

APPLICATION OF THE RIGHT OF REPRODUCTION TO THE INTERNET: SHOULD
BROWSING BE CONSIDERED COPYRIGHT INFRINGEMENT?

by

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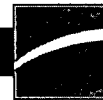
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Abstract

The application of the right of reproduction, found in section 3 of the *Copyright Act*, R.S.C. 1985, c. C-42, to Internet browsing results in the conclusion that the mere viewing of a website or digitally accessing a work is potentially an act of copyright infringement. Such a conclusion is tantamount to granting copyright owners the right to control reading and to dictate how the public may legitimately use copyrighted works. This is an undesirable result in light of copyright law policy goals, and cannot be justified under the utilitarian approach to copyright law. There should be an implied licence to make temporary reproductions of copyrighted works expressed in digital form necessary for acts of digital communication like Internet browsing. A copyright regime that recognizes the difference between reading and browsing on the one hand, and copying on the other, is needed. The viability of an implied licence in this context is examined using a primarily doctrinal method, based on traditional concepts of legal research. Elements of a law and society approach are also incorporated. Other options, such as express licence and the introduction of an appropriate statutory exception based on the Australian model, are also explored and recommended.

The rise of digital media, the creation of a global market, and the popularization of the Internet have brought about powerful cultural changes which demand that our perceptions of intellectual property rights be revisited. Due to the inherent differences between the print and digital environments, copyright law needs to adapt, on the basis of public policy, to the differences in the current copyright market. The efficacy of continuing to use reproduction as the means of measuring copyright infringement is discussed in light of this. Core intellectual property institutions in Canada are reviewed, along with an

examination of the relevant World Intellectual Property Organisation treaties and the American approach to copyright law in a digital context. Canada should not follow the American model, as it is overly protectionist and fails to strike an appropriate policy balance between the various stakeholders and competing interests involved in copyright law.

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Application of the Right of Reproduction to the Internet: Should browsing be considered copyright infringement?

CHAPTER I Introduction and Methodology

*"If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of everyone, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density at any point, and like the air in which we breathe, move, and have physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property."*¹

- Thomas Jefferson

1.1 Introduction

This thesis discusses the application of the right of reproduction, found in section 3 of the *Copyright Act*, R.S.C. 1985, c. C-42 ('the Act'), to Internet² browsing. It then examines the scope of implied licence under Canadian law to make reproductions of digital works necessary for Internet browsing. The question that arises as a result of the inherent differences between the print and digital environments is whether copyright law needs to adapt, on the basis of public policy, to the differences in the current copyright market.

¹ Thomas Jefferson, Writings 13:333-35 (to Isaac McPherson, 13 Aug 1813) in Andrew A. Lipscomb and Albert Ellery Bergh, eds., *The Writings of Thomas Jefferson* (Washington: Thomas Jefferson Memorial Association, 1905), online: *The Founders' Constitution* <http://press-pubs.uchicago.edu/founders/documents/a1_8_8s12.html>.

² Although technically distinct, the terms "Internet," "cyberspace," "information highway," "world wide web," and "WWW" are used interchangeably throughout this paper.

These issues are considered in light of the current policy balance between the rights of copyright holders and users.

The increasing importance of copyright law's role in maintaining and protecting intellectual property rights ('IPRs') is highlighted by today's volatile digital marketplace, where what is bought and sold is increasingly not made up of tangible goods. Information has emerged as the new commodity that forms the basic trading block of the digital economy.³ Consider these statistics: in 1947, intellectual property ('IP') comprised under 10% of all U.S. exports. In 1986, this figure rose to 37%. By the early 1990s, IP accounted for over 50% of exports from the U.S.⁴ In 1996, U.S. copyright-based industries (motion pictures, sound recording, computer software, and book industries) were America's leading export sector. Together, these industries achieved foreign sales and exports of \$60.18 billion, surpassing every other export sector (including the automotive, agriculture and aircraft sectors). By 1999, U.S. IP exports in the form of royalties and licensing revenues alone exceeded \$37 billion. The trade surplus (exports minus imports) in the U.S. in IP is running at approximately \$25 billion annually.⁵ In 1999, Canadian private sector Internet sales amounted to approximately \$4.2 billion. By 2000, this figure rose by 73.4% to \$7.2 billion.⁶ At the time these statistics were

³ The primary commodity bought and sold on the Internet is intellectual property ('IP'): A. Pollock, "Canadian Copyright and the Internet," online: AMPK Software Ltd. <<http://www.ampksoft.ca/compoly.htm>>.

⁴ Fred Warshofsky, *The Patent Wars: The Battle to Own the World's Technology* (New York: Wiley, 1994) at 6.

⁵ National Science Board, *Science and Engineering Indicators, 2000* (Washington: National Science Federation, 2000), online: National Science Federation <<http://nsf.gov/sbe/srs/seind00/>>.

⁶ *Survey of Electronic Commerce and Technology 2000*, online: Statistics Canada <<http://www.statcan.ca/Daily/English/010403/d010403a.htm>> as cited in Canada, Intellectual Property Policy Directorate of Industry Canada and Copyright Policy Branch of the Department of Canadian Heritage, *Consultation Paper on Digital Copyright Issues* (Ottawa: Industry Canada, 2001) at 2.

published, it was expected that by 2004 this figure would grow to \$151.5 billion annually of commercial Internet-based transactions.⁷

The increasing commercial implications of intellectual property will ensure that IPRs continue to grow in their political, economic, and legal importance. Indeed, “[t]he commercial importance of intellectual property in the last decade of the twentieth century can hardly be over-estimated as we witness the historical transition from an industrial society founded on tangible assets in manufacturing plant to an information society based on intangible assets.”⁸ Some even state: “intellectual property rights shape the very nature of society.”⁹

These sentiments may seem incongruous with the perception that, up until very recently, intellectual property was merely a small and esoteric faction of the vast body of law that did not register in most people’s consciousness. With the now marked social impact and function being placed on IPRs, one must guard against getting lost in the rhetoric of the “knowledge-based economy.” The underlying reasons for the newfound importance placed upon IPRs should be examined more carefully:

For many, *IP is a crucial element of prosperity in a knowledge-based economy*, an economy in which competitive success in the production of goods is increasingly dependent on the development of information and services anchored in research and knowledge. For others *IP is a kind of perverse new protectionism and a United States-led effort at the globalization of property*, a substitute, in effect, for other earlier or declining forms of trade protection such as the tariff and industrial subsidies.¹⁰

⁷ Online: IDC, 2000, <<http://idc.com>>.

⁸ Brian Niblett, “The Arbitration of Intellectual Property Disputes” (Paper presented at the Worldwide Forum on the Arbitration of Intellectual Property Disputes, March 3-4, 1994, Geneva, Switzerland) available online: WIPO Arbitration and Mediation Centre, <<http://www.arbiter.wipo.int/events/conferences/1994/niblett.html>> (last accessed March 2003) (emphasis added).

⁹ Michael Perelman, *Steal this Idea: Intellectual Property Rights and the Corporate Confiscation of Creativity* (New York: Palgrave, 2002) at 3.

¹⁰ G. Bruce Doern and Markus Sharaput, *Canadian Intellectual Property: The Politics of Innovating Institutions and Interests* (Toronto: University of Toronto Press, 2000) at 3-4 (emphasis added).

Whether one regards IPRs as a legal perversity, or a legal mechanism necessary to protect intangible assets, it is well documented that the rise of digital media, the creation of a global market, and the popularization of the Internet have brought about powerful cultural changes which demand that our perceptions of intellectual property protection be revisited.¹¹

Copyright law is the main form of IP protection online for website content and software. Historically, copyright law has had to adapt to accommodate the impacts of many technological innovations such as radio, television and photocopying. The *Copyright Act* has been amended several times since its introduction in 1924 to address the perceived threats of various information and communication technologies ('ICTs') to copyright protection. These technologies make it possible to instantaneously generate perfect copies of protected works on a massive scale, and also present the possibility of altering the works in ways not contemplated by the original author. However, the Internet and digital technologies arguably surpass previous technologies in their far-reaching impacts on the fundamental principles of copyright law (such as the assumption that reproduction is the fundamental right embodied in copyright, or that reproduction is the necessary

¹¹ "The ultimate context for, and cause of, this rise in the importance of IP is global change in general:" *supra*, note 10 at 4 citing: John de la Mothe and Gille Paquet, *Evolutionary Economics and the New International Political Economy* (London: Pinter, 1996); Christine Bellamy and John A. Taylor, *Governing in the Information Age* (Buckingham: Open University Press, 1998); Linda Weiss, *The Myth of the Powerless State: Governing the Economy in a Global Era* (London: Polity Press, 1998) and Charles Leadbeater, *Living on Thin Air: The New Economy* (London: Viking, 1999). A variety of factors contributes to such global change: "The key features of such change are well known but are also bewilderingly complex and interdependent: the globalization of production and the massive increases in the mobility of capital; the digitalization of computer and telecommunications, which escalates the formation of information- and service-based economies and societies; the demise of the Soviet Union and the transformation of Eastern Europe; the entrenchment of free trade and the formation of competing trading blocs as well as competing countries; the obvious interdependence of environmental ecosystems in a shrinking world; and, last but not least, the reinvention of government, as governments that are caught up in change seek to influence and guide it in less bureaucratic and more innovative and democratic ways" (*supra*, note 10 at 4).

measurement of infringement), and therefore its ability to adequately protect works embodied in digital form.

The challenges that digital technologies present to copyrighted works stem from the fact that copyright law was constructed so that the value of intellectual property lies not in an idea, but in its conveyance or distribution. Copyright law protects the bottle, but not the wine¹² – the wine being the idea, and the bottle being the medium in which the idea is expressed. Copyright's focus on the protection of the bottle can be attributed to its development specifically for the print environment.¹³ Further, one does not get paid for an idea itself, but rather for the ability to distribute that idea. However, with digitization, distribution methods are converged. The old 'bottles' are being replaced with patterns of zeros and ones. Media that previously depended on distinct technologies can now be disseminated by one method and accessed easily and cheaply with a computer and modem. The "old one-too-many architectures of publishing"¹⁴ (such as conventional newspapers, television, radio and books) are being supplanted by the Internet. The Internet enables anyone to become a publisher to a mass audience, while simultaneously enabling anyone to engage in massive copyright infringement with a single keystroke. Digital technologies enable individuals and entities who have up until recently been

¹² This analogy is borrowed from John Perry Barlow, "Selling Wine Without Bottles: the Economy of Mind on the Global Net," online: Electronic Frontier Foundation <http://www.eff.org/Publications/John_Perry_Barlow/HTML/idea_economy_article.html>.

¹³ "[Copyright law] was invented when print was invented...It has been stretched to protect images and sounds but the stretching has always shown, and now electronic text breaks the intellectual fabric down completely." R. Lanham, *The Electronic Word: Democracy, Technology and the Arts* (Chicago: University of Chicago Press, 1993) at xii. It is questionable whether copyright law may be "patched, retrofitted, or expanded to contain digitized expression." John Perry Barlow, "The Economy of Ideas: A Framework for Rethinking Patents and Copyrights in the Digital Age," *Wired* (March 1994), online: *Wired* <http://www.wired.com/wired/archive/2.03/economy.ideas_pr.html> (in reference to intellectual property generally). Note that some sources question whether the challenges to copyright truly represent challenges to core copyright principles or whether they are simply challenges to existing business and distribution models – see *infra*, note 145 at 7.

¹⁴ Lawrence Lessig, *Code and Other Laws of Cyberspace* (New York: Basic Books, 1999) at 4.

predominantly consumers of works to become authors and providers of works.¹⁵ The digital environment thus threatens copyright law because copyright is ill-equipped to handle the challenges endemic to it.

One can immediately see how this notion might bother newspaper publishers, television networks, record companies and other stakeholders. However, the fog of concern surrounding IP rights issues gives rise to the opportunity for those who are not concerned about their particular IP interests *per se* to use the opportunity to pursue independent agendas. The Internet threatens copyright protection by making copying and distribution easier and cheaper. Cheap copying and distribution via digital technologies in turn threaten copyright holders and industry stakeholders by potentially decreasing their profits.¹⁶ The possibility of decreased profits precipitates industry demands for copyright laws to be strengthened. The usual result is that copyright laws are amended in ways that will ensure the protection of industry profits, while users' rights are continually eroded.

