted respective “wishes” concerning the protection of producers of phonograms and the rights neighboring the authors’ rights, in particular the protection of performers. The majority of the delegations also “expressed the desire that the governments of the countries of the Union study the means of securing, without prejudice to the rights of the authors, the protection of the manufacturers of instruments serving the purpose of mechanical reproduction of music”.\textsuperscript{647}

Finally, after years of preparation, in 1960, a committee of experts from the predecessor of WIPO, UNESCO, and ILO met at The Hague to draft a convention that was later to become the International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations.\textsuperscript{648}

Since the Rome Convention combines the three basic neighboring rights, it has proven a rather slow instrument when, for example, rapid measures against piracy are needed. A simple convention – in comparison to Berne - was created in order to address the issues of making unauthorized duplicates of phonograms and the importation and distribution of such phonograms. In 1971 in Geneva, the Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms (“the Phonogram Convention”) was created. The quick increase in the number of States party to it is partly because the Convention does not contain a minimum requirement concerning rights granted to the producers. It leaves to the contracting states the means – one or more - to choose from the following: the grant of copyright or other specific rights, protection by means of the law on unfair competition, and penal sanctions.\textsuperscript{649}

III.7.3. The Motives and the Phonogram Solution

According to Ricketson, the most notable problem, and also an indication of the problems that were to emerge in the future, was “the threat posed to authors’ rights by the emergence of new technological means of reproducing and disseminating their works”, and the growth of powerful interest groups engaged in the exploitation of these new technologies.\textsuperscript{650}
If the point of view is strictly limited to the human rights motive – protection of the author as an intrinsic value – this conclusion is correct. Also from the point of view of the exclusivity doctrine, in a purely defined exclusivity-based copyright system, the idea of compulsory licensing was theoretically incorrect.

However, there is probably cause to examine Ricketson’s words somewhat critically. When someone becomes an artist, it is commonplace that this choice of profession is not inspired by a need for solitude and keeping the fruits of personal expression to oneself. Normally, an artist or an author are not only economically motivated, but also with a drive to have their works published and distributed as widely as possible. It is not at all clear that if an artist is presented with new forms of media, enabling a wider distribution of his work, and even new creative uses, he should feel threatened. On the contrary: artists are usually not known for their conservativeness, but rather for their interest to explore new areas of self-expression. Therefore, Ricketson’s view of the threat to the authors’ rights must be seen in the proper context: it is economic piracy, that was feared, not technology as such.

From an economic point of view, as technology offers better and cheaper ways of distributing copyright protected works, the authors and artists must have realized that there is an opportunity involved, either to have a larger share of the income collected from the consumer, to gain a bigger audience, and even broaden or create a completely new market.651

In a similar fashion, as we discuss electronic media, we notice another point that to some extent contradicts Ricketson’s opinion: in, for example, broadcasting, it is not proper that one author or rights holder could with his dissent block the broadcasting of a work that has several right-holders. This would in fact be against the right-holders’ interests, and would create ample opportunities for opportunistic behavior at the cost of the overall efficiency. The problem has also societal and cultural aspects that have to be taken into account.

If all right-holders were to act rationally, this problem would not exist according to Coase. However, as Posner allows the subjective evaluation of rights, the right-holders involved may evaluate their rights differently, and not come to a conclusion. The situation could be used for “hi-jacking” the others in order to receive excessive compensation. Finally, if the role of non-assignable (moral) rights is emphasized, this could lead to lengthy negotiations with random results. Even if we did not discuss the consequences of potential irrational behavior, we might conclude that under such circumstances, the market would no longer be effective or even function.

It is clear that along with the traditional profit and human rights motives in favor of the author, there were other interests that played an important role in the decision-making of the 1908 conference. The conference gave credit to the arguments of the
phonogram producers, thus supporting the development motive – the encouragement of the development of new technologies and business models that were based on them. The solution to allow competing record companies to make recordings of the same songs without the author’s express consent was pro-competitive and at least was intended to have a positive impact on the development of the recording industry.

It is interesting to compare this solution to the motives behind the introduction of the printing privileges in Venice in 1469 (as well as the Stationers’ Company): the system of privileges was introduced to avoid the risk of someone printing the same material someone else had printed or was printing.\textsuperscript{652} The Berne Convention regulation concerning phonograms in 1908 attempted – at least seemingly - to reach the opposite goal: to facilitate record company competition by compulsory licensing of works. Why the opposite results?

Because of the privileges, the Venetian printers were able to protect their investments against excessive competition, whereas record companies were able to compete without exclusive deals on their raw material, that is, copyright protected works of music and lyrics. For the record industry, this meant an ability to continue utilizing the business model that had been earlier adopted, which was based on the opportunity to make various performances of the work on phonograms.\textsuperscript{653}

The phonograph solution also served the profit motive, as the record industry claimed it had already been “built up” under the old regime, which afforded no copyright protection.\textsuperscript{654} The detrimental change of rules when an industry has already made significant investments under certain assumptions may easily lead to business failure, if the rules of the game are suddenly changed. The Venetian printing industry suffered from excessive competition within the industry and this required limitation. The record industry had adopted a business model, which was threatened by the authors’ requirements. So, as the basic threats of the respective industries were in different directions, the solutions had to be different.\textsuperscript{655}

The Venetian solution tackled a problem that threatened the adopted business model, and likewise, the phonogram solution was directed to the encouragement of the development of the record industry’s current business model. Concerning the record industry, there was no competition from the “old technology” as such technology did not exist, which meant that the development motive was not challenged by protective interests of investors of the old school. One might conclude that the Venetian privileges were handed out purely in the interest of the profit motive, with probably some public or censorship interest, but the 1908 conference placed more emphasis on the development motive.\textsuperscript{656} A common feature remains: the protection of the business model, whether static (Venice) or dynamic (the record industry).
The debate concerning the record producer’s right continued through most of the 20th century. The right was finally adopted at the international level in the Rome Convention 1961.657

Seen from the point of view of the artist, the development of technology may not only seem a threat, as Ricketson has pointed out, but an opportunity to use his or her talent investment in a new and additional way, and gain in the long run. It is self-evident that the record industry has enabled artists to gain income through sales of records. Some artists do not operate in any other way than by publishing recordings of their works.658 Some discussion has taken place on whether a recording could be a work of art itself, protected by copyright.659

The human rights motive as such does not seem to have been a prime concern in the 1908 conference. However, it is not too far-fetched to claim that the later development of the recording industry has also meant a development of a new art form, and thus benefited society. With the invention of music recordings, music itself has been made accessible all over the world, which may benefit mankind.660 Therefore, the presence of the human rights motive as “rights of others” could be argued.

Very importantly, the Berlin conference was persuaded to allow the states to draw a distinction in their domestic legislation, between the right of the author to equitable remuneration for the use of the work, and the right of the author, or his assignee, to restrict competition in the newly emerging record market.661 One could say that for the first time the traditional profit motive was challenged by the development motive.

III.8. Broadcasting and the Public Interest Motive

What was the role of the early broadcasting activity? As an initial technological limitation, an important element that affects broadcasting legislation was – and still is to a certain extent - the scarcity of the broadcasting frequencies662. Broadcasting is still today a problem area of legislation, as it, on the one hand, provides a remarkable opportunity for disseminating information to the masses, and therefore enhances democracy. On the other, concerning the international allocation of frequencies, smaller countries, in particular, were entitled to only a very limited number of broadcasting frequencies, which has lead to the creation of broadcasting monopolies. As these monopolies represented important political power, they were initially organized both in Europe and in most other countries to be controlled by the state and to have an important role as a tool for maintaining governmental control. In the era of National Socialism, and also in socialist countries, broadcasting was a central factor for controlling society. It has been pointed out that in a state coup, the first building the revolutionaries raid is no longer parliament but the central TV station.663
In the Rome Conference 1928, the national emphasis of broadcasting legislation was reflected in the report of the broadcasting sub-committee:

“(…) because national legislation has, in various guises, given broadcasting services a markedly social character, it is difficult, precisely when the tendency seems destined to increase more and more, to anticipate the manner in which broadcasting services and the laws governing them are going to develop.”

The reasons for regulating broadcasting may be divided into four categories:

a) because the airwaves are a public resource, the government (or some agency on its behalf) is entitled to license their use for broadcasting on the terms it sees fit

b) since the broadcasting frequencies are very limited, it is impossible for everyone to acquire a license to broadcast or to enjoy access to air his or her views on radio or television. Therefore, government may reasonably require licensees to share their privilege with other representatives of the public, and may compel them to present a balanced range of programs in the interests of the listeners and viewers. (according to Barendt, this is the most widely used argument.)

c) television and radio are more influential on public opinion than the press (or at least are widely thought to be).

d) broadcasting is still a relatively new phenomenon, and it is understandable that society has wanted to regulate it, just as it has treated the cinema with more caution than it has the theatre. (an argument contributed by Barendt to Lee Bollinger)

Although some of these arguments may have at least partially lost relevance, it is important especially from the point of view of copyright development to see their importance. From early on, broadcasting has been a target of wide public interest and also debate. It is therefore only natural that the copyright regulation models chosen have also reflected public interest.

The role of broadcasting as an important source of political power most likely had an effect, when the broadcasting right was discussed. The possibility for the Berne Convention member states to use compulsory licensing was opened again in the context of broadcasting. This was due to the problems of exclusivity in mass use, but one might also conclude that the operations of an important public policy vehicle were not allowed to be dismantled by individual right-holders or even collective organizations. British and French delegations suggested adding the radio broadcasting right to the
author’s other exclusive rights, while delegations of especially Australia and New Zeeland thought the matter must be subject to intervention by the public authorities to protect the cultural and social interests linked to this specific new form of popular dissemination of intellectual works. So, it is likely that the solution concerning broadcasting was not primarily based on economics as in the case of phonograms, but on public policy issues.

On the Berne agenda, broadcasting was first discussed in the 1928 Rome Conference. A sub-commission was appointed to report on the matter.

In the Rome Conference, the broadcasting right, as distinct from the public performance right, was introduced. A new Article 11bis recognized the exclusive right of authors to authorize the communications of their works to the public by means of broadcasting. It was however left to the member states to regulate the conditions under which this new right was to be exercised within their territory. This clearly comprehended such restrictions as compulsory licenses, but these restrictions should in no way prejudice the author’s moral right, nor his right to equitable remuneration. The problem illustrated by Friedman on parks and highways resembles, once again, the logic behind the solution:

“The growth of new technical methods of using works makes it increasingly difficult for authors to exercise exclusive rights, and may even make individual licenses impossible in practice.”

A proposal concerning the performers’ similar exclusive right in relation to the broadcasting of their performances was not dealt with, because the commission thought there was insufficient uniformity in national approaches to justify attempting an international solution. The question was left to a resolution on the subject.

As Ricketson points out, this was another instance of a new technological development that had profound implications for author’s rights. Radio broadcasting had begun in France and Great Britain in 1922, and was therefore unknown during the Berlin Conference in 1908.

In Europe, three approaches had been made on a national level concerning the broadcasting right: in some countries domestic law defined copyright broadly as including all means of reproduction and performance of a work: in these countries, the law clearly gave the author rights when the work was broadcast.

In countries of a more specifically defined protection of the author, the situation was more difficult. The definition of “performance” was however thought to include broadcasting by an important scholar, and later on the courts both in Great Britain and Australia adopted this view.
In Germany, the courts and the legal profession approached the issue by elimination: radio broadcasting was not an adaptation of the work, nor was it a reproduction. Rather it was re-diffusion, which was protected by the national law. Italy and Czechoslovakia had passed their copyright laws after the arrival of radio, and a broadcasting right was specifically identified in their national laws. This illustrates the classical difficulty of the “founding fathers” of copyright legislation to succeed with forward-looking legislation: new media forms do not easily - let alone certainly - adapt to old regulations, however they are formulated.

During the proceedings of the Rome Conference in 1928, France and Italy wanted specific recognition in the Convention of an exclusive right for authors of literary and artistic works to authorize their works to be broadcast. Australia, New Zealand, and Norway saw radio as just another publishing medium, and a public interest dimension to the manner in which it was established, as radio served the social and cultural interests of the public. Australia and New Zealand delegates in particular saw radio as an instrument of education, and were concerned about the Berne Convention's impact on their educational policies. They also expressed worries over the activities of the performing rights societies.

According to Porter, the old arguments about the social function of copyright resurfaced:

“Did the author have a fundamental quasi-mystical right over the manner in which the work might be used by any new technology, or could a society control the terms under which that technology was used? Was copyright law only to be beneficial to the author, or could it serve society as a whole?”

A compromise was reached during the final days of the conference. The first paragraph of the new Article 11bis established the exclusive right of the author to control the broadcasting of the work. The scope of the right was limited to broadcasts “communicated to the public”. The right granted was based on a process of public communication. The solution was very important concerning the development of copyright protection: The rights covered extended beyond individual acts of copying and performance to allow society to regulate one of its most advanced technologies of communication. The rules applying to other forms of exploitation might not apply to broadcasting. Member States were allowed to limit the author’s broadcasting right to enable broadcasters to fulfill their social responsibilities, as the second paragraph of the new Article 11bis allowed restrictions as long as the moral right was intact and the author had a right to obtain equitable remuneration. If no agreement on the remuneration could be reached, the state may appoint a competent authority to determine it.
It is no coincidence that the public interest motive (the human rights of others than the copyright holder) was strongly emphasized during the broadcasting discussion; since broadcasting capacity was scarce due to the limited number of frequencies allocated to each member country of ITU, the broadcasting operations were commonly organized to be carried out by state-owned companies or even governmental units. Therefore, the argumentation seeking justification for copyright limitations was based on the public service virtues – education, equal access to communication. The public interest motive was therefore quite important in the 1928 Conference, and one might say that it clearly overruled the human rights motive.

In Scandinavian legislation, the licensing systems were based on the extended collective licensing system, which are discussed in the context of photocopying later in this study.

As Russell encourages us to take a look beyond altruistic motives, it is quite clear that the member states had a public policy interest – if not censorship interest - in the new media, which could be justified by human rights argumentation. This is however not an attempt to undermine the importance of that argumentation.

III.8.1. The Broadcasting Business Model as Distinct from Cinema

Apparently for the first time in the history of copyright – with regard to both recording and broadcasting - the issue of mass use of copyright protected works emerges. The problem of mass use in relation to the exclusivity of the copyright holder has two elements: first of all, the technology allowing mass use can be paralyzed if every rights holder has in effect the right to prohibit the use. Second, if this happens, then the rights holder who consents, becomes a hostage of the one dissenting, which means that one rights holder can prevent another from realizing his economic rights and exploiting his copyright. This is both unjust from the right-holders' point of view and inappropriate from both the broadcasting companies' and society’s/users’ point of view.

Therefore effective measures had to be created in order to maintain two benefits, enable the right-holders to benefit from the use of their rights, and enable society to benefit from broadcasting without the threat of unreasonable demands of individual right-holders.

How is broadcasting then different from cinema which did not require a compulsory licensing exception? This was explained by the representative of the International Federation of Actors in the following manner in the conference discussing the Rome Convention: Contrary to general opinion, sound movies had not played a predominant role in the evolution. Although the cinema had attracted very many actors, most were still working in theatres:
“It was indisputable it was the mechanical means of reproduction and transmission (recording, radio and television) which had, in the space of a few years, transformed the author, who, until then, had been master of his own performance and his own talent, into a supplier for a chain of industries which reproduced and used his work unrestrictedly. (...) Broadcasting and television had introduced a new economic relationship between the performer and the public. Previously, the number of people listening to a performance could be controlled but recording now completely separated the performer from his performance, in other words, his performance could be possessed by others.”

As with the publishing contracts of books, the performer controls his performance in movies, and is able to create an agreement. Later on, the use of the movie in broadcasting is no longer under the performer’s direct control. From the author’s perspective, the “choke point” is lost. Therefore, it is quite apparent that the conditions and business logic of the broadcasting industry were and remained different from the movie industry.

### III.9. Cinema – the Authorship of a Business Unit

Unlike traditional arts, which were seen as a result of human creative effort – the creation of a genius – the cinema in the early days of international copyright protection was seen merely as an extension of photographic expression, reproducing reality with the aid of a machine. But when artists like Picasso and Cocteau took an interest in making movies, the critics and the audience could no longer disregard cinema as a art form.689 The ability to add sound to movies made an important improvement in the product itself but also created a new business setting.690 The movie industry was also commercially important to France in the early years of cinema. As Cowen has stated, France initially maintained the cinema industry’s global market leadership but lost it to the US shortly after the First World War.691

The US industry statistics on motion picture releases is more limited, but the level of production was very high in 1939 (761 releases, of which US produced 483 and imported 278). In the following decades, the production quantities would decrease rather than increase.692

Movies are very expensive to make, and in a given year there are fewer movies released than books, CDs, or paintings. These conditions favor dominant producers.693 In no other cultural area is the US dominance so clear.694

As an explanation of this state of affairs, Cowen believes that television has hurt especially the European domestic movie production.695 Hollywood has a superior ability to evaluate cinematic projects and forecast and meet consumer demand.696
Consumers prefer US movies. In Schumpeter’s language, their talent may be equal concerning “invention”, but superior concerning “innovations”.

But above all, since clusters are important for the creative industries, one turn-around effect may move a cluster from one locale to another. French had a dominant position in the world cinema market before the First World War, but lost it because movie productions ceased for many years. Hollywood was quick to take that place and started to dominate world markets in the 1920s, only a few years after the First World War. Hollywood executives also saw talking movies as an opportunity to expand abroad.

It is thus important to realize that the early acceptance of cinema as an art form in the Berne Convention (1908) had French backing and influence.


In the Berlin revision 1908, the first steps were taken to implement the continental European view that cinematography was an artistic form of creation rather than simply an industrial product. When a literary or artistic work was reproduced by cinematography, first of all, the author was protected. The movie itself could also be protected, if the author had given the work a personal and original character. Cinematographic works were compared to translations or dramatizations, and their protection was stipulated along the same lines.

In the Rome revision of 1928, the provision limiting protection to movies of a dramatic character was removed, and the need for a work to have an “original character” was removed in the Brussels revision of 1948.

In the revision of the Convention in Brussels 1948, cinematographic works were given “list status” enumerated in Article 2 of the Convention.

Unlike the case with recording rights, no compulsory licensing was allowed for the member states. Whereas in the record industry, competitive advantage had to be secured by exclusive contracts with performers and by making better recordings of a given work, in the movie industry competition had to be based on acquiring both the exclusive rights in the original work, and by exclusive contracts with the performers of that work. Blocking competition in the movie industry could thus be achieved by acquiring the exclusive rights of the literary work on which the movie was to be based.

One might point out that the solution was entirely opposite to that of the record protection. The movie itself was protected as a work of art, the record was not, and even the neighboring rights protection took until the 1961 Rome Convention. An
author could make an exclusive arrangement concerning the movie, but not concerning
the recording. Why is that?

As pointed out before, and unlike the movie, a recording was not seen as an independent
work of art, but merely a technical platform that was able to contain works and that
could be used for public or private performance of the work. Recording music was
faced with similar discussions on the man/machine dichotomy as photography did.
Since the business logic of the early 20th century recording industry was largely based
on copying successful recordings of other companies 707, other arrangements would
have been – as was claimed at the time - harmful to the recording industry.

The argumentation concerning the artistic importance of movies, and the early
recognition of movies as an independent form of art, had a French influence.708 However,
the profit motive also played an important role in the solution, as cinematographic
works were the only category of works in the Berne Convention whose author might
conceptually also be other than a human.709

In this respect, a major deviation from the earlier dominance of the human rights
motive was made in relation to movies, when it was agreed that the rights holder
did not have to be an individual human being. Also a commercial company could
be a rights holder. Since the rights for cinematographic works were never tied to a
human rights holder, it was evident that from this point of view, the Berne Convention
protected the investor as the rights holder. The business model of the movie industry
is, as a rule, based on the authorship of a legal person. This solution has been strongly
criticized by Ricketson.710

The process by which cinematographic works are made makes it difficult to identify the
persons who are final authors of the production.711 Differences in national approaches
seem to have emerged in the post –World War II period. By the time of the Stockholm
Revision Conference in 1967, the Berne members could be divided into two camps:
firstly, the “movie copyright” countries, mainly with a common law background, who
granted all rights in movies to one person, usually the producer, who could also be a
corporate entity. Secondly, some countries protected all human participants involved in
making the movie who could be regarded as its “authors” or intellectual creators.712

One consequence of the Stockholm Revision of 1967 was that the determination of the
ownership of copyright in cinematographic works was left as a matter to be decided
in the national legislation of the country where protection was claimed, allowing
however, as mentioned before, the authorship of a legal person.713

The different outcomes in relation to movies and recordings would interestingly suggest
a “cascade” theory of business models, resembling the Coase theorem: businesses will
find their way regardless of the legal allocation of rights. Both solutions also reflect the
international community’s ability to adjust copyright doctrine to correspond better to economic requirement of the relevant businesses, that is, the development motive.


In the 1896 Paris Revision Conference, proposals by Belgium and France to include photographic works in the list of works protected were fully debated. In the Berlin Conference 1908, a final compromise was made in a form of a separate Article 4, under which states were bound to protect photographic works and works produced by a process analogous to photography. This was however modified by Article 7 providing a shorter term of protection to be accorded to such works.

Oesch has pointed out that the reason for overlooking the granting of an author’s right to photographic works was the differing opinions of the member countries relating to the nature of a photograph as a literary or artistic work. Some countries considered photography way too technical to be considered a result of artistic work. The only exception at the first stage was the protection of a photograph taken from a protected work of art: this enjoyed the same protection as the original work. Thus, it seems clear that a strong human rights motive was lacking, due to a perceived man/machine dichotomy, as was a strong profit motive for granting exclusivity rights for photographic works.

However, photography is interesting from the point of view of technology: it illustrates the difficulties the legal community has had in identifying new forms of technology and evaluating their legal status. However, the initial reluctance of the member states to add the protection of photographic works to the Convention might indicate a lack of business interest or profit motive, which would have supported taking the issue to a higher political level in the Berne Convention’s agenda. There were initially no sufficient interests to oppose the ‘purity’ argument of photograph as a semi-technical work in comparison to ‘pure’ artistic works. Unlike phonograph, movies, or broadcasting, photography itself did not form a separate and independent business model with a strong profit or development motive. Nor was there an important public interest element.

