The Diminishing Public Domain with Regard to the Copyright in the Digital Age

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ABSTRACT

This work begins with a crude observation of copyright developments and focuses on discussing the recent expansion movement of copyright regime in response to the digital age. Then in the next chapter, I will begin to discuss the meaning and the importance of the public domain in the copyright regime. While arguing a positive definition of the public domain is needed, the attempt to recognize and emphasize its importance is also urgent. My conclusion is that, the diminishing public domain in the name of fighting the digital technology is not justified, particularly when considering the very purpose of the existence of the copyright regime is to ensure that a good balance is struck between the public and private interests.

Finally, following the opinions formed in the previous chapters, if the expansion of copyright is not a panacea to cure the digital syndrome, what should we do when facing the ferocious digital revolution? I will give a brief introduction on the current technological and legal solutions, and conclude that there is no conflict between the usage of the law and technology.

Keywords: Copyright expansion, copyright regime, digital piracy, public domain, public interest

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1. The expansions of copyright protections

Having a glance at the history of copyright development, we will discover that copyright is continually expanding.

In terms of subject matters that fall within the scope of copyright, the first English copyright legislation, the Statute of Anne in 1710 was mostly aimed at books. But today copyright has expanded through a combination of new legislation and broad interpretations by the courts. Their intention is to protect almost anything written, drawn or expressed in any way against copyright: from computer programs to music, from paintings to sculptures, from literature to drama.¹

In terms of the duration of copyright protection, the Statute of Anne granted a maximum 28 years to copyright holders. Since then the protection terms have increased through the passage of new legislations. In the 1988 Act it is specified as life of the author plus 50 full years for literature, dramatic, and musical works and a flat 50 years for computer – generated films, records, and broadcasts. Nevertheless, as a result of adopting the latest EU Copyright Directive, which is aimed at harmonizing various copyright protection terms within Member States, it has imposed a life plus 70 years protection term into the first category of works, bringing all Member States into line with the domestic law of Germany. As one of the familiar phenomena in the harmonization of copyright, is all about levelling up rather than levelling down.

The biggest changes on copyright were taken throughout the nineteenth century, when the Berne Convention for the Protection of Literary and Artistic Works was made to extend the protection term to the life of author plus 50 years as well as to enlarge the range of works protected. As Brad Sherman suggests, "a number of the traits associated with the copyright law that were imagined in the nineteenth century

¹ David Vaver, "Intellectual Property: The State of the Art"., 2000 LQR 621, at p623

continue to shape contemporary law." Over a century the standard set by the Berne Convention remained unchallenged, but from mid-to late-1990's, the second movement of copyright expansion started. During this time the rights for copyright holders were created and the protection term of life of the author plus 70 year was added in response to the advent of digital technology and the Internet.

In 1996, the period of copyright was extended, firstly in some countries in Europe then in America, to the life of the author plus 70 years. Another example is the Digital Millennium Copyright Act enacted in US in 1998, its legal framework of liability of ISPs was widely adopted in the EU E-commerce Directive³ and subsequent Copyright Directive⁴ which will be further discussed in this chapter.

The patent requires registration whereas most of the copyright protections exist while the works are being expressed. After a time and effort consuming procedure to complete the registration, in order to prove its novelty, the patent protection would grant maximum of 25 years protection while the copyright could last one and half centuries. One of the most accepted reasons of the second copyright expansion movement are the challenges posed by the digital age. During the digital revolution and the boom of the Internet in late 1990's, where copying cannot be easier and at such low cost, if not for free, copyright advocates argue that copyright protection should reach out in proportion to the easiness of copying. In reality the copyright protections have been expanded to tackle the digital technologies which diversify and multiply copyright infringement activities.

Indeed the digital technology, which can reproduce as many copies as possible at low cost, has a far greater impact on copyright regimes than

² Brad Sherman, "Remembering and forgetting" Ch11 of *The making of Modern Intellectual Property Law*, 1999, CUP, at p219

³ Directive 2000/31/EC

⁴ Directive 2001/29/EC

any other intellectual rights. However, one cannot help wondering, since the expansion of the copyright regime has inevitably resulted in the diminishing of the public domain, it's may be high time to review the concept of the public domain without interventions of commercial propaganda when there is full of copyright expansion rhetoric.

Therefore in this article, I mainly focus on the changing face of the public domain along with the developments of copyright protections expansion. And because among all the digital technologies used to operate copyright infringements, the so-called MP3 technology has thrown the most cases for us to examine what is going on with the copyright regime in the digital age. Therefore, throughout this whole article, MP3 will taken as an example to discuss the changing face of the public domain and whether it's justifies.

2. The diminishing public domain

As the copyright protections are expanding in the digital age, the territory of the public domain is diminishing. In this chapter I will argue that the public domain is significant to ensure a good balance is struck between the public and private interests and that this is necessary to fulfil the ultimate promise made by the copyright regime. Therefore, it is urgent to find a positive definition for the public domain to remind people's memory about its importance in today's world that is full of one-sided rhetoric for copyright expansion.

1 A positive definition for the public domain needed?

Traditionally, the public domain is defined negatively as works which are not subject to intellectual property rights⁵. Therefore, premised

⁵ William Van Caenegem, The Public Domain: Scientia Nullius, EIPR, 2002, 24(6), p324-330,retrieved from Westlaw electronic database website, at p1

on the legal frames of copyright, we can define those that fall outside the scope of copyright are in the public domain as the follows⁶:

- 1 Expiration of copyright, works with copyright for which the term of protection has run out.
- 2 Forfeiture of copyright, works that are unclaimed or have been forfeited, lack of required formalities.
- 3 Other works categorically excluded from copyright, falling outside the scope of the copyright protection.