¹⁵ U.S. Information Infrastructure Task Force, Working Group on Intellectual Property Rights, *Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights* (Washington: Department of Commerce, 1995), online: United States Patent and Trademark Office <<http://www.uspto.gov/web/offices/com/doc/ipnii/>> at 9 ('the White Paper').

¹⁶ For example, the music industry amounts to approximately US\$40 billion in annual sales worldwide, with American sales accounting for 37% and Canadian sales accounting for 2.3%. Based on these figures, Canadian music sales total approximately US\$920 million annually. Most artists are awarded royalties of between 11-15%. See "The World Sound Recording Market," online: Recording Industry Association of America ('RIAA'), <<http://www.riaa.com/MD-World.cfm>>. The RIAA estimates that approximately US\$4.5 billion is lost annually to music piracy. It is unknown what percentage of this figure the RIAA attributes to music piracy occurring over the Internet. However, a recent empirical study co-written by two professors from the Harvard Business School and the University of North Carolina found that Internet music piracy has no negative effect on legitimate music sales: "the impact of downloads on [music] sales, continues to be small and statistically indistinguishable from zero...file sharing has no statistically significant effect on purchases of the average album in our sample. Moreover, the estimates are of rather modest size when compared to the drastic reduction in sales in the music industry. At most, file sharing can explain a tiny fraction of this decline." (Felix Oberholzer and Koleman Strumpf, "The Effect of File Sharing on Record Sales: An Empirical Analysis" (March 2004), online: University of North Carolina <http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf> ['the Harvard-UNC Study'] at 24, emphasis added.)

Recent developments in copyright law have shown that there is a protectionist trend to increase copyright's scope and duration, while making the right easier to secure and keep.¹⁷ This thesis argues that our concern should be to ensure that increasingly eroding users' rights are maintained, and that the trend to expand copyright protection and duration should be closely examined and curtailed.

Specifically, this thesis examines the scope of implied licence under Canadian law to digitally reproduce copyrighted works posted online when Internet browsing. Since viewing a website necessarily involves making a copy of that website on the user's computer, some lawmakers and commentators propagate the assertion that Internet browsing constitutes copyright infringement.¹⁸ The White Paper and the Subcommittee Report maintain that the mere viewing of a web document is governed by copyright principles. The Subcommittee Report is of the view that "any act of [digitally] accessing

¹⁷ Examples of this trend include the *No Electronic Theft Act* (see *infra*, note 231) and the *Copyright Term Extension Act* of 1998 (The Sonny Bono Copyright Term Extension Act) S 505, P.L. 105-298, 11 Stat. 2827 (the 'Sonny Bono Act'). In broad terms, the Sonny Bono Act extends the term of copyright protection in the U.S. by 20 years (the term of protection is of equal duration in European Union countries). For works (other than works made for hire) created on or after January 1, 1978, protection will endure for the life time of the author plus 70 years after his or her death; for works made for hire created on or after January 1, 1978, protection will endure for 95 years from first publication or 120 years from the year of its creation, whichever expires first; for works created but not published or copyrighted before January 1, 1978, the term of protection will endure until December 31, 2047; for works in their first 28-year term on January 1, 1978, the automatic renewal term is extended from 47 to 67 years (for example, a work first published in 1975 would be protected through the year 2070, or a 28- plus 67-year term); for works in their renewal term on the effective date of the new law, protection will endure for a term of 95 years from the date copyright was originally secured (for example, a work first published in 1955 would be protected through the year 2050). Note that the U.S. Constitution originally provided for 14 years of monopoly rights under copyright. Some authors surmise that the 1998 revision of copyright law was deemed urgent because of massive pressure from huge corporate companies, for example Disney. Disney stood to lose copyright in a number of its characters, notably Mickey Mouse (first copyrighted in 1928) in 2003, putting Mickey Mouse into the public domain (*supra*, note 9 at 40). While the U.S. Constitution states that the purpose of copyright law is "to promote the progress of science and useful arts" (art. I, s. 8, cl. 8.), it is difficult to see how extending a dead artist's copyright will encourage her to create another piece of artwork, or how a dead author will be provided with an incentive to write another book.

¹⁸ This view is seen in the White Paper, and also in Canada, Copyright Subcommittee, *Copyright and the Information Highway: Final Report of the Subcommittee on Copyright* (Ottawa: Information Highway Advisory Council Secretariat, 1995), online: Industry Canada <<http://strategis.ic.gc.ca/SSG/ih01092e.html>>.

a work constitutes a reproduction, [and a]s such,...is subject to the right of reproduction.”¹⁹ If this assertion is adopted by Internet-based businesses, information providers, and large industry copyright holders, then every piece of information on the Internet may come with a price tag. To counter the potential for detrimental effects to the public, there should be an implied licence to make reproductions of works posted online necessary for browsing such works. A factor in maintaining an appropriate balance between users’ and holders’ rights is to ensure that there is a right to browse the Internet and make legitimate use of works posted online. An implied licence to make reproductions of copyrighted works necessary for Internet browsing should exist. Arguably, there should be an even broader right to download, copy, and print online works. Otherwise, copyright owners dictate how the public may legitimately use copyrighted works and control the right to read.

The following analysis of implied licence to make reproductions necessary to browse the Internet is based chiefly on the Canadian report of the Information Highway Advisory Council’s Subcommittee on Copyright (**‘the Subcommittee’**) entitled “Copyright and the Information Highway: Final Report of the Subcommittee on Copyright” (**‘the Subcommittee Report’**)²⁰ and the U.S. Information Infrastructure Taskforce’s “Report of the Working Group on Intellectual Property Rights” (**‘the White Paper’**).²¹ The Subcommittee Report states that its views regarding browsing are “based on the United States Model.”²²

¹⁹ Canada, *supra*, note 18 at 11.

²⁰ The Subcommittee Report, *supra*, note 18 at 6. The Subcommittee Report acknowledges drawing upon the U.S. National Information Infrastructure Task Force preliminary report (**‘the Green Paper’**).

²¹ *Supra*, note 15.

²² The Subcommittee Report, *supra*, note 18, Recommendation 6.3.

Further, given the ease with which digital information may be copied and disseminated, the efficacy of continuing to use reproduction as the means of measuring copyright infringement on the Internet is discussed. Unfortunately, the uncertainty found in the present state of Canadian copyright law affords neither copyright holders nor users much comfort. Users' rights especially are uncertain. Legislative amendment and judicial guidance are both necessary.

1.2 Methodology

The research problem addressed in this thesis is whether an implied licence exists under Canadian copyright law to make temporary reproductions of copyrighted works, which are expressed in digital form and posted online, necessary for Internet browsing. This problem arises from an assertion by the Canadian federal government that Internet browsing is subject to the right of reproduction, making every act of viewing a website a potential copyright infringement. The viability of an implied licence in this context is examined using a primarily doctrinal method, based on traditional concepts of legal research. Elements of a law and society approach are also incorporated, mainly in the second half of the thesis. The second half of the thesis is chiefly concerned with the policy balance that copyright law must strike between the competing interests of copyright holders, users, and the general public – a topic which lends itself well to a law and society-type analysis.

The examination of the research problem begins with an introduction to the basic problems that arise when digital technologies, the networked environment, and IPRs intersect. The newfound importance of IPRs in the information economy, and specific

impacts of the Internet to copyright law, are discussed. Of special concern are the problems arising in reference to the efficacy of copyright laws online.

In order to better grasp the applicable legal arguments and for ease of reference, it is important to understand the technologies underlying the Internet. The reader is thus presented with a background primer to the Internet and detailed definitions of some of the terminology used throughout this thesis. Additional background discussion centers on the development of copyright law and includes: the historical evolution of copyright law; dominant metaphors used to describe copyright; and an outline of the current model of copyright law in Canada.

The thesis then moves to focus on core intellectual property institutions in Canada. An examination of the policies of Canadian intellectual property agencies reveals that there is a strong U.S. influence over IP policy in Canada. This leads into a discussion of the various reactions, on both the domestic and international levels, to the digital copyright dilemma. International instruments such as World Intellectual Property Organisation ('WIPO') treaties, and legislative instruments such as the American *Digital Millennium Copyright Act* Pub. L. No. 105-304, 112 Stat. 2860 (1998) (the 'DMCA'), are then evaluated.

Following this discussion, the thesis moves to the direct application of s. 3 of the Act, which contains the right of reproduction, to the research problem identified above. The author attempts to answer the research question through the application and analysis of Canadian and American case law in light of copyright policy goals. After this examination of the right of reproduction as it applies to Internet browsing, the thesis

concludes that copies made during browsing are *prima facie* infringing copies. Thus defences to infringement, such as implied licence, are considered. Other solutions, such as express licence and introduction of an appropriate statutory exception, are also explored. The thesis finally concludes by briefly outlining the competing interests behind copyright policy and their application to the research question.

The author wishes to note a peculiar problem encountered when researching this thesis. There is a lack of academic journal articles and books written from a Canadian perspective on this topic. However, there is an abundance of American literature. Consequently the author heavily references the few Canadian sources available, while relying mainly on American publications.

1.3 Origins of the Internet

In 1969, a research project initiated by the U.S. Department of Defence became known as the Internet. The Internet was originally known as ARPAnet (“Advanced Research Project Administration”) and was designed to facilitate communication in the event of a nuclear catastrophe.²³ The ARPAnet initially consisted of a network of four computers. It functioned through use of a method of information transmission called “packet-switching,” which divides information into pieces of data called packets. Each packet is assigned the address of the ultimate destination of the information, but is sent independently through the network using the fastest available route. The packets are then reassembled at their final destination. This has the advantage of allowing data

²³ Jeremy F. De Beer, “Canadian Copyright Law in Cyberspace: An Examination of the Copyright Act in the Context of the Internet” (2000) 63 Sask. L. Rev. 503-538 ¶ 1 (QL). The Internet is officially known as the National Information Infrastructure (‘NII’) in the US. For further information, see the White Paper, *supra*, note 15.

transmission to continue even if a networked computer fails, as the packet will simply continue to its ultimate destination via an alternate route. In Canada, the CANet was formed in 1990 by a group of research institutions, universities, provincial governments, and the federal government. The CANet developed into Canada's current Internet infrastructure.²⁴ The components of the Internet in Canada and the US together form the Global Information Infrastructure.²⁵

The Internet is comprised of numerous interconnected, un-tolled, multipurpose networks that link together millions of computers globally. It is neither controlled by any single organization, nor is there a central point from which its content is monitored.²⁶ The Internet is a medium for conducting business internationally and has been termed both an "economic pond"²⁷ and a "global collection of copying machines."²⁸ It also functions as a tool for education, research, messaging, entertainment and publishing.²⁹ As of September

²⁴ Canada, Information Highway Advisory Council ('IHAC'), *Preparing Canada for a Digital World: Final Report of the Information Highway Advisory Council* (Ottawa: Industry Canada, 1997) at 25. IHAC was established in December 1994 by the then Minister of Industry, the Honourable John Manley. IHAC is described as a "blue ribbon panel of public and private sector experts." (See *infra*, note 145 at 7.) IHAC in turn created a number of subcommittees and working groups, including a subcommittee on copyright.

²⁵ *Supra*, note 15 at 8.

²⁶ See generally *supra*, note 24 at 26.

²⁷ Jon Mills, "Internet Casinos: A Sure Bet for Money Laundering" (2000) 19 Dick. J. Int'l L. 77 at 88.

²⁸ Mike Godwin, *Cyber Rights: Defending Free Speech in the Digital Age* (New York: Times Books Random House, 1998) at 166.

²⁹ There are some issues surrounding whether or not posting a work online amounts to 'publication' for purposes of the Act. Section 3(1) of the Act grants the owner of a copyrighted work the right to publish an unpublished work or any substantial part thereof; s. 3(1)(f) grants the right to communicate a work by telecommunication. Section 2 defines 'telecommunication' as "any transmission of signs, signals, writing, images or sounds or intelligence of any nature by wire, radio, visual, optical, or other electromagnetic system." This definition would capture transmissions via the Internet. However, s. 2.2(1)(a)(i) of the Act defines 'publication' as: "making copies of a work available to the public...But does not include: ...the communication to the public by telecommunication[.]" It is clear that posting a work on the Internet amounts to making copies available to the public, but whether this amounts to *publication* depends on how the posting is characterized.