It is apparent that during the discussions of the copyright status of the photograph, there were no Schumpeterian entrepreneurs to defend their economic positions, because there was no independently important economic function of photography as such.

Photographic works achieved “list status” in the Brussels Conference in 1948.
Footnotes

358 Stamatoudi p. 281.
359 Kivimäki, pp. 39-40.
360 May it be mentioned here that the Finnish word “tekijänoikeus” literally means a “maker’s right”. The Swedish word “upphovsrätt” refers to a copyright object, a work, whereas the older Swedish term “upphovsmannarätt” refers to the author as does the German “Urheberrecht”. The French phrase “droit de l’auteur” clearly refers to the author’s right. On the contrary, it might be claimed that “copyright” as a term is neutral as to whether the right belongs to a person or other entity.
361 Varpio, p. 1.
362 ibid. p. 2.
363 http://www.musicjournal.org/01copyright.html (“History of Copyright”)
364 Ricketson I, p. 3. Kivimäki, p. 41. According to Kivimäki, the price difference between a printed and a manually copied book was 1 to 15. This would suggest that the change in copying technology reduced the transformation costs of copying phenomenally, which naturally contributed to the success of the industry. “To copy a Bible manually and beautifully could have taken years.” - Goldstein p. 5 on development in England.
365 Ricketson I, p. 3
366 ibid., Laddie p. 54.
367 Goldstein p. 5: “One motive for the Crown regulations was political: to suppress the spread of dissenting views through cheap and easy copies. The other motive was economic. By granting court favorites and others willing to pay the price the exclusive right to publish particular books, the Crown put itself in a position to profit from the growing market for literary works.”
368 Cornish II pp. 345-346.
369 Menell, p. 131.
370 Kivimäki p. 42.
371 ibid.
372 A distant parallel can be seen to the contemporary Finnish telecommunications market which may be characterized as being in a state of “hyper-competition.”
373 Kivimäki pp. 41-42.
374 Varpio, p. 2.
375 Ricketson I, p. 4.
376 Patterson p. 42.
377 Kivimäki p. 42. The Nürnberg Council gave Luther in 1525 the right to forbid the reprinting of his works, unless it took place in an unmodified form. Even some artists were given privileges to their works, Albrecht Dürer in 1511 and Rubens. The manager of a theater could also receive a privilege. ibid.
378 Ricketson I, p. 4. Patterson p. 40: for books already printed the period of protection was 21 years as from 10 April 1710. See also Laddie, p. 51 citing the preamble of the Statute of Queen Anne: “Whereas printers, booksellers and other persons have of late frequently taken the liberty of printing, reprinting and publishing [...] books and other writings, without the consent of the authors or proprietors [...] to their very great detriment, and too often to the ruin of them and their families [...].” pp. 52- on the history of the Statute of Queen Anne. – N.B.: several monographs on copyright date this text to 1709, but 1710 is however the correct date (10.4.1710). See www.copyrighthistory.com/anne (containing the text of the Statute of Queen Anne).
379 Patterson p. 40: “The Statute of Anne was in fact a trade regulation statute designed to destroy the bookseller’s monopoly and prevent copyright from being used as a device of censorship.” This answer by Patterson leaves open an important question, why would the Crown want to give away its censorship opportunities? It did not, but had no choice, as that was the age of increasing political importance of Parliament. The Statute of Queen Anne was just one part of that process. Williams describes that era: “Another revolutionary idea was the granting of monopolies in trade by Parliament, and not by the time-honored system of royal dispensation to favorite courtiers. The 1698 Parliament showed its strength by announcing that such grants could no longer be granted as a general rule by royal charter but only though an act
of Parliament. The new East India Company came about as one of the first results of these acts, seen by many as the greatest event in the organization of British foreign trade. This company, together with the newly-formed Bank of England, showed only too well the growing power of the British traders and financiers over the state government. For many, the resolution of May 26, 1698 was as important as the "Magna Carta" of 1215, for it gave the granting of powers and privileges for carrying on the East India trade to Parliament." – This description illustrates the historical context of the change of copyright legislation in England in the early 18th century.

380 Koktvedgaard p. 53.
381 Ricketson I, p. 4. The protection took place under the old Star Chamber ordinances and Licensing Acts of the Restoration Period. See also Laddie, p. 52: When the Licensing Acts, which empowered the government summarily to suppress the printing of anything, were abolished in 1694, the publishers alleged that legal remedies were inadequate, for the defendants of unauthorized printing were always 'men of straw' who could not pay the damages or costs. ibid. p. 54: “Before the Statute of Queen Anne, there were no decisions of common law courts upholding any copyright.” On the actual interests concerned in the making of the Statute of Queen Anne, see further ibid. p. 54: “The simplest method of controlling this dangerous engine (that is, distributing revolutionary ideas, MH) was to make printing illegal save for a small band of licentiates whose activities would be easy to watch. It suited the government and the licensed publishers that interlopers should be kept out, and the (Stationers’) Company was given very oppressive and summary search and seizure powers. When the press became free it was these remedies the publishers missed, not the copyrights.” Stoner, concerning the shift of the role of the former monopolists, and their union with the authors, p. 4: “With the printing press and the Statute of Queen Anne, copyright clearingshouses developed to aid in the enforcement and as a registry of copyrights. The Stationers Company in England, having lost its monopoly, converted to such a copyright clearinghouse.” – A similar account in Phillips – Durie – Karet pp. 3-7.
382 Patterson p. 40.
383 ibid pp. 40-42. See discussion concerning Venice above.
384 Patterson p. 42. The Licensing Act was based on the Star Chamber Decree of 1637, the main content of which dates back to 1566, that is, literally close to the beginning of the printing activity. ibid.
385 Patterson p. 48, 40. See also Phillips – Durie – Karet, pp. 4-7.
386 ibid pp. 46-47.
387 Patterson p. 44.
389 Ricketson I, p. 4.
390 Varpio, p. 1. Cornish, p. 307: “This (The Statute of Queen Anne) may (...) have been a mere pretext for protecting the publishers who invented in the initial printing and distribution, but still it acted to give the potential underdogs, the authors, a legal standing.” This would imply that the author’s right is a vehicle for the publishers to cling to the position they lost along with the abolition of the printing privileges.
391 Ricketson I, p. 5.
392 Kivimäki p. 45.
393 Ricketson I, pp. 5-6. See also on the issue of moral rights, Strömholm, p. 117: “(1791, 1793 décret) ces textes ne contiennent aucun disposition sur le droit moral”. The moral rights (authorship, modification) were to develop later, see “human rights motive”.
394 Cornish II pp. 348-349. – This development covers England, but reflects also the general trend in Continental Europe.
395 Ricketson II, a reference to Prof. Jane C. Ginsburg’s comparative study of the US and French copyright system.
396 Ricketson II, p. 5. (”rapprochement” understood as “approaching” by MH).
397 Laddie, p. 56.
398 On path dependency, see Palgrave, Volume Three, pp. 18-19.
399 Ricketson I, p. 23.
178

400 Ricketson I, p. 23. See also in more detail ibid. pp. 22-38.
401 Ricketson I, p. 35.
402 Cowen, p. 6.
403 ibid., p. 6, footnote 5.
404 Ricketson I ibid. p. 5.
405 ibid. p. 17-18. The terms ‘counterfeiting’ and ‘piracy’ were often used to describe ‘reaping without sowing’.
406 Ricketson I p. 18. The use of a cassette levy for domestic purposes may even today raise this question, as the cassettes are most likely used primarily for copying foreign material, at least in countries with less copyright protected music production. The issue of spillover to neighboring countries raised later in the context of broadcasting and the cable transmission of those broadcasts.
407 Ricketson I p. 19.
408 See e.g. Kivimäki p. 54. The international patent protection was set forth only few years earlier, in the Vienna 1873 patent convention, due to similar reasons, see Kilpeläinen p. 690.
409 ALAI: Association littéraire et artistique internationale. French association, founded in 1878 by la Société des gens de letters with Victor Hugo as honorary chairman. The ALAI’s main objective was the creation of an international agreement aimed at protecting literary and artistic copyright. For further information see www.alai.org.
410 Ricketson I p. 50, Hugo, p. 135-136, Nordemann pp. 4-5..
411 Ricketson I p. 50, Hugo p. 135: “(...) toute production quelconque du domaine littéraire ou artistique qui pourrait être publié par un procédé quelconque d’impression ou de reproduction”.
412 Regarding the issue see Nordemann p. 17.
413 Thurow.
414 Ricketson I p. 50, Hugo p. 135
415 Thurow. See discussion earlier in relation to “choke point”.
416 Ricketson I p. 50, Hugo p. 135-136
417 Ricketson I p. 50, Hugo p. 136
418 Ricketson I p. 51
419 Société des Gens des Lettres and Boersen verein des Deutschen Buchändler; Porter, p.2.
420 Porter, p. 2, Ricketson I p. 51: the idea of a general Union was already embedded in the 1883 draft convention.
421 Berne Convention Centenary p. 19.
422 ibid. p. 19: the texts were the Convention, an “Additional Article”, and a “Final Protocol”.
423 Porter, p. 2. The countries were: Belgium, France, Germany, Great Britain, Italy, Spain, and Switzerland, and from outside Europe Tunis and Haiti. – Nordemann p. 4. Berne Convention Centenary p. 19.
424 Porter, p. 2
425 Porter, p. 3, Berne Convention for the Protection of Literary and Artistic Works of 9.9.1886, preamble. Ricketson I p. 51: the 1883 draft stated that the aim was “to constitute a general Union for the protection of the rights of authors in their literary works and manuscripts”.
426 Ricketson II, p. 6.
428 Haarmann, p. 22.
430 This aspect is emphasized in Drahos and Braithwaite.
431 Vienna Convention.
432 See WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment, web publication of 5 April 2003, prepared by Sam Ricketson, pp. 5-6: Vienna Convention of the Law of the Treaties, Art. 31(2): The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes: (a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty; (b) any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties
as an instrument related to the treaty (MH: e.g. the WIPO Copyright Treaty in relation to the Berne Convention). 31(3) There shall be taken into account together with the context: (a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions; (b) any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation; (c) any relevant rules of international law applicable in the relations between the parties (...). According to Art. 32, recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstances of its conclusions. – Brennan pp. 4-7.

433 Nordemann p. 17.
434 Berne Convention, Art. 2, original text 9th Sept. 1886.
435 Berne Convention 1886 article 4
436 Palgrave, Volume Three, pp. 18-19.
437 WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment, net publication 5 April 2003, p. 3. – Berne Centenary p. 105, minutes of the sixth meeting of the 1884 conference, President Numa Droz: “Consideration also has to be given to the fact that limitations on absolute protection are dictated, rightly in my opinion, by the public interest. The ever-growing need for mass instruction could never be met if there were no reservation of certain reproduction facilities, which at the same time should not degenerate into abuses.”

438 See e.g. Brennan, pp. 72-73.
439 TRIPS part I, article 4.
440 Gervais pp. 104-105.
441 See e.g. Brennan p. 71: “Moreover, (...), it is highly doubtful that the intention of the Contracting Parties was merely to adopt the bare text of the Berne articles. Rather, their intention in expressly incorporating these articles was more likely to incorporate such text within its context of over 100 years of existing multilateral treaty practice; the acquis of Berne.”

442 Ricketson I, p. 82-83. Other amendments see Ricketson I pp. 83-84.
444 Porter, p. 4.
446 Ibid., p. 94. See separate paragraph below.
447 Ibid., p. 95. See separate paragraph below. For other changes see Ricketson I p. 95-96.
448 Ricketson, pp. 97-98.
449 Porter, p. 5. See separate paragraph on broadcasting below.
450 See Ricketson I, pp. 103-104.
451 In Finland however, a foreign author had to demand the copyright legislation to be amended in case the Berne protection was not covered. Kivimäki p. 349. – See also the Copyright Law of the United States, §104(c) “Effect of Berne Convention”: “No right or interest in a work eligible for protection under this title may be claimed by virtue of, or in reliance upon, the provisions of the Berne Convention, or the adherence of the United States thereto. Any rights in a work eligible for protection under this title that derive from this title, other than Federal or State statutes, or the common law, shall not be expanded or reduced by the virtue of, or in reliance upon, the provisions of the Berne Convention, or the adherence of the United States thereto.” So, the federal statutory law may not be broadened or reduced by the Berne Convention, but the state level and common law bend.
454 Ricketson I, p. 113; “While none of the passion displayed by the advocates of these rights of the early Berne Conferences was lacking in their predecessors at Brussels, their task was more difficult, being rather like that of a person running the wrong way on a moving conveyor belt”.
455 Ricketson I, p. 113.
456 Ibid., p. 117.
457 Porter, p. 10.
458 Ricketson I, p. 119.
459 Porter, p. 12-14, and Ricketson I, p. 119-123.
The Berne Convention, Paris Act art. 9 (2): “It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.” Porter, p. 12. Ricketson I, p. 120: “Under earlier acts, the right of reproduction, the most basic author’s right, had not been expressly recognized, although the articles dealing with lawful borrowings and adaptations were clearly based on the existence of such a right.” This comment also reveals the basic dilemma of the early texts of the Berne Convention: although the intention is to create as wide a formulation as possible for the scope of rights in order to cover also any possible future applications, exact recognition is however in the end of the day required. See Ricketson’s later comment on the three-step test, “WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment” (5 April 2003), p. 20: “Although it has been argued that there was an implicit requirement under earlier Acts to provide such protection, the better view is that no such obligation existed”.

Ricketson I, p. 125.

Leaffer pp. 342-377 (the text of the Paris conference).

See the WIPO Glossary definition p. 50, discussed earlier on page 3. Cassler p. 232: “A compulsory license permits an individual to exercise one of the rights of someone else’s copyrighted work, with or without the owner’s consent, so long as a government-determined copyright royalty fee is paid to the owner.” Padbury – Fitzgerald p. 34: “Compulsory licenses authorize certain uses of specified copyright material without the permission of the copyright owner providing (in most cases) a fixed royalty is paid and other conditions met.” ibid on the intention of compulsory licensing: “Compulsory licences provide a mechanism by which the competing interests of the copyright owner and user may be balanced.” On compulsory licensing in the Finnish legislation see Haarmann II p. 156. Haarmann points out (Haarmann II p. 157) the unique character of the Finnish Copyright Act’s compulsory licenses which may not always resemble solutions adapted elsewhere.

Most of the material discussed here uses the term “compulsory license”, e.g. Beier, Brennan, Brennan T., Cassler, Cate, Gallagher, Le, Martin, Padbury-Fitzgerald. The German word “zwangslizenz”, as used by e.g. Schulze, refers to compulsion. For example, Einhorn uses the terms as synonyms, e.g. p. 102. - Berne Convention Centenary p. 166: “The proposal by the Austrian Delegation thus submits to the Conference for consideration the system of “compulsory licensing” or “legal licensing” in connection with the application of a musical work to mechanical instruments. The term in the US legislation is “statutory license”, but the literature mostly uses the term compulsory license.

Schulze p. 9.


See e.g. Mylly, Välimäki.


ibid. p. 23.

Brennan, pp. 8-15.

See Plant pp. 187-188: The Keeper of Printed Books at the British Museum advocated the system as early as 1837. “R.A. Macfie (...) gave evidence before the Copyright Commission of 1876-8 in which he outlined a scheme under which any publisher might issue an edition of any book on payment, during the term of the copyright period, of a percentage of the published price to the author or his assigns. Thereby the supply of successful books, and quite possibly the remuneration of authors, would be increased.” Both Italy and Canada were said to have adopted this model.

Brennan p. 8.

ibid.

ibid. p. 9.

ibid. p. 10.

Berne Convention, Final Protocol of 9 September 1886, Art. 3.

Brennan p. 10. See also Ricketson I p. 94, and the discussion on Ricketson later.

Brennan p. 11.
The discussion reflected some of the "eternal" issues of copyright: "The interest of manufacturers of instruments does not differ greatly from that of printers who wish to be able to produce freely; translators say they do a service to the reputation of the authors they translate just as manufacturers claim that they contribute to the fame of the composer whose pieces are played by their instruments."

First of all, the right to manufacture and sell instruments reproducing tunes in which copyright subsists implies that public performances are allowed without the consent of the authors and without paying them anything at all!" (…) "Authors thus suffer a material injury, since large profits are made from the reproduction of their works without them receiving any remuneration; their interest seems to be at least as deserving as that of the manufacturers."

According to a decision of the German Federal Patent Court in 1993, the license fee (equitable remuneration; eine angemessene Vergütung) must be set within two boundaries: it should grant the patentee reasonable compensation, but it should also enable the licensee to sustain the operation of his business,

The idea of using liability rules when the consequences of allocating property rights are not known to the legislator, is not remote in this context. See Calabresi and Melamed.

Compulsory licensing may also be used as a vehicle to encourage voluntary contracting: in the patent system, "compulsory licenses, through their mere existence as well as through the apprehension of compulsory license proceedings are liable to increase the willingness of a patent owner to grant voluntary licenses". Beier p. 260.

According to Nordemann (p. 6), the UCC was created after hopes for US signature were not fulfilled. The hopes raised in the 1908 Berlin conference. - The first revision of the UCC was synchronized with the Berne Paris Revision Conference (ibid. p. 6). – The Soviet Union joined the UCC in May 25, 1973 (ibid. p. 8). – The Soviet

According to Haarmann, the intention was to create an alternative also for countries other than the high-culture nations.

Concerning the basic philosophical disagreement Porter writes: "Some took the view that performers were second order artists, who merely breathed life into an author’s work. Others however, saw the performer as making an equally significant contribution to the new works. The quality of a performance was a crucial stage in the communication of the work to the listener or viewer, and no less ‘artistic’ than writing or composing it. Although one process preceded the other, the only real difference was that one activity was primarily physical while the other was mainly mental." From the perspective of the modern music industry, especially in the case of singer-songwriters, it might sometimes be difficult to separate the importance of these elements. E.g. considering Jimi Hendrix or Bruce Springsteen, separating the song from a distinctive performance is rather artificial. The role of the producer in the creation of a star may today as well be inseparable from the elements of performance or songwriting.

Porter, p. 19, concerning the conference to agree on the Rome Convention: “Whereas there was a strong consonance between the interests of the authors and those of the publishers in establishing the protection afforded by the Berne Convention, the interests of the employers have led to the imposition of more extensive limitations on performers rights, particularly over the exploitation of their performances in secondary markets.” And later: “The film producers insisted that they were entitled to an author’s right in their films, and the award of a neighboring right to performers would obstruct their right to authorize the manner in which their films

were marketed. In this they were supported by the television broadcasters. This was why performers were allowed no further rights over a visual or audiovisual fixation of their work. For the purposes of this study, this indicates that presence of the profit motive as well as the development motive was quite strong in the decision-making.


Porter p. 21.

Boytha, p. 300.

The legal difference between copyright and neighboring right is discussed widely in Ricketson’s article “Man or Machine”, see several references elsewhere. An interesting comment (although ironic) on the distinctive features of the respective neighbouring rights is made by Rotkirch, p. 329: “The manufacturing of records is merely a technical process. The performing artist’s right is closer to the author’s right: a performing artist is revealing a part of her soul (spiritual jag) in the performance of a work.” Rotkirch is however very much in favor of the protection of record producers interests, as the activity of record producing is very demanding both in skill and investment.

Bergström, p. 133.

ibid., p. 134.

ibid.: According Bergström, some of the countries which aligned with the US proposal were developing countries with a slightly different agenda, since the North American proposal was also based on the assumption that the North American conditions concerning neighboring rights protection were satisfactory and no additional protection was required. There was also an argument presented, that a low level of protection of neighboring rights would be in the interest of the authors, as their interests were firmly protected; this might indicate that there was a concern of what would be the best method for dividing the copyright income between authors and performers.

Bergström, p. 135.

ibid., p. 136.

ibid., p. 139.

ibid., p. 140-141.


Bergström p. 143-144.

Desjeux, p. 73: “La Convention de Rome protège les auxiliaires de la création intellectuelle.” See also e.g. Rotkirch, p. 326.

Desjeux, 73. – See the discussion on the work/performance dichotomy in the last chapter.

Haarmann, p. 25, Haarmann II p 32.

Leaffer p. 430.

ibid. The distinction was made between broadcasting satellite and fixed-satellite services, the latter of which was not within the scope of the Brussels Satellite Convention.

Leaffer p. 437.

Leaffer p. 441, the Brussels Art. 8(3)(a): “Any Contracting State which, on May 21, 1974, limits or denies protection with respect to the distribution of programme-carrying signals by means of wires, cable or other similar communications channels to subscribing members of the public may, by a written notification (…) declare that, to the extent that and as long as its domestic law limits or denies protection, it will not apply this Convention to such distribution.”


Rosas pp. 798-799: the European Court of Justice stated that the Union had no exclusive competence in matters concerning intellectual property, but agreed the Union may harmonize legislation of the Member States or introduce new rights.

Rosas p. 800.


Concerning the important cases of the practice of the European Court of Justice, see Haarmann p. 30-36, Haarmann II pp. 40-46.

Amsterdam Treaty Art. 12.


The Satellite and Cable Directive, Art. 3(2).

There are at least two identifiable issues: as the Berne Convention originally was a treaty of colonial states, the independence movement of the 20th century radically increased the number of participating states, thus challenging the dynamism of the convention. Moreover, as Drahos and Braithwaite have pointed out, the major exporter of copyright protected products – the USA – saw in the late 1980s an important strategic need to raise the level of e.g. computer program protection. It was assumed this would directly improve the US foreign trade.

Haarmann II p. 25-26. See also a quote from WTO-officials Adrian Otter and Hannu Wager: “In fact, the negotiation of the TRIPS Agreement was prompted by the perception that inadequate standards of protection and ineffective enforcement of intellectual property rights were often unfairly depriving the holders of such rights of the benefits of their creativity and inventiveness, and, as a result, prejudicing the legitimate commercial interests of their respective countries.” - Haarmann II pp. 34-36.

