

Rules of improvement for derivative works

Transplanting patent doctrine into copyright law*

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This paper is concerned with the control that owners of intellectual property rights can exercise over third parties that build upon their own IP-protected entities to create new, distinct entities. In patent law, these new entities are commonly referred to as “improvement inventions”, while in copyright they are usually classified under the common denominator of “derivative works”. From a legal perspective, improvement inventions and derivative works have in common the fact of being eligible for protection under the relevant legal regime—i.e., they are, in principle, patentable *inventions* and copyrightable *works*—but the scope and effect of this protection is limited by the subsistence of rights in the entities upon which they build.

Despite the obvious analogy between improvement inventions and derivative works, the way in which patent law and copyright law function in this respect is substantially different.

First, patent law does not prohibit the making of improvements that fall outside the scope of the claims of an existing invention. Moreover, if an improvement is sufficiently new and nonobvious on its own merits, it can be patented in turn which means that (at least) two *concurrent* rights will subsist in the improved invention, namely the inventor’s and the improver’s rights. In order to lawfully exploit the improved invention, however, the two (or more) right holders will have to negotiate a licence or cross-licence. Where negotiations fail, a compulsory licence can be sought for by the improver.

By contrast, copyright law restricts the making of works that build upon a copyrighted work, such as translations and adaptations. The right to authorize or prohibit such “derivative works” extends beyond the scope of the right to copy, and covers instances where the derivative work is not a copy or a reproduction of the copyrighted work.¹ If a derivative work attracts copyright on its own merits, the author of the derivative work will enjoy a right which is *dependent upon* the right of the author of the original work. Moreover, in some jurisdictions, copyright does not subsist in infringing works, including derivative works made without permission from the right holder. This gives to the author of the initial work full control over works derived from it.

The power of control that copyright law affords to authors with respect to derivative works is, comparatively, stronger than the power of control that patent law affords to inventors with respect to improvement inventions.² This is true, despite the fact that patent is comparatively much more generous than copyright in terms of protection given to his owner.³ So, how is this divergence justified? In the following, we discuss the backgrounds of the improvement/derivative works framework in patent law

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¹ Despite the obvious overlap between right of copy and right to make derivative works, not all derivative works are also “copies” of the original work: novel’s or film’s sequels do not copy or imitate any part of the original novel or film, but are infringing derivative works (at least under US law).

² Mark A. Lemley, ‘The Economics of Improvement in Intellectual Property’ [1997] *Texas Law Review* 998, 1008-1013.

³ P. Samuelson, “Strategies for Discerning the Boundaries of Copyright and Patent Protections” 92 *Notre Dame L. Rev* 1495 (2017).

and copyright law respectively.⁴ We will show that the current strong level of control over derivative works in copyright law is mainly due to historical contingent factors and does not correspond to a clear rationale. We will then make the case for adopting a patent-like system in copyright, and we will discuss the viability of this “transplant” within the current international copyright framework.

1. Improvement inventions in patent law

Patents provide exclusive rights over a patented process or product.⁵ The exclusivity provided by patents is deemed to be more extensive than among other intellectual property rights.⁶ However, patent law does provide mechanisms that allow curtailing this exclusivity even without authorisation of the right holder. In particular, patent legislation allows the issue of compulsory licenses for so-called dependent improvement patents. This part of the paper discusses how this mechanism can be explained based on patent theory, the nature of such dependent patents and the mechanism that shifts the exclusivity of patents to a liability rule. This should enable to provide a useful reference point for a comparison and possible adoption for derivative works within copyright law.

1.1 Patent theory and improvements

While justifications such as natural rights approaches are mentioned within the relevant literature,⁷ utilitarian justifications are most commonly applied for the grant patents.⁸ The ultimate goal that the patent system wishes to achieve is to stimulate innovation.⁹ This is accomplished by limiting competition on the production level in order to stimulate competition on the innovation level.¹⁰ Such limitation is achieved by granting the patent holder the exclusive use of the patented invention.¹¹ The logic of exclusivity of patent rights deems that without such mechanism investment into research and development would not be sufficiently generated due to the free riding problem.¹² Additionally, the exclusivity granted by the right would enable to put a price on the innovative information surrounding the invention.¹³ The reward for the invention can be generated by licensing fees or by marketing the patented product or process. Finally, the excess of the generated income may be channelled to invest in further research and development.

⁴ While being relevant for the discussion, we limit our analysis a comparison between improver patents with derivate works within copyright law. A discussion on the scope of the respective rights as well as on how exceptions or limitations apply is outside of the scope of this paper.

⁵ Article 28 (1) TRIPS.

⁶ Stanley M. Besen and Leo J. Raskind, ‘An Introduction to the Law and Economics of Intellectual Property’ (1991) *The Journal of Economic Perspectives* 3, 6; Lionel Bently and Brad Sherman, *Intellectual Property Law* (4th edn, OUP 2014) 375.

⁷ See for instance Matthew Fisher, *Fundamentals of Patent Law* (Hart Publishing 2007) pp. 65; Lionel Bently and Brad Sherman, *Intellectual Property Law* (3rd ed, Oxford University Press 2009) 339; Rudolf Kraßer, *Patentrecht* (5th ed, C.H. Beck Verlag 2004) 34; Rogge in: Benkard (ed) *Patentgesetz* (10th ed, C.H. Beck Verlag 2006) Einl [2]; see also: Sigrid Sterckx and Julian Cockbain, *Exclusions from Patentability – How far has the European Patent Office eroded boundaries* (Cambridge University Press 2012) 12.

⁸ F. Scott Kieff, ‘On the economics of patent law and policy’ in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar 2008) 4.

⁹ Dan L. Burk and Mark A. Lemley, ‘Policy Levers in Patent Law’ [2003] *Virginia Law* 1575, 1580.

¹⁰ Ansgar Ohly, ‘Geistiges Eigentum und Wettbewerbsrecht - Konflikt oder Symbiose?’ in Peter Oberender (ed), *Wettbewerb und geistiges Eigentum* (Duncker & Humblot 2007) 52.

¹¹ Article 28 TRIPS.

¹² Peter Drahos, *A Philosophy of Intellectual Property* (Dartmouth Publishing Company 1996) 123.

¹³ Kenneth J. Arrow, ‘Economic Welfare and the Allocation of Resources of Invention’ in National Bureau of Economic Research, *The Rate and Direction of Inventive Activity* (Princeton University Press 1962) 615.

