

2011s-38

**The Economics of Life + +
Reflections on the Term of Copyright**

Ejan Mackaay

Série Scientifique
Scientific Series

Montréal
Avril 2011

© 2011 *Ejan Mackaay*. Tous droits réservés. *All rights reserved*. Reproduction partielle permise avec citation du document source, incluant la notice ©.

Short sections may be quoted without explicit permission, if full credit, including © notice, is given to the source.



Centre interuniversitaire de recherche en analyse des organisations

CIRANO

Le CIRANO est un organisme sans but lucratif constitué en vertu de la Loi des compagnies du Québec. Le financement de son infrastructure et de ses activités de recherche provient des cotisations de ses organisations-membres, d'une subvention d'infrastructure du Ministère du Développement économique et régional et de la Recherche, de même que des subventions et mandats obtenus par ses équipes de recherche.

CIRANO is a private non-profit organization incorporated under the Québec Companies Act. Its infrastructure and research activities are funded through fees paid by member organizations, an infrastructure grant from the Ministère du Développement économique et régional et de la Recherche, and grants and research mandates obtained by its research teams.

Les partenaires du CIRANO

Partenaire majeur

Ministère du Développement économique, de l'Innovation et de l'Exportation

Partenaires corporatifs

Banque de développement du Canada
Banque du Canada
Banque Laurentienne du Canada
Banque Nationale du Canada
Banque Royale du Canada
Banque Scotia
Bell Canada
BMO Groupe financier
Caisse de dépôt et placement du Québec
Fédération des caisses Desjardins du Québec
Financière Sun Life, Québec
Gaz Métro
Hydro-Québec
Industrie Canada
Investissements PSP
Ministère des Finances du Québec
Power Corporation du Canada
Raymond Chabot Grant Thornton
Rio Tinto
State Street Global Advisors
Transat A.T.
Ville de Montréal

Partenaires universitaires

École Polytechnique de Montréal
HEC Montréal
McGill University
Université Concordia
Université de Montréal
Université de Sherbrooke
Université du Québec
Université du Québec à Montréal
Université Laval

Le CIRANO collabore avec de nombreux centres et chaires de recherche universitaires dont on peut consulter la liste sur son site web.

Les cahiers de la série scientifique (CS) visent à rendre accessibles des résultats de recherche effectuée au CIRANO afin de susciter échanges et commentaires. Ces cahiers sont écrits dans le style des publications scientifiques. Les idées et les opinions émises sont sous l'unique responsabilité des auteurs et ne représentent pas nécessairement les positions du CIRANO ou de ses partenaires.

This paper presents research carried out at CIRANO and aims at encouraging discussion and comment. The observations and viewpoints expressed are the sole responsibility of the authors. They do not necessarily represent positions of CIRANO or its partners.

ISSN 1198-8177

Partenaire financier

Développement
économique, Innovation
et Exportation
Québec 

The Economics of Life ++ Reflections on the Term of Copyright *

Ejan Mackaay[†]

Abstract

Copyright, and indeed all intellectual property, reflects a compromise between the need for reward on creations we see – by reserving them to the creator – and the need to let information freely flow so as to permit further creations to emerge with as few encumbrances as possible. Over the past quarter century or so, all parameters of copyright have been moved towards more protection, disturbing the underlying compromise. The term of protection extends well beyond what is practically useful for the vast majority of creators, much as it may serve the needs of a small number of large players who hold important older copyrights still producing revenue. This paradoxical situation results from a few founding principles considered untouchable in the countries members of the Berne Convention: it is automatically obtained, without formality and for a uniform and rather lengthy term. If we want to redress the balance underlying copyright, we may have to call these principles into question and lead creators individually to reveal the value they attach to their right by renewing it, allowing it to lapse into the public domain when they no longer value it. Whilst this would reintroduce formalities into the structure of copyright, technological advances may make these less of a burden than they were at the time of their abolition. Alternatively, one might consider an interpretation of equitable exceptions to copyright (such as fair use and fair dealing) so as to expand them gradually as the copyright in question ages. Such approaches would have the fortunate effect of avoiding that lobbying by the happy few needlessly locks up culture for most of us.

Keywords: Intellectual property, copyright, term, fair dealing.

* Prepared for the ALAI Study Days Vienna, 9-11 September 2010.

[†] Emeritus Professor of Law, Université de Montréal, Fellow, CIRANO, ejan.mackaay@umontreal.ca.

CONTENTS

The term of copyright as seen in legal treatises	2
The term of copyright – economic theory	5
The term of copyright – some empirics	10
Where do we go from here.....	12
Conclusion	15

Over the past decade or so the term of copyright has been extended in many jurisdictions for authors who are individuals from life + 50 years to life + 70 years. The term looks rather generous against the backdrop of the 14-year term granted in the first formal copyright legislation, the Statute of Anne, whose three-hundredth anniversary we have just celebrated.¹ This invites a reflection upon what justifies the term of copyright and its recent extension.