Haarmann II p. 35.

Parts III and V of TRIPS.

ibid. p. 71, 82.

Brennan, p. 65.

ibid. For the drafting history of TRIPS, see ibid. pp. 66-70.

See criticism of the Berne dispute mechanism in Drahos - Braithwaite, p. 111. “But as Jacques Gorlin had pointed out, in the 37 years since that possibility has presented itself in the Berne Convention the ICJ had not heard one dispute”. This is partly due to WIPO’s tradition of settling matters in working groups, ibid.

Brennan p. 72. However, Brennan’s analysis of the WTO Panel case concerning the US “Fairness in Music Licensing Act (1998)” might suggest the contrary, because the application of Berne Art.11bis(2) was rejected because it would not allow free use, contrary to what the Act stipulated. The doctrine of minor exceptions was adopted instead. See Brennan pp. 76-93, (“The “Home-Style” Decision”).
The negotiation process and political implications of the TRIPS agreement are widely documented and debated in Peter Drahos’ and Braithwaite’s book “Information Feudalism” (Drahos – Braithwaite). The writers are highly vocal in their criticism of the TRIPS agreement and the process leading to it, claiming essentially that the US succeeded in tying its national immaterial property interests to the international trade sanction mechanism, and started to turn information into private property. - See also Huuskonen II.

Berne Convention, Art. 20.

WIPO Copyright Treaty 1996 Art. 20.


WIPO Copyright Treaty 1996, preamble: “Recognizing the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention.”

WIPO Copyright Treaty, Art. 8: Right of Communication to the Public: “Without prejudice to the provisions of Articles (...) of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.”


Brennan, p. 93.


Copyright Law of the United States, §115.

Copyright Law of the United States, §§115(a)(1), 114(g)(7): “interactive service” is one that enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording, whether or not as part of a program, which is selected by or on behalf of the recipient.”

Cassler p. 233.

The United States Copyright Law §115(a)(1)(i) and §115(a)(1)(ii).

The United States Copyright Law §114(2), “Statutory Licensing of Certain Transmissions”.

The United States Copyright Law §115(c)(4). Cassler p. 234: the provision had not been implemented by 1990.

Cassler p. 233.

The United States Copyright Law §§111(c)(1), §111(d). Non-simultaneous retransmission as a rule are not exempted, §111(e). Cassler p. 233.

The United States Copyright Law §112(e).


Cassler p. 234. Martin.

The United States Copyright Law §116(b)(1), §116(b)(2).

The United States Copyright Law §119(2)(A).

The United States Copyright Law §118(b)(3).

Boytha, p. 295.


Gronow, p. 36.


Gronow believes that the early material is permanently lost.

Rubin – Huber. According to the introduction of the book, 1972 has been chosen as the “base year”.

Drahos - Braithwaite, p. 180: “The major companies in the sound recording business were born of or increased their size through a complex process of mergers and acquisitions. The forces behind this shifting corporate landscape were industrial giants like Philips, AT&T, and General Electric, which were themselves struggling for control over new technologies such as radio, electrical sound recording and sound in movies.”

Drahos - Braithwaite, p. 180.

ibid., p. 137, Table VI-14.
It could be said that the material might indicate that phonographs and radio are both complements and substitutes for each other, where the substituting effect was probably stronger in the early days of the radio. – On the definitions of complements and substitutes, see e.g. Posner p. 49.

Gronow p. 59: Caruso’s recording of the Pajazzo aria “Vesti la giubba” sold hundreds of thousands of copies during the 1910s. However, exact information of the early industry sales are no longer available, see ibid. p. 44.

Brennan p. 15.

Brennan p. 16.

Coase II p. 3.

Krasilovsky - Shemel, p. 4.

ibid.

Gronow p. 59: Caruso’s recording of the Pajazzo aria “Vesti la giubba” sold hundreds of thousands of copies during the 1910s. However, exact information of the early industry sales are no longer available, see ibid. p. 44.

Brennan p. 16.

Coase II p. 3.

Krasilovsky - Shemel, p. 4.

ibid.

IFPI London 3 October 2005. www.ifpi.org. IFPI must be seen as an industry association with a task to present estimations in the interest of the record industry. Whether or not this interest is reflected in the numbers, is difficult to assess.

Several commercial companies have attempted online sales of music downloads and reported successes during 2004, most notably Apple iTunes (see www.apple.com/itunes/).

ibid., p. 445. “When technology raised the specter of new unauthorized uses, such as record rental shops or home copying, legislative changes were enacted to protect the flow of royalties.”

Citigroup, p. 4. – A reservation to these numbers must however be made, as they measure the immeasurable and are therefore rough estimates only.

ibid., p. 5.

ibid.

Locke, p. 150: “That labor (that is, the first gathering, MH) put a distinction between them and common; that added something to them more than nature, the common mother of all, had done, and so they became his private right.” p. 152: “For it is labor indeed that puts the difference of value on everything”; See also comment on Locke on ibid. p. 131.

Modern” is referring to the aftermath of the Second Industrial Revolution.

Donaldson – Werhane – Cording, p. 131. See also Friedman II, discussing the harm of governmental action, pp. 202-204.

Citigroup is widely referred to here.

Davies, p. 12. The book by the same author, “Piracy of Phonograms”, Oxford 1986, p. 4, is using a wider definition, “the activities against which producers of phonograms should be protected”, specifying, “the manufacture of duplicates of legitimately produced phonograms without the authorization of the original producer of the phonogram and the importation, distribution, or sale to the public of such unlawful duplicates for commercial gain.” – The issue of piracy is a difficult one to approach from a scientific perspective, since we are dealing with “grey economics”, of which there are no clear statistics or documents. Usually the figures related to piracy are more or less reliable industry estimates. In this study, the actual reliability of those estimates is not discussed but assumed, since that is not within the scope of this study. However, one might ask how does the managing director explain to the company board, why the company did not reach the marketing targets: because of a failure in marketing or widespread piracy? It could be tempting to blame the legislator, if such an opportunity arises.

Citigroup p. 5.

ibid., p. 4.

ibid.

ibid. Why is the recording industry doing worse than the others? Along with some technical factor, such as the very large memory capacity still required by movie products, the report puts part of the blame on the industry itself (see ibid. p. 5): The report sees the October 2003 price cut by Universal Music Group (by 25 to 30 per cent) as an acknowledgement of the current consumer trends: that music should be offered at a reasonable price and that consumers want to buy music a la carte, whenever and wherever they want. “We believe that it was this refusal to adapt, as well as the reluctance to acknowledge or prevent and punish the growing problem, that led the music industry into dire straits”.

Citigroup, p. 5: “In the case of music industry, piracy grew from 19 per cent of global industry demand in 1999, when piracy was almost entirely composed of the physical kind, to
nearly 35 per cent in 2002, when we believe more than one-third of piracy came from illegal online downloads”. It is however striking, that the level of piracy was already at almost 20 per cent level even before the emergence of the large-scale Internet copying. The industry seems to constantly suffer from piracy: the question of the C-cassette – copying and the levy system that was created was another example of analog piracy. A parallel to the history of the Berne Convention can be made in relation to the 1908 Berlin Conference, in which the record industry was advocating in favor of their current business model, which was at that time based on unauthorized recordings of other record producers’ recordings, and led to the compulsory licensing of copyright protected works for recordings. So, in the very early history of the industry, piracy was a business model and was given ‘protection’ on the lines of the development motive.  

It is quite probable that Koktvedgaard intended to refer to the 20th century. ibid. p.441: modern immaterial rights tendency is that inventions are protected as impersonal, rather than personal effort.

See Ricketson’s view of the period between Rome to Brussels being an era of important technological impact on copyright. Koktvedgaard p. 440: artistic skill of an inventive genius must give way to modern and more impersonal protection in the 19th century. – A comparison in brackets to the division of rights as in Calabresi-Melamed, Landes-Posner III. –

N.B.: The earlier distinction of property right – liability rule is also relevant in this discussion.

See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels. See reference above to Ricketson’s view of the period between Rome to Brussels.
and to avoid any surprise. A country could make rules in the manufacturers' favour, permit them to reproduce tunes under conditions which were very mild for the manufacturers and very harsh for the authors." - Berne Convention Centenary p. 166: Three arguments are put forward in support of the proposal (that is, compulsory licensing, MH): (a) the first is general, based on the social necessity, in the interest of culture, of permitting wider dissemination of musical works; (b) the second is of a more restricted nature, being based on the supposition that the exclusive right of the author to agree to mechanical-musical applications could be a threat to or a restriction on the development of the phonomechanical industries, in which so many economic and financial interests are involved; (c) the third is of private character, being used on the assertion that the compulsory or legal license system would dramatically increase the profits of authors and their successors in title.

621 Cate pp. 202-203.
622 Berne Convention Centenary p. 156: "(…) the German authorities were seeking to safeguard the interests of small manufacturers of sound recordings.
623 Cassler p. 246.
624 Gallagher p. 88.
625 ibid.
626 Gallagher p. 89
627 Cassler 237.
628 Cassler p. 251
629 Ricketson I, p. 90. Photographic works were already debated in the 1896 Paris Revision Conference, but no agreement was reached. Ibid. p. 84
630 Porter, p. 4
631 Ricketson I p. 94
632 ibid.
633 ibid.
634 We acknowledge that this is an unfair broadening of Ricketson's statement, but it is done for the purpose of illustrating the "mental models" that the observers have in assessing the effects of rights on an economic activity.
635 Porter, p. 4
636 ibid.
637 ibid.
638 Ricketson I p. 94, Porter p. 4
639 Ricketson I p. 94, Porter p. 5
640 Porter, p. 5
641 Cornish, p. 307-308.
642 Boytha, p. 296.
643 ibid.
644 Cornish, p. 308.
645 Boytha, p. 299.
646 ibid., p. 300.
647 ibid., p. 301.
648 ibid., p. 302.
649 ibid.
650 Ricketson I p. 96. "In this regard, the gramophone recording and the cinematographic film were the harbingers of other more startling developments which were already in the train, such as sound and visual broadcasting." See also Records of Diplomatic Conference on the International Protection of Performers, Producers of Phonograms and Broadcasting Organizations, (Rome 10 to 26 Oct 1961), Unesco 1968, p. 64: "Although creations of the mind owed much to technique, which had made it possible to disseminate them more widely, and had also led to the emergence of new forms of creation, it entailed risks for them: it sometimes tended to obscure or alter the concept of intellectual creation to the point where the work was completely lost to sight behind the material means permitting its dissemination."
651 See however International Labor Organization's comment to the Rome Convention (Records of the Diplomatic Conference on the International Protection of Performers, Producers of Phonograms and Broadcasting Organizations, Rome 10 to 26 Oct 1961), Unesco 1968, p. 65:
“The ILO was concerned primarily with the conditions of working people, including performers. It had been led to deal with the problems of performers’ rights because of the adverse effects upon the social economic conditions of performers resulting from innovations in the field of recording and broadcasting and from the ever increasing use of more and more elaborate, and often combined, methods and techniques of communication of performances, whether live or recorded, to the public.”

652 Kivimäki p. 42
653 Boytha, p. 296: “Otherwise the authors, performers and consumers of sound recordings would all have been deprived of the possibility of having various performances of the work on phonograms of different sound technology and aural effect available on the market.”
654 see Ricketson I p. 94
655 Lessig sees that the record industry was in fact built on a business model based on piracy, pp. 55-56. Lessig, later, sees the same pattern in other technological areas.
656 The profit motive may also be seen from the author’s point of view: considering that the author has made an investment in his or her education and training, and that the use of his or her talent is also a form of using that investment, we might think that the author has also an invested interest.
657 See Boytha, pp. 299-304.
658 The list of examples could be lengthy, but one might point out pianist Glenn Gould, the Beatles from 1966 onwards, Steely Dan and young Mike Oldfield, who all have had an important role in developing phonographic recording as an art form, without live performances, except on rare occasions. Concerning the use of samples in modern pop music, the whole concept of live performance receives new dimensions.
659 Geller, p. 445: “For example, if a jazz performance incorporated original and creative improvisations, it could be protected by copyright as a derivative musical work, indeed even without fixation in many Berne countries. However, if the performance were recorded, the sound recording might, considered apart from any underlying musical work, qualify for protection as well. But, since sound recordings are not on the Berne list, they would be protected under the Berne Convention by virtue of national treatment only if they were expressly treated as “works” protected by copyright in the protecting country. Otherwise protection would only be available under a treaty such as the Rome or Geneva Conventions concerning neighboring rights.”
660 However, the globalization of culture may pose threats to smaller, distinctive national cultures. The problem is discussed by e.g. in Drahos - Braithwaite.
661 Porter, p. 4.
662 The difficulty in organizing the broadcasting activities leads to endless debates on the role of commercial television and radio in Finland. (see Yleisradio). Not until the satellite and cable television development loosened the doctrine of limited frequencies, the states who had organized their broadcasting activities as monopolies had to refrain from their earlier policies.
663 An observation of Kastari p. 74. The development of VCRs and satellite distribution in the 1970s and 1980s challenged the monopoly-based broadcasting system in many European countries. See e.g. Ogan p. 63: “Policies throughout the world, which have been established and maintained over a long time to preserve the cultural heritage of nations as well as to protect local broadcast industries, are now inadequate”.
664 Berne Convention Centenary p. 165.
665 Barendt, pp. 4-10.
666 ibid. p. 6: in the Pacifica case, the US Supreme Court majority said that they (television and radio) intrude into the home, are more pervasive, and are more difficult to control than the print media.
667 Ricketson p. 522: “Fears were expressed at the monopolistic practices or tendencies of the various national collecting societies which controlled the performing rights in most musical works, and which might be tempted to abuse these rights in relation to the new medium of broadcasting”. A clear indication of the development motive. The conclusions of Hugenholtz concerning the human rights relationship to copyright, see above, provide a logical similarity (although the angle is very different) to compulsory licensing: whether the issue between copyright and freedom of speech is about the level of economic compensation, there is likely no
human rights issue. Whether the issue is the use of veto on the basis of exclusivity, a conflict is more likely to take place.
669 Without much exaggeration one might suggest that the governments’ ability to maintain censorship, which was eventually lost to the free unlimited press, was recouped for some decades by the limited broadcasting frequencies doctrine.
670 Ricketson I, p. 101. In the conference, the two most important additions made to the Berne Convention, moral rights and the rights over broadcasting.
671 Porter, p. 5.
672 The Report of the Rapporteur-General E. Piola Castelli, illustrates the doctrinal compromise: "(…) the system of protection sanctioned by the Convention emerges from this Conference not only preserved but also strengthened, especially in relation to the new discovery of broadcasting, which has introduced such a dramatically different and new vehicle for the communication of thought. The application of the principle of the exclusive privilege to radio broadcasting (…) – whatever may be the conditions governing the exercise of the privilege that national legislation adopt (italics MH) – represents a victory for copyright of considerable importance.” Berne Centenary p. 177. – Berne Guide Art. 11 bis.7, p. 67: “(…) Broadcasting offers such a variety of works of all kinds that it is no exaggeration to say it has revolutionized the whole problem of the access to knowledge and entertainment.” – Art.11bis.16, p. 70: “This (that is, compulsory licensing, MH) was done in the interests of the public. – Art.11bis.17, p. 70: “The spirit of this paragraph is one of striking a balance between the conflicting interests, and the national lawmakers must decide on their own methods of providing it.”
673 Ricketson I, p. 103.
674 Berne Guide Art.11bis.17, p. 70.
675 ibid.
676 ibid.
677 Porter, p. 5.
678 ibid. Porter’s examples are France, Poland, and Switzerland.
679 Porter, p. 5. Examples are Great Britain and Australia.
681 Porter, pp. 5-6. In Czechoslovakia the right only extended to dramatic and musical works.
682 Porter, p. 6.
683 ibid.
684 ibid.
685 ibid., p. 7. This definition was later to have an important role when the distinction between broadcasting satellites and transmission satellites (välityssatellitit) was drawn.
686 Porter, p. 7.
687 Barendt, p. 2.
689 Salokannel, p. 11. Stoner, p. 5: “Motion pictures challenged copyright legislation regarding whether authors of printed works also control the rights to later reproductions in film.”
690 ibid., p. 60: “It is important to remember the capital economic fact that it is thanks to the patent of sound that high finance has taken over in the cinema industry.”
691 Cowen, p. 89.
692 Rubin - Huber p. 141, Table VI-18.
693 Edelman, p. 57: the producer directs all the successive elements from which stems the complete production of a cinematic work for which he has responsibility. This emphasizes the investment character of movie making.
694 Cowen, p. 73.
695 ibid. p. 76.
696 ibid. p. 89.
697 ibid. p. 90.
698 ibid.
699 ibid. p. 84.
In the current form, the protection of cinematographic work is in the article 14bis, without the original qualification.

According to Salokannel, the level of protection would also have been raised simultaneously, but Ricketson merely refers to list status as a formality.

One might be tempted to claim that since the business model was already then based on piracy, it was seen fit to continue this state of affairs as being an essential part of the industry’s business logic! Clearly the solution has been very much oriented towards the development motive.

Berne Convention Art. 14bis: “Without prejudice to the copyright in any work which may have been adapted or reproduced, a cinematographic work shall be protected as an original work”. That is, the protection is afforded to the work without reference to the author. See also Porter, discussion on the different concepts of authorship p. 10.

The nature of movie as a product rather than art has been discussed especially in the Marxist tradition, e.g. Edelman, p. 55: “(...) The film is a commodity subject to the ‘law of profit’ and all those participating in it are subject to the monopolist structure of the cinema. (...) The film is not a product for itself; it is not a means of artistic expression. Its production allows the financiers a useful placement for their capitals, it is as industrial as can be, and the standardization of the product shows that a commercial criterion operates at all levels of the industry.” p. 57: “The law will state what we would never have hoped it could state – the true creative subject is capital.”

The question is: what is the photographer’s contribution to the final image that is produced? At the most banal level, all that she may have done is to point the camera and press the button. At the other extreme, there may have been a great deal of care and artistry involved in the arrangement(s) (...)”.

An interesting approach to the legal nature of photography (and cinema) was carried out by Edelman. He sees the problem of the legal nature of photography to arise, not inasmuch from the technological element itself, but rather from the ownership of the photograph that includes both the creative investment of the photographer, and objects that are within public sphere. Edelman p. 38: “So if, on the one hand, all juridical production is the production of a subject whose essence is property and whose activity can only be that of a private owner, then, on the other hand, the specific activity of the film-maker or photographer is exercised on a real (that is, a subject falling into a juridical category, MH) already invested with property, that is, already constituted as privative common property, in the public domain(...) With this in mind, we propose the concept of the overappropriation of the real.”
CHAPTER FOUR:

Further Deviation from the Exclusivity Doctrine
Towards Platform Fees
IV.1. Background Factors to the Change: The Evolving Concept of the Author

As we have discussed above, in the Middle Ages, the copying technology available allowed no one to efficiently copy works of art in the modern sense. Therefore, the originality of the works was not an issue, that is, the authorship of the work. The writings may have stemmed from many historical sources, and were usually copied by hand from oral speech. In the age of electronic distribution and the mass use of copyright protected works, the position of the author at the centre of copyright has again emerged in the debate. The concept of the individual author created in the Enlightenment is criticized. An indication of the change is evident in, for example, the EU directive on the legal protection of computer programs, where the author is defined in the following manner (Article 2:1):

“The author of a computer program shall be the natural person or group of natural persons who has created the program, or, where the legislation of the Members State permits, the legal person designated as the rightholder by that legislation.”

Ricketson wrote in 1992:

“My thesis is that (the concept of authorship) has now developed close to the breaking point. While it still embodies the values of personal creation traditionally central to copyright law, these values have now reached the point at which they are being steadily undermined and debased. (...) The choice is rapidly becoming one between people and machines: which value should the Berne Convention and national copyright laws embody and protect?”

Ricketson gives several supporting factors concerning his argument that the author is, and must be, a person. Article 1 of the Berne Convention refers to the need to protect the “rights of authors in their literary and artistic works”, which seems a clear reference to personal rather than corporate rights. The general term of protection is made dependent upon the author’s lifetime. Moral rights would make no sense if the author is not a human. Finally, the only instance where the author may be other than human, cinematographic works, is “clearly an exception”. Ricketson summarizes that the work must not be generated by a machine or be the result of some organized industrial undertaking wherein it is impossible to identify an individual human creator or creators.

This anxious request for maintaining a human creator in the center of the copyright legislation may raise several questions. The author can be a corporation in the case of a movie, or the rights may be concentrated through exclusivity agreements in a corporation enjoying copyright benefits of the author, as in the case of, for example,
record producers and publishers. In the case of data programming, it may not make very much sense to use the concept “author” for a commissioned work for industrial use, where the legal presumption is the transfer of copyright to the employer.

However, an even more serious blow against the concept of author, especially droit d’auteur/genius, may come from the direction of computer-generated or computer-assisted works. The human intellectual effort that was praised in the 18th and 19th century, may seem less impressive, when a chess computer beats the human world champion, and when the qualities of individual humans are increasingly explained using genealogical concepts.

Another point that sounds almost trivial: the copyright of the 19th century was granted for literary and artistic works that could be produced by an individual artist on his own, with the help of pencil and paper: a novel or a music composition. Therefore, to control the terms of the use of such a work was relatively simple. The works of the late 20th and 21st century may be very different, since especially concerning television or movie production, the efforts of the producer/investor are sine qua non to the end result. The division of copyright into the industrial rights–natured economic protection of investments, and the human rights–based moral rights could be justified at least in the cases where the production of the copyright protected works is no longer in the sole control of the original, individual author.

IV.1.1. The Author’s Autonomy

Another important point, which relates to the issue of “impact”, is what does an author actually do with the rights? In the 19th century, it was conceivable that the author could maintain some kind of direct control over the use of his works. The development of the mass media has necessitated the rise of collecting societies and has also meant that rights management has become an industry in itself, demanding expertise, which is not possible for individual authors or performers to maintain. Their profession is not the “establishment”, but rather the actual creation. When rights are strengthened through legislative changes, and the author’s position is stronger, will the author benefit from this directly or should we monitor the totality comprising the author as a holder of right and the collecting organization as the manager of rights?