The value of this logic of exclusivity for its declared goal is often challenged:¹⁴ Apart from issues of monopoly pricing¹⁵ and thus generally inhibiting innovation,¹⁶ it has been said that exclusive use of a patented invention may particularly impair cumulative innovation¹⁷: Often, innovation is built on a foundation provided by earlier innovators which is progressively improved by other innovators.¹⁸ The reality of today's research is that is based on a cumulative effort undertaken by many researchers: "Innovations build upon each other, and subsequent research activity is directed toward improvements or applications of previous discoveries."¹⁹ However, broad patent protection for the first innovator may impair the development of second generation products.²⁰

However, to solely focus on this mechanism of exclusivity would be short sighted. Patent law provides for a rich "tool box" that permits and encourages follow-on innovation. First, the full disclosure of the patented invention needs be mentioned with this regard. While not affecting the exclusivity of patent rights, it provides rivals with sufficient information to seek for solutions that would not fall within the scope of protection of the patent.²¹ Additionally, patent law provides for mechanisms or "policy levers"²² that specifically enable follow-on inventions.²³ Such measures are embodied internally within patent law. They can be guised as *ex-ante* restrictions of what subject matter may be patentable: Since patent protection can be sought for all inventions²⁴ the legislator has provided for statutory provisions which *ex-ante* excludes certain subject matter from patent protection. The excluded subject matter can range from scientific theories, artistic works to computer programs as such.²⁵ Additionally, exceptions to patent infringement are provided in many jurisdictions,²⁶ for instance for experimental uses. Finally, legal

¹⁴ See, for instance: James Bessen and Eric Maskin, 'Sequential innovation, patents, and imitation' [2009] *RAND Journal of Economics* 611, 612; F. Scott Kieff, 'On the economics of patent law and policy' in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar2008) 5-6.

¹⁵ Due to the exclusive right the right holder may demand monopoly prices for use of the patented invention - Joseph E. Stiglitz, 'Economic Foundations of Intellectual Property Rights' [2007-2008] *Duke Law Journal* 1693, 1719-1720.

¹⁶ "[M]onopolists can also increase their profit by discouraging innovation by rivals and raising rivals' discourage innovation by rivals and raising rivals' costs." - Joseph E. Stiglitz, 'Economic Foundations of Intellectual Property Rights' [2007-2008] *Duke Law Journal* 1693, 1710.

This rise of costs for competitors, so-called deadweight loss, is deemed to be "the main defect of intellectual property as an incentive mechanism." - Suzanne Scotchmer, *Innovation and Incentives* (The MIT Press 2004) 37.

¹⁷ Ove Granstad, 'Patents and Policies for Innovations and Entrepreneurship' in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar2008) 71.

¹⁸ Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative research and the Patent Law*, *Journal of Economic Perspectives* [1991] 29 - 41, 29.

¹⁹ Nancy Gallini and Suzanne Scotchmer, 'Intellectual Property: When is it the best Incentive System?', in Adam B. Jaffe, Josh Lerner and Scott Stern (eds), *Innovation Policy and the Economy- Volume 2*, (2002 MIT Press) 51-77, 65.

²⁰ Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative research and the Patent Law*, *Journal of Economic Perspectives* [1991] 29, 37-38.

²¹ "Disclosure would thereby stimulate and coordinate the R & D for of others, speed up differentiation and cumulation of results, speed up exploitation of new, promising areas, help to avoid duplication, and provide efficient technology markets." - Ove Granstad, 'Patents and Policies for Innovations and Entrepreneurship' in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar2008) 74.

²² Dan L. Burk and Mark A. Lemley, 'Policy Levers in Patent Law' [2003] *Virginia Law Review* 1575.

²³ Suzanne Scotchmer, *Innovation and Incentives* (MIT Press 2004) 156.

²⁴ Article 27 (1) TRIPS.

²⁵ See within European Patent law, Article 53 (2), (3) European Patent Convention. The rationales for such exclusions are various and relate to the specific of the excluded subject matter. If, for instance, discoveries and ideas were patentable the transaction costs would make it impossible for the users of the system to pay for them. Hence, basic research, as building blocks for further inventions are not patentable.

Furthermore, basic research is provided with government funding which diminishes the incentive by granting property rights - William M. Landes and Richard A. Posner, *The Economic structure of Intellectual Property Law* (2003 Harvard), 305-307.

²⁶ Lionel Bently identifies 33 types of exceptions within his report for the World Intellectual Property Organisation (WIPO) - Lionel Bently et al, 'Exclusions from Patentability and Exceptions and Limitations to Patentees' Rights' (WIPO Standing Committee on the Law of Patents, SCP/15/3 Annex I, World Intellectual Property Organisation 2010) 30 - 31.

remedies external to patent law in form of Competition or Antitrust Laws can diminish the adverse effects of economic monopolies created by patents.²⁷

As seen, patent law does not solely rely on the exclusivity paradigm to foster innovation since it provides for many mechanisms to aid follow-on inventions. The means to do so are various: Some leave the exclusivity of the patent holder untouched, others leave certain subject matter unpatentable for the sake of further innovation while others curtail the exclusivity of the patent right. This paper does not wish - nor does it have the scope - to provide for a definite answer to the complex question whether derivative invention is best accommodated by strong, weak or no patent protection at all.²⁸ However, it can be submitted here that the reason for limiting or “tailoring” intellectual property rights by curtailing the exclusivity provided by IP rights is sound from an economic perspective on which the patent system is based on.²⁹

With regards to follow-on inventions, Ghidini eloquently summarises the rationale of patent law:

[The Patent system shall] not merely reward[...] inventors in order to stimulate them to invent more, or to stimulate third parties to achieve independent inventive steps in turn, but more specifically rewarding the innovation already developed in such a way that the reward granted to the current inventor stimulates both that inventor to continue, and third parties to develop a subsequent innovation which might compete with the preceding one, thus also spurring on the first innovator, in a virtuous pro-innovation and pro-competition dynamic process even in the long term.³⁰

He adds:

In this sense, the grant of exclusive rights to that indispensable extent kills two birds with one stone: it rewards the patented innovation in such a way as to stimulate innovation by competitors, namely the development of *substitute* (independent) solutions as well as derivative solutions improving on prior patents.³¹

²⁷ The refusal to license a patented technology to a third party may constitute an abuse of a dominant position which is actionable under Article 102 TFEU. See: Valentine Korah, *Intellectual Property Rights and the EC Competition Rules* (Hart Publishing 2006) 134; Steven Anderman and Hedvig Schmidt, *EU Competition Law and Intellectual Property Rights - The Regulation of Innovation* (2nd ed, OUP 2011) pp. 93.

²⁸ This discussion has received wide scholarly interest among economists. While there is a mutual understanding that derivative use of patented inventions for follow up innovation is of benefit for technological progress, the means to achieve this are quite distinct.

Kobak provides a useful summary of the diverging views by academic scholarship. He states that scholars like Barton, Merges and Nelson have claimed that in industries where the innovative process is made up of an addition of incremental steps, “the follow-on innovator deserves more protection than the initial inventor and that incentives and opportunities for the follow-on should be strengthened.” On the other hand, he states that Scotchmer argued that the first inventor should solely be awarded while follow up inventors should not be able to obtain patents and that it would be more efficient if the latter had to “instead negotiate an ex ante licence with the initial inventor.” - James B.Kobak, *Intellectual Property, Competition Law and Hidden Choices between original and sequential Innovation*, [1998] Virginia Journal of Law and Technology 1998 [16].

²⁹ “[T]he optimum [according to economic wisdom] is to be found not in maximum protection, but in a form of reduced exclusivity somewhere between no protection and high level protection (assuming, of course that both no protection and too much protection may stifle creativity and innovation and that granting some form of intellectual property protection has a positive effect on creativity and innovation)” - Thomas Dreier, ‘How much ‘property’ is there in IP?’ in Helena R. Howe and Jonathan Griffiths (eds), *Concepts of Property in Intellectual Property Law* (Cambridge University Press 2013) 131. See also - F. Scott Kieff, ‘On the economics of patent law and policy’ in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar 2008) 34-35.