There are two options – a posting may be characterized as either: (1) a telecommunication; or (2) a reproduction. If posting amounts to a 'reproduction' of the work, then it is virtually inescapable that the posting is a publication. If a posting is characterized as a telecommunication, then by virtue of s. 2.2(1)(c), there has been *no publication for purposes of the Act*. Some clarification may be provided by the Ontario case of *Robertson v. Thomson Corp.*, [2001] O.J. No. 3868 ('*Robertson*'). The case concerned a motion for

2002, approximately 605.6 million people worldwide were using the Internet, 182.67 million of those being in Canada and the United States.³⁰ That number of Internet users globally is expected to reach 720 million by 2006.³¹ In 1993, there were only about 50 servers that provided Internet access; by 1997, there were over 100,000.³²

A major development in the history of the Internet occurred in 1989 when Hypertext Transfer Protocol (“**HTTP**”) was developed by CERN (the European Physics Particle Laboratory). HTTP allows different types of content to be displayed on the same web page. The impact of HTTP was built upon with the creation of Hypertext Markup Language (“**HTML**”). HTML standardized the programming of web pages, which then led to the development of Internet browsers capable of surfing and graphically displaying web pages.³³

partial summary judgement; the focus of the motion was whether there were genuine issues for trial. In *Robertson*, the plaintiff alleged that she had given authorization to the Globe and Mail to publish a book review in print format only. The book was subsequently available in an online database operated by the defendant, and she sued for copyright infringement. Cumming J characterized the posting of Robertson’s articles in an online electronic database as a *reproduction* (as opposed to a *telecommunication*). However, this was mentioned in passing and was not the main issue before the court (the main issue was whether the reproduction amounted to a reproduction of the plaintiff’s individual works in which she held copyright, or a reproduction of a collective work in which the Globe held copyright), so it cannot be seen as a definitive ruling on this issue. *Robertson* can be contrasted to the case of *R. v. M. (J.P.)* (1996), 67 CPR (3d) 152 at 156 (N.S.C.A.), in which a 17 yr old computer bulletin board operator made infringing copies of computer software available to selected users and was held guilty of the criminal offence of ‘*distributing*’ the copies to the copyright owner’s prejudice under s. 42(1)(c) of the Act.

The better view is that documents made available online may be considered ‘published.’ Information Highway Advisory Council, *Final Report of the Copyright Subcommittee*, *supra* note 18: at 11. See also David Vaver, *Intellectual Property Law Copyright, Patents, Trade-marks*, (Toronto: Irwin Law, 1997) at 67.

³⁰ Nua.com Internet Surveys, *How Many Online?*, online: <<http://www.nua.ie/surveys/>>. Note the staggering growth in usage of the Internet over the past three years. The same survey was quoted in Dr. Russell G. Smith, “The Prevention of On-Line Fraud” (Paper presented to the International Society for the Reform of Criminal Law at the 13th International Conference held in St. Julian, Malta, July 8-12, 1999) [unpublished]. At that point the survey estimated 171.25 million people worldwide were using the Internet.

³¹ PR Newswire, “North America Is the Leading Region for Internet Users According to the Computer Industry Almanac” PR Newswire (17 August 1999).

³² A. Staiman, “Shielding Internet Users from Undesirable Content: The Advantages of a PICS Based Rating System” 20 Fordham Int’l L.J. 866 at 874 as cited in Alex Colangelo, “Copyright Infringement in the Internet Era: The Challenge of MP3s” (2002) 39 Alta. L. Rev. (No. 4) 891 at para. 6.

³³ Colangelo, *supra*, note 32 at para. 4.

The joint impact of HTTP and HTML to the Internet contributed significantly to the three key features that can be attributed to the Internet's growth in popularity. Firstly, the Internet can distinguish between various file types such as text and images; secondly, it simplifies navigation between web pages by allowing hypertext linking; and thirdly, it employs a Graphic User Interface, which facilitates accessibility for the average user who is unfamiliar with computer languages.³⁴ Further, HTTP and HTML not only served to standardize web page programming and viewing, but they also revolutionized traditional concepts of publishing and licensing. The Internet opened the door to self-publication to many authors and creators who were previously unable to publish their work. It also introduced a new and lucrative method of publication for large commercial publishers.

1.4 Communication Methods

The Internet allows for several different communication methods, as its open and neutral platform has prompted hundreds of companies to develop new ways for individuals to interact. Some examples include:³⁵

- Electronic mail ('**email**'), which allows point to point messaging;
 - World Wide Web ('**WWW**'), a common graphical interface based on HTML.
- HTML documents are referred to as websites (When a user wishes to view a specific website, that user's browser sends a request over the Internet to a web server for the desired HTML file. It is important to note that the web server sends

³⁴ Colangelo, *supra*, note 32 at para. 5.

³⁵ Evidence presented to the *SOCAN Statement of Royalties, Public Performance of Musical Works 1996, 1997, 1998 (Tariff 22, Internet) (Re)* (1999), 1 CPR (4th) 417 ['**Tariff 22**'] at 430-41. See also Shahram Shayesteh, "High Speed Chase On the Information Superhighway: the Evolution of Criminal Liability for Internet Piracy" (1999) 33:1 Loy. L.A. L. Rev. 183 at 186-91.

a *copy* of the file to the browser, which then interprets and displays the file on the user's screen.);

- Newsgroups, which are distributed message databases that allow for discussions and postings, usually on a particular topic;³⁶
- Internet Relay Chat ('IRC'), which allows for person-to-person messaging in real time;
- File Transfer Protocol ('ftp'), which allows users to send, receive and use files located on another computer; and
- Telnet, which allows users to access the drives of computers in another physical location.

The variety of communication methods available illustrate that the Internet is an important means of disseminating and exchanging digitized information. Information may appear online in many forms, including: data, text, music, computer software, and visual and audio-visual material. All of these could qualify as copyrightable material.

1.5 MP3 Files

It is also important to be aware of Motion Picture Experts Group Audio Layer 3 ('MP3') files. MP3 files are essentially compressed sound files. MP3s work by employing a method of file compression called perceptual audio coding – digital information which is inaudible to the human ear is stripped away from the sound recording, so that much of

³⁶ "Groups form easily to discuss any issue imaginable; public debate is enabled by removing perhaps the most significant cost of human interaction – synchronicity. I can add to your conversation tonight; you can follow it up tomorrow; someone else, the day after." Lawrence Lessig, *The Future of Ideas* (New York: Random House, 2001) at 10.

the sound data can be discarded from the digitized file.³⁷ Compression allows MP3 files to be downloaded quickly (for example, as against .wav files) and gives them the advantage of taking up less disk space, so that the compact disc is no longer necessary as a storage device for music. For example, an uncompressed music file could take up around 50 megabytes of hard disk space, while the average MP3 files takes up around 5 megabytes. MP3 files are usually downloaded and shared via a peer-to-peer file-sharing program. Some highly profiled programs include Napster, Kazaa, WinMX, Bear Share, Gnutella, Morpheus, Grokster and Limewire. The operation of peer-to-peer file sharing programs such as these was described in recent case law as follows:

In both cases, the software [Morpheus and Grokster] can be transferred to the user's computer, or "downloaded," from servers operated by Defendants. Once installed, a user may elect to "share" certain files located on the user's computer, including, for instance, music files, video files, software applications, e-books and text files. When launched on the user's computer, the software automatically connects to a peer-to-peer network...and makes any shared files available for transfer to any other user currently connected to the same peer-to-peer network.

Both the Morpheus and Grokster software provide a range of means through which a user may search through the respective pool of shared files. For instance, a user can select to search only among audio files, and then enter a keyword, title, or artist search. Once a search commences, the software displays a list (or partial list) of users who are currently sharing files that match the search criteria, including data such as the estimated time required to transfer each file.

The user may then click on a specific listing to initiate a direct transfer from the source computer to the requesting user's computer. When the transfer is complete, the requesting user and source user have identical copies of the file, and the requesting user may also start sharing the file with others. Multiple transfers to other users ("uploads"), or from other users ("downloads"), may occur simultaneously to and from a single user's computer.³⁸

File sharing has now become one of the most common activities to occur online. This can be attributed to a number of factors: firstly, file sharing is a primarily non-rivalrous

³⁷ "MPEG Audio Layer-3," online: Fraunhofer Institute for Integrated Circuits <iis.fhg.de/amm/techinf/layer3/index.html>, as cited in Colangelo, *supra*, note 32 at para. 9.

³⁸ *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*, 259 F. Supp. 2d 1029 (C.D. Cal. 2003) at 1032-1033, as cited in *BMG Canada Inc. et. al. v. John Doe* 2004 FC 488 [*'BMG v. John Doe'*] at para. 4, online: Federal Court of Canada <<http://www.fct-cf.gc.ca/bulletins/whatsnew/T-292-04.pdf>>. See also the judgement of Patel C.J. in *A & M Records, Inc. v. Napster, Inc.*, 114 F. Supp.2d 896 (Cal. Dist. Ct. 2000) for a comprehensive description of how Napster functions.

activity and therefore the cost of file sharing is low; secondly, physical distance is usually irrelevant, enabling a broad dynamic of individuals globally to participate in file sharing; and, thirdly, a huge selection of files is available for downloading.³⁹

It has been noted that, “[b]y most accounts, the predominant use of MP3 is the trafficking in illicit audio recordings, presumably because MP3 files do not contain codes identifying whether the compressed audio material is copyright protected.”⁴⁰ MP3 files may also facilitate file sharing because of their smaller size and corresponding shorter file transfer time. While copyright infringement has always existed, the print environment and some of the hardware technologies available in the past had a limiting effect on one’s ability to partake in infringing acts such as copying. For example, music stored on a compact disc could be extracted and duplicated onto a computer, but the size of the files was so large as to effectively prohibit sharing of these files. The files took up a relatively large amount of hard drive space, were too large to fit on a floppy disk, and usually involved a comparatively long transfer time as against other file types.

MP3 file sharing is widely attributed to the recent decline in record sales. Figures released by the RIAA show that the number of CDs shipped in the US between 2000 and 2002 fell from 940 million units to 800 units.⁴¹ The record industry directly attributes this 15% decline to file sharing. However, the causal link is indeterminate. Curiously, shipments of CDs continued to rise between 1999 and 2000,⁴² which were the first two

³⁹ Oberholzer and Strumpf, *supra*, note 16 at 1.

⁴⁰ *Recording Industry Association of America v. Diamond Multimedia Systems* (US Court of Appeals for the Ninth Circuit) as cited in Starr, “Are the New Devices for Recording Music off the Internet Legal?” (1999) 3 Copyright & New Media Law Newsletter, Issue 3, at para. 4.

⁴¹ RIAA, *The Recording Industry Association of America’s 2002 Yearend Statistics* (2002), online: RIAA <<http://www.riaa.com>>.

⁴² *Supra*, note 41.

years that file sharing grew sharply in popularity (Napster was founded in 1999, and few individuals participated in file sharing prior to 1999⁴³). According to the Harvard-UNC Study, there are a number of varying conclusions one can reach about the impact of file sharing on record sales: "While file sharing significantly reduces the financial cost of obtaining music, *it has an ambiguous theoretical effect on record sales.*"⁴⁴ The study describes several possible effects of file sharing on record sales:

- 1) record sales are reduced because participants in downloading substitute downloads for legal purchases (this effect would have the greatest impact on record sales, assuming that downloading acted to substitute all or almost all legal purchases that would have otherwise been made by the downloader);
- 2) new sales are promoted because file sharing exposes consumers to music they would not otherwise be exposed to;
- 3) file sharing is used to sample music, which either increases or decreases record sales depending on whether users like what they hear;
- 4) consumers are less willing to pay for music due to the availability of file sharing, therefore sales are either decreasing due to the ever present option of downloading, or increased because music tracks have gained the new use of sharing with others; and
- 5) file sharing has no effect on sales.⁴⁵

⁴³ Oberholzer and Strumpf, *supra*, note 16 at 1.

⁴⁴ Oberholzer and Strumpf, *supra*, note 16 at 2 (emphasis added).

⁴⁵ Oberholzer and Strumpf, *supra*, note 16 at 2 (references omitted).

The researchers of the Harvard-UNC Study tracked sales of 680 albums over 17 weeks for the second half of 2002. Surprisingly, songs that were heavily downloaded on the OpenNap file-sharing network showed no measurable drop in sales. In fact, it was found that file sharing increased sales for albums selling more than 600,000 copies (for every 150 downloads of a song on the OpenNap file-sharing network, an additional copy of such albums was sold). Even the most pessimistic statistical model used in the study showed that illegal file sharing would account for a decline of only 2 million CD sales in 2002, whereas RIAA statistics cited above show that CD sales declined by approximately 140 million units over 2000-2002. The upshot of this is that: "From a statistical point of view, this means that *there is no effect between downloading and sales.*"⁴⁶ The overall conclusion is that "file sharing primarily serves to increase total music consumption,"⁴⁷ as it lowers the price of music, thereby drawing in low-valuation individuals who would otherwise not have purchased albums.