The term of copyright as seen in legal treatises

Most legal treatises on copyright barely touch upon the question of the duration of copyright. The Lucas brothers, in their well-known French treatise on copyright,² observe that "the recent extension has been justified by the consideration that the *ratio legis* [of the term provision] was that the patrimonial rights should benefit two generations of heirs, an objective that the fifty year term [after the author's death] no longer allows to meet considering the increase in average life expectation."³ They add that this postulate is really arbitrary and that the recent extension may also be due to significant industry pressure. For Canada, Vaver deplures that as a result of the lengthy term of protection "the public today pays for recycled work where it previously had cheaper or even free access" and sees as a contentious issue the question of "how far authors or their descendants benefit from the longer terms, either absolutely or relatively to distributors."⁴ A major Dutch copyright treatise, by Spoor, Verkade and Visser, points out that of the two broad ways in which copyright is usually justified, that is personality and personal reward theories, on one side, and utilitarian theories, on the other, only the former could comfortably justify protection terms as long as

¹ Bently, Lionel, Uma Suthersanen and Paul Torremans (eds), *Global Copyright - Three Hundred Years Since the Statute of Anne, from 1709 to Cyberspace*, Cheltenham, UK, Edward Elgar, 2010. The text of the Act is reproduced at pp. 501-506.

² Lucas, André and Henri-Jacques Lucas, *Traité de propriété littéraire & artistique*, Paris, Litec, 2001, (2nd ed.), n° 431, p. 351.

³ Lucas & Lucas 2001, id. "L'allongement a été justifié par l'idée que la *ratio legis* était de faire bénéficier deux générations d'héritiers des droits patrimoniaux, objectif que le délai de cinquante ans ne permettait plus d'atteindre compte tenu de l'augmentation de la durée de vie moyenne (3). Au-delà du postulat, en vérité arbitraire (4), la solution était réclamée avec insistance par les exploitants."

⁴ Vaver, David, *Copyright Law*, Toronto, Irwin Law, 2000, p. 100.

we currently have.⁵ They refer to a study by two other Dutch authors, Teijl and Holzhauser, who conclude that the evidence in support of the thesis that copyright is beneficial to general economic welfare is not overwhelming.⁶

For Britain, Bently and Sherman⁷ refer the reader to Ricketson's 1992 piece on the copyright term⁸ and to the extensive public debate surrounding the 2003 Eldred case before the US Supreme Court, as well as to the opinions of the decision itself.⁹ Ricketson voices the careful opinion, as regards how long copyright should last, that, "[g]iven our uncertainty about the reward and incentive functions of copyright protection, this can hardly be a precise determination and any figure chosen will inevitably have an arbitrary feel about it"¹⁰ and adds that "the grant of a long term of protection may play little, if any, role in the decisions that [publishers and other initial exploiters of works] make in the present."¹¹ A specialist of the history of the Berne Convention, he further observes that "the wider questions of policy have seldom come to the fore in debates over the term of protection within the Berne Union."¹²

The Eldred-case asked the United States Supreme Court to consider whether federal legislation, the Sonny Bono Copyright Extension Act of 1998, designed retroactively and prospectively to extend the term of copyright by an additional 20 years over that provided in the 1976 Copyright Act was within the powers conferred upon Congress in article 1, section 8, clause 8 of the United States Constitution, enabling it specifically "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the

⁵ Spoor, J.H., D.W.F. Verkade and D.J.G. Visser, *Auteursrecht, naburige rechten en databankenrecht*, Deventer, Kluwer, 2005, (3rd ed.), §§ 13.1 and 13.2, referring to § 1.9.

⁶ Id at 11, referring to Teijl, R. and R.W. Holzhauser, *De toenemende complexiteit van het intellectuele eigendomsrecht - Een rechtseconomische analyse*, Arnhem, Gouda Quint BV, 1991, at p. 56. This view is shared by Ricketson, Sam, "New Wine into Old Bottles: Technological Change and Intellectual Property Rights", (1992) 10 *Prometheus* 53-82, at p. 72, echoing p. 58: "[...] there is an absence of convincing empirical evidence on the success or otherwise of our present intellectual property laws in achieving their stated goals."

⁷ Bently, Lionel et Brad Sherman, *Intellectual Property Law*, Oxford, Oxford University Press, 2004, (2nd ed.), p. 152.

⁸ Ricketson, Sam, "The Copyright Term", (1992) 23 *International Review of Industrial Property and Copyright Law (IIC)* 753-785.

⁹ *Eldred v. Ashcroft*, 537 U.S. 186 (2003), 123 SCt 769 (2003), 239 F.3d 372 (2003).