Based on this mutual connection, as the copyright system develops and grows, the sphere of the public domain changes in accordance to the boundaries of copyright. For example⁷, in 1790, copyright holders were only granted exclusive rights to print, reprint, publish, or vend the work. So there was no fair use principle to prevent works from copyright monopolistic protection because there was no need to do so. Any use other than printing, reprinting, publishing or vending was justified in the public domain. In a similar vain but in the opposing version, followed by the introduction of Copyright Act of 1909(USA), compulsory licenses were issued to grant copyright protection to new areas which the Supreme Court had not held covered by copyright, namely that they were originally in the public domain⁸.

As we can see there is an inverse relationship between the copyright system and the public domain, and we used to define the public domain in a negative way. But along with the contemporary expansion of the copyright, the public domain is diminishing "like the mighty rain –forest of South America"⁹. Therefore we may ask, is it better to define the

7 This example used in Edward Samuels, The public domain in copyright law, 41 Journal of the copyright society 137(1993), retrieved from http://www.nyls.edu/samuels/copyright/beyond/articles/public.html, at p5

⁶ Ibid.

⁸ Ibid

⁹ Jeremy Philips, The Diminishing Domain, E.I.P.R. 1996, 18(8), 429-430, retrieved from Westlaw electronic database website.

public domain positively instead of being shadowed by the copyright? Some argue that it is not necessary and there are substantial difficulties in creating a positive definition for the public domain in each of the categories of the current public domain¹⁰.

In the category of the public domain through expiration of copyright, as stated by Samuels, despite of "In fact, in the 200years history of American copyright, the duration has been extended from a term of 14 years in the copyright act of 1790 to the term of the life of the author plus 50 years in the 1976 Act. 11", it is noticeable that the trend to extend the term of copyright protection is not only in the American history but also in UK 12, Samuels adds that "The problem with finding a theory of the public domain in this context is that it may provide a basis for some limitation upon the duration of copyright, but it has very little to say about what that duration should be."

In the category of the public domain through forfeiture of copyright, Samuels argues that in this case a work placed into the public domain solely because of a failure to comply with formalities, it may be difficult to construct a concept of the public domain lacking of technical formalities. Only after considering the virtually elimination of formalities requirements following the Berne Convention implementation Act ¹³, Samuels admits "perhaps we should therefore rethink any theory of the public domain that may have existed under prior law, because an important component of the public domain has now been eliminated. ¹⁴"

In the last category of the public domain works excluded from copyright, although Samuels clearly states that "Nevertheless, the range

¹⁰ Samuels, op.cit.

¹¹ Ibid

¹² The Statute of Anne provided the author with 14 years copyrights, now the most significant copyright legislation, Copyright, Design and patents Act 1988, like in the USA, this set the period of copyright to be the life of the author plus 50 years.

¹³ Samuels, op.cit. at p 13

¹⁴ Ibid.

of works that go into the public domain because of categorical exclusion from the federal act has been diminishing.¹⁵", he insists "for the most part no theory of the public domain seems to have militated against the constant expansion.¹⁶"

Samuels's arguments not only illustrate obstacles faced by academics who attempt to define the public domain positively, but also shows the current expansion of the copyright, namely the diminishing of the other side, the public domain. From my point of view, despite of the question posed by Samuels ¹⁷: "What is gained by reifying the negative and imaging a "theory" of the public domain", notwithstanding, the description of the decreasing public domain in his article has answered partially the question.

With the current and continuous trend to expand copyright, people have been more and more aware of the importance of the public domain. Attempts to construct a theory of the public domain are ongoing, to some extent, in response to the enlarging copyright protection and endeavour to find a good balance between copyright and its corresponding public domain.

2 Rhetoric doesn't matter?

I agree with Professor Samuels that it is truly hard to construct a theory for the public domain and thus far it seems that those advocates for the public domain theories are driven by the anxiety of the current and continuous expansion of the copyright. But I am doubtful about his final conclusion that the public domain theories are mere rhetoric and does nothing more than adorn the real stage.

From my point of view, even these theories are mere rhetoric militated against the copyright expansion, rhetoric does something more

¹⁵ Samuels, op.cit. at p16

¹⁶ Samuels, op.cit. at p17

¹⁷ Samuels, op.cit. at p9

than "adorning the real stage on which actual decisions must be played out"¹⁸. In my opinion, despite rhetoric itself not playing any substantial roles on the stage, but it is a way by which actors express. If the real content matters, then the way to express the content also has great influence on the perception of audiences.

An example given by James Boyle in response of Samuels's question in his article¹⁹, Boyle articulates the functions of phrases such as "An environment" or "Environmental harm" as justifications to the need to set up the rhetoric for the public domain. Boyle argues that when we talk of "an environment" or "environmental harm", actually we refer to many different issues, such as clean water, beautiful vistas, biodiversity, raised sea levels, the morals of species preservation, skin cancers from thinned ozone layers, carbon sequestration, responsibilities to future generations, and so on. Although it is obscure whether there is possibility to link all issues together, it is fairly clear that there is no coherent or consistent definition of "nature" or "the environment." There are certainly lots of discrete contexts in which the idea of nature or the environment is raised, and why we conclude all of them in one simple phrase, he claims "Part of the answer, of course, is rhetorical.

The idea of the environment seems to add a moral overtone to the discussion, to counterbalance the arguments about "progress" and "growth" and modernity." And this is hardly an unimportant function."

I think Boyle recognizes a very important characteristic in legal arguments by providing an interesting example. That is the use of rhetoric

¹⁸ Samuels, op.cit, when speaking of the theories of the public domain, he concludes as such vague rhetoric does little more than adorn the stage o which actual choices must be played out.