Collecting organizations can increase the individual author’s negotiating power, and may also act as influential lobbying organizations. When the protection of the author is advocated during the legislation process, it is usually the collecting organizations or their representatives that speak with his or her voice. As clear as it is that the author’s protection is as legitimate as ever and a widely accepted value of any civilized society, it is only reasonable to recognize, that the rights management is an industry in itself, and like any industry, willing and also capable of defending
its own interests. Therefore, the choice of full exclusivity, economic compensation, compulsory licensing, extended collective licensing or platform fees, are also strategic choices for the copyright organizations. It is also strategically important for the collecting organizations to advocate the recognition of even non-assignable (person related human) rights, as this improves the position of the organization as a market maker. The harm inflicted on economic interests can always be calculated somehow, but an infringement against a “sacred right” may turn the negotiations in the direction of compensation for additional damages.

However, it is inconceivable that any chosen direction of the copyright legislation would lead to seriously questioning the existence and need for collective organizations of rights management, simply because the required special knowledge is substantially different from artistic creation, and there is a need for mass licenses and negotiations for agreeing on acceptable terms. Copyright organizations may also provide reduced transaction costs concerning copyright licensing.

IV.1.2. Artistic Creation: from Exclusivity Towards Compulsory Elements

When the rights of the phonogram producers and rights of authors in relation to phonogram production were discussed in the Rome Convention of 1928, the Italian representatives claimed that a copyright system based on exclusivity is not necessarily the only basis for the author’s economic protection, but instead the compulsory licensing system with economic benefits (remuneration) could be considered as the basis for the whole copyright system.\(^{729}\)

Although this idea as a general basis for a copyright system was premature in the early 20\(^{th}\) century, the development of the information technology has brought about the serious challenge of the mass use of copyright protected works, and the international copyright system has recognized this need in allowing flexible licensing regimes to develop. Compulsory licensing was allowed in 1908 concerning the needs of the recording industry and later on this model was used concerning broadcasting and re-broadcasting. The Nordic development of the extended collective license is an attempt to create a combination of the exclusivity element and compulsory license element with a bargaining element. This is however – from the contractually tied third parties’ point of view - also one step in the distancing from the original exclusivity model of copyright in the middle of the 19\(^{th}\) century.

Since the major problem of the use of copyright works is the private copying, which should according to the EU Infosoc directive be adequately compensated, it seems likely that the new copyright system will be increasingly based on general compensation and compulsory licensing than exclusivity and individual negotiations. Hugenholtz sees the
application of copyright levies for the purpose of ‘legalization’ of peer-to-peer activity and private copying as a “colossal expansion of the scope of statutory licenses”.

Thus, the choke point concerning the collective compensation of the authors will increasingly be a political issue in the public administration, rather than a commercial question between bargaining parties. However, some artists will remain more popular than others, and the industry around them will develop new forms.

Katarina Renman Claesson has proposed the separation of copyright into two distinct areas: the exclusivity of the creator, requiring originality, and the exclusivity of the investor, requiring actual investment in production. This would most likely provide a proper way of approaching one important deviation of the copyright doctrine, namely the protection of computer programs.

IV.2. Photocopying, VCRs and C-Cassettes – The Three-Step Test on Reproduction

After the Second World War, the advent of copying with magnetophones raised new demands for protection against illicit copying. It became both simple and cheap to copy records using a magnetic tape.

The right to reproduction was, on the one hand, a technical specification in the Berne Convention to expressly recognize the author’s position in relation to unauthorized reproduction. On the other, several developing new technologies for reproduction were emphasizing the urgency of the clear specification of the matter. The issue of new technologies for reproduction also brought the issue of mass use and how to fit the exclusivity doctrine of copyright into this picture.

The origins of the magnetic tape may be traced back to the invention made by the Dane Valdemar Poulsen in 1898, but it was not until the mid-1930s when commercial innovations started appear. The German company AEG introduced a voice-recording machine called a “Magnetofon”, in Berlin 1935. The device was originally used to help the voice recordings of musical performances, but developed quickly into a multi-faceted device enabling the development of modern studio technology. Sales to the general public were boosted after the introduction of Philip’s C-cassette in the mid-1960s.

During the same period, that is, shortly after the Second World War, photocopying was invented and the market for photocopying equipment suddenly increased. Also, videocassette recorders were developed and the sales of them had started successfully, which necessitated urgent discussions on the fair use and reproduction technologies
as a whole. “The VCR, similar to the printing press and photocopiers, introduced the ability to reproduce a performance as easy as a book.” Both of these developments raised the need for the exact definition of the right of reproduction, which was agreed on in the Paris Act of 1971. The three-step test was introduced.

The question that challenged the doctrine was the following: exclusivity might lead, due to opportunist behavior, to blocking the use of the new technological means, which however provide economic benefits for the right-holders, and several benefits for society as a whole. Exclusivity could not be upheld, but at the same time, a balance had to be created to avoid a total eruption of the copyright doctrine.

IV.2.1. The Three-Step Test and the Development Motive

As an attempt to find a compromise between the pressures of the development of the copying technology and the exclusivity doctrine, the Berne Convention was amended in Stockholm to include a three step test in the context of the right of reproduction:

“(1) Authors of literary and artistic works protected by this Convention shall have the exclusive right of authorizing the reproduction of these works, in any manner of form. (2) It shall be a matter for legislation in the countries of the Union to permit the reproduction of such works in certain special cases, provided that such reproduction does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author.”

The three-step test sets limitations or justifications to the limitations of copyright. In a recent study, Ricketson has analyzed the three-step test. Concerning the interpretation of the adjectives “certain” and “special”, the WTO panel has stated that an exception or limitation in national law must be clearly defined. It is not possible beforehand to identify and define every future situation to which the exception could apply, but the scope of the exception must be known and particularized. The exception should be narrow in a quantitative as well as in a qualitative sense. The expression “case” also needs a clearly defined and narrow scope of the exception.

Concerning the “conflict with the normal exploitation of the work”, the question is whether the exempted use would otherwise fall within the range of activities from which the copyright owner would usually expect to receive compensation. Usage that is presently not controlled by copyright owners might subsequently become so, as
the result of technological change. “Normal exploitation” will require consideration of potential, as well as current and actual, use or modes of extracting value from a work.740

An important criterion to the “normal” use is the relationship to economic competition with non-exempted forms of use. If such competition exists, a conflict arises as such use deprives the authors of significant or tangible commercial gains.741

Concerning the third step, “(...) does not unreasonably prejudice the legitimate interests of the author”, no wide reference for interpretation exists according to Ricketson. However, the requirement of proportionality clearly implies that there may be conditions placed on the usage that will make any prejudice that is caused “reasonable”, for example, where these interests are protected through a requirement that the usage should be done subject to certain conditions or within certain guidelines that here should be attribution, or even that payment should be made for the use. The conclusion of the WIPO study is that exceptions under Art. 9(2) may take the form of either free uses or compulsory licenses, depending essentially on the number of reproductions made.742

In his study of the three-step test, Senftleben observes that limitations to copyright have been adapted in the interest of freedom of expression and information, the dissemination of information, the right to privacy and the enhancement of democracy.743

We could see that these correspond to the human rights motive. Senftleben however recognizes, as was stated in the beginning of this chapter that limitations also have been motivated by industry practice and competition, which would correspond to the development motive. This also supports the view expressed by Cassler that copyright organizations tend to favor compulsory licensing as an alternative to fair use.744

We could conclude that the three-step test is an instrument for striking a proper balance between the different motives of copyright, mainly the profit motive and the development motive. The rights holder’s legitimate interests must not be prejudiced, but new (that is, not conflicting) uses may be allowed. A new technology should enjoy “the benefit of the doubt” in light of the three-step test, which would be compatible with the development motive.
IV.2.1.1. Private Copying and Fair Use

A distinction between the European and common law approach to private copying is to be seen with the different formulations of the EU Infosoc directive and the US fair use provision. The European legislation provides for economic compensation regarding private use (Art. 5(2)(b)):

“(…) in respect of reproductions on any medium made by a natural person for private use and for ends that are neither directly nor indirectly commercial, on condition that the right-holders receive fair compensation which takes account of the application or non-application of technological measures referred to in Art. 6 to the work or subject-matter concerned.”

If we read this in relation to the Berne three-step test, we might notice a certain analogy. Private copying is, in other words, allowed when limited to individuals (first step). It is assumed that such uses do not conflict with the normal exploitation of the work, that is, must not be for commercial purposes (second step). Finally, it requires that the right-holder receive fair compensation (that is, not prejudicing the legitimate interests of the author, third step) that takes account of the application, if any, of technological protection measures.

The fair use under §107 of the Copyright of the United States:

“Notwithstanding the provision of Sections 106 and 106A, the fair use of a copyright work including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include:

1) the purpose and character of the use, including whether such use is of a commercial nature or is for non-profit educational purposes;

2) the nature of the copyrighted work;

3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole;

4) the effect of the use upon the potential market for, or value of, the copyrighted work.

The fact that a work is unpublished shall not itself bar a finding of fair use if such finding is made upon consideration of all above factors.”
The US legislation has left the evaluation to be worked out by the courts on a case-by-case basis. This means that the interpretation may be more apt to change during the course of technological development. There seems to be, for example, a tendency to move away from allowing the time-shift argument to a more critical approach concerning the “space-shifting” argumentation that has been offered in some cases.\(^7\)

Originally, the most influential case in the United States in this respect was the Sony v. Universal Studios.\(^7\) According to Hugenholtz, contributory liability rested on whether video tape recorders were sold with constructive knowledge that the customer might make unauthorized copies of copyrighted material. The Supreme Court found that unauthorized home time shifting was fair use, after which it concluded that private use of videotape recorders for time shifting was a commercially significant non-infringing use precluding contributory liability.\(^7\)

The three-step test in relation to public-interest goals, such as (general) public interest, libraries and archives, education, assisting visually or hearing impaired people, news reporting, and criticism and review, are broadly discussed in the WIPO survey.\(^7\) It puts forward the question whether the use of legislative measures in order to safeguard public policy goals should be subject to the three-step test or whether the three-step test is more appropriate in consideration of the borderline cases between private and commercial activities.

Thus in principle, the modern copyright system comprises an element for controlling and balancing the interaction of the motives. The profit motive may be satisfied, not alone on the basis of exclusivity, but due to reasonable financial outcomes in other ways. Still, there seems to remain a difference between the European and US approach to platform fees.

### IV.3. Cable and Satellite Distribution

Cable and satellite distribution are clear examples of the mass use problems in an originally analogue environment.\(^7\) The solution for the clearance of the cable distribution copyright was described in the previous paragraph. It is however worth mentioning that in the Nordic environment, the copyright solution of cable television raised important concerns as to the detrimental effect the extended collective licensing and the partially applied compulsory licensing were having on the concept of the exclusive right of the author.\(^7\)

Cable television operations are mainly composed of four different business areas.\(^7\)
-network level: network maintenance and connection sales

-basic services: basic programming, such as national and some of the neighboring countries’ broadcasting channels, some major satellite television channels (Music Television, Eurosport, TV5, BBC World, etc)

-pay-TV services: premium movie channels such as Canal+, channel packages of different profiles

-Internet services and telephony

Cable television was developing in its early phase without clarity of the copyright treatment. The development of the cable television legislation resembles the development of the record production. The core issue of copyright is centered round retransmission of a broadcast. Although retransmissions may take place also terrestrially, by broadcasting stations and frequencies, it could be argued that originally cable television was developed mainly for the purpose of re-broadcasting terrestrial signals in a (coaxial) network.

The question bears certain resemblance to the issue of intermediate copying in the Internet networks. If the retransmission occurs at a place, which already is situated in the area of the original transmission, the retransmission brings basically nothing new to the sender – end user relation: the end user receives the signals of the original transmitter, regardless of the route. This “new public” or “service area principle” controversy has continued ever since.755

In the 1928 Rome Conference of the Berne Convention, retransmission was a side issue. It was originally seen merely as technical part of broadcasting, but as such, belonging to the scope of the author’s right to broadcasting. However, because of opposition, the re-broadcasting clause was not included in Article 11 bis in 1928.756

The preparations for the Brussels conference 1948 brought about one of the core problems that would remain key questions of cable retransmissions: whether an act of re-broadcasting would also be considered under a separate right, when the retransmission takes place within the same area, where the transmission originally was intended (“the service area principle”). This would lead to the obvious issue of double payment. The alternative would be to consider that a retransmission only takes place when it is targeted at an additional audience. The original proposals concerning this issue were mixed.757

Finally, and although the French delegation attempted to revive the “new public” criteria, the Belgian proposal in the Brussels conference was accepted.758 According to the final Article 11bis(1)(ii):
“Authors of literary and artistic works shall have the exclusive right of authorizing...any communication to the public, by wire or by re-broadcasting of the broadcast of the work, when this communication is made by an organization other than the original one.”

Therefore, the decisive criterion is not whether the retransmission takes place in the same area, but whether the organization is the same. This looks like an attempt to grasp the economic interface, and to see that if one broadcaster’s network consists of very many transmitters, every transmission should not be seen as a subject of a separate right, but an act of economic importance takes place between the rights holder and one broadcasting organization. However, a third party re-broadcasting of a signal creates a new economic factor for the chain of events.759

According to Brennan’s thorough analysis, all the delegates at Brussels appeared to accept that every third party communication to the public of broadcast content should constitute an exercise of copyright owner’s rights, regardless of whether it was to be a “new” or already served public.760

The issue of the Internet’s transient copies was in many respects different, and so were the conclusions. The main difference seems to be that the issue of “third-party economy”, which was decisive in the case of retransmission, was overlooked in the case of the Internet, as no such criteria was attempted.

The regulatory case for cable television retransmission is unsatisfactory in its present state, and the Berne Convention rules are insufficient in such special cases as the “must carry” –rules. It cannot be reasonable that a cable operator with a legal obligation to re-broadcast certain programs has to negotiate commercially on the remuneration of the copyright license. This is a clear sign of over-intensified copyright protection.761

The European Union adopted the extended collective licensing model in the satellite and cable directive (93/83/EEC), as a solution to the conflicting interests between exclusivity and mass use.

IV.4. The Scandinavian Compromise: The Extended Collective License

The extended collective license is a solution created originally in Scandinavian legislation to resolve the contradiction between copyright exclusivity and mass use. The problem first emerged in relation to the licensing of the broadcasting right of the authors and performers.762 At that time however, the concept of representation of third parties
(non-members of the collecting organization) was not included. The early licensing method could be described as a collective license based on agreement.763

The mass use of copyright protected works brings about the logical but also very practical problem, how to grant licenses when the identification of individual use is not possible or requires an unreasonable amount of effort. This problem requires methods by which the licenses can be granted without individual consent being asked from the right-holders.764

The collecting organizations provide services for both the right-holders and users by granting licenses for the use of copyright protected works, which could not be negotiated individually because of the said practical reasons. After the license has been given by the organization to the users, the user is entitled to trust that the use is legal. However, there will always be right-holders who are not members of any particular collecting organization, but whose works will be in demand.765

Especially right-holders living in another country are in an important position, because the requirement of minimum protection and reciprocal national treatment oblige the country where the work is used to arrange sufficient protection. Right-holders are usually not members of organizations outside their home country, and have not authorized such organizations to act on their behalf. Therefore the rights management is dependent on the reciprocity agreements entered into by the collecting organizations operating in different countries. This not being the case, the foreign right-holders would be themselves in charge of the rights management.766

Another problem regarding mass use is that the technology does not allow, at least in any practical manner, the efficient separation of the foreign material from domestic, for example, from broadcasting or satellite distribution. It is quite common that, for example, a cable operator cannot know what is being distributed in the network, since such an obligation would in practical terms require too heavy a cost load or operational impossibility.767

A classic example of a solution concerning the problem of unidentified or unreachable right-holders is the compulsory license. The user has a free right to use the work, but against compensation to the rights holder. A “legal license” is a license whose terms of compensation are regulated.768

The extended collective licensing was applied later in the Scandinavian countries, on the basis of joint or at least coordinated Nordic preparation, to photocopying from the early 1980s. In the adaptation of the solution, the Berne Convention’s three-step test adapted in the Paris 1971 text was referred to.769
It is of interest for the purpose of this study to look closely at the motivation of the choice of extended collective licensing, instead of the contractual license or compulsory license:

- the solution (the extended collective license) will enable and encourage agreements
- the solution is balanced for the users and right-holders; a compulsory license would be a weaker solution from the right-holders’ point of view
- the diverse quality of the copied material (otherwise would require a large number of different agreement types for different purposes)
- from the society’s point of view, the acknowledgement of important interests of the users (e.g. arbitration)
- consistent with the adapted Nordic preparatory work

It is quite evident that all basic motives were present in this solution. Both the profit and human right motives exist from the right-holders’ perspective, in denying both fair use and the compulsory license, and the development motive is equally clear when encouraging agreements and paying attention to the users’ interests are discussed. The public interest motive is present when the use in education is discussed.

A few years after the Paris Conference, the extended collective licensing was broadly discussed in the WIPO Annotated Principles for the Distribution of Programs by Cable. Principle 4 states:

“The authorization mentioned in Principle 1 (the authorization of cable redistribution of copyright protected works) may be given by an organization of authors also in respect of works the authors of which have not delegated to that organization the exercise of the right mentioned in the said Principle: however, this may be done only if such a power of that organization is recognized by the applicable law and only if, by virtue of that law, the said organization must guarantee the broadcaster or the cable distributor against possible claims of such authors, and must undertake to apply, in respect of the distribution of authors fees and other benefits, the same principles to the said authors as it applies to authors who have delegated to it the exercise of the right mentioned in Principle 1.” (emphasis MH)

The organization was therefore in a very powerful position, but at the same time all claims concerning unauthorized use were supposed to be targeted at the organization, which also means a broad responsibility.

The extended collective license was later adapted – or was allowed to be adapted by the member states—by the EU directive concerning cable and satellite distribution. The highly practical solution, which tries to strike a compromise between the several
different motives, was widely accepted. This may be regarded as one of the clearest examples of the importance of the technology impact arguments in copyright legislation.

The extended collective licensing solution may said to be suffering from a certain degree of inconsistency, as it is an attempt to combine exclusivity with a compulsory licensing system, that is, to mix oil and water. But regardless of whether the solution is theoretically correct or not, it is a practical attempt to balance between conflicting motives. From an ideological point of view, this would both maintain the exclusivity doctrine of copyright and allow mass licensing procedures.

IV.5. Platform Levies: Towards a Taxation –Based Model?

Hugenholtz has identified the introduction of a levy on the sale of sound video recording equipment in the German Copyright Act in 1965 as the first solution to the issue of private mass use (of physical copies). The main reason for the adoption of this solution was the belief that individual claims against private home taping would not be enforceable. Most European countries have followed the German example. A similar issue exists today in relation to the Internet.

A contrary attitude would easily lead to conflicts in society. Prohibiting private use in these cases would require supervision and monitoring of citizens, an increase in police forces, etc.

Regarding VCRs and music cassettes, in particular, the idea of platform levies has been widely accepted. In line with this general trend, in the European Union Infosoc directive, the platform levies were also seen as acceptable means to compensate authors for fair use, as discussed earlier. According to Hugenholtz, today there are levies on analog and digital recording equipment, levies on analog and digital photocopying machines, faxes, audio-recorders and VCR’s, levies on scanners, MP3 devices, CD writers, and - perhaps – also levies on PC’s. In addition, there are levies on blank media, audiotapes, audiovisual tapes, and all sorts of digital media including recordable DVDs. In favor of this development are the ease and perfection of digital private copying and the convergence of analog and digital equipment.

Platform levies represent in a way a far cry from the copyright doctrine: it is relatively difficult to see any connection to the original copyright doctrine based on exclusivity, when such anonymous methods as platform fees are adapted. As there is no knowledge of the actual use, and it bears no relation to actual compensation, we are very close to the “taxation” model suggested by Friedman for city-parks and certain types of
highways: no tolls, no choke points.\textsuperscript{776} This would also require a publicly financed “artist salary” system, which occasionally appears in the public policy discussion.\textsuperscript{777} This also suggests, that the “property” is common by nature, and cannot be charged separately due to high transaction costs.\textsuperscript{778}

There is however a reservation concerning the development of the DRM tools; if such transaction costs are low enough in the future to provide a feasible alternative, the platform fee regime may well be re-evaluated. It is however questionable, how DRM solutions can compete against taxation type of solutions, since, apparently, the transaction costs are lower in taxation-based systems.\textsuperscript{779}

\textbf{IV.6. Some Thoughts on the Internet as a Challenge to the Exclusivity Doctrine}

This study focuses on compulsory licensing and the impact of technology on copyright. It is one of our central theses that the most important technology-related changes to the protection of copyright already took place in the early 20\textsuperscript{th} century, and thus the emphasis in this study focuses on the events surrounding the adaptation of sound recording, broadcasting, and re-broadcasting to the international copyright system. To illustrate this we shall insert a famous note from a copyright “founding father”:\textsuperscript{780}

\begin{quote}
“There is hardly any area of law (…) that has as cosmopolitan a character and lends itself better to international codification than that with which we are going to concern ourselves. We are living in a century in which works of literary and artistic genius, regardless of their country of origin, very quickly spread all over the earth, making use of all civilized languages and all forms of reproduction.”
\end{quote}

This quote is neither from a hyped piece of contemporary copyright literature, nor does it discuss the revolutionary effects of the Internet. The quote dates back to 1884. These were the President’s opening words in the first meeting of the preparatory conference to create the Berne Convention. What caused the change for the copyright protected material to cross national boundaries in masses was in our understanding first and foremost the transportation vehicles invented and successfully implemented in the course of the Second Industrial Revolution. This was a starting point for a chain of development to which the Internet and satellite distribution form interesting, albeit not – as it seems today - revolutionizing chapters.