³⁰ Gustavo Ghidini, *Intellectual Property and Competition Law – The innovation Nexus* (Edward Elgar 2006) 24.

³¹ Gustavo Ghidini, *Intellectual Property and Competition Law – The innovation Nexus* (Edward Elgar 2006) 24

To summarise, patent theory permits the use of the patented invention as a spring board for further inventions. Patent law provides for manifold internal and external mechanisms that enable follow-on invention - some of which allow using the patented invention even without the authorisation of the right holder. The particular focus of this analysis is the mechanism for enabling improvement inventions by curtailing the exclusivity of patents through compulsory licensing.

1.2. The mechanism for enabling improvement patents

Patent law does not prohibit the patenting of an invention which is somehow derived from an already patented invention.³² Follow-on inventors can file for a patent for their derivative invention subject to surpassing the patentability criteria, such as novelty and inventive step. A problem arises where the follow-on inventor is not able to industrially or commercially practice it without the consent of the first patentee³³ since any unauthorised use may constitute patent infringement.³⁴ Such “dependency” of the prior patent is coined by Article 31 (l) of the TRIPS Agreement, whereby a patent is dependent where it “cannot be exploited without infringing another patent.”³⁵ To overcome this situation, the owner of the dependent improver patent may seek for a compulsory licence. In addition to dependency, such “improvements” may only be subject to this privileged treatment by compulsory licensing where they “involve an important technical advance of considerable economic significance.”³⁶ This means that “less significant” improvements may not fall within this ambit and the exclusivity of the patent right of the original patent holder prevails.³⁷

Often, however, compulsory licensing is not required in a situation of dependency since the follow-on inventor has the possibility to negotiate to license the patented invention for the payment of a royalty or lump sum. The subsequent inventor may then even cross-license a patent within his own portfolio for the use of the patent. Compulsory licensing, on the other hand, provides a solution in situations where licensing agreements cannot be established since the perspective licensor, i.e. the owner of the earlier patent, refuses to license the patent to the follow-on inventor. A dependent patent may then be used without consent but subject to remuneration of right holders under the conditions provided pursuant to the respective provisions within national law³⁸ (which are based on Article 31 (l) of the TRIPS Agreement).

In economic terms, such arrangements (i.e. the loss of exclusivity of a property right for remuneration) are referred to as liability rules. Since the loss of exclusivity is compensated, it can be argued that this would impair the general incentivizing function of patents to a lesser extent than unremunerated

³² Mark A. Lemley, ‘The Economics of Improvement in Intellectual Property’ (1997) *Texas Law Review* 998, 1008.

³³ Gustavo Ghidini and Emanuela Arezzo, ‘*Patent and Copyright Paradigms vis-à-vis Derivative Innovation: The case of Computer Programs*’ (IIC 2005) 161.

³⁴ Article 28 (1) TRIPS. The question of whether infringement is given, i.e. whether the subsequent dependent patent falls within the scope of protection of the first patent, depends on how this scope is defined - Eberhard Körner, ‘Äquivalenz und abhängige Erfindung [1970] GRUR 97.

³⁵ Joseph Straus, ‘Abhängigkeit bei Patenten auf genetische Information - ein Sonderfall?’ (1998) GRUR, 314, 316; Gustavo Ghidini, *Intellectual Property and Competition Law – The innovation Nexus* (Edward Elgar 2006) 36; Eberhard Körner, ‘Äquivalenz und abhängige Erfindung [1970] GRUR 97. The question of whether infringement is given, i.e. whether the subsequent dependent patent falls within the scope of protection of the first patent, depends on how this scope is defined.

³⁶ Article 31 (l) (i) TRIPS

³⁷ It could be argued that this is in line with Lemley’s considerations towards “significant” or “radical” improvements - Mark A. Lemley, ‘The Economics of Improvement in Intellectual Property’ [1997] *Texas Law Review* 998, 1008-1013.

³⁸ For instance, § 24 (2) of the German Patent Act (PatG), Section 48A (1)(b)(i) UK Patents Act 1977.

exceptions.³⁹ This shift from a property rule to a liability rule⁴⁰ through compulsory licensing is argued to be more efficient to internalize externalities “when the transaction costs of the market exchange are high.”⁴¹ In their seminal article, Calabresi and Melamed argue that “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.”⁴² The point then being that “[a]lthough intellectual property has provided mechanisms to facilitate consensual transfers, at times bargaining may be exceedingly expensive or it may be impractical to obtain enforcement against nonpurchasers, or other market flaws might preclude achievement of desirable consensual exchanges.”⁴³

Compulsory licenses are a recent phenomenon within patent law.⁴⁴ Within the international framework, the Paris Convention within its 1925 The Hague revision stipulated that compulsory licensing was possible for a failure to work the invention.⁴⁵ A modern international framework for compulsory licensing was established by the TRIPS Agreement. It provides within its Article 31 (l) the criteria necessary for issuing a compulsory licence with regards to a dependent invention:

(l) where such use is authorized to permit the exploitation of a patent (“the second patent”) which cannot be exploited without infringing another patent (“the first patent”), the following additional conditions shall apply:

(i) the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent;

(ii) the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the invention claimed in the second patent; and

(iii) the use authorized in respect of the first patent shall be non-assignable except with the assignment of the second patent.

The Luxembourg Convention 1975, which was used as a template for many national patent laws within Europe, mentioned the term dependent patents within its Article 48. Compulsory licenses for dependent inventions are therefore available in German and British Patent Law.⁴⁶ A compulsory licence can be applied for by a prospective licensee that is a holder of a patent and wishes to use his patent but cannot do so without infringing the patent with an earlier priority date.⁴⁷ The law allows him to seek for a compulsory license when he has futilely sought to seek a license from the patent holder with the earlier priority right. It has been said that the provision provides for the public interest by aiding technological

³⁹ Bently argues that exceptions can be applied more nuanced for policy reasons than the “all-or-nothing” approach provided by exclusions from patentability. He specifically mentions the fact that they can be remunerated, like the here discussed compulsory licenses - Lionel Bently, *Exclusions from Patentability and Exceptions and Limitations to Patentees' Rights* (2010) World Intellectual Property Organisation Annex I, p 65.

⁴⁰ Guido Calabresi and A. Douglas Melamed, ‘Property Rules, Liability Rules, and Inalienability: One view of the Cathedral’ [1972] *Harvard Law Review* 1089, 1105-1006

⁴¹ Avery Wiener Katz, *Foundations of the Economic Approach to Law* (Foundation Press, 1998) 91.

⁴² Guido Calabresi and A. Douglas Melamed, ‘Property Rules, Liability Rules, and Inalienability: One view of the Cathedral’ [1972] *Harvard Law Review* 1089, 1110

⁴³ Wendy J. Gordon, ‘Fair Use as Market Failure: A Structural and Economic Analysis of the “Betamax” Case and Its Predecessors’ [1982] *Columbia Law Review* 1600, 1613.

⁴⁴ Rosa Castro Ballradini, *Ex-Post Liability Rules in Modern Patent Law*, (Intersentia 2010) 68-69.

⁴⁵ Article 5A(4) Paris Convention for the Protection of Industrial Property.

