



**COPYRIGHT: CONSIDERATIONS BEYOND ECONOMICS**

**Marc-André Pigeon  
Economics Division**

**1 October 2002**

---

---

**PARLIAMENTARY RESEARCH BRANCH  
DIRECTION DE LA RECHERCHE PARLEMENTAIRE**

**The Parliamentary Research Branch of the Library of Parliament works exclusively for Parliament, conducting research and providing information for Committees and Members of the Senate and the House of Commons. This service is extended without partisan bias in such forms as Reports, Background Papers and Issue Reviews. Analysts in the Branch are also available for personal consultation in their respective fields of expertise.**

**CE DOCUMENT EST AUSSI  
PUBLIÉ EN FRANÇAIS**

## TABLE OF CONTENTS

	<b>Page</b>
HOMO ECONOMICUS .....	2
THE PUBLIC GOODS NATURE OF INFORMATION, KNOWLEDGE AND IDEAS (IKI).....	5
THE COSTS OF COPYRIGHT INCENTIVES .....	7
OTHER CHALLENGES TO THE INCENTIVE STORY.....	8
COPYRIGHT VERSUS PATENTS .....	11
THE TWIN ASPIRATIONS OF INFORMATION.....	12
CONCLUSION .....	13
SELECTED REFERENCES.....	13



CANADA

LIBRARY OF PARLIAMENT  
BIBLIOTHÈQUE DU PARLEMENT

## **COPYRIGHT: CONSIDERATIONS BEYOND ECONOMICS**

The traditional economic view of copyright law can be summed up in one word: incentives. For economists, copyright law is what motivates authors to publish, musicians to compose, artists to paint, producers to produce, programmers to program, and so on. Stripped bare, the argument says if creative people cannot make a living from their creative works, they will simply stop producing and find a steady-paying job, to the detriment of society as a whole.<sup>(1)</sup> Copyright law prevents this from happening, at least for creative people talented enough to garner some kind of following.

At the same time, economists have also long understood that overly strong copyright law can impede the creative process by limiting the scope of the public domain on which all works of authorship, musicianship and art are ultimately based. The public debate, however, rarely seems to advance to this level of nuance. For example, Michael McCabe, past president of the Canadian Association of Broadcasters (CAB), has argued that “[i]f copyrights are devalued by cheaters and takers, nobody will have any incentive to create, and everyone will be worse off.”<sup>(2)</sup> The economic dimensions of copyright have also assumed a pre-eminent role in legal circles, often trumping traditional philosophical, political and social considerations. James Boyle argues, for example, that “the current trend seems to be to assume that economics is the most appropriate theoretical language in which to discuss questions of the regulation of information.”<sup>(3)</sup>

This paper examines the public domain argument and explores two additional reasons why the “copyright-as-necessary-incentive” argument should be qualified. First, there are many ways for artists, authors, musicians and programmers to turn their creativity into

- 
- (1) Welfare provisions and state subsidies diminish the force of this argument.
  - (2) Michael McCabe, “TV, Film and Online Broadcasting in the Wake of iCraveTV – What Now?” Paper presented at The Canadian Institute’s Conference on “Intellectual Property Online” in Toronto, Ontario, 27 June 2000.
  - (3) See James Boyle, *Shamans, Software, and Spleens: Law and the Construction of the Information Society*, Cambridge, Mass., Harvard University Press, 1996, p. 115.

income. Copyright law is just one of them. Second, the creative process is driven not only by cost-benefit analysis of the kind implied by the standard economics argument, but also by innate human tendencies that seek expression regardless of whether copyright law exists or is in effect for long or short periods of time. If these arguments are accepted, the case for weakening, but not eliminating, current copyright law can be forcefully made. At the very least, these critiques call into question the use of economic arguments to extend the existing body of copyright law, as well as the rhetorical use of the “incentives” argument in public debates.