¹⁹ James Boyle, The Second Enclosure Movement And the Construction of the Public Domain, originally published on the Conference on the Public Domain in Duke University, 2001, retrieved from

http://www.law.duke.edu/pd/papers/Boyle.pdf

²⁰ Boyle, op.cit, at p70

does matter and does influence the way people think. If there is not the phrase of the public domain in the discourse of copyright, it is hard to show how the public domain has been played down by copyright, because the concept would not even come into our minds, or what comes into our minds are snippets of issues which can hardly have the strength to balance the other side, the expansion of copyright. To be short, although there are difficulties to construct a perfect theory of the public domain, it does not suggest we don't need one, and lacking of a theory could do more damage than an imperfect one.

So if we indeed need to have a positive theory of the public domain, where is it?

3 Attempts to recognize the public domain

As suggested by David Lange²¹ in 1981, "the growth of intellectual property in recent years has been uncontrolled to the point of recklessness. And I will suggest that recognition of new intellectual property interests should be offset today by equally deliberate recognition of individual rights in the public domain." Lange argues that intellectual property cannot be recognized by human senses because of its hypothetical nature, thus the boundaries of intellectual property are inevitably difficult to fix. With its unique susceptibility to conceptual imprecision and to infinite replication, Lange claims two fundamental principles are needed to be kept in mind. One is that doubtful cases of infringement should be resolved in favour of the defendant, the other is no exclusive rights should have affirmative recognition unless its conceptual opposite is also recognized.

The article written by David Lange initiated contemporary discussions of public domain 22 and increased visibility of the public

²¹ David Lange, Recognizing the Public Domain, originally published Law & Contemporary problems, Autumn 1981, retrieved from http://www.law.duke.edu/fac/lange, at p1

²² Boyle, op.cit.VII, recognizing the public domain, at p59

domain as well as its importance²³, but it is rather an advocate to recognize the public domain in a view of ceasing current excessive copyright protections, than to structure a theory of the public domain. Lange has pointed out the importance of the public domain and urges us to reconsider about the relationship of the copyright and the public domain, in an effort to place the public domain into the spotlight.

After David Lange, there are subsequent contributing efforts to construct a theory of the public domain. Prof. Jessica Litman works on the significance of the public domain in a 1990 article²⁴, and throughout the article, the main concept she offers to justify the existence of the public domain is the notion of originality, which has been premised in the copyright system, is a legal fiction or fallacy. Litman argues that "every new work is in some sense based on the works that preceded it is such as that is has long been a cliché, invoked examined. 25 "Therefore to protect an author by providing copyright monopoly is not a synonym to protect authorship, since based on the previous argument it is more helpful to promote authorship by providing access to raw materials freely. The originality notion underpins that the copyright system is flawed. The existence of the public domain rescues the copyright system from the dilemma of confronting this question of examination of originality which in reality it has no capacity to answer.

Litman's argument is inspiring in urging us to re-examine the basic assumptions within the copyright system and also offers an insightful view to the originality. But I would go for the opinion stated by Edward Samuels²⁶, "There is a fallacy in jumping from the observation that no work is totally original to the conclusion that no work is at all original. "And even the notion of originality is inherently obscure, as

²³ Samuels, op.cit.Iia 'theory' of the public domain? At p2

²⁴ Jessica Litman The Public Domain, originally published in Emory Law journal, Fall 1990, retrieved from http://www.law,wayne.edu/litman>

²⁵ Ibid

²⁶ Edward, op.cit.

Lange already suggested, there is a good way to deal with this conceptual imprecision of intellectual property, in doubtful cases should be ruled in favor of the defendant. The solution is not only a theoretical provision but also is adopted by the Court(USA)²⁷, which shifts the burden of proving non-originality to the plaintiff by presuming the work at issue is original unless it is proven not to be.

Litman sees the public domain as "Commons that includes those aspects of copyrighted works which copyright does not protect. 28" Following claims that the copyright system is a legal fiction and needs to be rescued by the public domain, she defines the public domain negatively and mostly from the perspective of the function of the public domain as a lever against a flawed copyright system.

Arguments provided by Prof. Lange and Litman, although form a different direction but do share something in common, that is to accentuate the public domain in a view of the excessive or imperfect copyright protections. But here comes the question: Is the public domain an additive to the copyright system in order to cure its illness or on the contrary, does the copyright function as an exception of the public domain?

Lindberg and Patterson's book *The nature of copyright: A Law of Users' Rights* reverse the normal depiction of the public domain ²⁹. Observed by James Boyle³⁰, Lindberg and Patterson treat "The public domain is the figure and copyright the ground." They claim the various categories of the public domain are not exceptions but at the heart of copyright if the copyright law is correctly interpreted and well understood. Thus "Copyright is, in fact a system designed to feed the public domain providing temporary and narrowly limited rights, themselves subject to

²⁷ Edward, op.cit.at p3

²⁸ Cited from footnote 115 of James Boyle's article, op.cit.

²⁹ L.Ray Patterson & Stanley W. Lindbegr, *The Nature of Copyright : A law of Users' Rights*, (1991)

³⁰ Boyle, op.cit.VII, recognizing the public domain

considerable restrictions even during their existence –all with the ultimate goal of promoting free access.³¹"

It is a courageous attempt to reverse the common depiction of the polarity between the public domain and copyright. Lindberg and Patterson's voice encouraging sounds while persuading us that the public domain has roots even in the initial form of copyright regulation. The passage of the Statute of Anne was to create a public domain rather than a copyright system by limiting copyright durations and requiring formalities³². But it does not sound convincing while we have to face up the contemporary trend of the law to expand the copyright protection. Further more, today there are too many newly emerging copyright areas that fall outside the purview of the Statute of Anne, to rely on the Statute to underpin the public domain risks losing the up-to-date vision of current laws and society.