¹⁰ Ricketson 1992 (Copyright Term), p. 761.

¹¹ Id. p. 766.

¹² Id. p. 783.

exclusive Right to their respective Writings and Discoveries."¹³ In a divided decision (7 against 2) the court held that the Act was within the powers of Congress. In a strong dissenting opinion, Mr Justice Breyer felt that the term "limited times" should be read to "prohibit an indefinite and endless power to extend existing terms". He added that if "[..] somehow, somewhere, some potential author might be moved by the thought of great-grandchildren receiving copyright royalties a century hence, so might some potential author also be moved by the thought of royalties being paid for two centuries, five centuries, 1,000 years, " 'til the End of Time." And from a rational economic perspective the time difference among these periods makes no real difference. The present extension will produce a copyright period of protection that, even under conservative assumptions, is worth more than 99.8% of protection in perpetuity (more than 99.99% for a songwriter like Irving Berlin and a song like Alexander's Ragtime Band)."¹⁴

Contributing to the debate from the United States, Reichman summarises the arguments advanced in favour of the current duration by observing that "the most generally accepted and least controversial is that an author should have the possibility of providing for himself during his own lifetime and then for his immediate dependents."¹⁵ But this standard begs the question of whether works will in fact produce revenue throughout the copyright term. Even casual evidence suggests that this will not be so for all but an exceedingly small number of very successful creations. This in turn suggests the reply that authors wishing to provide for themselves and their dependents should wisely invest moneys earned during the few years when the work is doing well in the market. They can then draw income from them for the rest of their lives and leave something as an inheritance.

All of this might be petty squabbling if there were no costs to extending the term of copyright. But there are: whilst the copyright is in place, access to the work is costlier than it would otherwise be and indeed may be altogether impeded. This interferes with access to information and follow-on creation. Almost all forms of human knowledge and cultural expression are cumulative, in

¹³ http://www.usconstitution.net/xconst_A1Sec8.html .

¹⁴ *Eldred v. Ashcroft*, op. cit., opinion of Breyer J. § I, C.

¹⁵ Reichman, J.H., "The Duration of Copyright and the Limits of Cultural Policy", (1996) 14 *Cardozo Arts & Entertainment Law Journal* 625-654, at p. 643.

the sense that innovations are made at the margin, building on or recombining existing content. Reducing access tends to slow the process of accretion, and hence the innovation flowing from it that drives the advancement of economic welfare. Surely this must be taken into consideration, even in the views seeking to justify copyright by personality theories. All rights reach their limit where they produce significant deleterious effects.

And yet there clearly are creations that would not be forthcoming if those who can produce them were not spurred on by the prospect of reward for their efforts. IP is a decentralised instrument for producing such spurs. So there is a clear policy question here of how to trade off principles that pull in opposite directions. To tackle such a policy question involves looking at the social effects of rules and of rule changes. Lawyers' tools do not equip them well to handle such matters. In this paper, we propose to turn to economics for an answer. What has economics got to say about the issue?¹⁶

The term of copyright – economic theory

Economics looks at rules through the incentives they create for individuals to prefer certain courses of action over others. A person made to face the prospect of liability in damages for negligent behaviour may react by being more careful. For any given rule, economics focuses on its foreseeable social effects. It judges rules by those social effects. Copyright holds out the prospect of revenue to the creators of copyright work. This prospect may draw them into creative endeavour. Creative endeavour feeds into innovation, which in turn leads to improvement of economic welfare.

The technique used in copyright to create the incentive effect for creative effort is to set up an individual right in an "information structure" embodied in the creation. This technique may be compared to others such as sponsoring creators or providing prizes.¹⁷ Intellectual property rights borrow some of the logic of

¹⁶ The ideas presented here are more fully developed in Mackaay, Ejan and Stéphane Rousseau, *Analyse économique du droit*, Paris/Montréal, Dalloz-Sirey/Éditions Thémis, 2008, (2nd ed.), pp. 264-325 and in the chapter on Intellectual Property in Ejan Mackaay, *Economic analysis of law for civilian legal systems*, Cheltenham, UK, Edward Elgar (forthcoming).

¹⁷ See for instance Gallini, Nancy T. and Suzanne Scotchmer, *Intellectual Property: When Is*

property rights in material objects. Property rights arise when an object becomes scarce in the sense that it can be used for different, incompatible uses. The property right is one technique of solving the disputes or even conflicts that may arise over such incompatible uses. It has the virtue of being entirely decentralised and incorporating an automatic feedback mechanism: the owner decides how to use the object and is informed on the quality of the choice made by the returns or losses flowing from such use. Where the right is transferable, a market for it may develop and this will tend to reinforce the feedback mechanism and move objects into the hands of those who make the most profitable use of them.¹⁸

But there is a problem with the transposition of property rights logic to information structures, as in intellectual property rights: unlike material objects, information is not naturally scarce; it can normally be used by multiple users all at once without the original form losing its value. Often it can be reproduced at little or no cost. Furthermore, most creations build on earlier creations: information "cumulates". All these "public goods" characteristics create problems for the creation of rights and lead one to wonder whether property rights are desirable at all and if so, how to ensure that their object can effectively be reserved to the titleholder.