## HOMO ECONOMICUS

In the late 1980s, a Finnish programmer named Linus Torvalds decided to build his own computer operating system<sup>(4)</sup> because he could not afford the then-dominant Unix operating system. Based on an older, cruder program already in the public domain, Torvalds crafted the core of a potentially sophisticated operating system and released it to programmers throughout the world under a General Public Licence (GPL), a mix of copyright law and contract law that essentially guarantees the licensed work is “always available to others to use or modify as they wish, as is the code that derives from GPL-protected code. This combination of copyright law and contract law essentially renders GPL code, as well as code derivative of GPL code, free.”<sup>(5)</sup>

Programmers built on Torvalds’ work, often on their own time and always at their own expense, with no obvious incentive other than possibly a sense of accomplishment, amusement and social standing among other programmers. Together, they developed what has become known as Linux, now recognized as one of the world’s best operating systems. According to Lawrence Lessig, the program is so good that it “is now the fastest-growing operating system in the world. It is supplied by a host of companies, commercial and non.”<sup>(6)</sup>

---

(4) Operating systems are the programs that tell computers how to manage files. The best-known example probably is Microsoft Windows.

(5) Lawrence Lessig, *The Future of Ideas*, New York, Random House, 2001, p. 59.

(6) *Ibid.*, pp. 54-55.

In 1996, a U.S. programmer named Eric Raymonds duplicated Torvalds' efforts, albeit on a much smaller scale, with a program called "Fetchmail."<sup>(7)</sup> Raymonds documented the process and identified several of the key elements forming a collaborative effort that at times involved almost 1,000 programmers, all working for free, most in their spare time.<sup>(8)</sup> He found that a successful collaborative effort of this kind should, among other things:

- **Fulfil a real need.** In Raymonds' words: "Every good work of software starts by scratching a developer's itch," by "finding an interesting problem." This adds an essential "fun" component that draws other high-level programmers who genuinely enjoy the process of programming, much like musicians who play for their own amusement.
- **Build on what is already available.** Raymonds said: "Good programmers know what to write. Great ones know what to rewrite and reuse." The existence of a vibrant public domain is a crucial building-block for good programming.
- **Treat other programmers as your most valuable resource.** According to Raymonds, by so doing, "they will respond by becoming your most valuable resource."
- **Choose a socially adept coordinator.** This person should be someone who can administer praise when the need arises and whom people genuinely like.

With these ingredients in place, the software development process can move along efficiently, quickly uncovering and solving the software "bugs" (i.e., problems) that inevitably crop up in that process much more quickly than under a controlled model – what Raymonds calls a "cathedral" model. Raymonds argues that the "bazaar" model (i.e., the GPL approach) avoids many of the normal and costly pitfalls associated with the software development process, including the need to: marshal the necessary resources within an organization (think turf battles); organize people for optimum productivity; motivate programmers for a project they may not enjoy; monitor the process to ensure details do not get missed; and define goals to keep everyone pointed in the same direction.

---

(7) Another well-known GPL program is the Apache server software, now bundled with all IBM servers. This public-domain server now practically dominates the server software sector, beating out competing programs from such firms as Microsoft. As Lessig (*ibid.*, p. 56) notes, "[a]lthough the debate still rages fiercely about whether open source software such as GNU/Linux can ever hope to best Microsoft, Apache has already done it."

(8) Raymonds' account of the Fetchmail development process – entitled *The Cathedral and the Bazaar* (2000) – is available on-line at <http://gnuwin.epfl.ch/articles/en/cathedralbazaar/cathedral-bazaar.pdf>.

Almost by definition, these issues disappear in the Torvalds/Raymonds approach in which:

- volunteers spontaneously marshal resources with no coercion involved;
- the organization of work also occurs spontaneously through a self-selection process – generally speaking, only the best programmers will be willing to subject their work to the high-level public scrutiny involved in the Linux or Fetchmail development process;<sup>(9)</sup>
- motivation is also assured, otherwise the project would not advance (these are, after all, volunteers);
- monitoring is unnecessary because it is a voluntary effort; and
- the goal-setting point is moot because it is, again by definition, an anarchic process willing to explore a variety of goals.

The Linux and Fetchmail examples get to the heart of the economic question concerning copyright law and intellectual property law in general. Most economic analysis of copyright rests on a particular assumption about human behaviour, namely that individuals are motivated by selfish ends translated into financial – or market – terms.<sup>(10)</sup> This in turn leads to economic incentive arguments that creative “production” would dry up without sufficient copyright safeguards. Others argue that this assumption is troubling in a very general sense – these theorists emphasize class or group dynamics over an individual-based analysis. However, the assumption of a money-obsessed selfish individual appears to be especially suspect when applied to the issue of what motivates people to create music, art, literature and, in a very general sense, ideas and even the expression of those ideas. It is almost a truism that at least some artists pursue their art not so much out of a desire to be rich but because of some ill-defined need to express who they are, to understand themselves and their society through their works regardless of whether this expression finds approval in the broader community. Also, the fact that music, poetry, literature and other cultural products predate organized markets of the kind we now know, as well as the more comprehensive copyright law of the modern era, supports this

---

(9) Although less talented programmers may want to participate (and may do so in other forums), social dynamics will generally impede them from participating in elite programming circles such as Linux.