Another attempt to place the public domain into the center of the copyright system is made by Prof. Wendy Gordon³³. In her article, by tracing modern copyright law back into John Locke's theory of natural law, as summarized by Edward³⁴, "she aligns the public domain with Locke's 'intangible common' that recognizes 'significant property rights of the public.' She argues that 'no natural right to property could exist where a laborer's claims would conflict with the public's claim in the common.' More particularly, she applies Locke's 'proviso,' that individual property rights are conditioned upon there being 'enough and as good left in common for others,' to the public domain, arguing that an intellectual property owner's rights should not be interpreted to allow any diminution in the existing 'commons,' the public domain."

31 Ibid.

³² Samuels, op.cit, in part II A'theory' of the public domain?.

³³ Wendy J. Gordon, A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102, Yale L.J. 1533(1993)

³⁴ Samuels, op.cit

Gordon uses a different approach to justify that the public domain should be outweighed by the copyright itself. This looks reasonable if we accept her presumption: John Lock's theory can be applied to explain the relationship between the public domain and the copyright. First of all, it is doubtful that Lock's method can be used to cover modern copyright laws and secondly, if so then it is uncertain that this is the only preferred method; therefore, Gordon's approach to adopt existing theory to support a theory for the public domain, is innovative but not persuasive enough.

There are various theories about the public domain as stated above which are intellectually arousing, but it seems none of them thus far can offer us a persuasive and integrated answer. More or less, the theories for the public domain have increased the attention for the public domain rather than rendering a convincing theoretical framework. That is why Professor Samuels claims in his article after reviewing the existing theories for the public domain, "If those who find themselves continually on the side arguing for limitation of protection need a rallying cry, perhaps it can be 'the public domain.' The invocation may seem to add a moral overtone to the argument, to counterbalance the morally charged analysis." But that affirmative language towards the public domain all seem still owing us an answer to the long standing question: what is the meaning of the public domain?

But speaking of a positive clear, and organized theoretical definition for the public domain, there are essential questions left to be answered in his article, For example, what is the public domain? What should be recognized and based on what rationale? Apparently, those remaining questions are associated with each other, and from my point of view the second question is the key to the first one, therefore we may assume a good start to develop a theory of the public domain is to seek justifications for the public domain. In other words, to find the meaning of the public domain, the question about the significance of the public

³⁵ Samuels, op.cit. at p 9

domain in copyright system should be answered at the same time if not before it.

4 What is the significance of the public domain?

.4.1 The justifications for the public domain

In the previous chapter, I already discussed the justifications of the copyright regime and concluded that consequential theory is preferred to vindicate the copyright regime. Then let's look back at the justifications for the public domain. It is easy to think that justifications for copyright must be against the justifications for the public domain, this may result in a superficial impression that the diminishing public domain is equal to a stronger copyright system, since there are inverse connections between them, but this may not be true. According to the consequential justification of copyright which emphasizes the external effect of copyright protection, it considers the economic return as an incentive to encourage production. I think it is not only justifying the public domain but even calling on the expansion of it. Some copyright antagonists may argue that without sufficient protections to the author, it is difficult to ensure the strength of the copyright regime. But as analogous to what Litman argues, to protect authorship is not the same as to protect the author³⁶, I would like to say to encourage the production may not be the same as to encourage the one who produce it. Economic gains are undoubtedly a strong incentive to stimulate the author to produce more works, but on the other hand, restriction of access to materials protected by copyright could hinder authors from having new works. Because even though it is the expression of idea but not the idea itself that is being protected, as long as the author does not have free access to the expression of idea, how can he or she have the chance to appreciate the unprotected idea without additional charge? We may put it this way, while the economic return provided by the copyright system induce the

³⁶Jessica Litman The Public Domain, originally published in Emory Law journal, Fall 1990, retrieved from http://www.law,wayne.edu/litman at p3-4.

existing authors to do their next work, it hampers all the potential authors to create new works, in the sense that the consequential effect not only can be used as a justification for copyright but also can be adopted as a justification of the public domain.

4.2 The significance of the public domain

Observed by James Boyle, it seems the arguments for and against copyright have never met each other, while he makes the comparison between the first enclosure movement which privatized the common land and the second enclosure movement refers to intellectual property rights, "Once again, the critics and proponents of enclosure are locked in battle, hurling at each other incommensurable claims about innovation, efficiency, traditional values, the boundaries of the market, the saving of lives, the loss of familiar liberties. Once again, opposition to enclosure is portrayed as economically illiterate; the beneficiaries of enclosure telling us that an expansion of property rights is needed in order to fuel progress."³⁷

The opposite claims from two sides would easily trap us into the dilemma, because based on the traditional incommensurable arguments, it seems one can only choose to advocate either copyright or the public domain, there is no way to get them both. But what I am arguing here, is the connection between copyright and the public domain actually may be deeper than we thought, they are not necessarily against each other just because there is an inverse relationship between them. While copyright expands then the public domain diminishes does not naturally suggest that while copyright is justified, then the public domain is ruled out. On the contrary, in my opinion, to advocate copyright is to advocate the public domain, namely to protect the former is to protect the latter, if the spirit of copyright and the public domain is correctly understood.

³⁷ Boyle, op.cit, at p40, when speaking of how much of the intangible commons must we enclose?

And the anti-monopoly argument against enclosure articulated by James Boyle³⁸, seems to be echoing this unique connection of copyright and the public domain in its context. As Boyle points out³⁹, most people would only notice that the anti-monopolists worry about the cost stressed on the intangible goods and harm caused by great concentration of wealth and power would lead to corruption, take it for granted that those who argue for anti-monopoly are against intellectual property rights, but it may be an illusion. The real concern ⁴⁰ of anti-monopolists is that intellectual property rights should not be treated as natural right, they should be circumscribed by law carefully but simultaneously anti-monopolists recognize that intellectual property rights are a necessary evil.