Further, several alternate reasons exist as to the recent decline in record sales. These factors include: poor macroeconomic conditions, a reduction in the number of album releases, growing competition from other forms of entertainment such as video games and DVDs (video game graphics have improved and the price of DVD players or movies have sharply fallen), a reduction in music variety stemming from the large consolidation

⁴⁶ Felix Oberholzer, associate professor at Harvard Business School and co-author of *supra*, note 16, as quoted in David McGuire "Study: File-Sharing No Threat to Music Sales" *The Washington Post* (29 March 2004), online: Washington Post <<http://www.washingtonpost.com/wp-dyn/articles/A34300-2004Mar29.html>> (emphasis added). In the same Washington Post article, Eric Garland (chief executive of the Atlanta-based company Big Champagne, which tracks file-sharing activity) is cited as saying that the study findings match the observations made by his company about the effect of file sharing on music sales.

⁴⁷ Oberholzer and Strumpf, *supra*, note 16 at 2 (references omitted). Oberholzer is also quoted *supra*, note 46, as stating: "Consumption of music increases dramatically with the introduction of file sharing but not everybody who likes to listen to music was a music consumer before, so it's very important to separate the two." A study conducted in 2002 by Jupiter Research analyst Aram Sinnreich found that persons who shared files for a period longer than six months were 75% more likely than average music consumers to spend more money on music (as cited *supra*, note 46).

in radio along with the rise of independent promoter fees to gain airplay, and possibly a consumer backlash against record industry tactics.⁴⁸ Such backlash could be in the form of an individual's refusal to buy music from major record labels at all. The Harvard-UNC Study notes the existence of several movements to boycott music sales from the major labels,⁴⁹ which would also result in a decline of record sales to some degree. All these factors are augmented with the fact that consumers are investing in other formats of music storage besides CD, such as mini-disk and MP3 players. A similar decline in record sales occurred in both the late 1970s and early 1980s – presumably because audiotapes began to rise in popularity. Further, record sales in the 1990s were abnormally high as consumers bought CDs to replace older music storage formats such as audiotapes.⁵⁰ The comparison of current sales figures to 1990s statistics is therefore an inaccurate one that does not truly reflect a decline of record sales due to file-sharing.

⁴⁸ Oberholzer and Strumpf, *supra*, note 16 at 24, references omitted. Some of the tactics used by the RIAA are indeed heinous. For example, in 2001, the RIAA attempted to invoke the American Digital Millennium Copyright Act to prevent a high-profile Princeton professor from publishing and presenting his paper on the Secure Digital Music Initiative ('SDMI'). Prof. Edward Felten and several students participated in the SDMI's "Hack SDMI" contest. The successfully cracked all four watermarks used by SDMI. However, he then withdrew from the contest and decided to publish a paper for research purposes, explaining how the watermarks were cracked, rather than claiming the prize. When Prof. Felten was to finally present the results of his research, he was sent a letter by Matthew Oppenheim (the then senior vice president of business and legal affairs for the RIAA) threatening legal action if the paper was published. The widely circulated letter reads: "Because public disclosure of your research would be outside the limited authorization of the [click-wrap agreement 'signed' by Prof. Felten when he entered the Hack SDMI contest], you could be subject to enforcement actions under federal law, including the DMCA." (The letter is available online: Cryptome <<http://cryptome.org/sdmi-attack.htm>>). Both SDMI and the RIAA were attempting to use the DMCA to prevent a professor from publishing legitimate research. Hopefully even the writers of the DMCA would agree that its purpose was not to stifle academic research. (Janelle Brown, "Is the RIAA Running Scared?" *Salon* (26 April 2001), online: [Salon.com](http://dir.salon.com/tech/log/2001/04/26/felten/index.html) <<http://dir.salon.com/tech/log/2001/04/26/felten/index.html>>).

⁴⁹ For example, online: Boycott-RIAA <<http://www.boycott-riaa.com/>> and The Don't Buy CDs Organization <<http://www.dontbuycds.org/>> (*supra*, note 16 at 24, footnote 26).

⁵⁰ Stan Liebowitz. "Will MP3 Downloads Annihilate the Record Industry? The Evidence So Far" in Gary Libecap, ed., *Advances in the Study of Entrepreneurship, Innovation and Economic Growth* (New York: JAI Press, 2003), online: University of Texas at Dallas <http://www.utdallas.edu/~liebowit/knowledge_goods/records.pdf> cited *supra*, note 16 at 24.

However, institutional players and pro-protectionist lobbyist groups have a vested interest in maintaining and encouraging current public perception that file-sharing amounts to “stealing music,” and is an activity which causes great economical harm to both record labels and artists. This perception will likely not dissipate easily, as groups such as the RIAA have the financial resources and public relations expertise needed to run “public education” campaigns propagating their views. Most interest groups representing the alternative view do not have such resources.

One group, which is an exception to this, is the Electronic Frontier Foundation (‘EFF’). EFF is a membership organization funded by donor support which works to protect civil liberties in light of technology-related issues.⁵¹ The Canadian counterpart is Electronic Frontier Canada (‘EFC’), which works to ensure that the principles embodied in the Canadian Charter of Rights and Freedoms remain protected as new information, communication, and computing technologies are introduced into Canadian society.⁵² Both organizations regularly act as intervenors or represent parties in technology-related lawsuits.

Besides media campaigns promoting pro-protectionist views, the record industry has recently been involved in a bout of lawsuits where 261 individuals were sued by the recording industry for allegedly sharing copyrighted music via peer-to-peer file-sharing programs. At first glance, these lawsuits may appear justified to the general public, and the record industry is perceived as a crusader for artists’ rights. A closer examination

⁵¹ See online, Electronic Frontier Foundation <<http://www EFF.org/about/>>.

⁵² See online, Electronic Frontier Canada <<http://www EFC.ca/>>.

reveals that many of the lawsuits were groundless and more likely part of a frenzied tactic to scare Americans away from using file-sharing programs.

For example, Sarah Ward, a 65-year-old grandmother from Massachusetts was sued by seven major record labels for copyright infringement. Ward was charged with sharing songs using the Kazaa file-sharing network. The record labels (Sony Music Entertainment, Inc.; BMG Music; Virgin Records America, Inc.; Interscope Records; Atlantic Recording Corporation; Warner Brothers Records, Inc.; and Arista Records, Inc.) sued Ward on the basis of information obtained from a controversial subpoena issued to Comcast (her ISP) under the DMCA. Ward was not informed by Comcast prior to the release of her identity and personal information. Ward was charged with illegally sharing more than 2,000 songs and was threatened to be held liable for damages up to US\$150,000 per song. However, Ward only owns a Mackintosh computer, which cannot run the Kazaa program. Nonetheless, her privacy was violated, she was sued for potentially millions of dollars and had to hire a defense lawyer.⁵³

⁵³ Chris Gaither "Recording Industry Withdraws Suit: Mistaken identity raises questions on legal strategy" *The Boston Globe* (24 September 2003), online: *The Boston Globe* <http://www.boston.com/business/articles/2003/09/24/recording_industry_withdraws_suit/> and Electronic Frontier Foundation, Media Release, "Recording Industry Withdraws Music Sharing Lawsuit: Lack of Due Process Leads to Mistaken Identity" (24 September 2003), online: Electronic Frontier Foundation <http://www.eff.org/IP/P2P/20030924_eff_pr.php>. For more information see: "RIAA v. The People," online: Electronic Frontier Foundation <<http://www.eff.org/IP/P2P/riaa-v-thepeople.php>>.

CHAPTER II Intellectual Property Rights In Canada: Justifications, Institutions and Policy

2.1 Terminology: 'Intellectual Property'

A convenient definition of intellectual property is found in art. 2(viii) of the Convention establishing WIPO in 1967, as amended in 1979. Art. 2(viii) provides that “intellectual property” includes the rights relating to: literary, artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavour; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.⁵⁴

Some commentators take issue with the term “intellectual property” itself, arguing that those who started to use the word “property” to describe creative works had a very specific purpose in mind: “they wanted to substitute a word with a respectable connotation, *property*, for a word that had an unpleasant ring, *privilege*.”⁵⁵ This statement recognizes IPRs as a legal construction (indeed, an artificial construction), and not a “natural right” (discussed below). Others argue against the conflation of intellectual property with real property:

For some people, the term ‘intellectual property,’ with its built-in connotative paradox of the tangible and the intangible, seems to be an oxymoron...But for the lack of a better legal

⁵⁴ The Convention Establishing the World Intellectual Property Organization (Signed at Stockholm on July 14, 1967 and as amended on September 28, 1979) is available online: World Intellectual Property Organization <http://www.wipo.int/clea/docs/en/wo/wo029en.htm#P50_1401>.

⁵⁵ F. Machlup and E. Penrose, “The Patent Controversy in the Nineteenth Century” (1950) 10 J. Econ. Hist. 1 at 16 (emphasis added).

term of art, 'intellectual property' has come to represent a whole class of legal interests. At the same time, it has confused generations of lawyers and laymen who have unthinkingly conflated 'intellectual property' with traditional property notions, with the results that include attempts to treat copyright infringement as the moral *and* legal equivalent of theft.⁵⁶

It is interesting to note that while the term 'intellectual property' has wormed its way into our current legal vocabulary so that most of us feel comfortable with its use and implications, it was an uncommon term until fairly recently. The term was not even used frequently in the language of the courts. It was used in an 1845 American circuit court case, *Davoll v. Brown*, 7 F. Case. 197 (Circuit Court, D. Massachusetts 1845) and then in an 1873 Supreme Court decision, *Mitchell v. Tilghman*, 86 U.S. 287 (which quoted a

⁵⁶ *Supra*, note 28 at 163 (emphasis in original). See also Tom G. Palmer, "Intellectual Property: A Non-Posnerian Law and Economics Approach" (1989) 12 Hamline L. Rev. 261; Tom G. Palmer, "Are Patents and Copyrights Morally Justified? The Philosophy of Property Rights and Ideal Objects" (1990) 13 Harv. J.L. & Pub. Pol'y 817. Palmer also argues that IPRs cannot be economically justified because they rely upon a creation of artificial scarcity, which is unreasonable: "The central element in the spontaneous emergence of property rights is scarcity...but copyright depends not on scarcity, but on law" (Palmer, 1989 at 279). Perelman illuminates further: "The central proposition of conventional economics is the idea that markets are efficient because competition drives prices down to the marginal cost – the cost of producing one more unit of a good. According to this logic, by setting a price on a good that excludes all but those who can afford that good, markets ration goods efficiently. Much of economics purports to show that allowing a competitive market to set prices for commodities is the most efficient method to distribute goods and services. This rationale is not wholly convincing to all economists because of the widespread effects that prices fail to reflect. Pollution and the depletion of resources are familiar examples of this sort of deficiency of the price system. Others object to this system on the grounds of equity. Putting such concerns aside, most economists admit one important exception, when the logic of markets does not make sense: rationing by price creates inefficiencies in all cases in which the marginal cost is very low while the unavoidable fixed cost, which a firm must incur regardless of the quantity of goods that is sold, is high. Thus, according to conventional economic theory, goods with zero marginal costs should be treated as public goods, meaning that they should be given away without cost rather than be sold as commodities" (*supra*, note 9 at 164-165). Goods which have zero marginal costs are called non-rivalrous goods. Information is the ultimate non-rivalrous public good – it is not scarce in the same sense that other commodities are. If one person eats a loaf of bread, then there is less bread for the next person. If one person owns three lots of land in Vancouver, then there is less land for the next person. But if one person consumes a piece of information – for example by reading a book or learning French – the amount of information available to others is not reduced. "The logic of public goods demonstrates that information, including science, should be provided by society as a whole. Those accustomed to accepting the logic and the discipline of the market without question might well ask, Why should the government pay to produce a good that it then gives away? Shouldn't the government at least charge a user fee? No. Economics teaches that goods are supposed to be priced at their marginal cost. If the state collected a tax or user fee each time a person used a unit of a public good, the tax or fee would be inefficient. The payment of a tax or user fee would discourage the use of the public good, even though such usage would impose no cost on the rest of society. The resulting wasted opportunity would create an inefficiency, according to the logic of economics" (*supra*, note 9 at 165). As Branscomb observes, copyright supposedly encourages access to works by legislating scarcity: Office of Technology Assessment of the U.S. Congress, *The Accommodation of Intellectual Property Law to the Introduction of New Technologies* by A.W. Branscomb (Washington, DC, 1984).

letter using the phrase). The term then did not reappear in a judicial decision until 1949, when it was used in an American Supreme Court decision, *C.I.R. v. Wodehouse* 337 U.S. 369.