⁴⁶ See footnote 39.

⁴⁷ Both , the UK and German provision do not verbatim speak of dependent patent but simply states the refusal to license by the patentee is the cause of the alleged prevention or hindrance of the exploitation of the latter patented invention. But this does incorporate the situation where “the projected exploitation would constitute an infringement of the first patent” - Cole P G and Jones S F (eds), *CIPA Guide to the Patent Act 1977* (8th edn, Sweet & Maxwell 2016) [48A.08] - in other words, dependency pursuant to Article 31(I) TRIPS.

advance⁴⁸ that lies in the use of the dependent invention. The German Federal High Court has held with this regard that applying compulsory licensing may be a tool to incentivise innovation.⁴⁹

The threshold for granting a compulsory licence for a dependent patent is quite high. It can only be granted where the second patent is dependent of the first one. Additionally, the invention would need to “demonstrate [...] an important technological advance of substantial economic significance compared to” the earlier patent. This term is subject to the individual assessment in the case at hand but “it will be quite difficult to establish this ground for the grant of a compulsory licence.”⁵⁰ Finally, the patent holder of the first patent can ask for a cross licence for the patent of the dependent subsequent patent.

1.3 Exploiting dependent inventions

Derivative uses of patented inventions can be successfully administered by the patent system. First and foremost, further research is generally possible in jurisdictions that provide for an experimental use exception. Additionally and focus of this part, the mechanism for providing compulsory licenses for dependent patent may serve as an additional tool to enable derivative use by allowing the use of dependent follow-on inventions. Such mechanisms are sound from an economic standpoint and ultimately make the patent system serve its ultimate purpose - to foster innovation.

The system for enabling derivative uses through compulsory licensing is, however, very burdensome and can involve high transaction costs. First, the conditions for granting a compulsory licence are high. The threshold might be that high in order to avoid a decreasing incentive to invent.⁵¹ Secondly, it should be borne in mind that compulsory licences, or, in other words, remunerated exceptions to the otherwise exclusive right of the patent holder, are to be granted under exceptional circumstances. The criteria that need to be provided constitute a substantial threshold for follow-on inventors. Furthermore, the mechanism requires the assessment of a judicial body that has to assess whether the criteria are provided⁵² which can be seen as a deterrent for prospective patent holders seeking the grant of compulsory licences.

2. Copyright and derivative works

The term “derivative works” refers generally to works that “derive from” an existing work, such as translations, adaptations, abridgments and (for musical works) transcriptions, variations, arrangements, and so on. Copyright law recognizes the inherent authorial nature of these works. In fact, the Berne Convention mandates to protect, as original works, “translations, adaptations, arrangements of music and other alterations of a literary or artistic work”.⁵³ Hence, for example, the translator of a novel in English enjoys full copyright protection on his English version of the novel. However, and more importantly, the Berne Convention adds that such protection shall be “without prejudice to the copyright in the original work”⁵⁴, which include the right to make and authorize translations,⁵⁵ as well as

⁴⁸ Benkard, *Patentgesetz* (10th ed C.H. Beck 2006) § 24 [22].

⁴⁹ BPatG GRUR 94, 98, 100-101.

⁵⁰ Cole P G and Jones S F (eds), *CIPA Guide to the Patent Act 1977* (8th edn, Sweet & Maxwell 2016) [48A.08].

⁵¹ The threshold might be that high avoid decreasing the incentive to invent - F. Scott Kieff, ‘On the economics of patent law and policy’ in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar2008) 43-44.

⁵² F. Scott Kieff, ‘On the economics of patent law and policy’ in Toshiko Takenaka (ed), *Patent Law and Theory: A Handbook of Contemporary Research* (Edward Elgar2008) 10.

⁵³ Berne Convention, art. 2 (3).

⁵⁴ BC, art. 2(3).

⁵⁵ BC, art. 8.

“adaptations, arrangements and other alterations of their works”.⁵⁶ This means that, in our example, the translator’s copyright does not replace, but rather coexists with, the copyright of the author of the novel.

The hurdle with derivative works in copyright lies precisely in this “coexistence” of (at least) two copyrights in the work. We will refer to these copyrights as “initial” and “subsequent” copyright. As we will see in the following, from a historical perspective copyright law has evolved from a generally accepted doctrine whereby the subsequent copyright and the initial copyright subsist *in different works*, to a system in which the subsequent copyright is *conflated with* the initial one *in the same work*. Otherwise put: copyright has moved from “no control” to “full control” over derivative works. In between these two extremes, there have been various attempts to limit the scope of the authorial control over derivative works, by imposing conditions and limitations on the exercise of derivative rights.

In the following, we discuss this peculiar evolution of copyright by dividing, schematically, copyright history into three phases. In its initial phase, copyright did not recognize derivative rights and, as a consequence, when a derivative work attracted copyright on its own merits, a new and independent work was deemed to have been created. In its second phase, copyright did recognize certain derivative rights, but the exercise and scope of these rights was subject to special conditions. Finally, in its third and current phase, derivative rights were fully assimilated to other exclusive rights, and the subsequent copyright was made *dependent upon* the initial one.

2. 1. Phase one: no derivative rights

In early copyright laws and jurisprudence, the scope of the author’s rights was generally limited to reproduction of the exact same work, or of colourable variations thereof. It did not extend to modified or altered versions of the work. One explanation is that copyright was still conceptually tied to the earlier print privilege system, which typically conferred exclusivity over the printing and reprinting of a given text.⁵⁷ However, this limitation on the scope of author’s right has also doctrinal justifications, flowing from the very definition of copyright’s subject matter and scope of protection. In particular, the foundation of author’s rights in authors such as Kant and Fichte provides sound arguments to conceptualize the exclusion of derivative rights from the scope of copyright.

a) *Different and distinct act of authorship*

In Kant’s analysis, the unlawfulness of book reprinting is inferred from the very nature of the “book”, which from a legal perspective is not to be regarded as a *thing* (however “intangible”, “immaterial” or even “spiritual”), but rather as the instantiation of an *act*, namely an act of authorship. According to Kant’s famous definition: “a book is a writing which represents a speech that someone, through visible signs of language, holds before the public”.⁵⁸ The author is precisely someone who speaks to the public in his own name, whereas the publisher speaks to the public in the name of the author. However, the publisher is only entitled to carry out this business (namely: the business of delivering the author’s speech to the public) to the extent that the author has given to him “a mandate to that effect”.⁵⁹ Now, the unauthorized publisher, too, speaks to the public in the name of the author, but without having a mandate

⁵⁶ BC, art. 12. In the following, we will occasionally refer to these rights collectively as “derivative rights” (see the seminal article of P. Goldstein “Derivative Rights and Derivative Works in Copyright”, 30 *Journal of the Copyright Society of the USA*, 209, 1982).

⁵⁷ O. Bracha, “Commentary on *Stowe v. Thomas* (1853)”, in *Primary Sources on Copyright (1450-1900)*, eds L. Bently & M. Kretschmer, 2008, www.copyrighthistory.org

⁵⁸ I. Kant, *Die Metaphysik der Sitten. Rechtslehre* [*The Metaphysics of Morals. Doctrine of Right*], in 8 WERKAUSGABE IMMANUEL KANT 404 (Wilhelm Weischedel ed., 1968).