According to anti-monopolists, the copyright should be limited by its nature, even we don't have to await justifications of the public domain. In other words, copyright should coexist with the public domain. If that is the case, the justifications for copyright have already included the existence of the public domain. The only problem left is where to draw the line for the public domain, but this is a too big question that I am going to deal with here.

Let's focus on the significance of the public domain, from my point of view, it can be considered as a main stone upholding the copyright system to ensure a proper balance stuck between the public and private interests. Without the public domain, there is really a danger to justify the existence of copyright, and a diminishing public domain. Although not necessarily a proof for a flawed copyright system, could be a warning sign to us, because while the back stone becomes smaller and the other thing it supports becomes bigger, then there is an imminent threat for the other one to fall down.

³⁸ Boyle, op.cit, at part two, against enclosure, VI anti-,monopoly and a tax on reading.

³⁹ Boyle, op.cit at p53, talking of citation of Thomas Jefferson.

⁴⁰ Ibid, at p55

3. Technological and legal solutions

In the previous chapters we have come toward the conclusion that diminishing the public interest is harmful to the copyright system. We have seen that the expansion of copyright protections in the name of fighting digital piracy is neither justified through examining the very justification of the existence of the copyright regime, nor by the arguments provided by the music industry.

But if the expansion of copyright is not a panacea to cure the digital syndrome, what should we do when facing the ferocious digital revolution? Is the current copyright regime sufficient to tackle those new types of deviant activities or is it already out of date and we need to find an alternative path? Now in this final chapter, I am going to discuss whether the shrine of the copyright regime, which is under attack by digital technologies, has been destroyed or remains serving its purpose.

1 Theories on technological solutions

This anti-copyright attitude grows almost simultaneously with the trend of copyright expansion ⁴¹. Unlike those copyright supporters who take copyright expansion as a cure to digitalization, some theorists have pointed out that the technology changes are so fast that it is out of the copyright's control. To be more precise, from their point of view, copyright regulation is a paralyzed legal body, it cannot move anywhere in the cyber world. The copyright regime is unable to deal with the digital age, and the speed of technology developments is too fast to be regulated in a traditional legal sense.

Members of the anti-copyright club emphasize that no matter how hard the law tries to catch all the deviant behaviour, the emergence of

⁴¹ Henning Wiese, "The Justification of the Copyright System in the Digital Age", E.I.P.R. 2002, 24(8), 387-396, this version retrieved from WestlawUK website, at p 1

new types of copyright infringements is always quicker than the adaptation of the law. Take music swapping for example, despite the fact that the Napster website was shut down by order of the Court, music swapping activities are still very much alive. Instead of using a central server to store music files of its users which made Napster being held liable for contributory copyright infringement, the descendents have deployed a decentralized system, the so-called peer-to –peer technology, to bypass the legal punishments. Such as the Gnutella and Kazaa websites 42, they serve only as a peer connected to the individuals' computers for users to exchange information but themselves don't hold any music files in the central servers. In this way, Gnutella, Kazaa and their likes facilitate music swapping online without breaking the law⁴³. In summary, there is always a spiralling relationship between the copyright and copyright infringement, and there is almost no time lag between the adaptation of the law and the following changes of technology, or the time lag is too short for us to notice that there has been any genuine effect that came into reality by alterations to the law. Therefore, scepticism of the copyright system grows, although there are still different points of views within this group.44

One kind of perspective that comes under this anti-copyright umbrella may be titled as "Information wants to be free". It is observed by John Perry Barlow⁴⁵, that copyright was designed to protect ideas as expressed in a fixed format, but not the information or ideas themselves. According to Barlow, the dematerialization resulted from digitalization,

⁴² http://www.gnutella.com , and http://www.kazaa.com

⁴³ Peter Biddle, Paul England, Marcus Peinado, and BryanWillman, "The Darknet and the Future of Content Distribution", retrieved from

http://crypto.stanford.edu/DRM2002/darknet5.doc

⁴⁴ Wiese, op.cit.

⁴⁵ John Perry Barlow, who is the co-founder of electronic frontier foundation and former lyricist of Grateful Dead band, wrote "Selling Wine Without Bottles :the Economy of mind on the Global Net", retrieved from

http://www.eff.org/Publications/John_Perry_Barlow/HTML/idea_economy_article.html

which entails detaching the intangible information from the physical plane, where property law of all sorts had always found definitions. Thus the traditional creed of copyright about protecting only the expression of the ideas but not the ideas themselves would be severely challenged, because it is difficult to separate the expression of an idea and the idea itself. While the idea takes no physical shape it exists in the form of digital numbers. Barlow used the metaphor of wine and bottles to depict the situation: copyright protects the bottles, not the wine. But now in the digital age the concept of bottles has become obsolete, we need no more bottles when any form of idea expression can be transformed into a digital format, the bottles have all overflowed. So Barlow insists "the Information wants to be free", and the traditional copyright doctrine should be replaced or thrown away. It seems that the copyright system doesn't make sense anymore.

Barlow portrays the copyright regime as a huge threat to free the information online which further drives back creativity⁴⁶, and in addition criticises the law's incapability of keeping up with the pace of technological developments. As stated by Barlow "Law adapts by continuous increments and at a pace second only to geology in its stateliness. Technology advances in lunging jerks, like the grotesquely accelerated punctuation of biological evolution. Real world conditions will continue to change at a blinding pace, and the law will get further behind, more profoundly confused. This mismatch is permanent" ⁴⁷. Therefore according to the nature of the law, there is always a time gap between the advent of technology and its corresponding regulation. In most of the cases when attempts by the latter at tackling problems caused by the former are finally put forward, is already out of date.

46 Ibid, and see more about Barlow's points of view on http://www.eff.org/John_Perry_Barlow/HTML 47 Ibid.

Based on the same pro-technology attitude, instead of proclaiming free information, some have come up with a different conclusion. This is that information still needs to be protected but the copyright system is no longer capable of doing this job. On the other hand, technology can do a better job in tackling technology and thus investing in security technology to prevent technological copyright -bypassing measures is more effective than enforcing the law⁴⁸.