2.2 Justifications for Intellectual Property Rights

There are three distinct philosophies about the nature of intellectual property and its protection: the natural rights view, the public rights view, and the utilitarian view.⁵⁷ The *natural rights* view, which stems from some European traditions, grants ownership of works and inventions to their authors or inventors under the principle that failure to do so constitutes theft of the fruits of their labour. Under this view, creators should have the right to control any manipulation or 'reworking' of their works. The natural rights view is a view based on morality, and exists independently of any incentive effects or economic justification of IP protection. This approach has been influential in many European countries, which have strong legal protections for artists' moral rights.

The *public rights* view holds that it is inappropriate to assign private property rights to intellectual creations. Free access to intellectual creations is central to social cohesion and learning; therefore, information, works and inventions belong rightly in the public domain so that all may freely benefit. Not surprisingly, this approach finds its strongest support and application in socialist systems, many of which do not recognize the private ownership of intellectual works. Under these systems, the task of generating knowledge and new works falls to the state, which theoretically would then disseminate the fruits of its invention to its subjects. Some scholars advocate an approach which is similar to the

⁵⁷ Keith E. Maskus, *Intellectual Property Rights in the Global Economy* (Washington: Institute for International Economics, 2000) at 27-28.

public rights view, in the sense that they believe it is wrong to assign property rights to intellectual creations. However, it is not up to the state to generate new works, but to individuals. IPRs are viewed as wrong because they are incompatible with free markets, since they grant monopolies or limited monopolies, and society should trust the free market to allocate the fruits of knowledge and information.⁵⁸

Finally, the *utilitarian* view adopts the precept that IPRs are a means of providing a necessary incentive for society to create new works. To achieve this goal, IPRs must strike a balance between the need for invention and creation (creators' rights), and the need for diffusion and access (users' rights). Moreover, private property rights in information bear both costs and benefits, and there must be incentives and trade-offs between creators' and users' rights for the system to function optimally. Generally, it is desirable that the only actions performed are those that result in a gain that is worth more than what is lost.⁵⁹ This is the view that is adopted by the IP systems in Canada and the United States. A property owner may be defined under the utilitarian view as follows: "the owner of a resource is simply the individual whose determination as to the use of the resource is taken as final in a system of this kind."⁶⁰ The individual or corporation holding the rights may deal with them as he pleases, subject to legal restraints. Property

⁵⁸ Perelman, *supra*, note 9 sums up the competing views towards IPRs in the following manner: "Society has three options regarding the current system of intellectual property. First, we could trust the free market to allocate the fruits of knowledge and information...Although you might not think so from reading the business press, in reality free markets are incompatible with intellectual property. In the absence of secrecy, virtually no business could make a profit by putting time and resources into the development of science or information, since competitors could take advantage of such investments without having to invest anything. Secrecy, however, is inimical to progress. The second option is to follow the present course by continuing to grant those who supposedly develop intellectual property the exclusive right to its benefits for a set period of time. The third option is to treat the knowledge and information that society develops as a social good – the property of society as a whole. This option has never been fully attempted, but it seems the most promising of the three" (at 11-12).

⁵⁹ R.H. Coase, "The Problem of Social Cost," (1960) 3 J.L. & Econ. 1.

⁶⁰ J. Waldron, *The Right to Private Property* (Oxford: Clarendon Press, 1988) at 35.

rights are defined as rights that specify how persons may be benefited and harmed. Theoretically, rights arise or are taken away with the emergence of new benefits or harmful effects. Property rights can also be categorized as a factor of production, the cost of which must be factored into any costing process.

The utilitarian approach argues that society benefits more if material resources are controlled by individuals, than if they were controlled by the state or the community as a whole. The creativity and wealth of society overall are increased by granting limited monopolies (e.g. copyright) or monopolies (e.g. patents) over works. Authors are encouraged to create new works by the promise of being able to protect and economically exploit their works via IPRs. This view falls between the extreme positions of the natural rights and public rights views, and recognizes that IPRs may be assigned and regulated for the purposes of social and economic policy. Property rights schemes may also be justified by asking two questions: 1) what individual interests are served by the existence of private property? and; 2) are any of these interests so important that they justify a government duty to protect them?⁶¹

However, there are several defects to the utilitarian approach. Firstly, it assigns property rights based on “benefits” and “harms” but does not define these terms. It provides no guidance as to how to balance creator and user interests, except to say that benefit should be maximised and harm should be minimised – a problematic approach due to the lack of definitions of benefits and harms. The utilitarian approach assumes that all human desires and interests are equal, even if they cause pain, suffering or disadvantage to others. Secondly, the utilitarian view cares little for how the sum of happiness is achieved. There

⁶¹ *Supra*, note 60.

is no concern with justice or equality – the ultimate goal is not justice but wealth maximisation through property redistribution. Under such a situation, the economy may be divided up into two unequal parts.⁶² One part of the economy enjoys a highly profitable existence under the protection of IPRs. The rest of the economy tends to suffer under a withering hyper-competition, monopolistic prices, and diminished access and ability to make legitimate use of IP. Further, inequalities in the distribution of wealth and income may be accentuated, given that the bulk of all IP is held by a handful of firms, universities and well-off individuals.⁶³ Thirdly, because the utilitarian view is one which relies on an economic justification for its approach to private property (private property is viewed as a means to maximise wealth and productivity), there is often an emphasis on short-term gains.⁶⁴ Social interests are sacrificed to profits, and productivity may decrease in the long-term. For example, even though the utilitarian approach recognizes that IPRs can be used as a tool to regulate social and economic policy (such as progress in the useful arts and inventions, increased creativity, or expansion of foreign trade), this is only a favourable feature if IPRs are used to carry out beneficial or just policies. IPRs can equally be exercised to institute unjust or morally bankrupt policies, if they are seen as being immediately profitable, or if an influential stakeholder lobbies for a favourable law. Additionally, IPRs that implement a seemingly beneficial policy can be wrongly exercised by their holders – for example, to incorrectly frustrate competition in a marketplace. Thus, there are several downfalls to the utilitarian approach to IP.

⁶² *Supra*, note 9 at 164 (references omitted).

⁶³ *Supra*, note 9 at 5. Perelman goes on to state: “The obscene wealth of a Bill Gates of Microsoft or a Phil Knight of Nike, or even of the lesser instant Internet billionaires, alongside the sizable residue of poverty that blights the contemporary United States, reminds us of the existence of a link between distribution of income and intellectual property” (at 5).

⁶⁴ Felix S. Cohen, “Transcendental Nonsense and the Functional Approach” (1935) 35(6) *Columbia Law Review* 809 in Robert L. Hayman, et al., eds., *Jurisprudence Classical and Contemporary: From Natural Law to Postmodernism*, 2nd ed. (St. Paul: West Group, 2002).

No matter which philosophy of IP is adopted, be it natural rights, public rights or utilitarian; or how property was obtained, it can be observed that the longer one holds the property, the stronger the expectation to continue to do so. The law finds value in protecting legitimate expectations and therefore is inclined to preserve the *status quo* of property rights, or to progress further along existing trends in the distribution of property rights. Predictability in application is a valued feature in common law systems and further emphasizes this leaning. This inclination towards preservation of the *status quo* may of course be either detrimental or beneficial to society, or certain interest groups within society, depending on what the present state of affairs is. However, it is a feature which may make it harder to properly balance creator and user interests, if the starting point is already skewed in favour of one group.

For example, if a piece of legislation is being revised via the process of multiparty negotiation⁶⁵ (a commonly used approach in both Canada and the U.S.), the bargaining industries will begin by characterizing the state of the current law in a way that is beneficial to their position. Since current law is the baseline against which new proposals are negotiated, its favourable description is key. Secondly, an affected party – unless constrained by lack of bargaining power – will not agree to support a law that leaves it worse off than it is under the current law. The result of the multiparty negotiation is legislation that is kind to the *status quo* and hostile to new industries and new competitors. Further, the natural outcome of the present system of IPRs “is a world of

⁶⁵ Legislation that stems from a multiparty negotiation process has some predictable characteristics – see Jessica Litman, *Digital Copyright* (Amherst: Prometheus Books, 2001) at 24.

excessive litigation, intrusive violations of privacy, interference with scientific research, and a lopsided distribution of income.”⁶⁶

The above discussion briefly illustrates the different theoretical approaches to intellectual property rights. Based on these differing views, the state may choose to approach its role of rule making from any of the following standpoints:

- 1) it can institute laws which support the expectations of those currently holding property;
- 2) it can pass laws which redistribute IP such that wealth and productivity are maximised;
- 3) it can use laws to implement a desired policy end; or
- 4) it can follow some other over-riding principle.

It is most likely that a combination of these four approaches is used in making rules and laws concerning IP.

2.3 Terminology: ‘Copyright’

Copyright embodies several types of rights, each of which is specific to the protected subject matter. In the case of a work, s. 3(1) of the Act lays out what constitutes copyright in a work and what economic rights are accorded to the holder. It reads in part:

For the purposes of this Act, “copyright”, in relation to a work, means the sole right to produce or *reproduce* the work or any substantial part thereof *in any material form*

⁶⁶ *Supra*, note 9 at 7.

whatever...if the work is unpublished, to publish the work or any substantial part thereof, and includes the sole right...to authorize any such acts.⁶⁷ (Emphasis added)

WIPO describes copyright in the following manner:

The *original creators* of works protected by copyright, and their heirs, have certain basic rights. They hold the *exclusive right* to use or authorize others to use the work on agreed terms. The creator of a work can prohibit or authorize:

its *reproduction* in various forms, such as printed publication or sound recording;

its *public performance*, as in a play or musical work;

recordings of it, for example, in the form of compact discs, cassettes or videotapes;

its *broadcasting*, by radio, cable or satellite;

its *translation* into other languages, or its *adaptation*, such as a novel into a screenplay.⁶⁸

In order to determine if an activity (such as Internet browsing) amounts to copyright infringement, it is necessary to first examine the exclusive rights that are granted to a copyright owner under the Act. Accordingly, s. 3(1) of the Act is discussed in greater

⁶⁷ Section 3 of the Act. S. 3 goes on to state that copyright "includes the sole right (a) to produce, reproduce, perform or publish any translation of the work, (b) in the case of a dramatic work, to convert it into a novel or other non-dramatic work, (c) in the case of a novel or other non-dramatic work, or of an artistic work, to convert it into a dramatic work, by way of performance in public or otherwise, (d) in the case of a literary, dramatic or musical work, to make any sound recording, cinematograph film or other contrivance by means of which the work may be mechanically reproduced or performed, (e) in the case of any literary, dramatic, musical or artistic work, to reproduce, adapt and publicly present the work as a cinematographic work, (f) in the case of any literary, dramatic, musical or artistic work, to communicate the work to the public by telecommunication, (g) to present at a public exhibition, for a purpose other than sale or hire, an artistic work created after June 7, 1988, other than a map, chart or plan, (h) in the case of a computer program that can be reproduced in the ordinary course of its use, other than by a reproduction during its execution in conjunction with a machine, device or computer, to rent out the computer program, and (i) in the case of a musical work, to rent out a sound recording in which the work is embodied, and to authorize any such acts."