(10) The Torvalds and Raymonds examples also have interesting implications for Ronald Coase’s theory of the firm, which posits that the institution of the firm arose for efficiency reasons, to save on transaction costs. In contrast, these examples suggest that the most efficient approach to designing certain kinds of software may exist *outside* of the firm.

argument. Such analysts also point to the value of a free and easily available public domain of creative output and the “creative copying” that often precedes great art: many of Shakespeare’s works, for example, bear a remarkable and not-coincidental resemblance to well-known (at the time) Italian plays.

It is also somewhat ironic that the social science which devotes so much attention to monetary incentives was built by men seemingly little motivated by financial rewards. Adam Smith, David Ricardo, John Stuart Mill, Karl Marx, Thorstein Veblen and John Maynard Keynes devoted countless hours to their seminal works not so much out of a desire to enrich themselves but because of some abiding passion for their research.<sup>(11)</sup> Albert Einstein, arguably the pre-eminent scientist of the 20<sup>th</sup> century, was apparently motivated by the love of ideas and was known as a man of unrelenting modesty, hardly the type to be motivated by monetary concerns.<sup>(12)</sup>

Moreover, a growing body of research in the field of psychology and economics suggests that humans are at least partially motivated by concepts of fairness, equity and justice that transcend or override the purely selfish motivations (translated into monetary terms) commonly assumed by economists.<sup>(13)</sup>

## **THE PUBLIC GOODS NATURE OF INFORMATION, KNOWLEDGE AND IDEAS (IKI)**

Before continuing, it is important to point out the crucial distinction between information, knowledge and ideas (IKI) and what lawyers call the “expression” of those ideas in the form of books, papers, cassettes, movies, software, etc. In economics, IKI are considered public goods for two reasons:

- 
- (11) For details, see Robert L. Heilbroner’s *The Worldly Philosophers: The lives, times and ideas of the great economic thinkers*, New York, Simon & Schuster, 1953.
- (12) “The figure of Einstein emerges clearly from the background of cultural history, in his human qualities as well. He was naive, kindly, but also obstinate and absolutely without vanity. Indeed, he was so modest that almost everyone who had anything to do with him mentioned this as his outstanding quality. He refused to concern himself with the trivial things of everyday life, as far as possible, concentrating absolutely on the intellectual project he was working on.” From a review of *Einstein. The Wise Man of the World and his Century* by Armin Hermann, Munich, Piper Verlag, 1996.
- (13) See especially U.S. economist Matthew Rabin, “Psychology and Economics,” *Journal of Economic Literature*, Vol. XXXVI, March 1998, pp. 11-46.



- first, because of their generally non-competitive nature. Unlike the use of most kinds of property, my use of an idea does not diminish anyone else's ability to use that idea also; and
- second, because it is costly and difficult to exclude others from making use of them, as illustrated by the never-ending attempts to crack down on illegal copying.

Property rights essentially grant a monopoly right to the expression of an idea. Without these rights, standard economic theory says unauthorized copying would occur to a large extent because ideas and their expressions (books, tapes, programs) are inexpensive to copy. This, in turn, leaves little or no financial incentive to produce original works, to turn good ideas into forms that can be mass produced. The conventional economic story provides an accurate rendition of what happened when the Gutenberg press reduced the cost of reproducing books: society went from a situation where scribes spent days, weeks and years transcribing texts to a point where hundreds and thousands of copies could be made in a very short time. Consequently, the first copyright legislation – the Statute of Anne – was introduced to safeguard authors' rights over reproduction.<sup>(14)</sup>

The simple economic story is compelling. The difficulty arises when it is taken a step further to suggest that without copyright legislation, there would be almost no incentive for the creation of scholarly texts, artistic endeavours or other useful ideas. In fact, some economists argue just the opposite, namely that unregulated intellectual property markets would not lead to the loss of useful and/or creative ideas. For example, the inventor of a weather-forecasting technique could profit from his/her invention – even if it is easily copied – by speculating in the commodities market.<sup>(15)</sup> Something similar could be said to be happening in the GPL world: the programmers who contribute to the success of GPL, and are recognized in the programming community for having done so, can leverage that expertise into programming jobs at companies that want to tailor GPL software to their own particular needs.