Others, although similarly emphasising on the importance of technology in dealing with the deviance on the Internet, have suggested that that the law in the digital age is no longer set by the legislators but those software engineers who have power to design the code, the architecture of cyberspace⁴⁹. It is argued that especially in terms of legal enforcement, having computer codes replacing the law is cheaper and faster, as opposed to expensive and slow enforcement by the law⁵⁰. What is more, as Lessig suggests, the major advantage for "code is the law", is that the code leaves the user no alternative but to comply, therefore it is definitely more effective than the law who wants to become a general code in a cyber world⁵¹.

In general, we may conclude that the pro-technology theorists put emphasis on some distinctive qualities of the digital revolution, and argue that these make digital technology difficult for the law to tackle. Such as the decentralized nature of the internet, free from time and space limitations ...and so on, which are just opposite to the qualities of government regulations. They are suspicious about the fact that the copyright regime may not solve the problems b+- -*-*-ut``+ more likely

⁴⁸ see Hanry Harrington, "Is it the end of the line for Copyright?" Commercial Lawyer, 2000, 38, 66-70, this version retrieved from Westlaw UK website. at p2

⁴⁹ Lawrence Lessig, "The code in Law, and the Law in Code", the text of a lecture given in pcforum, 2000, phoenix, AZ. Retrieved form

http://cyber.law.harvard.edu/works/lessig/pcforum.pdf

⁵⁰ See Lawrence Lessig, "The Zones of Cyberspace", (1996) 48, Stanford Law Review 1403 at 1410.

⁵¹ Ibid, also see more in Lessisg, *Code and Other Laws of Cyberspace*, Basic Books, 1999

would hinder the growth and development of the Internet⁵². And it seems that we can extract an underlying assumption of these copyright pessimists, which is that the answer to digital age is the technology, not the law⁵³.

2 Perspectives on legal solutions

2.1 The current copyright regime

With regard to the enormous changes brought about by the digital age, there is a positive voice on copyright regime contrary to the aforementioned copyright scepticism and technology advocates. The basic assumption in this view is that the copyright regime is an organic body of law, it is possible as well as capable to fit itself into changing surroundings ⁵⁴. According to copyright optimists, despite that the copyright system is being crippled within the digital environment, after all the law is able to adapt, develop and reform itself to fit to new situations ⁵⁵.

To support this point of view, theorists who are in favour of it provide several reasons. Firstly, as we look back to the history, we can see that copyright law has adapted to the advent of--at the time almost revolutionary--technological developments such as silent and talking pictures, radio, television and cable television broadcasts, sound recordings, photocopiers and, eventually, computer programs⁵⁶. Secondly, despite this internet environment is capable of carrying information at previously unseen high speeds and on an unprecedented scale, it is not something we have never experienced before. But it is rather an advanced

⁵² Joel.R.Reidenberg, "Lex Informatica: the Formulation of Information Policy Rules Through Technology", Texas Law Review , 76,(3), 1998, this version used retrieved from http://reidenberg.home.sprynet.com/lex_informatica.pdf

⁵³ Wiese, op.cit, at p2.

⁵⁴ Kathy. Bowrey, "Who's writing Copyright History?" E.I.P.R.1996, 18(6), 322-329, this version retrieved from WestlawUK website, at p1

⁵⁵ Ibid.

⁵⁶ Wiese, op.cit, at p2, when introducing the perspective about there remains a justification of copyright regime in digital age.

communication medium that was invented on the shoulders of other media⁵⁷. Therefore, these difficulties posed by the digital environment are not threatening copyright at its core, and even though they shake the copyright regime for the time being, in the long run, the copyright regime will finally adapt and develop itself to accommodate the new changes just like it did many times before. In any case, regardless of what the technology of the day, the copyright regime will keep doing its job and will be capable of serving the main, long-term purpose of copyright, which is to provide incentives for creation and for intellectual efforts.

In short, there is a common belief that copyright will adapt itself based on the fact that it has adapted successfully in the past. However, there is no exact answer about how to deal with new digital forms of exploitation of intellectual works protected by the copyright regime. In other words, "how exactly this adaptation to the new challenge is to be achieved is as yet unclear.⁵⁸"

2.2 An alternative option: The creative commons movement

Even the law has not provided us with a clear answer, there is something worth our attention: That is "creative commons" movement (hereafter referred as "CC" movement) growing up with the prevalence of the digital age⁵⁹. The advocates show us a different direction from traditional copyright basics and challenge the decrees of copyright protections. For example, we are very used to "All rights reserved" when speaking of copyright, but "creative commons" points out an alternative option such as "some rights reserved.⁶⁰"

The "creative commons" movement encourages authors set free of

⁵⁷ Lucinda .Jones, "An Artist's Entry into Cyberspace: intellectual Property on the Internet"

E.I.P.R. 2000, 22(2), 79-92.this version used retrieved from WestlawUk website

⁵⁸ Wiese, op.cit at p2

⁵⁹ This organization was founded in 2001, see

http://creativecommons.org/learn/aboutus/>

copyrighted works for certain uses. It believes that "we use private rights to create public good.⁶¹" And on the permission of the authors, the stringent copyright law which may hinder the developments of the public good can be balanced with free use.

This is a legal reaction of significance in response to the digital age. The "CC" movement has offered people a different perspective of copyright regime. The basic concept lies within "CC" is the author can choose to "reserve only some rights", and leave some space to build a reasonable copyright layers. Not all cases should fit into the same copyright protections standard. For example, according to the "creative commons deed⁶²": you are free to copy, distribute, display, and perform the work, to make derivative works, under the following three conditions: first of all, give the attribution credit to the original author; secondly, for non-commercial purposes; then makes it clear that you make this work under the "creative commons" principles.