⁶⁸ Available online, World Intellectual Property Organization <<http://www.wipo.int/copyright/en/faq/faqs.htm#rights>>. A self-proclaimed layperson's definition of copyright is as follows: "A *copyright* is a right to prevent copying of literary, artistic, and musical works. It arises automatically without a period of waiting for registration but does not give a complete monopoly in the way that patents do. A copyright does not protect the underlying ideas or concepts themselves but rather protects the way an author or artist expresses an idea or concept. Other rights exist that are related to or 'neighbouring on' copyright and typically include the rights of performing artists, producers of phonograms, and broadcasting organizations:" *supra*, note 10 at 18 (references omitted; emphasis in original). This definition is partially based on the WIPO definition of copyright (World Intellectual Property Organization, *WIPO: General Information* (Geneva: World Intellectual Property Organization, 1995). While it may be the instinct of someone with a legal background to turn to statutes and case law to determine the relevant rules governing a particular area of law, it is useful to consider the notion that the average layperson may not instinctively think of the *Copyright Act* when he or she thinks of copyright law. "Most people's idea of copyright law takes the form of a collection of principles and norms. They understand that those principles are expressed, if sometimes imperfectly, in the statutory language and the case law interpreting it, but they tend to believe that the underlying principles are what count" (*supra*, note 65 at 77).

detail below. Other forms of protected subject matter include: a performer's performance (rights as set out in ss. 15 and 26 of the Act); sound recordings (as per s. 18 of the Act); and communication signals (s. 21 of the Act).

2.4 Justifications for Copyright

Most authors agree that copyright is a bundle of property rights that produce or protect a limited monopoly.⁶⁹ However, the basis for copyright, and its scope of protection, are both hotly debated topics. As with IPRs generally, some scholars view copyright as a "natural" right⁷⁰ – i.e. the author or creator has a natural right to the fruits of her labour. Others use an economic or utilitarian justification for copyright law, and view copyright as a tool used by the state to achieve set policy goals. For example, copyright's use may be to promote the useful arts or public access to information;⁷¹ or it may be a means to ensure an orderly market for works of the mind.⁷² It should be noted that, no matter which view one assumes, its proponents are unsatisfied with the current formulation of copyright law.

⁶⁹ B.A. Ringer and P. Gitlin, *Copyrights*, rev. ed. (New York: Practising Law Institute, 1965).

⁷⁰ J.C. Ginsburg, "Creation and Commercial Value: Copyright Protection of Works of Information" (1990) 90 Colum. L. Rev. 7:1865.; P. Goldstein, "Copyright" (1992) 55 Law & Contemp. Probs. 2:79; J.B. Hicks, "Copyright and Computer Databases: Is Traditional Compilation Law Adequate?" (1987) 65 Tex. L. Rev. 5:993.

⁷¹ Jessica Litman, "Copyright and Information Policy" (1992) 55 Law & Contemp. Probs. 2:185; L.R. Patterson and S.W. Lindberg, *The Nature of Copyright: A Law of Users' Rights* (Athens: University of Georgia Press, 1991); P. Samuelson, "The U.S. Digital Agenda at WIPO" (1997) 37 Virginia J. of Int'l Law 369.

⁷² Demsetz, H. "Toward A Theory Of Property Rights" (1967) 57(2) The American Economic Rev. 347; W. Gordon, "Toward A Jurisprudence of Benefits: The Norms of Copyright and the Problem of Private Censorship" (1990) 57 U. Chicago L. Rev. 1009; W.M. Landes and R.A. Posner, "An Economic Analysis of Copyright Law" (1989) 28 J. Legal Stud. 325.

Case law indicates that copyright is *not* viewed as a natural right that exists at common law.⁷³ Rather, under Canadian jurisprudence, it is a statutory creation and is protected solely under the Act.⁷⁴ Copyright does not arise from contract or tort law, and these two regimes are of limited help in assessing copyright cases.⁷⁵ Section 5(1) of the Act stipulates the conditions for subsistence of copyright. Copyright arises automatically upon the creation of a work, provided the work meets minimum requirements of originality and fixation.⁷⁶ No further acts (e.g. registration) are required by an author or creator to attract copyright protection – rather, an immediate moral and economic claim is established. IPRs are international, in that their existence does not necessarily depend on where the activity creating the work took place. If the work was created in a “treaty country,” copyright protection is enjoyed in Canada: s. 5(1) of the Act. A treaty country is defined in s. 2 as a country that is party to the Berne Convention, Universal Copyright Convention (‘UCC’),⁷⁷ or a member of the World Trade Organization (‘WTO’). Countries belonging to these international conventions or to the WTO likewise extend

⁷³ *Donaldson v. Beckett* (1774), 4 Burr. 2408 (H.L.) affirmed that a common law perpetual copyright existed for authors over their unpublished works. The right ceased upon publication. This common law copyright was abolished by England’s Copyright Act of 1911 (1 & 2 Geo. 5, c. 46), bringing them within the umbrella of the statute. Canada’s copyright law is imported to a large degree from the 1911 British Act.

⁷⁴ *Compo Co. v. Blue Crest Music Inc.*, [1980] 1 S.C.R. 357 at 372. Estey J stated at 372-373 that, “...copyright law is neither tort law nor property law in classification, but is statutory law. It neither cuts across existing rights in property or conduct nor falls between rights and obligations heretofore existing in the common law. Copyright legislation simply creates rights and obligations upon the terms and in the circumstances set out in the statute. This creature of statute has been known to the law of England at least since the days of Queen Anne when the first copyright statute was passed. It does not assist the interpretive analysis to import tort concepts. The legislation speaks for itself and the actions of the appellant must be measured according to the terms of the statute.” The full text of the Act is available online: Department of Justice Canada <<http://www.canada.justice.gc.ca/FTP/EN/Laws/Chap/C/C-42.txt>>.

⁷⁵ *Télé-Métropole Inc. v. Bishop*, [1990] 2 S.C.R. 467 at 477; *Delrina Corp. v. Triolet Systems Ltd.* (1993), 47 C.P.R. (3d) 1 (Ont. Ct. (Gen. Div.)) at 27.

⁷⁶ To be granted protection under the Act, a work must be “fixed.” This term is not defined in the Act, but has been interpreted to require an expression in a more or less permanent and tangible form, so as to make the work identifiable. The implications of the fixation requirement to the digital context are discussed in greater detail below.

⁷⁷ *Universal Copyright Convention*, signed 6 September 1952 in Geneva, Switzerland, as revised in Paris, France on 24 July 1971.

copyright protection in their countries to Canadian copyright holders. Generally, copyright protection lasts for the author's life plus 50 years: s. 6 of the Act. A creator may sell the rights to her works to an individual or company in order to maximize the financial gain associated with dissemination of copyrighted works. Payment for copyright may depend on the actual use of the work, in which case the payment to the creator is referred to as a royalty.

Copyright owners generally hold moral rights, in addition to economic or property rights, in their works. Moral rights are granted under s. 14.1(1) of the Act. Under this provision, the author has the right to the integrity of the work, the right to be associated with the work as its author, and the right to remain anonymous if so desired. Section 28.2(1) further states that the "integrity of a work" is infringed only if the work is distorted, mutilated, or otherwise modified; or used in association with a product, service, cause or institution to the prejudice of the creator's honour or reputation. Moral rights may not be assigned, but may be waived in whole or in part: s. 14.1(2). The level of recognition and reference to moral rights varies greatly between copyright regimes. For example, France and many central European countries have a copyright regime strongly supportive of moral rights. Countries such as Canada, the U.S., and the U.K. stress economic rights, tempered in varying degrees by fair dealing provisions.⁷⁸ Even within Canada, differences in emphasis on moral rights exist between Quebec and the federal government. The focus on economic rights can be seen in the lack of moral rights contained in the Trade Related Aspects of Intellectual Property Rights ('TRIPs') agreement of 1994.

⁷⁸ See generally *supra*, note 10 at 102 and Claire Easton, "Copyright in the Digital Age" (1999) 4 I.P. & I.T. Law, Issue 6 at para. 28.

Moral rights stem from the natural rights justification for copyright law, and the low level of moral rights found in Canadian copyright law is in line with its utilitarian view and economic justification for copyright. Critics of moral rights argue that, while the concept that a person is entitled to the fruits of her labour is a powerful idea, a more realistic view is that intellectual works are built on the labour of others, and it is therefore “difficult,” or even unfair, to assign rights in a work to a specific individual.⁷⁹ The often quoted statement of Sir Isaac Newton alludes to this idea: “If I have seen further it is by standing on [the shoulders] of Giants.”⁸⁰ Creativity is impossible without a rich public domain and without an appropriately wide right for the public to make legitimate use of works: “Nothing today, likely nothing since we tamed fire, is genuinely new: Culture, like science and technology, grows by accretion, *each new creator building on the works of those who came before.*”⁸¹ Since intellectual products are fundamentally social products, there is no reason for the last contributor to get all the rewards. The proposition that one is “entitled” to a reward for their intellectual labour is a fallacy, and that while rewarding labour may be a social policy, it is not a moral right. Further, there is a gap between the claim that a creator is entitled to a reward for the use of the fruits of his labour, and the assertion that a creator should receive whatever price the market will bear.

Some critics also refute the economic/utilitarian argument that copyright is necessary to promote competition by offering an incentive (copyright protection and economic rights)

⁷⁹ Edwin C. Hettinger, “Justifying Intellectual Property” (1989) 18 *Philosophy and Public Affairs* 31.

⁸⁰ Sir Isaac Newton, letter to Robert Hooke, Feb. 5, 1675/1676.

⁸¹ *White v. Samsung Elec. Am., Inc.*, 989 F.2d 1512, 26 U.S.P.Q.2D (BNA) 1362 (cited to F.2d) at 1513 per Kozinski J (footnotes omitted, emphasis added). Kozinski J goes on to state at 1513: “Overprotection [of intellectual property] stifles the very creative forces it’s supposed to nurture.”

to a creator to make new works.⁸² However, it is not actually known that copyright functions as an incentive to create. It is simply assumed because it appears logical and because it is almost impossible to test. The idea that copyright is necessary for the continued creation of new works can be dispelled easily by pointing to many great works that were written before copyright was invented – for example, those written by the ancient Greek philosophers, Homer, Shakespeare or even religious works. Another example can be found in collective works. Under the original American copyright law of 1909, copyright was only granted to individual writers. Collective works such as newspapers, magazines and encyclopaedias could not be copyrighted as a whole – yet they did not cease to be produced for lack of copyright protection. Garment designs are not copyrightable subject matter, yet the fashion industry continues to thrive.⁸³ Even though the incentive of copyright is not applicable, clothing designers continue to invest in the design, manufacture and distribution of clothing. Similarly, a recipe on its own is not subject to copyright protection, yet restaurants and chefs continue to invent new food creations.⁸⁴

The hypothesis that creators would cease to make new works if copyright did not exist can be examined in a different way. Instead, copyright can be categorized as an incentive to *distribute or market* works, rather than an incentive to create works. If copyright protection ceased to exist, people would most likely continue to create works such as

⁸² E.g. *supra*, note 79 and McLaren, Carrie. "Copyrights and Copywrongs, Interview with Siva Vaidhyathan" *Stay Free!* 20 (2003), online: *Stay Free!* <http://www.stayfreemagazine.org/archives/20/siva_vaidhyathan.html>.

⁸³ Jennifer Mencken, "A Design for the Copyright of Fashion" (1997) B.C. Intell. Prop. & Tech. F. 121201; Malla Pollack, "A Rose is a Rose, but Is a Costume a Dress? An Alternative Solution in *Whimsicality, Inc. v. Rubie's Costume Co.*" (1993) 41 Journal of the Copyright Society of the USA 1.

⁸⁴ Malla A. Pollack, "Copyright Protection for the Creative Chef, or How to Copyright a Cake: A Modest Proposal" (1991) 12 Cardozo L. R. 1477; "What does Copyright Protect?" online: U.S. Copyright Office <<http://www.copyright.gov/help/faq/faq-protect.html>>.

poetry, musical compositions, paintings or novels. But they may be more reluctant to create works involving a large financial outlay, such as a major motion picture or complex software.⁸⁵ It is a more defensible proposition that copyright acts as an incentive for individuals or corporations to distribute and market works, rather than an incentive to create works for the sake of artistic expression or creation itself. The debate takes on an interesting dimension if one pauses to consider the copyrightability of a work in terms of its social value. For example, Landes and Posner argue that the amount of copyright protection should be greater for classes of works that are more socially valuable than those that are not.⁸⁶ Of course this has the obvious downfall of the need to create a test to assess social value, which is a highly subjective concept. Still others argue that copyright is not necessary as an incentive to create at all: the free market, coupled with individual arrangements such as licences and trade agreements, would be sufficient to allow creators to profit from their works without the need for copyright.⁸⁷

However, regardless of which view of IPRs or which justification for copyright is adopted, the issue that should be borne in mind is not the maintenance or abolition of property rights, but rather the determination of the precise lines along which private enterprise should be given free scope, and where it must be restricted in the interests of the common good. Put another way, we should be concerned with the line between the

⁸⁵ A movie studio could potentially make a movie and then licence it to theatres under the condition that they do not make or distribute copies. Such an arrangement would still protect their investment, since a competing movie studio would be unlikely to make a movie with exactly the same plot and characters, and theatres would not profit from the making of copies. However, problems would arise in respect to derivative works (Studio B could use popular characters invented by Studio A and make its own movies about them), and incentive to distribute copies for private viewing such as DVDs (individuals could mass-market their own copies).