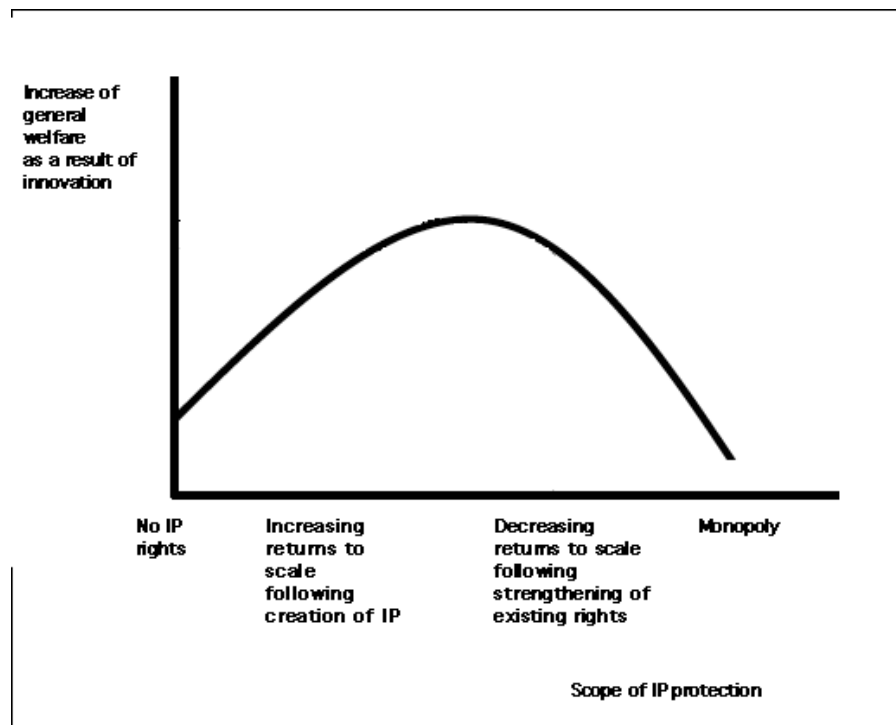
As regards the first question, whilst information itself is not naturally scarce in the economic sense of the term, human talent to create it may well be. Where particular forms of creation are not a natural by-product of ordinary human activity undertaken for other reasons, but require particular talents to be directed to producing them, there may be a point to setting up legal institutions that create special incentives to that effect. To put it differently, human talent is scarce and hence triggers the creation of forms of property rights to direct it to its most productive deployment.

If we go for individual rights as incentive structures, we face the challenge of reserving – by legal fiat – the informational object to the titleholder – a

¹⁸ it the Best Incentive System?, in: *Innovation Policy and the Economy, Vol 2*, Adam Jaffe, Joshua Lerner and Scott Stern (eds), Cambridge, Mass., MIT Press, 2002, pp. 51-78. See generally Mackaay, Ejan and Stéphane Rousseau, *Analyse économique du droit*, Paris/Montréal, Dalloz-Sirey/Éditions Thémis, 2008, (2nd ed.), pp. 206-263 or Ejan Mackaay, *Economic analysis of law for civilian legal systems*, Cheltenham, UK, Edward Elgar (forthcoming), chapter on *Property rights*.

condition for any property right. To the extent that such reservation is successful, it restricts the possibility for others to build on existing works for follow-on creation and this tends to slow welfare growth. To judge a particular copyright regime one has to know the composite effect of these two opposite forces: that of stimulating creators whose creations are visible and that of restricting access for creators whose creations are yet to come. We should like to set this trade-off so as to maximise overall creativity in society in the longer run. As regards this trade-off, we are fairly confident that the relationship has the general shape of an inverted U-curve displayed in Diagram 1.

Diagram 1 Relationship between the strength of intellectual property and the increase of general welfare (as mediated by the level of innovation)¹⁹



¹⁹ This presentation draws on Sag, Matthew J., "Beyond Abstraction, The Law and Economics of Copyright Scope and Doctrinal Efficiency", (2006) 81 *Tulane Law Review* 187-250, fig. 1 and 3, and on Valkonen, Sami J. and Lawrence J. White, "An Economic Model for the Incentive/Access Paradigm of Copyright Propertization: An Argument in Support of the Proposed New §514 to the Copyright Act", (2006) 29 *Hastings Communications & Entertainment Law Journal* 359-400.