---

(14) The Statute of Anne (1709) was also known as “An Act for the Encouragement of Learning.” According to Stewart E. Sterk (“Rhetoric and reality in copyright law,” *Michigan Law Review*, Vol. 94, No. 5, March 1996, pp. 1197-1249), the Statute's preamble “deplored the growing tendency of printers and booksellers to reprint books ‘without the Consent of the Authors or Proprietors ... to their very great Detriment, and too often to the Ruin of them and their Families.’ ... [N]ot only were these printers and booksellers usurping revenues from more deserving authors, but copyright legislation also was needed ‘for the encouragement of learned men to compose and write useful books’ ” (p. 1 of 30 in the on-line version).

(15) This example is borrowed from Robert Cooter and Thomas Ulen, *Law and Economics*, Glenview, Illinois, Scott, Foresman and Company, 1988, p. 114.

## THE COSTS OF COPYRIGHT INCENTIVES

As noted earlier, economists have long understood that copyright law imposes costs. For example, Stewart Sterk points out that expanding copyright protection “increases the costs to authors by requiring them to obtain permission when they seek to build upon existing work.” At some point, the costs associated with expanded copyright rules exceed the benefits: more people are deterred from producing than are encouraged. While it may seem that we are a long way from that point, Hollywood abounds with stories of producers deterred from making movies because of the costs involved in acquiring rights to music, logos and stories. According to Lawrence Lessig, many low-budget film producers even have to worry about accidentally filming so-called “incidental” artwork – an advertisement on a truck in the background, a can of Coke or posters on a dorm-room wall.<sup>(16)</sup> According to a textbook on law and economics, “put succinctly, the dilemma is that without a legal monopoly, not enough information will be produced but with the legal monopoly too little of the information will be used.”<sup>(17)</sup> William Landes and Richard Posner make a similar point when they describe copyright as “constructed by the tension between the need to grant legally protected interests to authors in order to motivate them and the need to limit the rights of authors so as to allow future creators legal access to the raw material they need.”<sup>(18)</sup> Society’s “optimal” length of copyright will reflect that point where the benefits to society from an increase in copyright protection are just equal to the costs.

There are, however, several reasons for qualifying this kind of analysis. For the moment, it is important to note that it assumes that an author with a good idea or a musician with a song on the tip of his or her tongue will refrain from writing a book or a song and seeking its expression in some tangible way unless copyright is either implemented or extended beyond some difficult-to-calculate time horizon. There is psychological evidence that humans do not, in fact, behave this way, some of which was discussed earlier.<sup>(19)</sup> Economist Matthew Rabin, for example, points to a theory called “melioration” which says that “... people tend to make

---

(16) Lessig, pp. 1-2.

(17) Cooter and Ulen (1988), p. 135.

(18) Quoted in Boyle (1996), pp. 38-39.

(19) Corporations, on the other hand, may be forced to look further into the future if they have made large capital investments that will yield returns only many years down the road.

current choices according to which choice *directly* yields the highest utility, without taking into account the choice's effect on the utilities from future choices. That is, people often ignore 'internalities' – the effects a current choice has on the utilities of later choices."<sup>(20)</sup> Individuals, in other words, are for the most part short-sighted, possessing what economists call a strong time preference.

Copyright rules, especially when they are unclear or go against the grain of public opinion, can also be extremely costly in terms of litigation, monies spent on enforcement and, in some cases, monies spent on educating the public about what the law says. Jessica Litman points to numerous examples of businesses and individuals who simply refuse to believe the law forces them to pay a licensing fee for playing a CD at their restaurant.

Copyright owners have the exclusive right to authorize public performance of their works. ... licenses were cheap, a matter of a few hundred dollars per year. Nonetheless, because proprietors of small businesses found the well-settled rules incredible, dozens of them went to court to protect their supposed right to play music – every year – at a cost of hundreds of thousands of dollars, because they couldn't believe that these rules were really the rules.<sup>(21)</sup>

## **OTHER CHALLENGES TO THE INCENTIVE STORY**

There are other arguments that suggest the copyright-as-incentive argument is not as powerful as some creators have argued. To begin with, copyright legislation does not appear to be necessary for the full range of human creations. "For instance, giving copyright protection to personal snapshots or home videos is unlikely to have any impact on their volume. People who take snapshots and videos expect no financial return and would engage in the same behaviour without regard to the availability of copyright protection."<sup>(22)</sup> By contrast, whenever financial gain is *the* motivating factor, then, by definition, copyright protection will yield more output. This suggests that the quantity of textbooks, wire services (e.g., AP, Reuters, Bloomberg, Dow Jones) and data analysis services *is* probably a positive function of copyright protection, at least over the long term. Table 1 outlines the author's attempt to categorize

---

(20) Rabin (1998), p. 34.