⁸⁶ Landes and Posner, *supra*, note 72.

⁸⁷ Palmer, 1989, *supra*, note 56 at 279.

exclusive rights of copyright holders and the public's right to access information and make legitimate use of copyrighted works.

2.5 History of Copyright Law and Dominant Metaphors

It is important that debates about law and its implementation be set against Canadian copyright policy history.⁸⁸ Copyright is generally seen as emerging from the mists of common law as a natural right and taking definite form after the invention of the printing press and the subsequent increase in piracy. While the origin of copyright law may be traced back to the invention of the printing press by Johannes Gutenberg in 1450, the simple linking of copyright to this invention dismisses the historical ties between copyright and the English Crown's grants of printing monopolies, its efforts to suppress so-called heretical or seditious writings, and its efforts to exercise censorship control over all publications.⁸⁹ The reality is that copyright originated as a measure for ensuring government control over the printing press in a time of religious and political dissent, rather than from any concern of the state for the rights of authors.

The first copyright statute, the *Statute of Anne* 8 Anne c. 19 (1709), was passed in England in 1709 and was a direct outgrowth of an elaborate series of English Crown monopoly grants, Star Chamber decrees, licensing Acts, and a system involving mandatory registration of titles with the Stationers' Company.⁹⁰ Before 1709, authors did not possess any statutory or natural right over their works. Literary works were governed

⁸⁸ Douglas A. Smith, "Recent Proposals for Copyright Revision: And Evaluation" (1988) Can. Pub. Pol'y 14(2): 175-85; A.A. Keyes and C. Brunet, *Copyright in Canada: Proposals for a Revision of the Law* (Ottawa: Consumer and Corporate Affairs Canada, 1977) as cited *supra*, note 10 at 104.

⁸⁹ Barbara Ringer, "The Demonology of Copyright" in Philip G. Altbach and Sheila Slaughter, eds., *Perspectives on Publishing* (Lexington, MA: Lexington Books, 1976).

⁹⁰ *Supra*, note 89.

by the Charter of the Company of Stationers (the '**Charter**'), originally granted in 1556, which gave the Stationers the authority to enact "ordinances, provisions and statutes" for the administration of "the art or mistery of Stationary."⁹¹ The Charter also empowered the Company of Stationers (the '**Stationers**') to search and seize and destroy any unauthorized books, materials and printing presses. The Charter performed mutually beneficial functions: "the Stationers benefited economically from the Stationers' Charter's grant of a printing monopoly; the Crown benefited by co-opting the Stationers as enforcers of governmental censorship policies."⁹² The Star Chamber (which granted the Charter) was later abolished in 1641, and in light of this the Stationers began to face unregulated competition.

Shortly thereafter, the first mentioning of rights for actual authors (as opposed to the Crown and compliant printers) can be seen. When licensing law of 1662 expired in 1694 and was not renewed, the Stationers cast around for some other means of consolidating their control over the printing trade. Initially, they presented a petition to the Crown for a renewal of government censorship laws. But by this point, governmental policy had shifted from censorship to encouraging authorship. Publishers saw a tactical advantage in pushing for authors' rights as well as their own, with the result of the Statute of Anne granting authors (not publishers) a 14 year exclusive publication right. This was part of the Stationers' strategy to devise a form of copyright that would restore its perpetual publication monopoly. At this point, the Stationers appealed to the natural rights idea, and they sought to establish a judicially recognized natural right of authors to the fruits of

⁹¹ L.R. Patterson, "Copyright and the Exclusive Right of Authors" (1993) 1 J. Intell. Prop. L. 1 at 9.

⁹² David Fewer, "Constitutionalizing Copyright: Freedom of Expression and the Limits of Copyright in Canada" (1997) 55(2) U.T. Fac. L. Rev 175 at para. 12.

their labour. A right which could, of course, be conveniently assigned to the Company of Stationers as an incident of publication. The Stationers were partially successful. *Donaldson v. Beckett*⁹³ found a common law perpetual author's copyright for unpublished works. This right ceased upon publication. From this brief discussion, it can be seen that as government control faded away, the justification for copyright shifted away from censorship to economics. Much like today, the romantic notion of protection of authors' rights was only invoked when convenient for the dominant industry players. Even historically, copyright was valued primarily for its economic privileges, and not its moral force. The doctrine that copyright exists solely to benefit authors is a myth,⁹⁴ and the trend of publishers or other industry player pushing to formulate rights for authors continues today. For example, when the Information Highway Advisory Council's Subcommittee on Copyright considered amendments to the Act to accommodate ICTs, it received submissions from over 50 different interested parties, the majority of which represented publishers and copyright holders.⁹⁵

Beyond the printing press and the Company of Stationers, the historic evolution of copyright at the international level is usually portrayed as occurring in three phases.⁹⁶ The first phase of development was the territorial or national stage. International rules and regimes were not yet incorporated at this stage. The second phase of copyright evolution began in the late 19th century, when an international IP regime began to emerge

⁹³ *Supra*, note 73.

⁹⁴ See David Vaver, "Intellectual Property Today: Of Myths and Paradoxes" (1990) 69 Can. Bar Rev. 98 for further commentary.

⁹⁵ Subcommittee Report, *supra*, note 18.

⁹⁶ *Supra*, note 10 at 9, citing: Drahos, P. "Global Law Reform and Rent-Seeking: The Case of Intellectual Property" (1996) 7 Austl. J. Corp. L. 45; R. Marlin Bennett, "International Intellectual Property Rights in a Web of Social Relations" (1995) *Science Communication* 17(2): 119-36; and Robert Merges, "Battle of the Lateralisms: Intellectual Property and Trade" (1990) B.U. Int'l L.J. (Fall): 239-46.

as a result of the Paris and Berne copyright conventions.⁹⁷ This regime was territorially based, but extended creators' rights via international treaties. In the early 1900s, the prevalent metaphor used to describe copyright was the notion of a *quid pro quo*. Under this model, the public grants creators a limited monopoly in the form of the exclusive rights given by copyright. The limited monopoly is of a fixed duration, at the end of which the works become part of the public domain. In exchange for copyright protection, the creators publicly disseminate their works, and the public benefits by having access to more works.⁹⁸ As recently as fifty years ago, literature in the U.S. described copyright protection as "shallow" and "exception-ridden" – it was an article of faith that the nature of copyright required that it offer only circumscribed, porous protection to works of authorship.⁹⁹

The third stage of copyright development began in the mid-1980s. This stage of development was perhaps a response to industry concerns to the limited protection then offered by copyright law. A U.S.-led attempt to reform IPRs emerged at this time. In the 1990s, dozens of countries strengthened their IP laws and regulations under the joint pressures of the United States and the European Union ('EU'), both of which played a key role in pushing forward a global reform agenda of IPRs. Widely publicized American negotiations and threats in the 1980s and 1990s helped usher in stronger IPRs legislation in South Korea, Argentina, Brazil, Thailand, Taiwan, and China, often using section 301

⁹⁷ *Convention for the Protection of Literary and Artistic Works*, signed 9 September 1886 in Berne, Switzerland, or any of its revisions, including the *Paris Act* of 1971 ('the Berne Convention').

⁹⁸ Jessica Litman, "The Public Domain" (1990) 39 Emory L. J. 965 at 977-92.

⁹⁹ *Supra*, note 65 at 78.

of the Trade Act of 1974 as authority. Meanwhile, European Union negotiations and assistance helped to accordingly reform IPRs in Egypt and Turkey.¹⁰⁰

During this time, numerous regional trade and investment agreements, such as the North American Free Trade Agreement ('NAFTA') and bilateral accords between the European Union and countries in the Middle East and North Africa, were seen to emerge with IP protection at their core. The successful conclusion of multilateral agreements, such as the Agreement on Trade-Related Aspects of Intellectual Property Rights ('TRIPs'), further elevated recognition and enforcement of IPRs to the level of inviolable international commitment. At that time, international efforts were already underway to expand IP protection for critical new technologies, such as electronic commerce.¹⁰¹

This recent push to formulate a common IP regime served to elevate IP to its present state of political-economic centrality.¹⁰² The once dominant *quid pro quo* model of copyright was eventually transformed into one centred on compensation: copyright was now predominantly seen as a tool through which authors could economically exploit their works. Under this model, copyright is portrayed as a "bargain," whereby the public grants a limited monopoly to creators as a means of advancing the public interest.¹⁰³ The potential for making money is the incentive which functions to encourage the creation and public dissemination of new works. The "reward" for dissemination of works is not the protection itself (as under the *quid pro quo* model), but rather the potential for monetary gain.

¹⁰⁰ *Supra*, note 57 at 4.

¹⁰¹ *Supra*, note 57 at 1.

¹⁰² *Supra*, note 10 at 10.

¹⁰³ For example, see *Sony Corporation of America v. Universal City Studios Inc.*, 464 U.S. 417 at 429 and n.10 (1984) (quoting H.R. Rep. No. 2222, 60th Cong., 2d sess. [1909]).

In the U.S., the first American copyright statute was passed in 1790¹⁰⁴ ('the 1790 Act'). This statute gave copyright owners the "sole right and liberty of printing, reprinting, publishing and vending." As a condition for copyright protection, the 1790 Act required compliance with several formalities. This included registration, copyright notice and renewal. Until 1909, when American copyright law was reformed with the passing of another copyright Act, registration was needed to secure copyright. The copyright subsisted for a term of 14 years, with the possibility of renewal for an additional term if the proper renewal procedures were followed. The 1909 Act provided for the creation of copyright in two ways: copyright could be secured via registration; or by publication of the work with the prescribed copyright notice. However, to renew copyright, registration was necessary under either option. Copyright was forfeited if copies were distributed to the public without the statutory notice.¹⁰⁵ Early American copyright statutes put some burden on copyright owners to register their work, to deposit copies of their work with the government, and to renew their copyright term.

The original copyright model in the U.S. was premised on the basic assertion that creators were to be compensated for the sale of every copy of their work. However, when other means of exploiting works overwhelmed the sale of copies, this model was no longer satisfactory. For example, musical composers were satisfied with this compensation model of copyright, as long as the chief source of revenue for their compositions was the sale of sheet music. Technology then advanced and it became possible for music to be recorded on a phonograph record. Copies of the record could be

¹⁰⁴ Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124.

¹⁰⁵ See Robert A. Gorman and Jane C. Ginsburg, *Copyright: Cases and Materials*, 5th ed. (1999, Lexis Law Publishing) at 4-9, 339-343, 383-397.

sold for profit, although this did not benefit the composer under the existing copyright scheme. Until 1909, composers were not able to share in the revenues from record sales since they were not deemed to be “copies” of the music under the 1790 Act.¹⁰⁶ It was with technological advances such as this that copyright law was reformed to its present state. With the new technologies came new ways of economically exploiting creative works, and disputes arose regarding copyright owners’ entitlement to expanded rights over their works.

The fundamental US copyright law remained largely unchanged for almost 70 years until a major revision took place, resulting in the *Copyright Act of 1976*¹⁰⁷ (the ‘1976 Act’). Under the 1976 Act, copyright protection attaches automatically as soon as an original work of authorship is fixed in tangible form. Notice and registration are no longer required to secure copyright: s. 102 of the 1976 Act. Generally, the term of copyright protection in the U.S. is the author’s life plus seventy years.¹⁰⁸ Beyond creation of the work, the copyright owner need make no effort at all to enjoy the government-granted limited monopoly of copyright protection.

This current system is in contrast to the comparatively formal requirements once militated by the 1790 and 1909 Acts to obtain copyright protection. Copyright laws in the U.S. and elsewhere were developed with the principle that neither the creator of a new work, nor the public, ought to be able to appropriate all of the benefits that flow from the creation of a new, original work. This was both as a matter of fairness, and as a matter of

¹⁰⁶ *White-Smith Music Publishing Co. v. Apollo Co.*, 209 U.S. 1 (1908).

¹⁰⁷ Act of Oct. 19, 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976) (codified as amended in scattered sections of 17 U.S.C.).