In the absence of formal protection of intellectual property, interested persons can still secure their creation by keeping it secret and insisting on confidentiality agreements when giving access to it. So the left hand side of the graph does not start at the horizontal axis. When formal protection is weak, strengthening it should have the effect of improving overall creativity in society. Beyond a certain point, however, strengthening it further will reduce overall creativity as the monopolising effect of the rights crowds out follow-on innovation.

Some empirical support for this inverted U-shape may be found in Lerner's survey over a 150-year period, admittedly for patents.²⁰ Lerner uses as dependent variable the number of patents taken out and relates this to the scope of the legislation protecting patents, as the explanatory variable. Where the protection is weak, legal changes strengthening it will lead to more patents being taken out (the left side of the curve in Diagram 1); where protection is already strong, further strengthening it will have little or no effect.

Pollock attempts to estimate the optimal term of copyright by means of a formal model.²¹ For parameters of copyright other than duration, one could take welfare to be indicated by the number of works created and make this depend on the stimulating effect of copyright, on one hand, and on its deadweight-loss effect (on follow-on creators) on the other. For the copyright term, a richer model is necessary which includes the consideration that copyright work produces welfare increases over time, but these increases decline as time goes by ("cultural decay"). By building in the cultural decay factor as well as a standard discount factor for the value of money earned in the future, Pollock is able to estimate an optimal copyright term of 15 years in a steady-state model.²² The estimate is, however, quite sensitive to the values of these parameters and putting them at the low end of the range, he arrives at an estimate of 52 years.²³

Valuable though this first attempt at empirical estimation may be, we consider this in itself not yet conclusive as regard the optimal term of copyright. Hence, whilst we may feel confident that the relationship has the form of an

²⁰ Lerner, Josh, « 150 Years of Patent Protection », (2002) 92 *American Economic Review Papers and Proceedings* 221-225.

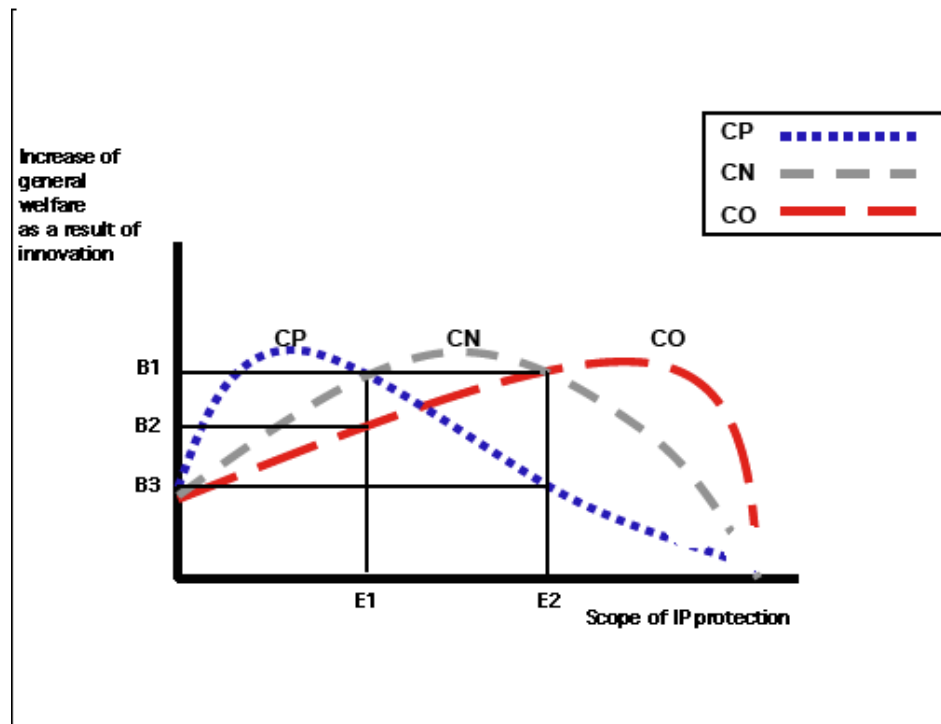
²¹ Pollock, Rufus, « Forever Minus a Day? Some Theory and Empirics of Optimal Copyright », (2009) 6 *Review of Economic Research on Copyright Issues* 35-60.

²² Id. p. 52.

²³ Ibid.

inverted U, we do not know with confidence how to "measure the curve", and hence cannot yet ascertain in practice where the optimum lies. To illustrate what this means, consider Diagram 2.