It is clear, that in a manner similar to sound recording and broadcasting, both the Internet and mobile technology provide immense challenges to the licensing system, that is, to the dichotomy between mass use and exclusivity.
IV.6.1. The Internet – From Mass Use Towards P-2-P

Both the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty had the object to meet the challenge of the new uses of works and other subject matter in relation to the digital environment. The intention was also to provide for greater protection of authors and right-holders. However, this was seen to take place subject to maintaining the balance between these rights and the larger public interest.\(^\text{781}\)

Presently, the Internet provides a great challenge to the copyright system due to unlimited possibilities of digital copying. Still, as we have seen, similar issues were confronted with the copyright community in relation to phonograms, broadcasting, photocopying, and copying to VCRs and C-cassettes. The major difference seems to be that copying done by individuals practically only requires very modest investments, as the prices for computers and Internet connections are within reach of most of the population. However, compared to the revolutionary step of recording a performance in 1877, copying a performance in a more effective manner can be claimed to be a development that is perhaps less profound.\(^\text{782}\) Enormous increase in the transmission capacity will not increase the emission capacity of the end-user.

IV.6.1.1. The “Hidden Economy” of Digital Distribution

From the surface and judging from public debate, the Internet is free and creates an environment of free activity and distribution. Looking deeper into the use of the Internet, it is clear that it has a sound and vibrant economy around it: telecom operators and equipment manufacturers are able to create important turnover by keeping alive the “free Internet”. Therefore, it might be misleading to call the Internet the distribution of free goods, as it is the distribution, related equipment, and services that cost if the goods as such do not.\(^\text{783}\)

The legislator’s intention to ensure that in compensation for fair use some remuneration should be allocated to the right-holders means that, from the legislator’s point of view, it is indeed economically dubious or at least unethical to make money for the free Internet, unless a compensation to the right-holders is taken care of.

In Europe, the role of the telecom operators has been harmonized by the e-commerce directive. If the operator has no other role in the actual distribution but offering access and capacity, it should not be regarded as an active distributor and thus not have copyright liability. From an economic point of view, the operator still has an important role in controlling the access and customer relations management system.

Concerning the so-called Internet piracy, a sound economic activity revolves around unauthorized downloading of music. The Internet service providers obtain customers and conclude agreements with them, including monthly payments and usage fees,
sometimes based on the time used or capacity reserved or simply a flat fee. Computers are bought and used for music piracy, and compact music players are sold for use of pirated music (MP3–players). So, there seems to be a vibrant economy around music consumption in the Internet after all. We are probably not discussing so much whether any money is received at all from using equipment for listening music, but where the money is allocated.\textsuperscript{784}

It looks like the consumers’ excitement for getting music for free on the Internet creates important business opportunities for many companies – telecom operators, service providers and equipment manufacturers. It looks like they are benefiting at least indirectly from this new type of customer activity. Since the activity – downloading music from the Internet – is mainly targeted at age groups below 30, or even 20, very many of the users may never see the bills coming from the use of the Internet or for the purchase of the equipment.\textsuperscript{785}

Another point of view, contrary to this, is the development motive: if we agree, as seems to be the case to a large extent, that technological development profits mankind and offers new opportunities, it is important to exempt the “mere conduit” operators from distribution liabilities. This will clearly enable them to develop Internet distribution and the technology without running the risk of negotiation blocks or additional cost-factors. This is in line with the early 20\textsuperscript{th} century’s phonogram and broadcasting issues, with the exception concerning remuneration.

Some observers have even taken the stand that the Internet will mean a new era of creativity in society, as it allows a new kind of dissemination and mixing of ideas and materials.\textsuperscript{786}

\textbf{IV.6.1.2. The Right of Communication to the Public and the Three-Step Test}

The reason for the creation of a new right was the technological “anomaly” created by the Internet. Copyright legislation may have been created with the intention that it would be forward-looking and take into consideration all new emerging technologies for the disseminating of copyright protected material.\textsuperscript{787} The legality principle in, for example, criminal law assessments (the legal rights of the accused) requires however clear legislation that cannot be complemented in judicial decision-making by broadened concepts or analogous interpretation of old rules in new circumstances.

A new exclusive right, the right of communication to the public, was introduced in the WIPO Copyright Treaty 1996, to cover the gap between the existing forms of protection and the possibility offered by the Internet to access copyright protected material from a place and at a time individually chosen by the consumer.\textsuperscript{788} The
provision leaves without prejudice the provisions of the Berne Convention in which the right of communication to the public is provided and which have to comply with the framework of the WCT. It supplements those provisions by an exclusive right of communication to the public for authors of all kinds of works, as far as this is not yet covered by the Berne Convention.\textsuperscript{789}

The right of making available has been conceived as an element of the author’s broader right of communication to the public. The act of making available to the public for access covers the offering of works for access and extends to the entire transmission to the user. However, the mere establishment of a server, which may be accessed individually by the members of the public and at their choice regarding time and place, constitutes the act of making available. The mere provision of cables or other physical facilities for the purpose of communication to the public does not constitute any act of making available to the public.\textsuperscript{790}

At the same time, the three-step test of the Berne Convention, created to draw the line between acceptable and unacceptable forms of limitations of the right of reproduction, was adapted as a general principle to offer guidance on national implementation of all the rights afforded in the WIPO 1996 Copyright Treaty.\textsuperscript{791}

**IV.6.1.3. Transient Copies in the Internet**

The Diplomatic Conference debated in 1996 the possibility of limitations on the reproduction right in the case of temporary reproductions made for the

\textit{“sole purpose of making the work perceptible or where the reproduction is of a transient or incidental nature, provided that such reproduction takes place in the course of use of the work that is authorized by the author of permitted by law.”}

Although this received general support concerning the former part, delegates had differing views about the meaning and scope of the second part.\textsuperscript{792}

It was therefore decided that it would be preferable to leave the matter to be dealt with under Article 9 (the three-step test) of Berne, supplement or elaborated by an “agreed statement”:

\textit{“The reproduction rights, as set out in Article 9 of the Berne Convention, and the exceptions permitted thereunder, apply fully in the digital environment, in particular to the use of works in digital form. It is understood that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention.”}
Thus, it is clear that the interim copies are within copyright protection, and possible limitations have to meet the three-step test scrutiny.

There are some major differences in comparison to the other 20th century limitations of copyright for new technology purposes: compulsory licensing concerning sound recordings contains equitable remuneration, and in the case of a retransmission right, the exclusivity is afforded in relation to an operation carried out by a third party. The (telecommunications) economy of the distribution of copyright protected works may stay totally intact of the right-holders’ demands.

IV.6.1.4. The Internet Business Models in “Perennial Gale”

Internet business models do not seem at present separate from the current communication and retail businesses, but rather a complementary form of extending marketing and supporting logistics. Many “traditional” businesses are currently probing or already utilizing the business opportunities offered via the Internet as an advertising arm of their core business, offering, for example, search services.

In a Schumpeterian sense, the Internet business is probably in the middle of a “perennial gale”, a state of slow and painful establishment, as the business models are still developing and changing. Creative destruction takes place in, for example, the pricing of Internet connections, which has been subject to either perfect competition as such or regulation simulating perfect competition. Internet service providers as independent companies separate from telecommunications or media operations have become more or less extinct, since during the past years, they have been integrated with larger telecommunications companies offering a broad range of services.

From copyright perspective, it is therefore rather difficult to identify a business model that would later become an industry norm. There are however many indications of the direction of the development. Firstly, like a highway needs control against traffic violations, the degree of telecommunications control is important and will affect the organization of the Internet business. As a legal starting point however, the network operator is out of the chain of responsibility. Still, issues like computer viruses and “spam” have led to demands for the telecommunications companies to increase their content control. Secondly, the Internet as an advertising and search tool for established businesses will play an important role.

From a technical point of view, the Internet service operations may be divided into two distinct categories:

- “wholesale dial-up call termination on Internet” (ISP 1); connects the customer to the Internet and/or to a voice/data-network. Usually provides a broad assortment of its own services, including platform services to other Internet
service providers. Also usually owns important network elements, and may be called a "virtual network operator"

- “retail access to the Internet from fixed networks” (ISP 2): connects the customer to ISP 1. May offer own services, but as a rule sells ISP1’s services.

The former category represents the major companies in the field. In the latter category, independent smaller companies may succeed in creating a margin from buying wholesale connections and selling retail, and keeping a minimal cost structure.

IV.6.1.5. Issues Regarding Music Distribution on the Internet

During the past few years, the total value of the music market has started to decrease after a long period of growth, and the focus in the business has shifted from selling physical recordings to owning and selling rights to music. Technological development has again brought about the problem of piracy.

A recent study estimates that out of the estimated worldwide total sales of music (51.6 bill. USD), nearly 39 per cent (20.1 bill. USD) was unauthorized. Although these approximations have to be approached with caution, since they investigate a phenomenon of which no public records exist, the effect of free distribution of music on the Internet is considerable.

Another problem even more difficult to control for the record companies and artists is the digital distribution of music. Unauthorized or even illegal activities are extremely difficult to control in this area, and they are increasing rapidly despite Napster’s collapse. In 2001, there were 500 million music files available on P2P illegal services, and there were over 3 million users more than in the Napster era. The estimated annual illegal copying is the same size as the whole global music industry sales – almost three billion copies.

A major strategic problem lies in the definition of illegal versus free use. It is illegal to distribute copies of music for profit, but it is not illegal to make a copy for private use. To make this distinction is increasingly difficult, and individual customers may with confidence claim that there is nothing wrong in copying a product for their own private use and/or sending it to a friend or relative for private use. However, a company cannot create a commercial model on the basis of free use, since it would no longer be acting in the domain of free use but in commercial interest, and under copyright obligations.
IV.6.1.6. The Role of the Network and Service Operator

In many ways, the network operator that facilitates the connection from the server to the user is in a critical position concerning the development of the Internet and the Internet business models. As an example of the Internet legislation’s logic, the basic assumption of the EU e-commerce directive is that the network operator is only a technical intermediary with no knowledge or participation in the actual communication with the service provider/content producer and the user. The directive classifies certain services (mere conduit, caching, hosting) as being out of liabilities, on certain conditions.

The directive states in Article 12 (“Mere conduit”), that where an information society service is provided that consists of the transmission in a communication network of information provided by a recipient of the service, or the provision of access to a communication network, Member States shall ensure that the service provider is not liable for the information transmitted (on certain conditions). According to Article 13 (“Caching”), where an information society service is provided that consists of the transmission in a communication network of information provided by a recipient of the service, Member States shall ensure that the service provider is not liable for the automatic, intermediate, and temporary storage of that information, performed for the sole purpose of making more efficient the information’s onward transmission to other recipients of the service upon their request (which requires certain conditions to be fulfilled).

Finally, in the Article 14 (Hosting), where an information society service is provided that consists of the storage of information provided by a recipient of the service, Member States shall ensure that the service provider is not liable for the information stored at the request of a recipient of the service, on the condition that:

- the provider does not have actual knowledge of illegal activity or information and, as regards claims for damages, is not aware of facts or circumstances from which the illegal activity or information is apparent; or

- the provider, upon obtaining such knowledge or awareness, acts expeditiously to remove or to disable access to the information.

The providers of the above-mentioned services shall neither - according to Article 15 - have a general obligation to monitor the information which they transmit or store, nor a general obligation actively to seek facts or circumstances indicating illegal activity.

As we shall discuss later in Conclusions, it is apparent that the legislation has been crafted to suit the adapted business model of the telecom operators, namely the “mere conduit” model. The legislation reflects a strong development motive. This legislation may however also act as a separator of the distribution and content markets, because from this basis, the telecom operators probably do not see a reason to enter into the content business, due to both lack of know-how and the legal issues that may arise, if
the “mere conduit” status is compromised. At the same time, it is absolutely clear that telecommunications operators’ benefit from the traffic of unauthorized or even illegal copies of copyright protected work. Estimations of the amount of traffic however vary, and are not yet reliable.802

It is relatively easy to see that similar conclusions to those regarding the Internet were debated in the copyright mass use solutions earlier in the 20th century. Introducing exclusive elements of copyright control might seriously endanger the functioning of the current business model of the Internet. We could even claim that the development motive must have been dominant in this respect. The major difference is that as the early 20th century compulsory licensing recognized the right to compensation – equitable remuneration – the exemption of the operators is complete. Retransmission limitation on the other hand was only in relation to retransmission within the same economic entity, and not third party operators.803

However, in Finland, due to the constant and enduring problem of Internet- spread computer viruses, which were disseminated by large amounts of spam, it has been proposed that the operators’ responsibility for the functioning of the telecommunications system be increased. This would amount to actually ciphering away spam from the e-mail. This requires identification of spam, which leads to the question, what is actually the level of the operators’ knowledge of the content or quality of the messages.

According to the new Finnish Act on Data Protection in Electronic Communications, which entered into force on 1 September 2004, telecommunications operators and corporate and association subscribers have the right to prevent the reception of email and SMS messages and remove malicious programs from messages in order to remove information security disturbances and prevent infringements. The measures can be put to use only if communication services or the recipient’s access to a means of communication are endangered. In such cases, messages can be filtered out without the recipient’s consent. With the user’s consent, a telecommunications operator or a corporate or association subscriber can always prevent the reception of disruptive email.804

The question whether and under what conditions a network operator, telecommunications company, or online service provider infringes the right of making available or works on networks, depends upon the activity in question and has to be decided under national law on a case-by-case –basis.805 Whether or not this operator liability is recommendable from society’s perspective - could this pave the way to a censorship role for the operators – this will clearly mean a deviation from the principle in the e-commerce directive. The operator may no longer play the role of the “innocent bystander”, but is assumed to have knowledge of harmful communications on the Internet, and may - and in practice is required - to operate.
IV.7. Computer Programming – An Anomaly to the Copyright Doctrine

The issue of the protection of computer programs within the copyright system was raised during the 1980s. A major step towards copyright protection took place in 1980, when the Computer Software Copyright Act was passed in the United States. International organizations like OECD and WIPO had already discussed the possibility of computer programs’ copyright protection. The International Association for the Protection of Industrial Property’s (AIPPI) executive committee had concluded in its meeting in Rio de Janeiro in 1985 that the national and international means of copyright protection offer a cost-efficient and immediate protection for computer programming.

The harmonization of the European legislation concerning computer programming was initiated by the Green Paper on Copyright and the Challenge of Technology (COM (88) 172 final). The Directive was adopted on 14 May 1991 (91/250/EEC). Copyright protection had two major advantages against sui generis – protection: first, copyright had been able to evolve with new technologies in the past, and secondly, it was widely recognized around the world. Later, the copyright protection was internationally adapted in the TRIPS agreement and the WIPO 1996 Treaty.

The copyright protection of computer programming is based on broad exclusivity on copying, adaptation, and distribution. The major exceptions are related to the user’s right to make necessary copies (backup), to correct errors, and the exhaustion of the right when a particular sample of a program is sold.

As a general remark, the exceptions concerning the copyright protection of computer programming are more related to the individual user’s act during the use of the computer program. Contrary to the changes of the Berne Convention earlier, there was no lobbying against the commercial exclusivity, with the exception of ephemeral copying on the Internet. In the computer business, the right-holders and the commercial exploiter of those rights is the same company, and therefore no other major conflict of interest existed except that of the telecom operators’ interest to be exempted from the liability concerning ephemeral copies created during the processes of the network distribution. Therefore, no general compulsory licenses or extended collective licensing agreements were adopted.

The protection of computer programs within a copyright framework is a source of wide and endless debate which easily could fill libraries. The various problems of that area are not discussed in much further detail here. However, in relation to the basic theme of our study, there is probably no clearer example to be found on the effect and power of technological innovation leading to huge economic interest, which clearly
“overrides” any and all arguments relating to the logic and original purpose of the copyright system.

IV.8. Mobile Telecommunications: Integration of Earlier Technologies

Concerning the second theme of our study, the impact of technology on copyright, the most important current development takes place in the area of mobile communications. Mobility and mobile devices will most likely become a converged platform of various forms of content provisioning, and although past forms of media will probably maintain a position, the mobile technology may combine many if not all of the elements of previous technological innovations, among the most important telecommunications, sound recording distribution, broadcasting (and rebroadcasting), the Internet, and photography.

Mobile telecommunications has expanded during the past decade to become an important means of telecommunications, in many countries surpassing the importance of fixed line telecommunications measured by turnover and number of connections. Globally, it is estimated that the GSM-system has over one billion users. Telecommunications as a whole has grown to become one of the most important industries in the world. It is estimated that in 2004 there will be 1.5 billion users, and by 2010 2.3 billion users.

The combined turnover of mobile operators was 426 billion USD in 2003, which is 19 per cent more than in the previous year. The telecommunications industry is estimated to be highly profitable, although there is a division into highly and less profitable companies. There are basically only two very profitable companies, the global mobile operator Vodafone, and the world’s biggest handset manufacturer Nokia.

IV.8.1. Telecommunications Evolving Towards a Content Distribution Media

Telecommunications as a technological phenomena had its roots in the invention of the telegraph in the mid 19th century. The revolutionary effect of that innovation is sometimes said to be the first separation of physical matter and content. The first century of telecommunications was a period of a relatively slow development of the fixed network telephony until the last decade of the 20th century. The industry grew from the basis of the 19th century innovations, the telegraph and the telephone. The slow growth took place based on national and - in some countries - local geographical monopolies. Telecommunications became a commodity and a central part of society’s infrastructure comparable to water and electricity.
The slow but steady development of early telecommunications is illustrated by the US statistics. The number of telephones per 1000 population grew in the following manner:\textsuperscript{816}

\begin{align*}
-1880: & \quad 1 \\
-1900: & \quad 17.6 \\
-1920: & \quad 123.9 \\
-1940: & \quad 165.1 \\
-1960: & \quad 407.8 \\
-1980: & \quad 790.2 \\
\end{align*}

The operating revenues as a percentage of the US GNP grew from 0.60 per cent in 1920 to 2.05 per cent in 1970 and 2.32 in 1980.\textsuperscript{817}

Mobile telecommunications were launched already in the 1970s with analog systems.\textsuperscript{818} The mobile technology was however expensive and was reserved for special purposes (e.g. for the use of authorities). The expansion of mobile telecommunications started with the development of the GSM (Global System for Mobile Communications) standard, which enabled the industry to create a global system of mobile telecommunications allowing the handsets to work in the networks of different operators via international roaming agreements. GSM is an open, non-proprietary standard.\textsuperscript{819}

Mobile telecommunications developed more rapidly in the 1990s based on speedy technical development in the mobile network and handsets technology. This was enabled by the international standardization of digital mobile technology (most importantly the GSM system).\textsuperscript{820} The development of mobile telecommunications was further encouraged by competitive license policies allowing several operators to compete in the same geographical areas, in contrast to the fixed line telephone monopolies.

The GSM system was originally developed within the European environment. GSM is a time division multiplex (TDM) system. It makes use of, and interacts directly with, standard telephone networks. Evolution to a data carrying service is a fundamental part of the specification.\textsuperscript{821} The standardization process has been hindered by the parallel development of complex solutions (GPRS, HSCSD, EDGE) intended for digital distribution.\textsuperscript{822}

The quick development of digital technology has caused – in accordance with Moore’s law\textsuperscript{823} – an expansion in the availability of the network capacity. This revolutionary development has many consequences for the parties of the telecommunications value chain.\textsuperscript{824}
The escalation path provides several possibilities but also threats: the possibility to utilize more capacity gives new opportunities for developing and offering more and new services. Yet at the same time, it will lead the way to a collapse of prices for data transmission, which in turn may decrease turnovers and the ability to invest, as the price of a voice call may approach zero.\textsuperscript{825} At the same time, the use of mobile services becomes all the more interesting to different user groups.

The mobile market faces the risk of following the same path as fixed network Internet service provisioning, leaving little opportunity to increase turnovers but going more in the direction of a toll free access, that is, hyper-competition.\textsuperscript{826} Still, mobile telecommunications provides better chances to develop sound business models and revenue sources for right-holders, as mobile telecommunications billing is so far still based on used units rather than monthly payment. Mobile technology provides also a better opportunity to monitor individual use.\textsuperscript{827}

From the Schumpeterian perspective, we might suggest that Moore’s law indicates a state of “permanent (destructive) revolution” that keeps continuously challenging the business strategies of the market players and may shift the balance of power almost overnight. – A famous example of this fluctuation is the business agreement between Microsoft and IBM in 1980. The agreement was a kind of “bet” between two industry partners on how the future was going to look: Microsoft placed its bet on developing the user interface.\textsuperscript{828} Another example might be the negative price development of mobile services (price erosion), which has, for example, in Europe been a constant phenomenon.\textsuperscript{829}

There are several factors that will increase the importance of copyright protection in the field of mobile distribution: 1. Moore’s law illustrates the development of capacity: there will be increasingly extra capacity for data transmission, left over from peer-to-peer telephony, which will lead to new opportunities for content distribution and thus new business models. 2. Technology enables quality video and voice services for mobile phones. 3. Mobile transmission may contain a bundle of relevant elements from the copyright point of view: distribution, reproduction, broadcasting, and communication to the public. Ring-tones provide a special case, which may develop towards “true tones” and provide thus an actual analogy to phonograms.

In the following, it is not possible to offer a final answer to the problem of mobile implications as that is a moving target. However, we shall briefly discuss several new elements – copyright anomalies - that mobility brings about, and evaluate whether there is a need or a chance to rely on alternative approaches in relation to the classic exclusivity doctrine of copyright.
IV.8.2. Mobility Impact on Copyright

It is doubtful, whether mobile technologies as such provide a similar radical impact to the copyright doctrine as did recording and broadcasting. The impact may well be of a different nature: Mobile technology seems to have the ability to combine traditional telecommunications (and the Internet) with broadcasting and music distribution, rather than creating a need for separate legal definitions. It seems more evolutionary than revolutionary by nature. It has not challenged the existing business models as such, but by creating a networked business model it creates challenges for broad cooperation. Content providers shall quite probably stay in their role, and develop an interest to provide content also for mobile purposes, whereas the telecommunications operators will most likely stay in their technical “mediator” role.