(21) Jessica Litman, *Digital Copyright*, Amherst, New York, Prometheus Books, 2001, p. 29.

(22) Sterk (1996), p. 7 of 30.

“content” by its need for copyright protection.<sup>(23)</sup> For example, it is difficult to justify strong copyright protection for commercial advertising because the objective is to differentiate one product from another. It would do an advertiser little good to copy a competitor’s ads wholesale because consumers would have little incentive to buy one product rather than another.<sup>(24)</sup>

<b>Table 1: Classing IKI by Copyright Protection Need</b>			
<i>IKI Product</i>	<i>Strong</i>	<i>Mid-Range</i>	<i>Weak</i>
Textbooks	X		
News services	X		
Information services	X		
Business software applications		X	
Movies		X	
Literature			X
Derivative works (e.g., movie rights to a book)			X
Advertisements			X
Entertainment software			X
Architectural software			X

It is difficult to see how strong movie rights to a best-selling book (i.e., derivative works) are a *necessary* incentive for more literary output.<sup>(25)</sup> At the very least, granting authors rights over derivatives of their books increases the cost of movies and reduces their output.

---

(23) It should be noted that no judgment is being made as to what exactly (in terms of years of copyright protection, for example) constitutes “strong,” “mid-range” and “weak.” As well, this is only a *tentative* classification and is meant as a starting point for discussion rather than a definitive classification.

(24) Strong protection for textbooks, news and information services can be justified because these services are essential for the advancement of human knowledge and might not be produced in the absence of copyright protection. Business software could continue to exist and be produced under a mid-range copyright protection regime if only because software producers can make money by tailoring their programs to the particular needs of their clients. This would in effect be their “value-added.” As for movies, there is no obvious reason why more moderate protection would dry up production: successful movies can earn handsome profits on box office receipts, as they did before the advent of VCRs, DVDs and pay-per-view. None of these technologies, not even elaborate and accessible home theatres, appear to have seriously affected movie attendance. Entertainment software is likely to be produced with only weak copyright protection for the same reasons that music will generally be created even in the absence of strong copyright protection, i.e., this is part of the human condition. Similarly, architectural software will likely continue to thrive so long as architects are needed to design buildings and homes: most (conceptual) architectural tools were created in the public domain in a spirit of shared scientific knowledge. There is no reason something similar could not happen with architectural software, as the Linux and Fetchmail examples illustrate.

(25) There may be, of course, some moral rationale for allocating these rights.

For the author's first book, potential movie royalties are unlikely to be a significant factor either in the decision to write or in the decision to publish. Indeed, because the chance that movie rights to the book will command a high price is infinitesimally small, any first author who makes movie royalties a critical factor in deciding to write is almost certainly misperceiving his own interests. ... For books by a more established author, movie rights may well have significant value. But for the established author, revenues from the book alone generally will be enough to keep the author writing, unless the author has other opportunities that are more remunerative.<sup>(26)</sup>

In addition to distinguishing among IKI by type, it is also useful to differentiate IKI by whether they were generated by a "creative spark" or a sustained, sometimes tedious, effort. In general, the incentive argument suggests that works of the former type should be accorded less protection than those of the latter type because they occur almost spontaneously.

Finally, it is worth noting that many of the incentive arguments in favour of extending copyright protection assume a high degree of prescience or, at the very least, an unusual degree of confidence on the part of creators. In the United States, for example, the 1976 revisions to copyright legislation extended protection from 28 years, together with a single renewal term, for a total of 56 years, to a system where a work is copyrighted until 50 years after an author's death.<sup>(27)</sup>

Only an author with extreme confidence in his own success would worry about the rights to his work fifty-six years into the future; the overwhelming majority of copyrighted works will have no economic value after fifty-six years. ... An author who expects his work to be successful immediately is unlikely to abstain from creating because he will not be able to retain a monopoly after fifty-six years have expired.<sup>(28)</sup>

In a dynamic, real-world context, extending copyright protection beyond a certain threshold may also lead to an uncontrollable increase in illegal activity as the rewards for this behaviour rise. If this dynamic is not stopped, there could very well be a shift towards increasing black market behaviour that even a rollback of copyright protection may not cure, at least in the short term. Consider the case of Napster, a company that allowed users to copy music files

---

(26) Sterk (1996), p. 8 of 30.