Diagram 2 Optimistic and pessimistic views of the relationship between the strength of intellectual property and the increase of general welfare (as mediated by the level of innovation)



The grey curve (CN) is the same we used in Diagram 1. An optimistic view of current copyright (CO; the red curve) might hold that current protection is still below what would be optimal and hence that, if we are currently at E1, further strengthening (moving from E1 to E2, for instance) would enhance economic welfare. It appears to correspond to the view generally taken by the cultural industries. The opposite, pessimistic view (CP) is represented by the blue curve. It holds that at point E1, copyright is extended beyond what is socially optimal and that moving from E1 to E2 would reduce overall welfare. By contrast, tightening (moving to the left of E1) the criteria for eligibility for copyright (and hence leaving more work ineligible for it and in the public domain) would enhance economic welfare.

We should now look at some observational evidence regarding the effects of copyright.

The term of copyright – some empirics

Scherer has done a remarkable study on the returns to innovation in the consumer market. It concerns both patents (patents in general and those on pharmaceutical products in particular) and copyright (with respect to music) in both the United States and Germany. Significantly, the study's name is "The Innovation Lottery."²⁴ In all fields, the findings seem to support Schumpeter's thesis that, owing to the deep uncertainty involved in invention and its low success rate, only exceptional profits would be able to encourage it. The profit should be much greater than the yield that attracts persons into ordinary commercial ventures.²⁵ Scherer observes an extremely skewed distribution of profits: many participants earn very little and may even lose their shirt, whilst a minority hits the jackpot. In order to play in the lottery, one has to be risk-loving. These findings find support in Bessen's more recent study.²⁶

Commercial exploitation of creations is normally turned over to major organisations (music, film and software publishers) the senior officers of which are anything but inveterate gamblers. Why do they participate in the innovation process? One must assume that they are able to spread the risk. They could shift part of the risk to other actors and put together a diversified project portfolio for the remainder, effectively pooling the risks. In an empirical study,²⁷ Baumol

²⁴ Scherer, F.M., *The Innovation Lottery*, in: *Expanding the Boundaries of Intellectual Property : Innovation Policy for the Knowledge Society*, Rochelle Cooper Dreyfuss, Diane Leenheer Zimmerman and Harry First (eds), Oxford, Oxford University Press, 2001, pp. 3-21. Kretschmer, Martin, *Artists' Earnings and Copyright: A Review of British and German Music Data in the Context of Digital Technologies*, in: *New Directions in Copyright Law, Volume 2*, Fiona Macmillan (ed.), Cheltenham, UK, Edward Elgar, 2005, pp. 61-78, has similar findings for the music markets in Germany and Great Britain.

²⁵ Schumpeter, Joseph A., *Capitalism, Socialism and Democracy*, New York, Harper & Row [1942], 1976, (5th ed.), at pp. 73-74, cited by Scherer 2001, at p. 3.

²⁶ Bessen, James E., "The Value of U.S. Patents by Owner and Patent Characteristics", (2008) 37 *Research Policy* 932-945.

²⁷ Baumol, William J., *Education for Innovation: Entrepreneurial Breakthroughs vs. Corporate Incremental Improvements*, in: *Innovation Policy and the Economy, Volume 5*, Adam B. Jaffe, Josh Lerner and Scott Stern (eds), Cambridge, Mass., MIT Press, 2005, pp. 33-56; <http://www.nber.org/chapters/c10806.pdf> .

confirms this division of labour between inventors (often individuals or very small groups), who gamble on a small chance of winning the jackpot, and those, often large organisations, who take care of polishing and marketing, and who bet on the relative certainty of acceptable average profits across a broadly balanced portfolio of creations. The two functions are complementary and not interchangeable. They both seem essential to bringing new products to market for consumers. For our purposes, one may expect copyright works that still produce revenue towards the end of the term of protection to be in the hands of these large payers.

Is an extended term helpful in counteracting the prospect of a very skewed lottery involving a "pot of gold?" Economists consider that the incentive effect today of future revenue diminishes with time. A dollar to be earned next year is discounted to the present and enters at its discounted value in decisions the beneficiary has to make now. As the number of years increases so does the discount factor, exponentially. Discounted to the present at a plausible rate, the current value of money to be earned 50 or more years from now is almost zero and hence so is its incentive effect.

It would be interesting to go and see how creators themselves view the matter. This has been attempted by means of data on copyright renewals in the US before the country adhered to the Berne Convention in 1989. One may presume holders who did not renew copyright at the end of the initial 28-year term to value it less at the time of renewal than the small renewal fee, that is almost nothing. Taken over all copyright holders, non-renewals allow one to extrapolate the useful life of copyright to the holders: the median value is about 15 years according to a study by Landes and Posner.²⁸ Of course, this value hides enormous variation. For most creators, the value of copyright goes down to zero after only a few years. For the exceptional few (such as the holders of the copyright in Mickey Mouse) it is valuable for as long as the right is valid. This asymmetry may itself be part of the "pot of gold" logic driving copyright.