⁵⁹ *Ibid.*, 404.

to this effect, and hence encroaching upon the business between the author and the publisher. Hence, the peculiar subject matter upon which the publisher can claim (not “possession”, but) certain entitlements to use is not just an act of speech as such, but a speech “in one’s own name”, namely in the name of the author. As soon as a third party modifies the speech, so that it can no longer be regarded by the public as *the author’s* speech, the publisher surrenders his legitimate entitlements. In Kant’s words:

But if one modifies a book written by someone else (abridging it, or adding to it, or reworking it) in such a way that it would actually be wrongful to bring it out under the name of the author of the original, then such a modification carried out in the publisher’s own name does not constitute reprinting and is therefore not forbidden. For here it is another author who is conducting through his publisher a different business to that of the first author, and this other author is therefore not encroaching in the latter’s business with the public. He is not presenting that author as speaking through himself, but rather an altogether different author. Neither can translation into a different language be treated as reprinting, for it is not the same speech by the author, even though the thoughts may well be the same.⁶⁰

The argument that modifications of the original work implying an altogether different act of authorships cannot be regarded as “reprinting” is implicit in the common law doctrines that English courts have applied in cases of non-literal copying until the end of 19th Century. These are the “colourable variations” and “*animus furandi*” doctrines. As expressed by Wiles J in the landmark *Millar v Taylor* case: “Certain bonâ fide imitations, translations, and abridgments are different [i.e. are not reprint]; and, in respect of the property, may be considered as new works: but colourable and fraudulent variations will not do”.⁶¹ Any variation which does not qualify as “colourable *and* fraudulent” may be considered a work attracting a new copyright that does not conflate with the copyright in the original work. While “colourable” implies an objective comparison between the plaintiff’s and defendant’s work, “fraudulent” has to do with the manner and purpose of the alteration. Has the plaintiff’s work been altered by effect of a genuine act of authorship? Or is the alteration directed only at disguising an act of copying?

b) Colourable variations

The doctrine found extensive application in 19th Century, both as a test for infringement in cases of non-literal copying, adaptations and other alterations, and as a test for copyright subsistence in cases of works based upon pre-existing works. In these second cases, the supposed “colouring” is less aimed at disguising an act of copying (so to avoid infringement) than it is aimed at mimicking an original act of authorship (so to attract copyright). A good example of this second line of cases is *Black v Murray and Son* (1870), in which the plaintiffs claimed copyright in a series of annotated editions of Walter Scott’s works, in which copyright had expired. In denying in part the claim, the court argued that:

it will not create copyright in a new edition of a work, of which the copyright has expired, merely to make a few emendations of the text, or to add a few unimportant notes. To create a copyright by alterations of the text, these must be extensive and substantial, practically making a new book. With regard to notes, in like manner, they must exhibit an addition to the work which is not superficial or colourable, but imparts to the book a true and real value, over and above that belonging to the text.⁶²

It is in particular in this second meaning, namely as a test for copyright subsistence, that the “colourable variations” doctrine has survived until now. In the *Interlego* case, a benchmark for copyright

⁶⁰ I. Kant “On the Unlawfulness of Reprinting”, Berlin (1785), *Primary Sources on Copyright (1450-1900)*, eds L. Bently & M. Kretschmer, www.copyrighthistory.org.

⁶¹ *Millar v. Taylor*, (1769) 4 Burr. 2310, 98 Eng. Rep. 205 (K.B.) (Willes J).

⁶² *Black v Murray and Son* (1870) 9 M. 341 (Lord Kinloch).

subsistence under UK copyright law, the Court, citing approvingly *Black v Murray*, denied copyright subsistence in artistic works that consisted in re-drawing of earlier drawings.⁶³

c) *Animus furandi*

To constitute an infringement, the alteration must be both colourable and “fraudulent”. The fraudulent element has been conceptualized in the 19th Century jurisprudence as “*animus furandi*”. A classical formulation of this principle is the one of Lord Ellenborough in *Cary v. Kearsley* (1804):

a man may fairly adopt part of the work of another: he may so make use of another’s labours for the promotion of science, and the benefit of the public: but having done so, the question will be, Was the matter so taken used fairly with that view, and without what I may term the *animus furandi*?⁶⁴

The doctrine has been extensively applied in cases of abridgments as a test to determine whether the defendant’s work was an infringing reprint or a (non-infringing) “fair abridgment”.⁶⁵ More in general, the doctrine found application in the early “fair dealing” cases, as one of the factors to be considered in the assessment of fairness.⁶⁶ Unlike the “colourable variations” doctrine, which survived until now—although *not* as a test for infringement, but as a test for subsistence—*animus furandi* has been progressively abandoned in the UK jurisprudence.⁶⁷ The notion was eventually explicitly dismissed by the Court of Appeal in *Baigent v Random House* (2007), where Lloyd L.J. said:

I cannot see how the intention with which any copying was done is or can be legally relevant to the issue whether the copying is an infringement [...] It seems to me that *animus furandi* is a red herring in modern English copyright law, and that it should not be invoked in future.⁶⁸

Although it is certainly correct, in point of law, that infringement does not depend on the defendant’s intention, we cannot help but observe that the notion of *animus furandi* does not correspond squarely to an “intention of stealing”. *Animus* does not refer primarily to the subjective motive of the act, but rather to its inherent meaning and purpose. Therefore, the question is not whether the defendant willingly aimed at robbing from the plaintiff’s work, but whether its act bore in itself such a trait, namely the characteristic of a robbery.⁶⁹ The relevant difference is not between good and bad intentions, but between authorial and non-authorial alterations of the original work.

The doctrines of “colourable variations” and *animus furandi* are premised on an understanding of copyright as a law protecting acts of authorship. When the author of the derivative work engages in an act of authorship, a different work is created and a distinct copyright subsists. The question to be addressed in these cases is always whether “there is something in the nature of authorship”⁷⁰ in the defendant’s work.

2.2. Phase two: Derivative rights subject to special conditions and limitations

⁶³ *Interlego A.G. v Tyco Industries* [1988] 3 W.L.R. 678.

⁶⁴ *Cary v Kearsley* (1802) 4 Esp. 168.

⁶⁵ *Campbell v Scott* (1842) 59 E.R. 784, *Sweet v Benning and Lovell* (1855) 139 E.R. 838, *Edward Caird v William S. Sime* (1885) 13 R. 23. See D. Vaver “Abridgments and abstracts: copyright implications” *E.I.P.R.*, 1995, 17(5), 225-235.

⁶⁶ *Jarrold v Houlston* (1857) 3 K & J 708. See M. De Zwart “A historical analysis of the birth of fair dealing and fair use: lessons for the digital age”, *Intellectual Property Quarterly* 2007, 1, 60-91.

⁶⁷ See L. Bently, “Sampling and copyright: is the law on the right track?” *Journal of Business Law*, 1989, Sep, 405-413.

⁶⁸ *Baigent v The Random House Group Ltd* [2007] EWCA Civ 247, § 97.

⁶⁹ We intentionally avoid the term “stealing”, mindful of T.S. Eliot’s famous caveat: “Immature poets imitate; mature poets steal” (T.S. Eliot, “Philip Massinger”, in *The Sacred Wood: Essays on Poetry and Criticism*, Dover Books, 2000, p. 123).