(27) Copyright protection in the United States and the European Union now extends to 70 years after an author's death.

(28) Sterk (1996), p. 10 of 30.

illegally through its servers: although the threat of lawsuits by music publishers was sufficient to shut the company down, at least as a distributor of “free” music, there has been little discussion as to whether this succeeded in stemming the unauthorized exchange of copyrighted material. Many replacement Napsters have sprung up in its place, perhaps in part because of the publicity generated by the Napster case.

## **COPYRIGHT VERSUS PATENTS**

It is important to bear in mind a key distinction between copyrighted versus patented material. To the extent that patented materials are created under the auspices of a profit-seeking corporation, and require costly and risky capital investments, there is justification for some form of patent rights, although the actual duration of those patents is a matter of debate.<sup>(29)</sup>

Copyrighted materials, on the other hand, are usually produced by individuals (e.g., books, plays, songs, poems, paintings) or by small groups of individuals (e.g., musical bands, theatre groups) and, far less frequently, corporations. It has been argued, or at least suggested, that creativity springs from the human condition and rarely requires significant capital investments. These creative endeavours are also not risky to the extent that, again, the individual pursues these interests for something other than purely pecuniary reasons, i.e., their creativity is not motivated by profit and therefore does not depend on how profitable their venture might be.<sup>(30)</sup> Even where monetary motivations dominate, there are non-copyright ways of making money. Even the production of movies, which traditionally have been “big-budget” items and can be quite risky, is becoming increasingly accessible to the average individual as a result of recent advances and lower costs of the relevant technology – as *The Blair Witch Project* and other unexpected, small-budget hits suggest. Quite simply, as a consequence of technological advances such as the Internet, the *feasibility* of producing and *distributing* (thereby cutting out

---

(29) Arguably, however, the state could conduct – and historically has conducted – a large part of the ground-breaking research that forms the corpus of our knowledge. See, for example, “Rewards Versus Intellectual Property Rights,” by Steven Shavell and Tanguay Van Ypersele, *Journal of Law and Economics*, Vol. XLIV, October 2001, pp. 525-547.

(30) Consider another example of an artist who apparently feels *compelled* to create art. Steve Earle, considered “one of the ten most respected singer-songwriters of any style on the planet today,” says: “What never stops for me is language” and also describes one of his protégés, the Canadian singer-songwriter Ron Sexsmith, as the type of person who writes melodies walking down the street without a guitar in his hand. “That’s what never stops for him.” See “A Conversation with Steve Earle,” by Frank Goodman, *Puremusic*, December 2001, available on-line at: <http://www.puremusic.com/cover13.html>.

the “middleman” of production companies, publishers, etc.) virtually any kind of content at low cost is growing. The *ability* and *motivation* to do so have always been there, as the Internet – through examples such as Linux and Fetchmail – makes clear.

## THE TWIN ASPIRATIONS OF INFORMATION

Intellectual property rights in general, and copyright in particular, are peculiar legal artifacts from the perspective of some economists.<sup>(31)</sup> On the one hand, economists have always given a special place to information in their models: information is generally assumed to be perfect in the sense that it is widely available at no cost, widely known and, in the long run, correctly perceived.<sup>(32)</sup> It is a necessary lubricant to the functioning of an orderly market. This presumption, or at least the attempt at its realization, is reflected in insider trading laws that, for example, forbid individuals from profiting from specialized, proprietary knowledge. This simple assumption also anchors a huge body of economic literature including, most famously perhaps, the efficient markets theorem which says that prices (stocks, commodities, consumer goods) reflect all known information even if unevenly distributed.

On the other hand, the production of information would, on the face of it, seem to require the creation of monopoly rights, i.e., the establishment of sufficiently generous copyright protection so that popular authors, musicians, artists, programmers and data-producing companies can live off the fruits of their labour. This equivocation is not at all typical of economics. In other policy areas, economists usually agree on some important baseline principles that are not beset by competing visions.<sup>(33)</sup> In the field of industrial policy, for example, it is widely believed that competition will generally yield more social good than monopolies. Similarly, in the field of international trade, it is widely accepted that free trade is

---

(31) Cooter and Ulen (1998) write: “For economists there is something extraordinary about the commodity *information*” (p. 112).