²⁸ Landes, William M. and Richard A. Posner, "Indefinitely Renewable Copyright", (2003) 70 *University of Chicago Law Review* 471-518; reproduced in Landes, William M. and Richard A. Posner, *The Economic Structure of Intellectual Property Law*, Cambridge, Mass., Belknap of Harvard University Press, 2003, pp. 210-253.

The composite image resulting from these observations is that the current term of copyright goes very much beyond the needs of the vast majority of creators. Only a minute fraction of them benefit from it; in most of these cases the copyright has been transferred into the hands of large-scale players that form the "cultural industries".

What we do know is that over the past quarter century copyright has been extended in practice towards more protection on all of its registers: protectable objects, scope and duration of the right, sanctions available for infringement.²⁹ Many of these changes clearly benefit the large-scale players who hold copyrights that still earn money. They operate at the scale required to engage in effective political lobbying. The legislative changes resulting from their efforts must be qualified as rent-seeking. Since copyright is uniform and automatically granted to all creators, these changes also reinforce the rights of the vast majority of copyright holders who don't need this and as a result lock up much cultural expression needlessly. In this spirit, a recent study by a team of the IVIR-Institute, in Amsterdam, vehemently opposes a term extension for sound recordings.³⁰

Where do we go from here

What evidence we have suggests that the need for protection varies greatly amongst works subject to copyright and amongst their creators. At the extreme end of the distribution, fabulous revenues are earned, perhaps over the full term of copyright, and these may well be the "pots of gold" that prospectively entice creators into the lottery that is creative effort, where at the other end of the distribution persons earn little, for a short time, if they do not lose their shirt altogether.

These realities are severely at odds with three of the principles on which copyright is essentially founded in the countries of the Berne Union. In each country, copyright

²⁹ Nimmer, David, "Codifying Copyright Comprehensibly", (2004) 51 *UCLA Law Review* 1233-1387 has examined in detail each of the amendments to US copyright legislation.

³⁰ Helberger, Natali, Nicole Dufft, Stef J. van Gompel and P. Bernt Hugenholtz, "Never Forever: Why Extending the Term of Protection for Sound Recordings is a bad Idea", (2008) 30 *European Intellectual Property Review* 174-181.

- is essentially of uniform duration across products and copyright holders (save neighbouring rights)
- is automatically obtained (no formality)
- has a term of at least life + 50 years, for individual creators or 50 years after publication for films and anonymous work

Perhaps time has come to question some or all of these principles. Given the extreme variation of the usefulness of copyright to the different holders and the difficulty we have in actually assessing that usefulness, one should like to see in place a system in which creators would be led to reveal what value they attach themselves to the copyright and protection would extend no further than the creator's expressed need for it.

Revealing one's need requires an act by the creator – a formality. The drawbacks of formalities have been amply discussed in the literature, most recently in the Bently *et al.* reader on Global Copyright.³¹ Whatever the historical experience, van Gompel feels that technological advances have made registration and consultation of the registers over the internet less of a burden than it would have been in the past, and advocates their reintroduction.³² Looking back at the long US experience with formalities and registration, Ginsburg cautions against underestimating the difficulties of organising a smoothly functioning and quick registration system and even the practicalities of obliging authors to affix a copyright notice.³³ But she admits that formalities have benefits: "If the creator cannot take care enough to mark off her claims, then perhaps the public should be entitled to rely on the absence of notice to treat the work as unclaimed and free. Law and economics reasoning might reinforce this conclusion: the creator is better able to assume the costs of notification than the

³¹ Bently, Lionel, Uma Suthersanen and Paul Torremans (eds), *Global Copyright - Three Hundred Years Since the Statute of Anne, from 1709 to Cyberspace*, Cheltenham, UK, Edward Elgar, 2010, chapters 28 to 31, pp. 467-477.

³² van Gompel, Stef, Formalities in the digital era: an obstacle or opportunity?, *in: Global Copyright: Three Hundred Years Since the Statute of Anne, from 1709 to Cyberspace*, Lionel Bently, Uma Suthersanen and Paul Torremans (eds), Cheltenham UK, Edward Elgar, 2010, pp. 395-424.

³³ Ginsburg, Jane C., The US Experience with Formalities: A Love/Hate Relationship, *in: Global Copyright: Three Hundred Years Since the Statute of Anne, from 1709 to Cyberspace*, Lionel Bently, Uma Suthersanen and Paul Torremans (eds), Cheltenham UK, Edward Elgar, 2010, pp. 425-459.

public is to incur the costs of tracing right holders."³⁴ The real issue is what happens in cases of failure to affix notice, register or record a transfer of ownership.