⁷⁰ *Wood v. Boosey* (1867-68) L.R. 3 Q.B. 223 (Bramwell B.).

Commentators have variously attempted to rationalize the specificity of rights such as translation and adaptation vis-à-vis the “core” rights of publication and reproduction. A leading Italian commentator of the early 20th Century, summarizing scholarship and jurisprudence of the civil law tradition, explains that the difference is both logical and legal and it is one between rights having an *actual and present* character — i.e. rights affecting the work as it actually exists now — and rights bearing a *virtual and future* value, since they apply to the work as it will possibly be modified, transformed or incorporated in another work. The distinction is illustrated with an example:

To an extent, the right to adapt the work can be paralleled with the entitlements of the landowner over the air above and the ground below his own plot of land; until he does not engage in construing or digging he has only the virtual right of carrying out those activities and the actual right of preventing others from carrying them out. This peculiar logical aspect of the right to make adaptations of the work explains why legislators have made its exercise subject to special conditions and limitations.⁷¹

The principle that derivative rights should be subject to special conditions and limitations as to their application and scope is one of the dominant features of copyright legislations of the second half of 19th Century. As a matter of fact, when rights such as those of making translations, abridgments, compilations, adaptations, and (for musical works) transcriptions and variations, made their first appearance in statutes,⁷² they were normally accompanied by conditions that limited the authorial power of control over these uses. These included specific formalities, time constraints (*delai d’usage*), limitations as to the duration and the exclusivity of the right. We discuss these conditions separately in the following.

a) Formalities

In times where copyright subsistence was generally subject to formalities, the protection of derivative rights was, too, occasionally conditioned upon special formalities. The most commonly applied was the compulsory notice of reservation for translations, musical arrangements and other adaptations. In essence, the author could benefit from a derivative right in relation to his work on condition that the right was expressly reserved, for instance in the form of a notice of reservation to be included in the front page of the first published edition. In this vein, when the right of translation and an extended right of dramatization were first introduced in US copyright law in 1870, both rights were conditional to the author’s reservation.⁷³ The same applied in most central-European copyright laws of the mid-19th Century with respect to the right of translation⁷⁴ and musical arrangement.⁷⁵ In these last cases, the requirement of reservation was also frequently accompanied by a further condition that limited the enjoyment of the reserved right to a given time frame.

b) Time limit on the use of the right (delai d’usage)

⁷¹ Eduardo Piola-Caselli *Trattato del diritto d’autore* (Napoli: 1907), 492.

⁷² By the second half of 19th Century and beginnings of 20th (M Borghi *Copyright Beyond the Right to Copy: Translations, Adaptations and Creative Reworking in 19th Century Law*, presentation at the IP Scholars Conference, Stanford University, 7 August 2008 *Copyright Beyond the Right to Copy*. Available at SSRN: <http://ssrn.com/abstract=2370028>). For an historical overview see Daniel Gervais ‘The Derivative Right, or Why Copyright Protects Foxes Better than Hedgehogs’, 15 *Vand. J. Ent. & Tech. L.* (2013) 785.

⁷³ US Consolidation Act (1870), sec. 86: “...and authors may reserve the right to dramatize or to translate their own works”. Primary sources.

⁷⁴ Prussian Copyright Act (1837), art. 4(b); Austro-Hungarian Copyright Act (1846), art. 5(b); German Copyright Act (1870), art. 6(c); Dutch Copyright Act (1881), art. 5(b); Austro-Sardinian Bilateral Treaty (1840), art. 3. See Ch. Lyon-Caen and Paul Delalaine, *Lois françaises et étrangères sur la propriété littéraire et artistique*, 2 vols (Paris: Cercle de la Librairie etc.; F. Pichon Éditeur, 1889).

⁷⁵ Austro-Hungarian Copyright Act (1846), art. 6.

Under a *dealai d'usage* provision, the author of the original work benefits from certain derivative rights on condition that he makes use of the right within a given time frame after the publication of the work. Delaying the exercise of the right beyond such a deadline would cause the author to lose the relevant right. So, for example, in the Austro-Sardinian Bilateral Treaty of 1840, which is the first international agreement on copyright, authors who reserved the right to translate their work in one member state had to publish the translation within six months from the initial publication, in order to conserve their rights.⁷⁶ In some national laws, the time limit to use the translation right varied from one year⁷⁷ to three years,⁷⁸ to five⁷⁹ or ten years,⁸⁰ occasionally with special exemptions for “serial novels” and other large works published in sequential instalments. The requirement applied also in contexts where the right to translate was automatic, i.e. without notice of reservation, such as under the Swiss and Italian copyright statutes, and, most notably, under the Paris Additional Act of the Berne Convention, 1896.⁸¹ The amendment introduced by the Paris Act was the result of a compromise between the majority of countries who favoured the complete assimilation of translation rights to all other author’s exclusive rights and countries who opposed such assimilation. The *dealai d'usage* principle offered an acceptable compromise, in that the translation right was given the same duration of all other rights, subject to the qualification that the right would be lost if it had not been exercised within ten years from the first publication in one member state.⁸²

c) Limited duration and scope

By the time of the preparatory works for the Berne Convention, in most of the countries where translation right or other derivative rights were statutorily recognized, the rights had shorter duration than other exclusive rights.⁸³ More importantly, certain derivative rights were given narrow scope; for instance, arrangement of musical compositions fell outside the scope of the right to make arrangements if they constitute “an autonomous composition on its own merits”,⁸⁴ or if they cause the original work to be “transformed into a new work”,⁸⁵ or if they constitute “variations, studies, phantasies, pot-pourri and other adaptations which can qualify as original works”.⁸⁶ In some jurisdictions, the system evolved into schemes of “paying public domain” for certain categories of derivative works, like dramatization and musical adaptations, and for other secondary uses of copyright works like public performances of dramatic works or reproduction of certain categories of drawings.⁸⁷

⁷⁶ Austro-Sardinian Bilateral Treaty (1840), art. 3.

⁷⁷ German Copyright Act (1870), art. 6(c)

⁷⁸ Dutch Copyright Act (1881), art. 5(b).

⁷⁹ Swiss Act 1883, art. 2.

⁸⁰ Italian Act 1865, art. 12.

⁸¹ Berne Convention, Paris Additional Act (1896), art. 12. See S. Ricketson & J. Ginsburg *International Copyright and Neighbouring Rights. The Berne Convention and Beyond* (Oxford, OUP 2010), § 11.29-11.32.

⁸² “Authors [...] shall enjoy [...] the exclusive right of making or authorizing the translation of their work during the entire term of their right over the original work. Nevertheless, the exclusive right of translation shall cease to exist if the author shall not have availed himself of it, during a term of ten years from the date of the first publication of the original work, by publishing or causing to be published [...] a translation in the language for which protection is to be claimed” Paris Additional Act, 1896, amendment to Art. 5.

⁸³ For example under the Austrian Act (1895) the right in translations expired after 10 years from the publication of the translation, whereas the reproduction right lasted for the life of the author plus 30 years.

⁸⁴ Hungarian Act 1879, art. 46.

⁸⁵ Italian Act 1882, art. 3.

⁸⁶ Norwegian Act 1876, art. 13.