(32) Those who misjudge information are systematically “weeded” out of the economy or forced to adapt and learn in the long run.

(33) This is generally true for what has become known as the “neoclassical” research paradigm. There are other traditions – post-Keynesian, Austrian, Marxian – that dispute these results, but they rarely make their way into the mainstream debates.

superior to managed trade.<sup>(34)</sup> The existence of competing visions of information within economics explains why theory can be used to argue for and against stronger or weaker copyright rules or, in the extreme case, no rules at all.

## CONCLUSION

This paper takes a critical look at copyright economics by exploring the argument that economic incentives *in the form of copyright law* are necessary for creative works to see the light of day. A case can be made that creativity has little to do with incentives; even when and where it does, there are usually ways to earn income that do not depend on copyright law, as the Linux and Fetchmail examples illustrate. The limited research that has been done on patent protection – arguably an area where it is easier to make a case for strong intellectual property protection – calls the copyright-as-necessary-incentive claim into question.<sup>(35)</sup>

By showing that economic incentive arguments based on copyright law need to be – at the very least – critically examined even from within an economic perspective, it is hoped that those who argue that creativity will dry up in the absence of stronger copyright protection will feel the need to re-think their position.

## SELECTED REFERENCES

Babe, Robert E. *Communication and the Transformation of Economics*. Boulder, Colorado: Westview, 1995.

Boyle, James. *Shamans, Software, and Spleens: Law and the Construction of the Information Society*. Cambridge, Mass.: Harvard University Press, 1996.

Cole, Julio H. and Paul A. Cleveland. “CONTROVERSY: Would the Absence of Copyright Laws Significantly Affect the Quality and Quantity of Literary Output?” *Journal of Markets & Morality*, Vol. 4, No. 1, 2001, pp. 112-135.

---

(34) See, for example, Cletus C. Coughlin’s “The Controversy Over Free Trade: The Gap Between Economists and the General Public,” *Federal Reserve Bank of St. Louis Review*, Vol. 84, No. 1, January/February 2002, pp. 1-21.

(35) See, for example, Boyle’s reference (p. 43) to a study by Edwin Mansfield, “Patents and Innovation: An Empirical Study,” *Management Science*, Vol. 32, No. 2, 1986, pp. 173-181 (pp. 174-175).



- Cooter, Robert and Thomas Ulen. *Law and Economics*. Glenview, Illinois: Scott, Foresman and Company, 1988.
- Geist, Michael A. "CYBERLAW: Copyright debate turns one-sided." *The Globe and Mail*, 6 December 2001, p. B27.
- Hébert, Monique. *Copyright Reform*. Background Paper BP-413E. Ottawa: Parliamentary Research Branch, Library of Parliament, 1996.
- Hermann, Armin. *Einstein. Der Weltweise und sein Jahrhundert (Einstein. The Wise Man of the World and his Century)*. Third edition, boxed. Munich: Piper Verlag, 1996.
- Industry Canada. "A Framework for Copyright Reform." 2000. Available on-line at: <http://strategis.ic.gc.ca/SSG/rp01101e.html>.
- Lessig, Lawrence. *Code and Other Laws of Cyber Space*. New York: Basic Books, 1999.
- . *the Future of Ideas*. New York: Random House, 2001.
- Litman, Jessica. *Digital Copyright*. Amherst, New York: Prometheus Books, 2001.
- McCabe, Michael. "TV, Film and Online Broadcasting in the Wake of iCraveTV – What Now?" Presented at The Canadian Institute's Conference on "Intellectual Property Online," Toronto, Ontario, 27 June 2000.
- Rabin, Matthew. "Psychology and Economics." *Journal of Economic Literature*, Vol. XXXVI, March 1998, pp. 11-46.
- Raymonds, Eric Steven. *The Cathedral and the Bazaar*. 2000. Available on-line, under GPL, at: <http://gnuwin.epfl.ch/articles/en/cathedralbazaar/cathedral-bazaar.pdf>.
- Sterk, Stewart E. "Rhetoric and reality in copyright law." *Michigan Law Review*, Vol. 94, No. 5, March 1996, pp. 1197-1249.