What might a system look like that would preserve as much as possible of the current rules, yet lead creators to reveal the value they attach to their copyright and allow copyright to be maintained on highly valued work, whilst letting it lapse for the others, which would then slide into the public domain? One might grant copyright automatically upon creation for a limited time, provided a notice is affixed indicating the year of creation and identifying the right holder. Absence of such notice might be taken to be prima facie evidence of a desire to put the work in the public domain. The right might be granted initially for 15 years, on the basis of the numbers mentioned above.³⁵ At the expiry of this term, copyright would be renewable for a limited time, say 5 or 10 years, upon registration and payment of a fee to a national or international registration agency. Debatable points are whether copyright should be renewable indefinitely or for a limited number of times only, and whether the fee for renewal should be uniform or move up over time, as creators are apparently sensitive to the cost of renewal.³⁶

One clear advantage of such a set-up would be that either the large players capable of mounting an effective lobbying effort will not need to do so (since they can renew their rights as they see fit) or if they do, legislation to accommodate them will not spill over onto all copyright. For follow-on creators – and aren't we all – the uniform extension of the copyright term has the effect of needlessly locking up lots of culture that could circulate freely. This must count as a wasteful social cost. Admittedly for a proposal of this sort to go forward, the Berne Convention will have to be reopened – a daunting international constraint on its chances of success.³⁷ Those leery of that prospect may ponder Justin Hughes'

³⁴ Ginsburg 2010 US Experience, at p. 457.

³⁵ The *Economist* weekly has proposed a 14-year term in *leaders* on 15/1/2003, 30/6/2005 and 8/4/2010.

³⁶ Landes & Posner, 2003 Indefinitely, p. 33 and 2003 *Economic Structure*, p. 245.

³⁷ Hishinuma considers the possibility of revision of the Berne Treaty purely hypothetical: Hishinuma, Takeshi, The Scope of Formalities in International Copyright Law in a Digital Context, in: *Global Copyright: Three Hundred Years Since the Statute of Anne, from 1709 to Cyberspace*, Lionel Bently, Uma Suthersanen and Paul Torremans (eds), Cheltenham UK, Edward Elgar, 2010, pp. 460-477, at p. 471.

proposal, for the US, of an interpretation of copyright in which the scope of fair use expands as a work ages.³⁸ Equitable doctrines to similar effect in legislation and case law of other jurisdictions could be put to the same use³⁹. For Canada, for instance, the broad interpretation of the fair dealing provision in the *Copyright Act* the Supreme Court has adopted in the *CCH*-case leaves the door open to such a development, as a recent report by Boyer intimates⁴⁰.

Conclusion

Economics looks at copyright through the incentives it provides to entice creators into creative effort. It shows how copyright borrows some characteristics of property rights generally, but parts ways with them to accommodate its particular objects, information structures, which unlike physical objects are not naturally scarce. It points to the negative side effect of copyright in that it complicates access to the works subject to it. This should count as a cost in as much as new information structures build on existing ones: almost all information is "cumulative". It suggests that copyright, and indeed all intellectual property, is a compromise between the need for reward on creations we see by reserving them to the creator and the need to let information freely flow so as to permit further creations to emerge with as few encumbrances as possible.

Over the past quarter century or so, all parameters of copyright have been moved towards more protection, disturbing the underlying compromise. The term of protection extends well beyond what is practically useful for the vast majority of creators, much as it may serve the needs of a small number of large players who hold important older copyrights still producing revenue. This paradoxical situation results from a few founding principles considered untouchable in the countries members of the Berne Convention: it is automatically obtained, without formality and for a uniform and rather lengthy term. If we want to redress the

³⁸ Hughes, Justin, "Fair Use Across Time", (2003) 50 *UCLA Law Review* 775-800.

³⁹ On this, see for instance Geller, Paul Edward, "A German Approach to Fair Use: Test Cases for TRIPs Criteria for Copyright Limitations", (2010) 57 *Journal of the Copyright Society of the USA* 901-919.

⁴⁰ *Copyright Act*, RSC 1985, Ch. C-42, sect. 29; *CCH v. Upper Canada Law Society*, [2004] 1 SCR 339, 2004 SCC 13; Boyer, Marcel, *The Economics of Copyright and Fair Dealing*, Report, CIRANO S2007-32, 2007, <http://www.cirano.qc.ca/pdf/publication/2007s-32.pdf>

balance underlying copyright, we may have to call these principles into question and lead creators individually to reveal the value they attach to their right by renewing it, allowing it to lapse into the public domain when they no longer value it. Whilst this would reintroduce formalities into the structure of copyright, technological advances may make these less of a burden than they were at the time of their abolition. Such an approach would have the fortunate effect of avoiding that lobbying by the happy few needlessly locks up culture for most of us.