Telecommunications has traditionally been a medium for peer-to-peer or point-to-point communications. As opposed to broadcasting, the “transmitter” and “receiver” have been individuals, and the nature of the communication has been private and confidential. In broadcasting, there is one broadcaster and a large number of anonymous receivers that are unknown to the broadcaster. However, the development of the communications capacity has enabled telecommunications to develop in the direction of broad distribution of data in various forms – including the Internet. Mobility adds mainly a personal dimension to this: constant access.

Resembling the retransmission issue in cable programming, the networked business model may likewise require, for obtaining sufficient rights-control, a vast amount of contracting and large transaction costs through demanding negotiations. Traditionally, in the perspective of the development motive of copyright in the early 20th century, and also from a legal-economic perspective, the network business case would speak for liability rather than property rules.

The impact of the Internet was widely debated and basic principles were agreed in the WIPO treaty of 1996. The impact of mobile distribution may require further discussion on the principal issues of copyright. Mobile distribution needs at least as a minimum to be fitted into the current framework of copyright conventions and legislation, either directly or through legal interpretation of the norms.

IV.8.3. The Business Network of the Mobile Environment

The business environment of mobile telecommunications is highly technology related and technology dependent. The customers are very close to the technological interface: the use of the services requires technical adaptations to the mobile phone device and the consumer has to be able to “survive” with several service providers’ technical requirements. The Windows –type of system for the standardization of the mobile user interface has not yet emerged.
The mobile telecommunications business may be defined in several ways, but for the purpose of this study, we shall use the definition in a recent economic study on the mobile industry’s economic impact. Mobile telephony is defined as “the manufacture, operation and distribution of mobile phones and any additional services that are directly facilitated by mobile telecommunications”.\textsuperscript{832}

Because of both the technological and commercial complexity of the mobile telecommunications business, the business model of telecommunications is composed of several partnerships and cooperation relations. We shall not discuss “value-chains” in the traditional sense, as the interrelations of the companies may be more complicated and sometimes ephemeral.\textsuperscript{833}

At least the following stakeholders or partners in the networked mobile business environment can be identified:\textsuperscript{834}

- 	extit{service provider (may be separate from the network operator): service provider takes care of the consumer interface and customer relations management (CRM)}

- 	extit{network operator (may be separate, if service provider leases the network capacity): takes care of the technical aspect of telecommunications, that is, the network operations and functionalities: operation of base-stations, transmission connections between base-stations and the mobile switching center, invests in capacity and sells it to service providers}

- 	extit{network equipment manufacturer: manufacturer of the network hardware (base stations, mobile switching centers, transmission equipment etc.)}

- 	extit{mobile handset manufacturer}

- 	extit{customer/consumer and their associations}

- 	extit{governmental authorities (licensing, supervising, competition)}

- 	extit{copyrights holders of the content provided in mobile telecommunications (content providers, authors, performers, producers, media houses)}

- 	extit{copyright holders of computer programming: applications}

The business impact of the rapid development of data processing and mobile telecommunications, whether we agree on the speed of development suggested by the Moore’s law or not, can be very different depending on the position of the different individual stakeholders. This creates an almost perpetual playing field for different operators and stakeholders, who have great risks and opportunities. For instance, if we assume that the price of network capacity diminishes, the media companies may obtain a cheap distribution route for their products. The telecommunications operators become mere technical facilitators without the ability to independently set prices. The first media company on the playing field may establish a strong position.
Another question is which way the customer loyalty develops: will the customer identify rather with the handset manufacturer, or the telecommunications service provider, or the content provider of his or her choice? The attempt with the “Vodafone Live!” integrated service concept means the creation of the “choke point” at the operator level, whereas Microsoft managed to create immense success at the customer interface as a programming company.835

Mobile networks consist of the following fundamental elements:836

- mobile switches and interconnecting transmission links
- ‘backhaul links’ between switches and transmitter sites (either owned by the network operator or leased from another provider)
- ‘access’ part of the network comprising a multiplicity of cell sites. Each site will contain one or more of the following:
  - base station controller: the intelligent part of the transmitter site providing logical control of frequency allocation, signal strength measurement, and backhaul connectivity. Each controller may control a number of cell sites.
  - mast: may be of different types depending on location, capacity requirements, environmental constraints, etc.
  - aerials (provides the actual radio interface): there may be several of these on each mast depending on the traffic demands and system dimensioning

Interconnection with other operators requires an interface through which the user of the other operator’s network is able to call (mobile originated call MOC) to the receiving network’s user (mobile terminated call, MTC).

The evolution of service provision from the first analog generation to the 3G services has followed a steady escalation path:837

- from local service provisioning to global roaming ability
- from analog technology to digital technologies
- from providing voice services only to voice and data
- from time division circuit switching to packet switching

From the copyright point of view, the network operator naturally has an interest to develop his own business and mainly keep out of the copyright field. The main interest is to be able to continue the networking business without messy responsibilities regarding Internet piracy or the like. The network operator is not interested in the role of a censorship authority. The risk is however the question of how long is it feasible
that the network operator stays out of the chain of events in the network, when, for example violations of the law take place.838

The service provider sells services like phone calls (minutes) and SMSs to the consumers, and rents the network capacity from the network operator. The service provider can be completely different from the network operator.839

The service provider pays the network operator a compensation that may be at least partially based on the amount of traffic they are able to generate. This contains an incentive to actively look for new information business opportunities. Therefore, the service operator is keen to include in his offering almost anything that he may expect to increase the use of the network. The service provider may be in the role of a “mere conduit”, but usually has obtained a more active stance in developing and packaging new service offerings to the customers. This also means that the service provider, more often than not, has a copyright interest.840

IV.8.4. Elements of the Mobile Content Business

We may see that the development of the mobile business is still at rather an initial level. The manufacturing of handsets has a relatively clear industry structure, but when we discuss the mobile content business, it is quite evident that business is still at the initial level of “creative destruction” without a clear industry organization or value chain.

The evolution of digital wireless telecommunications networks is enabling the distribution of larger data files, including media such as polyphonic ring-tones or picture messaging.841 The technical development will allow the distribution of “true tones”, that is, actual digital recordings, and video clips.

Existing competitor groupings in the mobile content market can be identified in the following manner:842

- telecommunications operators: content packaging, service provision, infrastructure
- broadcasters: content creation, packaging, service provision
- publishers: content creation, packaging
- ISPs: packaging, service provision
- content creators: content creation
- software developers: packaging, service provision

There are basically two approaches concerning the position in the value chain: the traditional telecommunications-model has insisted that the operator keeps all control and leverages its position to new stages of the value chain. The other approach
(“facilitator” or enabler–strategy) emphasizes the importance of all players working in their core competence arena, and thus providing better opportunities in the creation of mobile content business.\textsuperscript{843}

Information services offer, for example, weather services, banking and economic information, traveling, number and address inquiry services, route and timetable information of public transportation, municipal services, box office information and tickets, postal services, yellow pages, and a mobile dictionary. The list is not exhaustive but illustrates how an operator may offer mobile information services.\textsuperscript{844}

Information services are commonly – but not necessarily - billed by the operators’ billing system, but the price of the actual telecommunications network connection and the price of the content are usually separated.

The recent development in the handsets technology has allowed the emergence of video services in the form of MMS (mobile multimedia services). This has allowed the use of phones to take, send and receive still pictures. Also short pieces of videos can technically be distributed.

**IV.8.5. Issues Concerning Mobile Music**

William Buhse has suggested four different business models concerning music distribution, in particular, but applicable as an example to other forms of content delivery:\textsuperscript{845}

First is the peer-to-peer distribution. This means file-sharing between individuals (Napster, attempts to utilize private use). Napster in its prime had 1 billion titles and 70 million users but ran into legal difficulties as a business model. File-sharing is basically beyond any control or business interest, representing music as public good, which is a menace to the record industry, but not least to itself as it is unable to create a sound economy.

In Scandinavia it has since long been allowed to reproduce works of art for private use. In common law, limitations of copyright must follow the “fair dealing doctrine”, which means that the scope of private use is much more limited.\textsuperscript{846}

The European Union’s Infosoc Directive enables Member States to allow reproduction for private use, subject to the condition that the right-holders receive fair compensation.\textsuperscript{847} According to Montero and Simmons, peer-to-peer transmission between two private individuals is a communication to the public and is licensable as such.\textsuperscript{848}
Second in Buhse’s category is the mobile operator as a music service provider. The usage of the service is billed, but the value is not in the content itself but rather in the functionality and services. The business interest lies in the elimination of the motive to copy. A near future product may well be the “celestial jukebox” offering personalization: the customer might be able to create his or her own “radio station” with the desired profile of music. Companies that could position themselves as music service providers should be companies with music brands, companies with strong existing customer relationships, or companies with strong ties to end devices.849

Third, there are different subscription models on the basis of “watermarked signals”. For the music industry: means a new approach in having a continuous relationship with the end-user.

Finally there is the super-distribution model with the basic idea of allowing free distribution of digital content, while controlling access to usage and changes with the content owner defining the terms. This would require a persistent cryptographic wrapper in place when digital property is used, copied, redistributed, etc., a digital rights management system with a tool that tracks the deals, and payment information exchanged by the parties.

Telecommunications companies have had difficulty in obtaining and providing desirable content to consumers because content owners are worried about protecting their intellectual property rights. Telecom companies have not yet found the right revenue model to enhance ARPU (see 2.4.) while respecting and protecting intellectual property rights.850

Needless to say, which way the development turns will also very much depend on the transaction costs of the various alternatives. The success of a DRM –based model will most likely depend on its ability to compete with platform fees as an efficient model for copyright fees collection.

**IV.8.6. An Example: Ring-tones**

A ring-tone is a personalized alert tone that is stored on a personal mobile device. Ring-tones generally consist of 20-30 second extracts of the melody of a familiar tune, and have been partly defined by the technical limitations of GSM networks.851

The mobile music market today consists primarily of the ring-tone market, which has grown phenomenally during the past few years. Japan is the clear leader in terms of ring-tone revenues, and the ring-tone market in Europe is estimated to be € 1.18 billion in 2002 and to grow to € 2.40 billion in 2005.852 The telecom operators do not collect these revenues alone, as third party service providers are significant players in the ring-
The market is highly fragmented and dominated by a number of small players, not all of which pay royalties to the artists and their representatives. Use of music in mobile devices – mainly as ring-tones - is however generating significant revenues for the music authors even though royal-free usage is a problem.

Major record companies have noticed the opportunity in the ring-tone market, and are looking at the opportunities to collaborate with third party ring-tone providers. Sony Music Entertainment took a step further in November 2002 when it acquired a mobile content and technology provider RUNtones. BMG has in turn made licensing agreements with Jippii Group and Vitaminic about using BMG copyrights for ring-tone service provisioning in Europe. Further, Jay Samit, SVP of EMI Recorded Music has predicted that cellular networks could “save the record industry”.853

Distribution predominantly takes place via a single short message service (SMS) message, which contains space for up to 160 characters. This space may be used to include information that instructs the recipient device to play back music, by means of an audio oscillator through a small speaker. The small file size has limited the ring-tones initially to mainly “monophonic” quality (single tonal sound).854

Access points for requesting ring-tones over mobile networks include IVR855, WAP856 and the Web. The consumer will interact with one or a combination of these interfaces to browse and select media. Once consumers have chosen the ring-tone they purchase, payment may be made either via credit card, pre-pay, or via premium telephone billing857, this being the common payment method.

The ring-tone request is forwarded in the form of one or two binary SMS messages containing the ring-tone information and the consumer’s mobile number via HTTP or FTP coding protocol to an SMS Center (SMSc). Where the request has been made via IVR, the IVR operator may have a direct connection to an SMSc, in which case the request is initiated in “real time” as the consumer places his order. SMScs are access points to the networks for the purposes of delivering SMS.858

If the actual delivery of the ring-tone is made via WAP, then the consumer is provided with a link to the server of the content provider, from which he can download the ring-tone to his device, again via WAP.859

As network capacity increases, and personal mobile devices improve, polyphonic ring-tones are starting to become widely available on the market. The ring-tone might comprise up to sixteen “instruments”. Mobile telephone handsets, which embed extracts of sound recordings as ring-tones at the point of manufacture, are already available.860
Ring-tones may raise important moral rights issues, as to whether the song is presented in a way that is not disrespectful to the original composition.

**IV.8.7. Licensing in the UK**

MCPS\(^\text{862}\) and PRS\(^\text{863}\) started licensing the supply of mobile ring-tones to the public during 2000.

The royalty that is payable under the MCPS scheme is (a) 10 % of gross revenue received by the licensee or any party at the licensee’s direction in relation to the supply of each ring-tone file or (b) 10p per work per file supplied, whichever is greater. A non-returnable advance of 500 GBP (plus VAT) is also payable as part of the application process.

MCPS license agreement contains standard restrictions on usage, such as excluding synchronization with visual images, arrangements, sound recording, and performance rights. In addition, there are some special clauses due to the particular nature of the ring-tones, such as the licensees’ right to make preview extracts available free-of-charge.

PRS licenses the supply of mobile ring-tones at a royalty rate of 5% of gross revenue received by the licensee, subject to a minimal annual payment.

MCPS controls the right to reproduce and distribute musical works in its repertoire, and has a role in licensing since it is usual that a service which involves the transmission of musical works to mobile devices also involves the copying of those works in some form or other.

PRS owns the copyright in musical works written or published by its members as regards the right to publicly perform the works, communicate them to the public, broadcast them, or include them in a cable program service.

**IV.8.8. Exclusivity vs. Mass Use in Mobile Solutions: Broadcasting, Re-Broadcasting**

In modern society where copyright protected works are used in massive quantities, it is virtually impossible for an individual rights holder to administer their rights. The European Union’s Green Paper concerning copyright concludes that management by collecting societies plays an important role in the music industry as it would be
hopeless for an author or performer to try to control and manage rights in a musical work or recorded performance individually.  

As discussed earlier, the mass use of works protected by copyright is a well-established concept in the copyright literature, meaning use of works in such vast amounts that obtaining individual licenses is not possible. For example, in broadcasting the number of users of copyright protected works is limited (the broadcasting companies), but the number of individual right-holders who have in different ways given their creative work to be used in the broadcasting, may be large. At the same time, obtaining individual licenses for cable distribution of a broadcasting, for example, is considered not only impracticable but also impossible.

The mass use of works protected by copyright, and also neighboring rights, requires a licensing procedure, where the work may be used without the individual consent of the rights holder. If no limitations were adapted, the individual rights holder might in practice simultaneously forbid the use of other right-holders’ works.

As discussed earlier, collective licensing is a traditional way of licensing mass use. Collective licensing has basically two forms, either licensing by the licensing organization on behalf of its members (authors, composers, performers, etc) or, when certain legal conditions are met, on behalf of also other right-holders of that particular area of rights (extended collective licensing).

Mass use may also be covered by platform fees. This is the case concerning otherwise legal private use; EU’s Infosoc Directive requires that Member States who allow private copying have to regulate means of appropriate remuneration for the right-holders in compensation. This has been done by platform fees, for example, in the new government proposal for amendments to the copyright act in Finland.

As discussed previously regarding reproduction rights, in particular, licensing alternatives may include on a national level compulsory licensing or extended collective licensing. Concerning private use, the remaining alternative would be the platform fees. Platform fees however are in sharp contrast to the copyright doctrine developed in the late 19th century, and which was based on utmost exclusivity. No control or even knowledge of actual use is required in the case of the platform fees.

However, mobile technology may also provide more opportunities to trace individual use. According to a Nokia expert, the closed nature of the mobile network allows more individual control of the use of copyright protected material.
The rapid development of mobility may raise the question, if the copyright system were built today, would it at all be based on the exclusivity doctrine and property rules, or rather on liability rules.

IV.8.9. Conclusions on Mobility

Looking at the categories of rights in the Copyright Law of the United States, §106, it is difficult to exclude such forms of use that might not be affected by mobility or carried out by mobile devices.884

Licensing practices on mobile content distribution are developing based on established models applied in different earlier forms of use. Solutions tend to be practical rather than prohibitive. The “old” content industry is participating in the network of business, and there seems to be no major conflicts. Prima facie, the situation does not seem to provide a reason to discuss forced mass licensing procedures, except in the case of private use. Concerning private use, a taxation model on the lines of Friedman’s earlier examples, is applied in, for example, EU legislation.

It is however remarkable that mobile communications seems to be integrating nearly all previous elements of the copyright system: some rights are handled exclusively (ring-tones, content services, music distribution products as reproduction or communication to the public), some rights are within compulsory or extended collective licensing regimes (broadcasting, rebroadcasting), and finally, private use will most likely be tackled by platform fees. Whether this multi-faceted copyright management is sustainable in the future will most likely raise questions: after all, one single device in the hand of the customer would require complicated rights management machinery. To continue a little further, mobile use would have to deal with all the rights elements given by Calabresi-Melamed: property rights, liability rules, and inalienable rights in the form of moral rights.

As the price of the bulk product – minutes and bits – is decreasing, in order to maintain their level of profitability and turnover, the telecommunications industry will need to develop new business on the side of pure voice telephony and SMS, the present cash cows. The key success factor is the telecommunications operators’ ability to maintain a high “average revenue per unit” level (ARPU), which will not get easier in the future as the free voice-over-Internet telephony spreads.885 This requires new dimensions of business, that is, media and communications in a broader sense.

Regardless of the decrease in the industry’s ability to invest and the collapse of the stock prices in 2001-2002, it looks highly likely that the industry will play a very important role in the development of the media and telecommunications industry as a whole,
and have a large impact on the everyday life of most individuals at home and in the office.

As discussed before, this will lead to an important challenge not only regarding copyright, but also equipment and technical platforms, namely the problem of anti-commons.886 As the networked business environment requires wide cooperation and open interfaces between companies, the results of the cooperation may contain intellectual property of several participants. This in turn may lead to the problem of too many right-holders, and the consequent difficulties in licensing procedures. A practical consequence of this might be the inability of the industry to create working interfaces and streamlined, standardized services. In order to be competitive, modern mobile services should not require several individual, service-specified settings to be inserted by the customer, which however is a consequence of the network–type business model.

As we have seen earlier, similar problems were encountered in the early 20th century, when the copyright models for phonograms and broadcasting were discussed. The issue of fragmentation was in these cases solved by allowing compulsory licensing to Berne Convention member states.

Copyright affects mobility however from two distinct angles: the first one concerns the content provision and the related problems. The other one, probably far more important from a business perspective, is related to the computer programming rights of the user interfaces. Since this interface may become much more important than the GSM standard itself, the question is should development interests require an open standard user interface, as the mobile handset most probably will be the focus of great service innovation in the coming years. In the case of market failures, this might require compulsory licensing, that is, a liability rule–based system. This would serve both the interests of the user (the public interest motive) and the interests of the commercial developers of the mobile services (the development motive).887

As the early non-proprietary standardization of mobile technology (GSM) provided a successful outcome, the question is will the content provision and customer interface develop as smoothly or will the problem of fragmentation of rights slow down the development. No apparent need or practical solutions for regulatory action however yet exist, which from the perspective of efficient resource allocation should only come as a second alternative to market-based solutions.

The basic “mechanism of change” described in this study for the impact of technology on copyright does not allow very much space for de lege ferenda—discussion, since one of the basic conclusions is the strong influence of economic power in legislation. However, concerning to what extent the legislation should have flexibility in adopting new innovations, there may be certain possible policy formulations.
Mobile related issues are at present not clearly visible in copyright legislation. Mobile distribution of copyright protected content is partly similar to the Internet-related copyright issues, and partly bears a close relationship to broadcasting and also re-broadcasting. The new proposals put forward by WIPO concerning the rights of the broadcasting organization seem to address the possible mobile distribution of broadcasting companies signals and content in other forms (fixations). All regulation having a tendency for technological neutrality is basically targeted also at mobile technology. The real test of well-intended technology neutral legislation is in the criminal sanctions: will the court accept sanctions in the case concerning mobile services, when the legislation, originally, was drafted for another purpose, for example, broadcasting or public performance. An analogous application of criminal sanctions is not allowed by common criminal law standards.

All participants in the value chain should have an interest in developing it into a successful business and ensuring that security measures are sufficient. Therefore, the absence of the operators from the responsibility chain may be reconsidered, as has already partially been done in the case of harmful and unwanted e-mail (spam).

**IV.9. The Future of the Berne Convention?**

The last amendment to the Berne Convention was agreed as long ago as 1971, after which the international community has been unable to agree on common changes to the Convention. This is the longest time in the history of the Berne Convention. The previous 20-year cycle of amendments has been interrupted. However, the WIPO Treaties (Copyright Treaty and Performances and Phonograms Treaty) intend to maintain some of the early consistency of the international copyright system. The TRIPS agreement has emphasized the importance of both the interpretation of the acquis of Berne, and added trade sanctions to the international copyright system.

The TRIPS connection creates an internationally interesting “collision” between the two distinct copyright traditions that were referred to by L. Ray Patterson, that is, the statutory copyright with a limitation function, and the natural law tradition with the self-interest aspect, flavored with a human right tone. The European and US traditions will most likely have to “converge” in order to maintain a coherent international copyright protection. In the terminology of Menell, the convergence happens between the utilitarian and non-utilitarian traditions of copyright.

Looking at the broad lines of development, it seems that the division of the neighboring rights into a separate Rome Convention was not a clear-cut solution, and the need for maintaining a coherent international copyright and related rights system has required not only the WIPO Treaties of 1996, but also the preparation of the Broadcasting Treaty, which is underway at WIPO.
Since the Berne Convention is a crucial document to understand the outline of international copyright protection, it is of course important to discuss also the possible future development concerning the Convention. However, the most important thing is to understand, also for the purpose of this study, the nature and development of the international copyright protection as an international system. Looking at the object of the study from this perspective raises immediately the question concerning the future of the computer programs protection.