The "CC" movement has offered us a new choice dealing with digital times. It revolutionized the concept of "copyright", further suggesting that if we are running out of the weapon to fight against the digital enemies, we might be wrong choosing to be its enemy in the first place.

As we discussed it in the previous pages, too many copyright protections may not be doing good to serve the end of this regime. If we would like to alter the concept of "copyright protection", the "CC" movement is certainly a good start.

However, there are limitations on this movement. Firstly, it depends on the author's choice but not legal force, so it may decrease the problems in the future but not solve the existent ones. And as it mainly limits on the non-commercial use, it hardly have influence on the biggest

⁶¹ Ibid. "some rights reserved: building a layer of reasonable copyright"

⁶² The deed can be seen at: http://creativecommons.org/licenses/by-nc-sa/2.0/

power to shape the copyright expansion--the commercial wield. So the copyright expansion initiated mainly by commercial power, may keep developing in the same and bring us the fruit.

Nevertheless, the "CC" movement enlightens us to review our fixed belief to "unshakable copyright" and offers a possible legal solution. It not yet be true, but with its influence deepen in the digital society, unavoidably it will turn to the real world to reshape the current framework of copyright regime.

3 A combination of Law and technology

From my point of view, it seems there is no conflict between the copyright regime supporters and technology advocates. The basic concept of the former is that copyright has adapted itself in the past and it will do so again. So there is no need to develop another set of rules no matter how the technology changes. But this concept although based on historical facts, it is more like a supportive attitude to the existence of the copyright regime, as it never mentions how copyright law is going to do it. On the contrary, the technology advocates concentrate on the realities and on offering practical solutions. However making use of technology in tackling digital forms of exploitation does not necessarily negate the existence of current copyright regime.

The most extreme technology advocates would suggest that there is no need for the copyright regime, and that the information wants to be free. But first of all, with regard to the slowness of the law to adapt to the technological changes, it is not sufficient enough to the support the proclamation "information should be free". Firstly, I would like to borrow the argument from the copyright regime supporters. If we look at the history of the development of copyright, we will find copyright has adapted itself to the advent of novel technologies several times. Since the very first modern copyright law, the statute of Anne, was put to the public in the eighteenth century, the world has experienced a lot of profound

changes, such as the broadcast medium, television, and the recent satellite television..... and so on. Thus at least from a historical view, there is no way to predict that the copyright cannot survive in the digital age before putting effort into adaptation of the law. Secondly, as discussed in the previous chapter, in the name of fighting against copyright infringement activities on the Internet, copyright protections have expanded globally and quickly. It seems the main problem of the copyright system is not about its slowness in responding to the digital revolution, on the contrary, it may be too fast in its expansion stride. The incapability of law to deal with the new technological changes seems more like a superficial perception than the reality. What is more, even if the law hasn't found a solution, it does not vindicate that we don't need a solution. As stated by Wiese, "the fact that it is still possible to circumvent anti-circumvention technology does not negate the need for the protection of copyright by law and technology in principle. 63 " let alone now that the solution provided by law actually is too strong rather than weak.

If we still have the consensus on the very purpose of copyright regime, to encourage the production of creative works in order to promote the public good, then there is no reason that we have to give up our principle just because of the advent of new technology. Indeed, there are more difficulties which remain to be solved, but the law is moving, and if having a look at the recent expansion of the copyright regime, we will find its progression is apparently not at a speed as slow as geologic movements.

While technology advocates claim that the copyright regime may be the biggest threat to creativity and needs not to exist in cyberspace⁶⁴, it seems that this is not a new question but has already been discussed since the first day the copyright regime was formed. According to the economic

⁶³ Wiese, op.cit, at p5

⁶⁴ John Perry Barlow, "The Next Economy of Ideas: Will Copyright Survive the Napster Bomb? Nope, But Creativity Will", October, 2000, retrieved from http://www.http.negativland.com/wired.html

justification of the copyright regime that we reached in the second chapter, the copyright regime can indeed be a threat to creativity if it does not strike a good balance between the end and the means. But my point is that the copyright system can be a threat to creativity at anytime, no matter which technology it faces, as long as it does not consider the relation of its ultimate end with its means properly. The copyright regime should not be justified regardless of technological changes. So I think the emphasis should be put on how to balance the public interest and private interests, instead of on the technology. Especially when today, the common belief of technology advocates about the incompetence of the current copyright regime in this digital age, to some extent has contributed to the tendency of copyright expansion. It's definitely not the initial intention of technology advocates, but putting the accent on the wrong part, can mislead people's understanding of the whole context. The technology advocates discuss the incompetence of the law at a practical level but ignore the very purpose of the copyright regime in a higher level. This may somewhat deepen the impression of the incapability of the law to deal with digital revolution, but it has given a good reason to expand the copyright protection, which makes the copyright regime a bigger threat to creativity.

As to the advocates for a new set of rules established by technology, I think it is an utopian view on the technology, it overstates the function of technology and underestimates the ability of law⁶⁵. What is more, if we can establish a new set of rules why don't we make use of current legal framework but insist on making them totally isolated from other regulations⁶⁶?

I think the most significant contribution of technology advocates, is to point out that there are some characteristics in the digital environment

⁶⁵ See more discussion in Wiese, op,cit. in the section of "Hypothesis: There is Need for Both Technology and I.P Law"

⁶⁶ Wiese, op.cit

which make possible that technology can function the same way as the law does to some extent. Ironically, the point which is made clear by the technology advocates is a perfect justification for the existence of law. Since the use of technology is never neutral, the rules set by the technological framework is likely to influence the flow and the distribution of information and those creative works fall within the purview of the copyright regime. If the law can be discriminative to the weaker and the poorer, the technology can have the same effect as well, depending on in which way people chose to use it. But compared to the process of legislation, the making of technology is more controlled at the hand of commercial moguls than the public. Now, since copyright is a means to achieve the end of promoting the public good, if we substitute it for technology, the control over the right balance between the end and the means could be even harder than with the current copyright regime.