⁸⁷ Austrian Imperial Patent 1846, Swiss Act 1883.

In the aftermath of the Berlin's revision of the Berne Convention, adaptations rights were gradually assimilated to other "core" rights in terms of duration, scope and requirements for protection.⁸⁸

2.3. Phase three: Derivative rights fully assimilated to other rights

The limitations that, according to commentators of late 19th Century and early 20th Century, derive from the very logic of derivative rights, were progressively removed by legislators and those rights morphed into fully-fledged proprietary entitlements with no special conditions for its exercise. A key role in this process was played by the Berne Convention and its subsequent revisions.

The right to make adaptations was introduced in the Berne Convention 1886, initially as a special qualification of the reproduction right and with a narrowly defined scope.⁸⁹ The Convention also introduced the right to make or authorize translations, subject to the rule of 10 years *delai d'usage*.⁹⁰ In the subsequent revisions,⁹¹ derivative rights expanded in two directions: scope of protection and scope of application. While the abolition of limitations and special conditions had a welcomed effect of simplifying the law, the progressive inclusion of new forms of derivatives into the scope of the right made the language of the statutes overly intricate.⁹²

As a result of this evolution, the peculiarity of copyright vis-à-vis patent law is that the scope of protection extends now beyond the work that initially attracted copyright to reach the indefinite number of works that can possibly be "derived from" the initial work, including works that can be in turn derived from derivative works. So, for example, the initial copyright in a novel extends not only to its English translation, but also to a screenplay based upon the translation, to a film based upon the screenplay, and so on. In principle, the power of control over all possible derivations extends to the whole chain of modifications that fall within the statutory definition of derivative works.

This mechanism is peculiar to copyright and does not apply to other intellectual property rights. The main issue in this mechanism is the relationship between the two (or more) rights that coexist in a derivative work. In essence, the question is: do these rights have, in principle, an equal standing, or rather one (namely: the author's right) has a primacy over the other(s) (namely: the "derivator(s)'"s rights)? In other words: are the rights of the derivator *concurrent* or *dependent* rights? We argue that the rights should be interpreted as concurrent instead of dependent. We also argue that this interpretation is not only

⁸⁸ At the Berlin Conference (1908), the translation right was extended to the whole term of protection (art. 8) and other forms of adaptation were equated to reproduction (art. 12, modified in the current form with the Brussels Act, 1948). By the time of the Berlin revision, most rights in adaptation were already given full protection in some signatory countries, like Belgium, Germany, Spain.

⁸⁹ Berne Convention 1886, art. 10 ("The following shall be specially included amongst the illicit reproductions to which the present Convention applies: unauthorized indirect appropriations of a literary or artistic work, of various kinds, such as adaptations, musical arrangements, etc., when they are only the reproduction of a particular work, in the same form, or in another form, without essential alterations, additions, or abridgments, so as not to present the character of a new original work"). For a thorough discussion of the historical backgrounds see S. Ricketson & J. Ginsburg *International Copyright and Neighbouring Rights. The Berne Convention and Beyond* (Oxford, OUP 2010), § 11.28-11.37.

⁹⁰ "Authors [...] shall enjoy [...] the exclusive right of making or authorizing the translation of their works until the expiration of ten years from the publication of the original work in one of the countries of the Union." (art. 5).

⁹¹ Paris Additional Act (1896), Berlin Act (1908), Rome Act (1928), Brussels Act (1948) and Stockholm Act (1967).

⁹² For example, the Berlin Act 1908 that extended the full-term protection to the making of translations, defined "adaptations" as follows in its article 12: "unauthorized indirect appropriations of a literary or artistic work, such as adaptations, musical arrangements, transformations of a novel, tale, or piece of poetry into a dramatic piece and *vice versa*, etc., when they are only the reproduction of that work, in the same form or in another form without essential alterations, additions, or abridgments, and do not present the character of a new original work".

preferable from a doctrinal perspective, but is also compatible with the “without prejudice” proviso Berne Convention and is therefore allowed under international obligations.

a) *Scope of derivative rights: minimum requirements under international obligations*

Under the Berne Convention, authors of literary or artistic works have the exclusive right of authorizing the translation⁹³ as well as “adaptations, arrangements and other alterations”,⁹⁴ including specifically the cinematographic adaptation.⁹⁵ These derivative rights are recognized to authors of all categories of protected works.⁹⁶ Moreover, art. 10(1) of the TRIPS Agreement requests that computer programs are protected as literary works under the Berne Convention, which means that all the derivative rights granted to authors of literary works under the Convention apply also *mutatis mutandis* to computer programs. The only category of works that do not attract derivative rights are databases and compilations; these receive protection under art. 10(2) of TRIPS, but not as “literary works”, and are therefore excluded from the applicable Berne’s provisions on derivative rights.⁹⁷

The word “other alterations” in art. 12 suggests that the scope of protection is relatively open-ended and may include other, more specific forms of derivative works, such as the conversion of a novel into comic strip or illustrated children’s book.⁹⁸ “Alteration” seems to imply a kind of modification or variation *of the work*, and namely of its expressive form, so that the initial work is presented in a form and/or in a medium different than the original one.⁹⁹ In this respect, the definition of “derivative work” in the US copyright law—“work based upon one or more preexisting works”¹⁰⁰—, and the relevant exclusive right granted to copyright owners “to prepare derivative works based upon the copyrighted work”¹⁰¹ seem much broader in scope than the Berne Convention’s parallel notion. As a matter of fact, a work can be “based upon” another work in a number of ways without having necessarily to “alter” it, and US courts have applied sec. 106(2) in many cases where the defendant’s work did not copy nor altered anything of the plaintiff’s work. These include the making of film’s sequels or prequels, videogames based on movie’s characters, software that adds new functionalities to existing software and videogames, as well as the inclusion of a pre-existing work into a new work.¹⁰² Not all these works find coverage under the open-ended definition of the Berne Convention and as a matter of fact are likely to fall outside the scope of the right to make adaptations in many jurisdictions.¹⁰³ It can be plausibly argued that the US derivative rights doctrine *exceeds* (unnecessarily) the minimum standards of protection required by international

⁹³ BC, art. 8.

⁹⁴ BC, art. 12

⁹⁵ BC, art. 14.

⁹⁶ Under art. 2(1), “literary and artistic works” covers a wide range of works, including musical works, cinematographic works and photographs.

⁹⁷ However, under UK copyright law the making of an adaptation of a databases is explicitly restricted: see CDPA 1988, sec. 21(3)(ac) (“in relation to a database, [adaptation] means an arrangement or altered version of the database or a translation thereof”).

⁹⁸ As specified in the UK statute: see CDPA 1988, sec. 21(3)(iii).

⁹⁹ See the discussion of “alteration” in S. Ricketson & J. Ginsburg *International Copyright and Neighbouring Rights. The Berne Convention and Beyond* (Oxford, OUP 2010), § 11.37.

¹⁰⁰ 17 U.S.C. § 101.

¹⁰¹ 17 U.S.C. § 106(2).

¹⁰² See a thorough discussion of these and other examples in P. Samuelson “The Quest for a Sound Conception of Copyright’s Derivative Work Right”, 101 *The Georgetown Law Journal* (2013), part V.