It is evident that the protection of computer programs within the sphere of the Berne Convention can be criticized in many ways.\textsuperscript{892} One might say that a computer program is not the kind of literary or artistic creation the copyright protection, and especially the international copyright protection system, was originally designed for. Moreover, a problematic area is the authorship of a computer program: since one of the basic ideas of the copyright protection is the protection of an individual’s creative work, who should benefit from the copyright on computer programs, the programmer who designs the code or the one who orders and gives specifications to create a certain program? Since the conditions in which computer programs are made are usually set and fixed by the conditions and goal of the programming work – to make the computer do a certain set of operations to, for example, guide a technological process – computer programming seems to have fairly little in common with the basic foundations and especially the values behind the international copyright protection. Protection of computer programs might also create a problem concerning the authorship from another perspective – whether the protection is granted to man or machine.\textsuperscript{893}

However, is there a value in maintaining a logically coherent and consistent copyright system which anyhow remains remote to practical needs of intellectual property protection. Companies and individuals need protection and flexible licensing practices in order to use and make use of their copyright protected works. A functioning copyright system has to change with the development of the economy and technology, and adapt new elements when the technological development and business models so require.

From this point of view, the preliminary conclusion is that the technological development of the 20\textsuperscript{th} century has required pragmatic copyright and related rights solutions and also provided opportunities for important limitations to the exclusivity of the author and rights holder.

From a structural point of view, several problems have arisen since 1886. The former colonialist empires have fallen, and the movement for independence has swept over the globe\textsuperscript{894}. This development is clearly positive from the point of view of democracy and profound human rights, but from a practical point of view has put an almost invincible challenge on the Berne Convention as a system for regulating international copyright protection. Any change in the content of the Convention has become increasingly
difficult if not impossible to make. The Berne system cannot follow the development of technology as smoothly as it did in the early 20th century.

Moreover, computer programming provides not only a systemic challenge, but also a challenge from the structural point of view. The copyright owners and the commercial users of those rights have traditionally created a contradiction within the copyright system, forcing the legislator to adapt a compromise between these conflicting interests (human rights/profit motive versus the development motive). The birth of the development motive in the early 20th century is a direct consequence of this conflict.

On the lines of the analysis of “social lock” and “electronic lock” by Drahos and Braithwaite, the technological development may lead to the dominance of the technological over the legal protection. This development may also lead to the “inflation” of the chances of national states to regulate exceptions or limitations to copyright in the public interest (human rights of others), if the technological lock is tighter than the social lock.

If we return to the table presented at the end of Chapter One, we shall see that certain elements and their emphasis have changed during the era of international copyright protection. As in the early 20th century, we can see that the development motive had its advocates. We might have to develop our table a little further.

From the Schumpeterian point of view, and in relation to the process of product development, we may conclude that the originator’s protection is important, if the purpose of the legislation is to protect the original and creative work (invention). If we however focus on the practical exploitation of that creative work, we discuss the protection of the innovation and the development motive in the sense of the commercial users’ rights. It is difficult to see, from this point of view, how the economy could develop without offering the protection and opportunities for the commercial exploitation of creative work.

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<td>Originator</td>
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<td>User</td>
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<td>public interest motive</td>
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<td>invention</td>
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<td>(creative work)</td>
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It is difficult or practically impossible to develop the Berne structure further due to its rigid decision-making structure. Furthermore, it seems probable that within the next decade\textsuperscript{897}, we will see a major disruption of the Berne system from the inside. This is due to the technological development related to mobile technology. It is likely that it may bring not just a new element to the dissemination of copyright protected works, but integrate all or nearly all previous form of use and make technology-dependent regulations more or less obsolete.
Footnotes

721 Varpio, p.2.
722 ibid., references to Roland Barthes and Michel Foucault.
723 Ricketson II, p. 3.
724 ibid., p. 11.
725 Barlow p. 531.
726 ibid., p. 31: Concerning collective management, Ricketson states: “Collective management will not usually be relevant at the point at which rights are initially exploited by an author, for example, at the time the initial publishing contract for a book is signed or the initial agreement commissioning a work of music or art is made”. – See also a reference to Katarina Renman Claesson below.
727 On the need for rebalancing this market power, see e.g. Cassler in relation to cable distribution.
728 See Peters, on the abolishing compulsory licensing in digital music distribution and replace it with blanket license and a newly-defined music rights organization (“MRO”) to operate as an interface in licensing.
729 Kivimäki p. 66
730 Hugenholtz III, pp. 297-298.
731 Renman Claesson, pp. 97-124.
732 Rotkirch, p. 329.
733 Äänilevytuottajat, pp. 12-14.
734 Stoner, pp. 5-6: “Before the VCR, television broadcasts were restricted to the memories of the viewers, much like speeches in the ancient Greece forum.”
736 Berne Convention, Paris Act 1971 art. 9 (2). - For a thorough investigation of the three-step test, see also Senftleben. Concerning the concept of limitation, see Senftleben pp. 22-23.
737 WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment, 5 April 2003, net publication, pp. 20-28. - The case concerned is the WTO panel case WT/DS 160/R, concerning the US Fairness in Music Licensing Act. The case is also thoroughly discussed by Brennan.
738 ibid.
739 ibid. p. 21-22.
740 ibid. p. 23: The question contains certain circularity: Ricketson cites Prof. Goldstein as saying, “by definition, markets for exempted uses fall outside the range of normal exploitation.” Another problem related to this line of thinking is, according to Ricketson, that reference to ordinary use tends to disregard new exploitation forms in the future, ibid. Therefore, the phrase “normal exploitation” should be interpreted as including “in addition to those forms of exploitation that currently generate significant or tangible revenue, those forms of exploitation which, with a certain degree of likelihood and plausibility, could acquire considerable economic or practical importance”.
742 ibid., pp. 26-27.
743 Senftleben
744 Cassler, p. 251.
745 ibid., pp. 74-75. See Shay p. 123, the division of private copying regulations to “structured” and “open-ended”. “Structured” approach to private copying defines ex ante the limits of copying, whereas “open-ended” approach leaves it to ex post –judgments concerning the interpretation of “fair” or “equitable” remuneration. To structured approach countries Shay lists e.g. Germany, Sweden, and Finland, and to “open-ended” countries e.g. Australia, Canada, and Greece.
746 ibid.: At this point, the analysis of the Directive is slightly different from the WIPO study, where the assumption concerning the conflict with normal exploitation of the work is not tied with step two, which is the conclusion for the purpose of this study.
This is sometimes called a “four prong test”, see e.g. Stoner, p. 6.


Sony v. Universal Studios (US 417 (1984)

Sony v. Universal Studios, Hugenholtz – Guibault – Geffen, p. 39. – The recent case on Grokster (Music & Copyright No: 300, 6 July 2005; US Supreme Court, Metro-Goldwyn-Mayer Studios Inc. v. Grokster Ltd. No 04-480) indicates a principle slightly redefined from Sony, that is, the harmful activity being first and foremost of a commercial nature turned the case against Grokster.

Concerning the discussion on mass use and extended collective license as a solution for the exclusivity – mass use – dilemma, see previous paragraph.

Petri. Petri saw that the cable television regulation was a mistake based on the misconception of cable television activity; since the origin of the licensing practices came from the broadcasting arena, Petri claimed that the legislator had mistaken cable television for public service broadcasting, and was offering unreasonable benefits for this commercial operation by extended collective and compulsory licensing. Compulsory licensing is still used in cases of simultaneous re-broadcasting of signals within their original broadcasting area, see e.g. Gounalakis.

See Brennan.

Brennan, pp. 29-30.

Brennan, pp. 30-34. See also Gounalakis, Huuskonen I.

Brennan, pp. 35-36.

This is an interpretation of the author of this study. Brennan cites the 1983 Annotated Principles, which basically only use the legal argument, that there is no legal basis for considering the author’s right to authorize the communication by cable of his (broadcast) work as exhausted by the exercise of his exclusive right to authorize the broadcast of his work, Brennan p. 44.

Brennan, p. 46.


Karnell I, p. 145: The concept appeared for the first time in an article by Svante Bergström “Program för Upphovsrätten”, which is included in the book ”Rättsvetenskapliga studier, ägnade av minnet Philips Hult”, p. 74. Bergström had earlier worked as legal counsel for Aktiebolaget Radiotjänst i Sverige, and had in this position an important role in the creation of the first extended licensing agreement system. At this stage however, the third parties were not involved but the authorization of the license was based on membership of the author’s organization. When the third parties were included, the term “extended” was added.

Karnell I, p. 145-146. This element was added to the extended license agreement in a proposal to copyright in Sweden by the working group “Konstnärliga och Litterära Yrkesutövares Samarbetsnämnd” (KLYS), in 1969. The original task of the group was to change the present compulsory licenses to licenses based on collective agreements. Apparently, this attempt ran into severe difficulties, which led the group to present a solution for inclusion of the (usually foreign) third parties. – However, already in 1961 the Finnish Copyright Act contained the third party element.


Karnell II, p. 1.

ibid., p. 2. The GESAC “Code of Conduct”, Oct. 1995 Brussels (GESAC), discusses this theme, emphasizing the competition law aspects. According to GESAC, the organizations are not prohibited from international licensing practices. For practical reasons, it does not happen at least to a larger extent.


ibid.
The Committee reflected the extended collective licensing against the Berne Convention’s three-step test in the following manner: The collective organizations will take care that the agreement terms are reasonable for the authors, both for the members and non-members. The author must have a right to forbid copying if he wants to. A non-member has a right to demand individual remuneration. The user has a right for arbitration, but only concerning the photocopying for educational purposes. The Committee saw the solution however as temporary, and saw the possibility of developing reporting practices as providing a basis for returning to a purely agreement based solution. It is justified to say that within analog technology this never happened, but whether digital copying allows for a different approach, remains to be seen.

The annotated Principles is not a legally binding instrument, but mainly serves as a guideline for the national implementation of copyright regulation.

In Finland, PeV 7/2005 reflects however a contrary tendency. The Constitutional Law Committee of the Finnish Parliament concluded that from a constitutional rights perspective, an author who has not given a mandate to an organization managing extended collective licensing, should have a right to individual contracting. This conclusion is rather confusing, although the constitutional committee strongly emphasized the need for balancing constitutional rights within the copyright system. At least theoretically, an individual rights holder may block a national broadcast. This would imply that the Berne Convention’s national exceptions option on broadcasting are not utilized, neither is it in line with the logic provided by Hugenholtz (see later on human rights conflicts), and it may also produce both practical difficulties and internal legal conflicts within the constitutional rights system.

On the difficulty of drawing a proper line to society’s control, the pre-Second World War alcohol prohibition laws in many countries might provide an interesting parallel, although outside the scope of this study. – See also PeV 7/2005.

Hugenholtz is critical, as the PC should be seen as “universal” equipment without a primary purpose for use of copyright protected material, ibid. p. 297. – See a comparable list on Government Bill 28/2004, p. 107.

Friedman II. The question of whether platform levies (or copyright levies, or platform fees) should be compared to taxation is put forward in Hugenholtz III: “Certain exclusive rights are replaced by rights to remuneration, in particular in respect of private copying but also in the broader field of reprography. (...) If we are going to pay levies for acts of piracy, is that not really a tax? If it is, does the principle of national treatment apply?”

Beier p. 256, concerning industrial property, states that “experience has shown that the grant of exclusive exploitation rights is more likely to confer on an inventor or designer the well-earner “reasonable reward” simply and effectively than is any government remuneration system.” Beier’s focus on industrial property might provide a slightly different conclusion than judging from the copyright mass use situations. But it is clear that platform fees represent a compromise rather than an ideal reward/profit motive solution.

Hugenholtz III on DRM as an alternative, p. 298, and the problems of “phasing out” p. 299. - See however criticism of Merges, who sees that systems applying compulsory licensing will require different transaction costs, namely those involved in influencing the authorities adjusting the price. – On DRM information management, see Clark.

Berne Convention Centerenary p. 87.

See e.g. WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment, 5 April 2003, net publication, p. 78.
bills paid by parents or universities. – The expression “free” may however refer to other features besides “costless”.  
784 This is not to suggest that the telecom and equipment industry would have been smarter than the music industry in creating ways of benefiting from music consumption. It seems rather that music consumption just falls into the hands of these new industries that happen to have an ideal position concerning the technological development, whereas the record producers have not been able to make the leap to other formats and platforms for music products. One might with justification agree with the subtle criticism of the Citicorp Smith Barney study, referred to above.  
785 Some estimations have been debated in the Finnish press, stating that the share of unauthorized files would amount to half of the total traffic in telecommunications networks. However, no reliable sources of information on this exist.  
786 Lessig. This assumption is however more dubious, since human creativity is probably not very dependent on the quality of the technological tools available. A gifted person can create history with a pencil and paper, or even a mouth organ (Stevie Wonder), but very few do.  
787 Concerning the right of making available, it is intended in the WCT regime that technical means of making the work available are irrelevant. Reinbothe – von Lewinski.  
788 WIPO Copyright Treaty 1996, art 8. - On the background of the problem, see e.g. Hugenholtz II.  
790 Ibid. pp. 108-109. Agreed Statements concerning Article 8: “(...) mere provision of physical facilities for enabling or making a communication does not in itself amount to communication.”  
791 WIPO Copyright Treaty 1996, Art. 10 “Limitations and Exceptions”, 10(1): “Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to authors of literary and artistic works under this Treaty in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.” (emphasis MH)  
793 In Finland, major ISPs are Elisa, Saunalahhti, Nettiportti, Sonera, and MTV3, of which MTV3 is a media company operating a commercial television network, and all the others are major telecommunications operators. Source: “Suomen telemaksujen hintataso”, publication of Ministry of Transport and Communications, 15/2003, p. 36.  
794 See discussion later concerning the directive on electronic commerce (2000/31/EC).  
797 http://www.ifpi.org ; http://www.musicunited.org)  
798 The industry may also be encouraged to develop an “electric lock” (DRM) instead of relying on the “social lock” (copyright and its enforcement mechanism). See Drahos – Braithwaite.  
801 For a broader analysis of the problem see Koelman.  
802 According to Oesch, (Oesch II p. 119), knowledge of the distribution of the infringing material is the reason for legislative solution. This would bring about the question, which is however not within this study to answer, what should be the consequences, if knowledge of large illegal or unauthorized use exists, if not knowledge of an individual case. - See Aamulehti 12.11.2004, where an industry specialist estimates the amount of P2P traffic to be between 50 to 80 per cent of the total telecommunications traffic.  
803 Koelman p. 49, emphasizes a balance of development, human rights and public interest motives: "(...) to promote the development of e-commerce, and apparently taking into account the fundamental rights to freedom of speech and to communications privacy, the EU and US legislatures have chosen to exempt access and network providers from liability to damage.”  
805 Reinbothe – von Lewinski p. 112.
See Välimäki II, for a broad account of the history of computer programming.


Ruotsalainen, p. 27.

ibid. pp. 35-41.

Ricketson’s powerful criticism on the solution will be discussed later.

A reader expecting a broad analysis of the current debate on whether and to what extent the patent protection should be extended to computer programming will be disappointed at this point. As such the discussion would require a wide mapping of the background of the patent system, it shall not be attempted within the context of this study. The early observation in Klami – Neejärvi, p. 602, is still pending: those who believe that copyright protection will be a long-term solution for computer programs’ protection in favor of patent system will be disappointed.

Mobile telecommunications is in a “perennial gale” and a fast-moving target for a legal study or scientific analysis. This means that the discussion in this chapter will necessarily be less of jurisprudential nature but focus more on the introduction of the problematic issues. This section is partly influenced by the author’s experience as managing director of the Finnish Cable Television Association 1990-1996, and legal counsel and vice president in charge of legal affairs and IPRs at mobile operator Radiolinja from 1997 to 2003.

A recent study “The Contribution of Mobile Phones to the UK Economy”, commissioned by British mobile operator mm02 and published by the GSM Association (www.gsmworld.com) reveals that in England, the importance of mobile telephony (2.3 per cent of the total national output, GDP) equals that of oil and gas extraction (2.3 per cent), food manufacturing (2.3 per cent), and printing, publishing and paper industry (2.2 per cent), right after construction (5.8 per cent) and hotels and restaurants (3.4 per cent). There is little reason to believe that either the present situation or the trend would be very different in other European countries or in major national economies globally.

GSM stands for Global System of Mobile Communications. GSM is also called the second generation (2G), to distinguish it from UMTS (Universal Mobile Telecommunications System or 3G). GSM was first agreed upon internationally in 1982. – see also Häikiö, p. 178, on the development of the world market for mobile phones.


For further information on GSM, see e.g. www.gsmworld.com/technology.

For a broader overview of the development see e.g. Häikiö.

Caves, p. 11.

ibid.

When these words were originally drafted in 2003, this was just a more or less educated guess. In 2005, Skype offers free voice-over-Internet phone services (VoIP, www.skype.com). Several other providers are anticipated to join the competition of the VoIP market share.


The Finnish operators’ billing for ADSL services is based on a fixed monthly rate. Also, the Finnish mobile operator DNA offers a mobile service with a fixed monthly fee, where the
consequent risk for interconnection unbalance (that is, high tariffs of other operators for the use of their network in inter-network calls) is managed by allowing “toll free” calls only within the company’s own network. TeliaSonera has been reported to consider a monthly payment only – mobile connection in Sweden.

Drahos - Braithwaite, p. 59. Drahos and Braithwaite see the agreement as a token of great intuitive understanding of the ways to use property in information to develop a pricing strategy. We would like to offer an additional explanation in the lines of “Moore’s law”: Gates quite probably saw the prices of hardware diminishing due to Moore’s law; a piece of equipment that can only do half of what a new model can do is practically worthless. So, the hardware business is risky and suffers from expedient lifecycles of the products. What it however enables, and what is also very much required, is a user interface. Since common consumers and even corporate users usually only can utilize relatively simple methods for using the computer, a simple interface (Windows) is much more important and valuable for broad customer groups than a machine which becomes out-dated in a year, or even plain infinite data capacity. – See also Häikiö, p. 263.

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A study commissioned by British operator mm02, for the web address see table of contents.

On the organization of the mobile environment in Finland see e.g. Ministry of Transport and Communication Finland, report of May 11 2005, “Future of mobile telecommunications networks”.


On the integration of different type of service to mobile phones, see e.g. www.vodafone.com: Vodafone Spain announces Vodafone Live! devices with 3G ability has risen by 87% in two months to 225,000 units (a press release 19 September 2005), Vodafone Live! offers previews and summaries for episodes of “Desperate Housewives” TV series (a press release 20 September 2005).

Caves p. 12-13

ibid. p. 18


The mobile telecommunications business comprises nowadays of a large amount of service providers, who bargain for the network wholesale prices and sell the end products. Service providers may have very different strategies depending on, will they simply re-brand the retail products of the existing networks or whether they have their own central, billing and home location registers allowing wider independent product development. This extreme case is called the MVNO (mobile virtual network operator). Among the best-known service providers/ MVNOs is the British Virgin Mobile. See e.g. “International Study of Telecommunication Service Operators”, a publication of Ministry of Transport and Communications, 16/2004 (with English summary).


Montero – Simmons, p. 159

ibid. p. 25

see e.g. Caves p. 25, and “International Study of Telecommunication Service Operators”, a publication of Ministry of Transport and Communications, 16/2004 (with English summary).


Buhse pp. 50-55, with some additions by the writer

Plogell, p. 107.

Art 5:2 (b). See also ibid p. 109.

Montero – Simmons, p. 163.
Interactive Voice Response; a software application that accepts a combination of voice telephone input and touch-tone keypad selection and provides appropriate responses in the form of voice, fax, callback, and e-mail. IVR is usually part of a larger application that includes access. (Montero - Simmons, p. 177)

Wireless Application Protocol; a specification for a set of communications to standardize the way that devices, such as cellular telephones and radio transceivers, can be used for Internet access, including e-mail, the World Wide Web, newsgroups, and internet relay chat. (Montero - Simmons, p. 177)

A case in the Finnish Copyright Council (under Ministry of Education), 2000:12. The case however concerned more the relationship between a copyright organisation and its member, and the actual moral rights issue was left open.

Mechanical Copyright Protection Society Ltd
Performing Rights Society Ltd

Meyer, p. 116
Erben, pp. 68-69
Verronen, p. 1145.

Haarmann, p. 163. Karnell II p. 1, The Finnish Copyright Committee 1980:12 p. 129, The Finnish Governments Proposal to the Parliament 235/86 p. 4. WIPO Distribution of Programs by Cable: Annotated Principles 1984, p. 150: Principle 3, par. 73: “It has been recognized that as regards certain kinds of protected works, the clearance of rights through program-by-program negotiations with every copyright owner concerned is impracticable.” European Union Council Directive 93/83/EEC, 27.9.1993, on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission, recital 10: “Whereas at present the cable operators in particular cannot be sure that they have actually acquired all the program rights covered by such an agreement” – The Finnish Ministry of
Transport and Communications is currently planning to allocate one digital multiplex to mobile datacast.

881 E.g. Karnell II, p. 1

882 The Satellite and Cable Directive 1993, recital 5: “Whereas this means that holders of rights are exposed to the threat of seeing their works exploited without payment of remuneration or that the individual holders of exclusive rights in various Member States block the exploitation of their rights”.

883 Ollila, Heikki.

884 The Copyright Law of the United States, 106§: the owner of copyright has the exclusive rights to do and authorize any of the following: 1) to reproduce the copyrighted work in copies or phonorecords 2) to prepare derivative works based upon the copyrighted work 3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease or lending 4) in the case of literary, musical, dramatic, and choreographical works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly, and 6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

885 O’Neill, p. 34.

886 Rahnasto, pp. 196-202, on the problem of the fragmentation of rights.

887 See Beier p. 260 on compulsory licensing in patent law: “It appears as though the institution of the compulsory license has outlived itself and – at least in industrialized countries – has lost its practical significance. However, it is generally assumed that in many cases the mere existence of a provision on compulsory licenses is sufficient to cause a patent owner to grant a voluntary license on reasonable terms to a potential compulsory license applicant.”

888 WIPO Standing Committee on Copyright and Related Rights, Tenth Session, Geneva, November 3 to 5, 2003, “Protection of the Rights of Broadcasting Organizations”, p. 29: European Union suggests a formulation of Art. 7, “Right of Making Available of Fixed Broadcasts”, which contains wireless means “in such a way that members of the public may access them from a place and at a time individually chosen by them”.