Therefore, in spite that technological measures are more effective to realize the purpose of the law than the law is itself, the technology is never as neutral as we imagine. It is worth of attention that counting only on technology to protect intellectual works in the digital age is not free from risks, because of the fact that the technology is never neutral. It can be more easily manipulated by the rich and the powerful which may result in sacrificing the public interest at large in order to earn more private gains. This indeed already exists in the current copyright regime as pointed out in the previous chapters when discussing the diminishing public domain, but the situation may be even worse if we give up the law made through democratic means.

So my view is we should separate the technology and the law at different levels. The copyright law needs to exist to ensure the very purpose that justified the copyright regime, and the technologies can be used at a practical level to tackle the digital deviance within the existing legal framework. In other words, instead of going for one option, we can just combine the practical solutions and the spirit of copyright law

together.

And actually there already is an example of the combination of technology and the law. The DMCA, which allows digital right managements in favour of copyright holders and prohibits the usage of technological circumvention measures, is a good example corresponding to our observation. The technology may be neutral, the way people use it is never a neutral issue.

The DMCA is criticized for over stretching the rights of copyright holders⁶⁷, but I do not intend to discuss the problems of DMCA but want to emphasize that there is no conflict between the technology and the law, and the law should make use of the technology, regulate the usage of technology to ensure it corresponds to the spirit of the law. Indeed, DMCA is a bad example of this combination because it does not strike a good balance between the private and public interests⁶⁸, but that does not hold against my argument. The ideal way of adaptation of the copyright regime in the digital age should be the combination of law and the technology, and to keep an eye on the usage of technology to make sure that it corresponds to the spirit of the purpose of the existence of copyright law.

In sum, my conclusion would be, the existence of copyright regime is still justified in the digital age, despite that the technology indeed plays an important role and may function as the law does in some ways. But it would not exclude the existence of the law, on the contrary, the law needs to exist to ensure our purpose of copyright regime formed in the beginning, which is to encourage more supply of intellectual works. But the technology can be used to be the practical solution in tackling digital piracy. Most important of all, our emphasis should be put on how to strike a good balance between the ultimate end and the means of the copyright

⁶⁷ Jessica Litman, "Digital Copyirght and Information Policy", retrieved at http://www.law.wayne.edu/liman/papers.casrip.html 68 Ibid.

regime, rather than arguing for whether the technology or the law is better.

4. Conclusion

Digital technology which multiplies and diversifies the copyright infringement activities within the Internet environment has severely challenged the current copyright regime. But as discussed before, I don't think the expansion of copyright protection is a good solution and it is not justified in the name of fighting digital age piracy through reviewing the very justification of the existence of the copyright regime. Furthermore, the diminishing public domain is against the spirit of the copyright system which may cause the imbalance of the private and the public interests therefore jeopardising the purpose of the existence of the copyright regime.

So apparently if we are heading toward the direction of copyright expansion, then we may go into the wrong direction. But what to do with the ferocious digital revolution and the difficulties it poses to the current copyright system? There are technology advocates proclaiming that the answer to tackle the new technology is newer technology, and they have been sceptical about the need of the copyright regime. But I think there is no conflict between the usage of the law and the technology, as long as we don't confuse the question of different levels. Technology is supposed to deal with the question arising at the practical level such as the means to enforce the law, but the law is to set up the goal of consensual social value, such as a good balance between the public and private interests and to ensure more supply of intellectual works. This is a question about the spirit and the purpose of the rules.

Discussed in the previous chapters, the law is inclined to favour copyright holders and creates more and more imbalance to serve its purpose. So in the final chapter, I pointed out that it is not so important to decide whether the law or the technology is better, because actually they

can be combined together as in DMCA, but to ensure the law is in line with its very purpose and justification about its existence which is the issue of real importance.

DMCA already has portrayed the importance of the law, since the technology is included but in favour of copyright holders without careful consideration about the spirit of the copyright regime. The more effective the law is, the bigger threat it would be to creativity since it fails to strike a good balance when it is supposed to do so.

In the battle of fighting digital piracy, it is really important that we should not let the private interests take control of the law in the name of fighting digital piracy, because what they are fighting for is only the means aimed at an ultimate end of the copyright regime, and we have to keep abreast of the fact that there is no reason for the existence of the means if it fails to serve the end.

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數位時代著作權公共領域的縮減

江雅綺 稻江科技管理學院財經法律系

摘要

本文第一章,簡要地介紹了近年來無論立法或是司法實務, 爲了因應數位科技巨幅降低非法重製行爲的成本,都有逐年擴張 著作權保護範圍、以致於公共領域相對逐年縮減的趨勢。第二章 則進一步探討,在目前充斥「著作權」的語彙時,有關「公共領域」的概念與討論,長期以來被「著作權」的語彙所遮蔽,亟需 吾人重新審視公共領域與著作權利相依相存的共生關係。筆者認 爲,以著作權制度的存在目的來看,法律須在維護私權與保障公 益間維持平衡,故公共領域的過分縮減,可能危害到著作權制度存 在的本旨,長期而言可能對創作環境不利,有害於原先著作權制 度所服務的公益目的。

面對數位時代的挑戰,筆者繼續扼要介紹了法律及科技面的 可能解決方法。結論是,要維護著作權制度存在的根本價值,也 就是在私利與公益間取得平衡,不能只是依賴一味的擴張著作權 利範圍,必須進一步尋找其他可能的解決之道。

關鍵字:著作權擴張、著作權制度、非法數位重製行為、 公共領域、公益