¹⁰³ A comparison between jurisdictions (which is outside the scope of this paper) should consider the protection of derivative works within the broader picture of the copyright system and other forms of protection. For instance, in the UK, the narrow scope of the right in adaptations is compensated by other forms of protection, namely passing off (which can be used to control derivative works that fall outside the scope of the right in adaptations, such as sequels and characters). In the US, the broad scope of derivative rights is balanced by the equally broad scope of the fair use defence (17 U.S.C., § 107).

obligations, and that a narrow interpretation of the statutory definition of derivative works would be more in line with international standards.¹⁰⁴

b) Copyright subsistence in “unlawful” derivative works

Under article 2(2) of the Berne Convention, derivative works “shall be protected as original works without prejudice to the copyright in the original work”. The first relevant question with respect to art. 2(2) is whether the “without prejudice” proviso implies that only derivative works authorized by the author of the original work are protected by copyright. Otherwise put, the question is whether copyright subsists or not in “unlawful” derivative works.

The question, which has received divergent responses from national states,¹⁰⁵ might seem of little practical importance, since in any case the author of a derivative work cannot exploit his work absent the authorization of the author of the pre-existing work. So, if there is no such authorization, it would not make much difference to have copyright in a work which cannot be used in any way.

However, there are at least two reasons why subsistence does matter. First, copyright subsistence is the pre-requisite in any actions for infringement. Suppose a translator makes a translation of a novel without asking permission from the author of the novel. Then suppose someone copies the translation without asking permission from neither the translator nor the author, but the original author does not take any action against the infringer: is the translator banned from bringing an action himself, on the ground that no copyright subsists in his translation in the first place? Second, copyright subsistence is also the necessary condition to any transfer of rights. Although derivative works are almost inevitably inseparable from the pre-existing work, so that the two works cannot be used or exploited separately, transfer of rights normally *is* distinct. So, in our example: would the unauthorized translator be entitled to negotiate a transfer of his rights in the translation to a publisher, *separately and independently* from the rights of the author of the original work (for instance, in view of exploiting the translation as soon as copyright in the original work expires)?¹⁰⁶

The “without prejudice” proviso made its appearance in the text of the Convention in the Berlin revision (1908), where for the first time derivative works other than translations were included in the list of subject matter protected by the Convention as “literary and artistic works”. In the previous text, protection was given to “lawful translations”,¹⁰⁷ and no mention was made to other derivative works such as adaptations and musical arrangements.¹⁰⁸ So, when art. 2 (protected subject matter) was amended to include translation and all other derivative works under the same umbrella, the adjective “lawful” was deleted and replaced by “without prejudice to the rights of the author of the original work”¹⁰⁹—which is substantially the wording that features in today’s text.¹¹⁰

¹⁰⁴ For a critique of the ‘open-ended’ approach to the right to prepare derivative works see P. Samuelson “The Quest for a Sound Conception of Copyright’s Derivative Work Right” (arguing that sec. 101 should not be read as covering instances that are not at least “analogous” to one or more of the exemplary derivatives in the statutory definition).

¹⁰⁵ No copyright in infringing derivative works in the US. Compare 17 U.S.C., § 103(a) and case law of the UK (*Redwood Music v Chappell*: copyright subsists in a musical arrangement, even though it infringes the right in the original composition). See Copinger.

¹⁰⁶ To publish the translation, the publisher will have to secure the author’s translation rights in the original work *and* the translator’s rights in the translation. The issue of copyright subsistence in unauthorized translations (and derivative works in general) is connected to the question of whether the rights of the translator are *dependent* or *independent* from those of the author, which is discussed in the following section.

¹⁰⁷ Berne Convention 1886, art. 6.

¹⁰⁸ These derivative works were only addressed under infringement (in art. 10), but not under subsistence.

¹⁰⁹ Berne Convention, Berlin Act (1908), art. 2.

¹¹⁰ BC, art. 2(2). On the genesis of art. 2 see S. Ricketson & J. Ginsburg *International Copyright and Neighbouring Rights. The Berne Convention and Beyond* (Oxford, OUP 2010), § 8.77.

Under the old provision, protection was not afforded to “unlawful translation”, whereas no such qualification was imposed on other categories of works. So, for instance, “unlawful” engravings were protected, but not unlawful translations. The rationale of this special qualification for translations is pretty clear: in an international treaty, which was meant to address cross-border uses of copyright works, it was felt that unlawful translations could not be given a status of protected works—however useless this recognition may be in the absence of authorization from the author. The same rationale does not seem to apply to other derivative works, though. The “without prejudice” proviso does not aim at removing protection from unlawful derivative works, but at ensuring that the exercise of copyright in derivative works does not encroach upon the exercise of copyright in the original work. “Without prejudice” simply means: copyright in the subsequent work *does not replace* copyright in the initial work. Nothing more it is said as to the relationship between the two copyrights.

c) *Concurrent exercise of rights*

The “without prejudice” proviso has another important effect on the rights that conflate in a derivative work, namely the right of the author of the initial work and those of the author of the derivative. Since the (exercise of the) latter must be “without prejudice” to the former, it might be easy to conclude that the right in the derivative is *dependent upon* the right in the original work. This is certainly how the relationship between the two rights has been interpreted by legislators and jurisprudence, in particular in common law jurisdictions.¹¹¹ However, if the “without prejudice” proviso—as we suggest—does not preclude the subsistence of rights in derivative works, but only limits their exercise, it can be equally reasonable to think of the two sets of rights as *concurrent*, albeit in a more limited sense than in patent law. This would allow, for instance, the author of a derivative right to exploit his rights *autonomously* and *independently* from the rights in the initial work, even when the derivative work cannot be used without infringing the rights of the author.

Conclusion

This paper wanted to explore whether the system applied for improvement patents based on concurrent rights and compulsory licensing could be in principle transplanted into copyright law. The current legal framework of copyright law would not permit the adoption of compulsory licenses for derivative rights. The Berne Convention establishes that derivative rights must be protected as *exclusive* rights, and a system of compulsory licensing would not respect this minimum requirement. Even if such a transplant were possible, it would hardly be desirable due to the costs it would incur. Furthermore, it has been argued that the system enabling the commercialisation of improvement patent only privileges significant improvements. This begs the question how derivative works could be qualified as “significant improvements” and which parameters are being applied. Finally, it could be argued that copyright law does already privilege certain derivative works, such as parodies, by exempting them from copyright infringement. In this case, the derivative work is not anymore dependent on the initial work.

The comparison with the situation within patent law was not entirely futile. What could be reaffirmed within copyright law is the idea that authors of derivative works are indeed holders of the copyright for their creations. First, this would enhance their position to negotiate with the author of the initial work. Additionally, it should be noted that while derivative *works* are clearly dependent on the initial work, this does not necessarily imply a dependance of the respective *rights*. As we have tried to demonstrate, the current copyright framework is compatible with an understanding of these coexisting rights as *concurrent*, instead of dependent. This approach would enhance the position of the author of the derivative work vis-à-vis third parties, without weakening the position of the initial author. Authors of derivative works

¹¹¹ See S. Ricketson & J. Ginsburg, § 11.35

should be able to manage the rights in their original works to their full extent, in a way which approximates the way in which owners of improver patents can exploit their legal entitlement.