890 See Patterson.

891 See Menell.

892 See Sam Ricketson’s quite powerful criticism of the computer program solution in the essay “Man or Machine”, which is discussed thoroughly in the final part of this study. – Välimäki II on criticism towards copyright protection of computer programming.

893 The Finnish Copyright Council has given several statements on the problem of originality of copyright programming as a threshold for copyright protection, recently in e.g. 7/2005. – A recent decision in Vaasa Court of Appeals had approached computer-generated programming as lacking originality, 17.5.2005, R 03/1245.

894 Berne Convention original text of September 9, 1886 Art. 19: [1] Countries acceding to this Convention shall also have the right to accede thereto at any time on behalf of their colonies or foreign possession (...). Berne Convention Centenary p. 228.

895 The decision-making is unanimous: Art. 17 [3] of the 1886 text: “It is understood that no amendment to this Convention shall be binding on the Union except by the unanimous consent of the countries which are members of it.” – Art. 27 [3] of the Stockholm Act 1967 maintains the same, with the exception relating to articles 22 to 26 (articles on the Berne administration). Berne Convention Centenary.

896 See Drahos – Braithwaite. - According to Rajala, neither legal nor technical protection will suffice alone, without the other.

897 This is the author’s anticipation based on the current speed of global adaptation of mobile technologies and its media possibilities.
CHAPTER FIVE:

Concluding Remarks
When phonograph was invented, and producing phonograms became a business, the main effect it had on listening to music was that it made music more easily accessible and enabled music to be listened to in individual homes. This reduced the transaction cost of listening to music. Going to a concert became at least partly an unnecessary or at least an optional transaction cost\(^8\) against which the purchase of phonograms could be measured. Concert halls allowed access against payment for only a limited number of people, especially in the era of no electronic sound amplifying systems. This reduction of transaction costs created economic opportunities for new businesses. The use of phonograms became so wide, that after the law’s initial ‘surprise’\(^9\), the activity had to be incorporated into the copyright system.

Broadcasting had a similar effect on the record and movie industries. Enabling direct reception of signals containing music and movies, purchasing records and cinema tickets became an unnecessary transaction cost to listening to music.\(^9\) Paying for a license fee to the state for permission to watch national broadcasting companies’ programmes became an unnecessary transaction cost, when cable companies started to retransmit satellite broadcasting. The law was “surprised” and tried to prohibit it.\(^9\) Finally, through sector-specific legislation and compulsory and extended collective licensing schemes in the copyright legislation, the status and rules of transactions were established for this field.

The electronic reproduction on the Internet offers a similar analogy: the increase of CD piracy is not only an indication of the difficulty of making legal rules, but all the more an indication that the physical element of music distribution has become an unnecessary transaction cost, as electronic distribution is far cheaper costing practically nothing. The law is again surprised, but it will have to move to the “second act”.

After a technological breakthrough, how will the legislator react? Considering the motives, one might see a clear economic dependency in the legislation. As Edelman has described it when discussing photography and movies:\(^9\)

> “Indeed, if there is no doubt that it is the capitals committed to the cinema and photographic industries that have brought about this radical reversal (that is, granting copyright protection, MH), it is no less doubtful that the juridical reversal – euphemistically called the ‘veering of jurisprudential opinion’ – has given industry the ‘means’ of its production.”

It is in society’s interest to protect by legislative means efficient methods of production. In a similar fashion, efficient production enables the development of powerful corporations that may have important momentum in changing the course of legal regulation.\(^9\)
V.1. Compulsory Licensing and the Development Motive

If the era of 18th and 19th century could from the perspective of copyright ideology be described as the era of the great literary geniuses, in the spirit of the Enlightenment, the early 20th century might be described as an era of strong belief in the development of technology. It is also shown in the copyright solutions concerning technological development that the tendency was to guarantee that such new forms of exploitation shall be allowed to develop and should not be harmed by excessive copyright protection. Further, the 21st century and even the late 20th century, might be regarded as the fall of the genius, as today’s scientific development has greatly reduced man’s belief in his own flawless rationality and the uniqueness of an individual’s ideas. This disbelief is very telling in Russell’s essay on “the springs of human action”, as discussed earlier.

The profit motive, understood as the protection of the investment in copying technology, has prevailed from the start of copyright protection and during the whole 20th century. In the 1990s, it has probably even gained in importance in relation to the protection of computer programming.

First of all, the human rights motive may be recognized in the development of the moral rights. These rights have a clear status of protecting human values, the protection of individual personality and dignity. What is going to be an important question for future legislation is to have a clear relationship between the international human rights protection and its relationship to copyright’s moral rights’ component. It is clear that copyright and the related rights are protected as property rights in the international human rights documents, but it is less clear, what is the status of the moral rights in those instruments and national constitutions. A problem that the economic analysis of copyright has to face is the at least partial non-transferability of the person-related moral rights, with a strong human rights nature.904

The public interest motive was clearly present when the broadcasting rights were decided in the Rome Conference of 1928. Even before that, several voices during the development of the copyright protection have emphasized the need to have a balance with society’s and the right-holders’ interests.

Concerning the development of the public interest motive, there is a clear departure from the censorship needs that were present in the early phases of copyright protection, towards protecting more general interests of society: protection of minorities, education for all, and access to information for all citizens.905

As the development motive was clearly vivid in the decisions concerning the phonogram rights, one could even claim that the international community – in the Berlin Conference of 1908 – was close to accepting a form of copyright ‘piracy’ as a business model to be
either protected or at least not harmed by the copyright legislation. The compulsory license exception was, as discussed earlier, later made in the case of broadcasting.

A clear indication of the development motive in copyright legislation was also the exemption of the interim copies in the Internet distribution, as well as the electronic commerce directive’s exemption clauses. No monetary compensation was suggested. The platform fees approach is also a relatively straightforward solution for new technologies, which shall not be burdened by complicated individual dealing.

According to Ricketson, it is conceivable that uses that are presently not controlled by right-holders might subsequently become so, as the result of technological change. An example of this might be private copying where the transaction costs involved in monitoring such uses might now be reduced because of the new technologies. Another example might be the protection of television program formats.

It will be left for further studies to evaluate, whether and to what extent the copyright solutions concerning the development of new technologies merit to successful lobbying of the respective industries. On the other hand, one could claim that just as creative work or performance were regarded as values in themselves, especially in the early 20th century the engineering inventions such as recording and broadcasting were also respected as results of human creativity for the benefit of mankind. The “protection” of those inventions and their commercial adaptations (innovations) was justified to a certain extent and comparable to the author’s exclusivity. This suggested the emergence of a fourth motive, namely the development motive.

V.2. Copyright and Market Structures

The mainstream of the development of the copyright and related rights manifested in the international copyright instruments has been a constant series of compromises, mainly creating reservations concerning exclusivity and towards economic remuneration as the necessary and often only compensation for the use of the copyright and related rights protected works and other matters. One might say that this was the era of the development of the analog mass media. This could also, in short, be claimed to be the impact of technology on copyright on the 20th century.

The early forms of copyright protection were targeted at exclusivity basically and simply because exclusivity as a pattern was feasible, that is, the author or in practice, the publisher, could de facto control the distribution and further use of the work, as all these events happened either near the artist or otherwise within his immediate control. The choke point existed and the copyright could be enforced. The development of technology especially in the analog era removed this possibility for immediate control.
and created the need – also in the economic interest of the artists and authors - to
develop copyright and related rights protection in a new direction. This development
led away from exclusivity towards economic compensation forms different from those
receivable in negotiations. The ultimate threat of negotiations is overcome, namely the
right of the party not to contract.

The introduction of the three-step test in the Berne Convention 1971 Paris text as a
general criterion for limitations and exceptions to copyright is an important approach
in order to try to create reasonably flexible instruments for licensing. However, the
three-step test also bears an important similarity to the discussion on when and under
what circumstances it is possible to create limitations and exceptions to general human
rights, which may be seen as an indication of the human rights nature of copyright
and related rights.

The development of media technologies has divided the copyright field perceived from
the party perspective. Great industries have been built on both the creation/ownership
and on the other hand the use of copyright protected material. The copyright business
models can be divided in two: first a model where the creation of copyright protected
material and the utilization of it in the end-user market are done by the same entities.
This was the case in the early printing industry, and later in the computer programming
industry. The creation and the commercial utilization are done by the same entity
(company), and this entity deals in the retail market.

The second is a model, where the selling of rights and the selling of products take
place in different markets. This is the traditional divide between creators and media
companies or producers in, for example, the recording and broadcasting industries.
The division is also apparent between creative work and its broadcasting and re-use in
different forms such as re-broadcasting or the Internet distribution.

In the first model, there is no commercial need for any compulsory licensing. In the
second model, compulsory or extended collective licensing has been used as a legislative
tool, if exclusivity were to provide a potential threat for the new media. A similar issue
may arise if an author’s veto based on exclusive right were to endanger freedom of speech.908 In the second market, where the use of rights and the ownership of rights
collude, highly exclusive protection follows as is the case in computer programming.

This will also inevitably lead to the conclusion that unlike in the 1880s, exclusivity
no longer represents undisputed core content of copyright. The basic outcome of
every major technology-related modification of copyright legislation during the 20th
century was that maintaining exclusivity was not required from the Berne Convention
member states if right-holders were economically compensated. Importantly, this has
taken place without any deeper scrutiny as to the human rights nature of copyright.
The compensation has become the core. Although not attempted here, it would be
feasible to outline a copyright system with compensation as the core and exclusivity as an exception.

It is likely that the development towards compensation was partly facilitated by the US staying outside the Berne Convention until 1989. As the strongest exporter of content goods did not participate in the rulemaking, those who did were nearly all net importers. Therefore, the interests of the commercial users were clearly present.

Concerning the development in the 1990s, Drahos and Braithwaite, in particular, has expressed concerns over the major net-exporter of information goods in the world, the United States of America, being active and successful in changing rapidly the rules of the game in the international setting: “The institution of intellectual property has globalized without some set of shared understandings concerning the role that institution is to play in the employment, health and culture of citizens around the world.”

More importantly, we have seen that the existence of contradictory commercial interests in the early 20th century copyright law resulted in balancing measures. The business logic of computer programming industry is very different, since both the rights holder and the commercial exploiter of the rights operate usually within the same company. This means that there are no contradictory interests present in the legislation process, and as a result, the legislative process automatically leans towards maximal exclusivity.

Concerning TRIPS, the intention to balance third party interests currently concerns the exceptions to trademark (Art. 17) and patent rights (Art.26.2) but not mentioned in relation to the copyright three-step test (Art.13). The role of balancing measures – among them compulsory licensing - should be re-evaluated not only from the point of view of economic balance of the interest parties, but also from the point of view of the human rights motive and the public interest.

V.3. Motives and Understanding Copyright

Completing our construction of a balanced set of copyright motives, not only the users’ rights perspective but also the perspective of commercial use must be added to the totality of copyright legislation, that is, to recognize the development motive.

We could finally end our discussion on the motives of copyright legislation in the following simplified manner:
“28. However, the Court of First Instance took the view that, while it was plain that the exercise of an exclusive right to reproduce a protected work was not itself an abuse, that did not apply when, in the light of the details of each individual case, it was apparent that the right was being exercised in such a ways and circumstances as in fact to pursue an aim manifestly contrary to the objectives or Article 86 (balancing of interests suggesting on a general level the public interest motive). In the event, the Court of First Instance continued, the copyright was no longer being exercised in a manner which correspond to its essential function, within the meaning of Article 36 of the Treaty, which was to protect the moral rights in the work (the human rights motive) and to ensure a reward for the creative effort (the profit motive), while respecting the aims of, in particular, Article 86 (the development motive).”

As stated earlier, the insertion of the motives may not be entirely correct, but serves as an indication of the mainstream of copyright argumentation. The main motives of the copyright field may with reasonable accuracy be reduced to the said four, which should help the interpretation of various complicated legal positions, and also work as an aid in the legislative process in analyzing the necessary positions of concerned parties. The Magill –case illustrates, too, that if the copyright regime does not maintain balancing functions, the balancing effect may be imposed on copyright field from the direction of other legal regimes, such as competition law.

Another example, regarding the history of compulsory licensing, is open to “institutional interpretation” within the motives framework in a similar manner:911

“The proposal by the Austrian Delegation thus submits to the Conference for consideration the system of “compulsory licensing” or “legal licensing” in connection with the application of a musical work to mechanical instruments. Three arguments are put forward in support of the proposal:
(a) the first is general, based on the social necessity, in the interest of culture, of permitting wider dissemination of musical works; (MH: the public interest motive)

(b) the second is of a more restricted nature, being based on the supposition that the exclusive right of the author to agree to mechanical-musical applications could be a threat to or a restriction on the development of the phonomechanical industries, in which so many economic and financial interests are involved; (MH: the development motive)

(c) the third is of private character, being used on the assertion that the compulsory or legal license system would dramatically increase the profits of authors and their successors in title. (MH: the profit motive)

Interpreting copyright from the perspective of institutional analysis - revealing the economic, historical, and ideological multi-layered structure of the copyright motives – gives as a result a more transparent approach to copyright law. “Rules do not themselves have purposes, except in the sense that people may ascribe purposes to them.”

V.4. Impact of Technology on Copyright

As a hypothesis, technology challenges and economic power disturbs the existing balance created by legal rights. Copyright protection is guided by mutual beliefs having their origins in the historical events of copyright development. The utilitarian profit motive was already present in the 15th century the human rights motive appeared in the late 17th century, whereas the development motive was a consequence of the Second Industrial Revolution and made its mark on the Berne system during the 20th century. The public interest motive as censorship was already present in the early printing privilege arrangements, to disappear and transform later into the discussion of the user’s rights, which is a central theme in the 21st century’s copyright debate.

Copyright protection, as developed from the late 15th century until the late 19th century, has changed during the 20th century from exclusivity-based models towards utilizing various forms of compulsory licensing. This has been caused by the need to adapt to technological development especially in the analog mass media. This direction has been further strengthened by the use of platform fees concerning compensation for private use. Applying the comparison to the tort law concepts, it could be claimed that the copyright system has evolved from a property rules emphasis towards a liability rule emphasis. This development established the technology-economy related development motive.
The “mechanism of change” in this respect seems quite convincingly to be the uncertainty before a new technological phenomenon, yet understanding that it represents economic significance. The legislator is indeed “surprised”, and will not want to decide in favor of any party to avoid too strong market positions. This typically is a pattern leading to compulsory licensing.

Digital distribution requires cost-efficient technologies to trace the users’ billions of relevant activities in the digital networks; whether and when these will succeed along with platform-based fees as a simple and low-transaction cost solution is questionable. Returning to Friedman and Thurow, digital technology has created too many choke points for the exclusive copyright contracting and protection to be cost-effective. This has changed the nature of the traditional copyright exclusivity model to become cost-inefficient. The copyright “parks and highways” may not be financed cost-efficiently by exclusive arrangements alone. This also raises the issue of taxation analogies, and the national character of the decisions concerning copyright levies.

Compulsory licensing, although disputed from several angles, means in practice an obligation for the parties to contract, and to accept remuneration equivalent to the market rate, and to reduce the transaction costs of dealing. Platform fees, which were adapted later in the history of the international copyright protection, already represent a remuneration method comparable to taxation in several respects.

Technology oriented change is usually sudden and surprising and has required a certain deviation from the traditional doctrine of exclusivity. A change in technology could be characterized as a brute fact, that is, not a conventional fact created in the society. The technological challenge has established the development motive as part of the copyright agenda.

Technological development has emphasized the importance of the development motive in the copyright system. The strength of the economy-based argumentation in the conflict with right-holders enabled the commercial users of new technologies to gain a position in the copyright system. We could state that the vital interests of economic production had for a moment changed from the ownership of rights (printing) to the use of rights (phonograms, broadcasting) due to the consequences of the Second Industrial Revolution.

As to the “direction” of the change, it seems evident that the institutionally initiated change in copyright, - creation of the author’s right in the 18th century, integration of different forms of artistic production within the copyright regime in 19th century, the development of the performer’s rights in the 19th and 20th century, and the introduction of moral rights into the international copyright system - has had a strong human rights or “natural law” tendency. The technologically initiated impact has required limitations
to this tendency, ensuring the ability of the industry to function, and therefore having at least seemingly a link to the “statutory law” tradition of copyright.

V.5. Conclusion

Realizing the difficulty in predicting human behavior\textsuperscript{919}, we could formulate our conclusion of the impact of technology on copyright legislation in the form of the following hypothesis. Any technological change, enhancing copying, and having the momentum to cause confusion in the market is followed by a legislative resolution maintaining the incurred business balance between the right-holders, commercial, and individual users’ interests. This will be the solution rather than restoring the earlier balance for the sake of maintaining an “old school” legal framework based on exclusivity. These resolutions have as a rule taken place in a form of compulsory licensing. The development motive has become an essential part of the copyright system.\textsuperscript{920}

Exclusivity remains the theoretical and logical starting point of copyright legislation and nearly any analysis of copyright, scientific or within legal practice. Anyhow, the 20\textsuperscript{th} century development has introduced a new set of regulations attempting to limit overly powerful legal positions and thus protect interests relating to development of new technologies and businesses by compulsory licensing. The broad use of platform fees is an illustration of this development in its extreme. The origin of this development is in the belief to scientific progress and innovation in the early 20\textsuperscript{th} century (the development motive).

Therefore, it is suggested that a more coherent approach towards copyright may be reached by studying copyright as a system of compensation, rather than a system of full control of the use of copyright protected matter. This also corresponds to the evolving set of beliefs of the copyright ideology. Exclusivity has not disappeared from the overall picture, but shall be reserved to those forms of use where it is applicable. That is, where copyright is directly controllable by the author or other copyright holder without prohibitive overall consequences as to other right holders, users, businesses, or the society.\textsuperscript{921}
Of course, regardless of the existence of the widest variety of electronic media, huge masses still go to concerts for the experience; music as such can be heard from many other alternative sources. The text refers to the situation in the early 20th century, when no alternative way of listening to music existed besides concerts – at concert halls or homes of the educated.

Needless to say, comparison of television and a movie theater experience is not totally appropriate. New forms of media and transmission rarely replace old ones totally, but both will rather co-exist. As is the case with music concerts, also the movie theater experience still enjoys wide popularity. The term used by Edelman is “denial” of the law, but the basic idea is comparable to Schumpeter’s idea of the social pressure confronted by the entrepreneur.

The concepts used by Edelman in relation to photography and film, p. 44. One could refer to the well-known, lengthy, and gradual liberalization of the cable television business in the Nordic countries in 1970-1990s, which was opposed for decades by the dominating and politically powerful broadcasting companies. Since viewers could now see their favorite soap operas also directly from the satellite channels, the broadcasting companies were in the early 1990s worried about the ‘legitimacy’ of their license fees, as some of these foreign and mostly US soap operas were also their most popular programmes. Most broadcasting companies are now relying on their mission of preserving and maintaining national cultures.

Edelman, pp. 50-51.

Concerning the topic see Rose-Ackerman.

See discussion on Schumpeter above.

Concerning the topic see Rose-Ackerman.

See e.g. Pevl. 7/2005 on the need for balancing the human rights interests within copyright legislation. Broader approaches on the fundamental criticism, see e.g. Lessig, Mylly, Torvalds, Välimäki.

Oesch sees also the Magill –case (EEC High Court, 6 April 1995) as an indication of the interest to ensure the development of certain information technologies (Oesch III p. 29).

WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment, net publication 5 April 2003, p. 23.

See Hugenholtz above.

Drahos-Braithwaite, p. 368.

According to Rahnasto, compulsory licensing has been wider in the copyright area than in patents due to the threat of fragmentation of rights (p. 156), which problem is also related to the question of “anti-commons”; property in which no single entity controls large enough bundle of rights that would enable it alone to make a product. Peukert, p. 16, sees that the discussion about the economic and social pros and cons of non-voluntary licenses as a solution to the digital dilemma is extremely important and has to be continued and intensified especially in Europe. Contrary point of view, see Merges, who regards compulsory licensing as potentially inefficient due to costs relating to lobbying, that is, influencing the authorities in their handling of the compensation levels. As an indication of contrary lobbying, the EBU Memorandum on Digital Copyright Management stresses the need to maintain the benefits of copyright exceptions and limitations granted to broadcasters. The document remains however quiet on this point when the position of listeners/viewers is discussed. The EU Report “The Management of Copyright and Related Rights in the Internal Market” requests a balancing policy requirement to DRM solutions, p. 10.


MacCormick – Weinberger p. 74.

This describes the historical “layers” that form the inner structure of copyright law. On the inner structure, see Tuori e.g. p. 203.

Besides Edelman, a reference can be made to Niemi p. 4, discussion on the impact of “meddling” factors on legal doctrine.

Regardless of the optimism for DRM solutions reflected in e.g. Hugenholtz III, the statement in the text contains a mild reservation concerning the DRM’s cost-effectiveness.

Hugenholtz III.
917 Calabresi – Melamed, p. 1110, on the application of liability rules: “(...) a very common reason, perhaps the most common one, for employing a liability rule rather than a property rule to protect an entitlement is that market valuation of the entitlement is deemed inefficient, that is, it is either unavailable or too expensive compared to a collective valuation”.
918 Technological change is “unknown to the players originally”, North p. 94.
919 See Lagerspetz, p. 36. Predictions of the human behavior include the problem of the rational actor being aware of the prediction, and thus being able to act against it. However, in the case of the international copyright protection, it is probably not highly likely, that the international copyright community would adopt a different course of action just for the reason of trying to falsify the above statement of this study.
920 Koktvedgaard, p. 48, sees that the history of intellectual property law reflects mankind’s cultural and technological development, and offers views to the values of the cultural society at a certain point of time. “Immaterialrettsens historia afspejler menneskeslægtens kulturelle og tekniske udvikling, og den driver en række interessante øjebliksbilleder af den almene vurdering af de værdier, der udgør den egentlige bestand i vor kulturkreds.” The intention in this study has been to further analyze this description, concentrating especially on the technological aspect, and analyze the factors of change, that is, the legal-economic mechanism of that development.
921 Similar conclusions have been suggested from the viewpoint of competition law analysis, see e.g. Kuoppamäki p. 850.
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