¹⁰⁸ There are some exceptions to the life plus seventy years term. For example, if the work is created within the course of employment, the creator’s employer holds the copyright, which lasts for 95 year from the date of the work’s first public distribution: ss. 201, 302 of the 1976 Act. See *supra*, note 17 for more detail.

fulfilling the U.S. constitutional goal of promoting the progress of science and the useful arts.¹⁰⁹ By encouraging authors to create new works, and by encouraging the public to consume them, copyright promoted learning. Copyright law “has always divided up the possible rights in and uses of a work, and given control over some of those rights to the creators and distributors and control over others to the general public.”¹¹⁰

In the early 1900s, the U.S. Congress began the habit of revising copyright laws by encouraging representatives of various industries significantly affected by copyright to put forth proposals to Congress. The industries were encouraged to decide among themselves which changes needed to be made, and to write proposals for the text of the amended laws. By the 1920s, this multiparty negotiation process was sufficiently entrenched so that it was the standard operating procedure for passing laws. When a member of Congress put forth a legislative proposal without engaging in this cumbersome pre-legislative process, the affected industries and stakeholders usually united to block the bill.¹¹¹ Copyright laws were passed only once private stakeholders were satisfied with the new provisions – a trend that continues today.

As mentioned above in Section 2.4, legislation that stems from a multiparty negotiation process has some predictable characteristics. Firstly, no affected party – unless constrained by a lack of bargaining power – will agree to support a Bill that leaves it worse off than it is under the current law. This means that industry players “need to identify some potential surplus they can divide among themselves to get enough support

¹⁰⁹ “The Congress shall have the power...To promote the Progress of Science and the Useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” United States Constitution, art. I, s. 8, cl. 8.

¹¹⁰ *Supra*, note 65 at 15-16.

¹¹¹ *Supra*, note 65 at 23.

for new proposals, and that surplus most often comes at the expense of outsiders.”¹¹² “Outsiders” usually include the general public and new players seeking to enter the market.

Secondly, the negotiating industries characterize the state of the current law in a way that is beneficial to their position. Since current law is the baseline against which new proposals are negotiated, its favourable description is important.¹¹³ This means that parties who want other stakeholders to sign off on a particular proposal must offer up some new provision or “bribe” as a trade off. For example, in the case of musical composers and phonograph records (mentioned above), if the current law is such that phonograph record producers are liable for making copies of records to sell commercially, they are more likely to support legislation which grants them the right to make records for commercial exploitation in return for paying royalties to composers. If, however, the state of the law is such that record companies may make and sell recordings of musical works without paying any royalties to the composers, then the composers need to come up with something else to offer as a trade off.¹¹⁴

¹¹² *Supra*, note 65 at 23.

¹¹³ *Supra*, note 65 at 24.

¹¹⁴ In fact, the perceived injustices stemming from music composers’ failure to receive royalties gave birth to the American Society of Composers, Authors and Publishers (ASCAP). After hearing his music played live by musicians in a restaurant, Victor Herbert sued the restaurant under the 1909 Act. Herbert eventually won the right to receive royalties in the United States Supreme Court: *Herbert v. Shanley Co.*, Nos. 427, 433, Supreme Court of the United States, 242 US 591; 37 S. Ct. 232; 61 L. Ed. 511; 1917 U.S. Lexis 2158. Before this 1917 victory, Herbert gathered eight composers, publishers and lyricists for a meeting that would result in the establishment of ASCAP as their collection agent. ASCAP was soon collecting fees wherever there was a performance for profit. In 1923, ASCAP saw its next fee-collecting opportunity arise from the broadcasting industry. It sued WEA (AT&T’s New York outlet), and the result was that WEA purchased a one-year licence to broadcast all ASCAP-licensed music for \$500. By 1931, ASCAP inflated its licence fees by 300%, by 1936 it was demanding five-year licences, and in 1930 it raised its fees again. In 1940, the radio industry finally formed its own licensing organization, Broadcast Music Incorporated (BMI) and ceases broadcasting ASCAP music by early 1941. See generally: Peter Orlik, “American Society of Composers, Authors and Publishers (ASCAP),” *Encyclopedia of Radio* (Chicago and London: Fitzroy Dearborn Publishers, 2001).

Thirdly, disputes over proposals for the new legislation tend to get settled by specifying.¹¹⁵ The record companies now have the right to make copies of records if they pay royalties to composers. Radio stations want to buy the records and play them on air, so they seek a right which allows them to broadcast records on air. Composers respond by agreeing to grant radio stations licences to play their compositions on air, but subject to payment of compensation, and only if radio stations are the only parties are allowed to broadcast their works. The bargaining parties simply make the negotiated privilege or trade off very specific to their particular end. This is problematic because negotiated privileges tend to pose substantial market entry barriers to outsiders who cannot be at the negotiating table because they do not have enough bargaining power to participate, or even because their industries have not been invented yet. The result of the multiparty negotiation is legislation which is kind to the *status quo* and hostile to new industries and new competitors.¹¹⁶

¹¹⁵ *Supra*, note 65 at 24.

¹¹⁶ Note that the strategy of major industry players joining together to negotiate favourable intellectual property protection is not unique to copyright law. Consider the actions of pharmaceutical companies in the early 1980's to advocate for favourable patent laws. Edmund J. Pratt, the Chairman Emeritus of Pfizer stated: "In 1983, Pfizer joined with other corporations such as Merck, Johnson & Johnson, Bristol-Myers, IBM, Hewlett Packard, General Motors, General Electric, Rockwell International, Du Pont, Monsanto, and Warner Communications to form the Intellectual Property Committee to advocate intellectual property protection. *The committee helped convince U.S. officials that we should take a tough stance on intellectual property issues*, and that led to trade-related intellectual property rights being included on the GATT agenda when negotiations began in Punta del Este, Uruguay, in 1986." (Published on Pfizer's website: <<http://www.pfizer.com/pfizerinc/policy/intellectual-propfrm.html>>) Six months before the Punta del Este meeting, the CEOs of 12 major corporations met again as the Intellectual Property Committee ('IPC'). Together with the IPC's counterparts in Europe and Japan, they drafted a proposal based on existing industrialized country laws and presented the proposal to the GATT Secretariat. "By 1994, the IPC had achieved its goal in the Trade Related Aspects of Intellectual Property (TRIPs) accord of the Uruguay trade round...In effect, twelve corporations made public law for the world." (Susan K. Sell, "Multinational Corporations as Agents of Change: The Globalization of Intellectual Property Rights," in *Private Authority and International Affairs*, ed. A. Claire Cutler, Virginia Haufler, and Tony Porter (Albany: State University of New York Press, 1999) at 169, 172 as cited *supra*, note 9 at 33.

2.6 The Current Model of Copyright Law in Canada

The current model of copyright is based on the Berne Convention and the WIPO copyright treaty, both of which stress the economic rights associated with copyright. The present *Copyright Act* dates back to 1924. It remained virtually unchanged until 1988 when an amending Act was passed.¹¹⁷ At that time, ethnological innovations were changing the ways that copyrighted works were being created, disseminated and used by the public. The Act was viewed as being too outdated to address these innovations. Its major downfall was its failure to provide copyright owners with the ability to exercise effective control over the use of their material and to get a fair return on their investment,¹¹⁸ thus defeating copyright law's primary function according to the dominant "bargain" paradigm. Once again, the consideration of economic interests in copyright law is paramount over any moral or policy-related considerations.

Efforts to amend IP law in Canada had been made on several occasions prior to 1988. These efforts never came to any substantial fruition. IP reform was ostensibly not a worthwhile platform from which to launch a political career. It was not seen as an area that could benefit the careers of successive ministers because it was very technical, and because attentions were focused on other aspects of industrial and cultural policy.¹¹⁹ IP reform thus never found itself as an item at the forefront of the legislative agenda. Finally, between 1988 and 1996, the Act was amended by five different Bills, largely due to the momentum created by successive trade agreements (such as the Canada-U.S. Free Trade

¹¹⁷ See generally: Royal Commission on Patents, Copyright, Trade Marks and Industrial Designs (Ilsley Commission), *Report* (Ottawa: Queen's Printer, 1960); and Economic Council of Canada, *Report on Intellectual and Industrial Property* (Ottawa: Information Canada, 1971).

¹¹⁸ Monique Hébert, *Background Paper: Copyright Reform* (Ottawa: Library of Parliament, 1996) at 1.

¹¹⁹ *Supra*, note 10 at 104.

Agreement Implementation Act of 1988 and the World Trade Agreement Implementation Act of 1994), and the aforementioned US-led effort to globalize IP laws in the third phase of the evolution of copyright law. The most striking aspect of this brief review of copyright law's development is that, for much of copyright's history, there was very limited political will (as compared to other governmental priorities) to advance the copyright file. It was only when copyright became an increasingly trade-related and trade-driven issue (and therefore a more economically significant issue) that meaningful amendments began to occur.

Another factor that propelled copyright reform is the Department of Canadian Heritage Canada's packaging of copyright policy as a "cultural policy." Copyright was seen as a cultural policy which could be presented as being entirely in keeping with pro-market framework rules. As cultural policy-makers could no longer easily and effectively protect Canadian culture using government subsidies, they turned – propelled again by international pressures – to IP laws as the next available policy tool.¹²⁰ During this time of copyright reform, there were strong disputes between lobbyists for creator and user interests. This culminated in a triumph of the protectionist stance – "as the new Millennium begins, there is *little doubt that creator interests are in the ascendancy in the copyright realm of IP.*"¹²¹

2.7 Canadian Intellectual Property Institutions

Intellectual property in Canada is regulated by several entities, each with their own changing roles, cultures and interdependent relations. The state must be seen as a broader

¹²⁰ *Supra*, note 10 at 117.

¹²¹ *Supra*, note 10 at 117.

institution than the government of the day. In policy domains like intellectual property it is not a neutral player, as it is itself a creator, grantor, enforcer and user of IP. A government's interdepartmental and institutional politics define its IP policies and their implementation. These are in turn influenced by changing interest-group coalitions and policy communities.¹²² The core IP agencies in Canada include:

- The Canadian Intellectual Property Office ('**CIPO**');
- Industry Canada;
- The Department of Foreign Affairs and International Trade ('**DFAIT**'); and
- The Department of Canadian Heritage ('**DCH**').

IP policy within the federal government is increasingly dominated by a consolidation of power by trade policy agencies such as DFAIT, Industry Canada and CIPO. This is so despite the recent proliferation of agency and departmental stakeholders and the increased institutional complexity of IP policy associated with the recent emergence of a stronger focus on IPRs in Canada (discussed in more detail in the following section). Core IP agencies are being strengthened, and Industry Canada, DFAIT and CIPO have become ever more powerful vis-à-vis departments such as Health Canada and Canadian Heritage and their ministers.¹²³

However, despite the recent focussing on IPRs and policy in Canada, it is unclear to what extent the institutional mélange allows for a truly integrated IP policy field, as opposed to a series of separate component realms for the different types of IP, such as patents,

¹²² *Supra*, note 10 at 4-5.

¹²³ *Supra*, note 10 at 8.

trademarks, and copyright. Copyright policy is especially difficult to navigate. When compared against the core institutions of other factions of IP (e.g. patent policy), the copyright core institutions are more pluralistic and dispersed, both within the state, and among its interest groups and policy communities.¹²⁴ For example, patent interests are dominated and heavily influenced by the pharmaceutical and biomedical industries. Copyright policy, on the other hand, is influenced by a multitude of industries, including the recording industry, the motion picture and television industry, the broadcasting industry, the software industry, and the publishing industry. The stakeholders are also much more diverse and, besides the multiplicity of copyright holders, include universities, libraries, individual end users, the government and small businesses.

With the copyright institutional structure being as complex and dispersed as it is, it is not surprising that copyright law reform often occurs a substantial time after a new problem in the copyright realm takes effect. Amendments to copyright law are usually retroactive at best. The scattered state of copyright institutions increases the difficulty associated with synthesizing and implementing a uniform copyright policy.

2.8 Core Copyright Agencies

In addition to the institutions mentioned above, copyright policy is regulated by several relatively small, but crucial, agencies. These include:

- The Copyright Board of Canada;

¹²⁴ *Supra*, note 10 at 9, 101.

- Various collective associations (a copyright collective is a group of copyright holders who join together to provide one-stop shopping for users of copyright protected materials); and
- Other institutions of authors and performers.

Together, these form a complex and semi-self-regulating regime. Examples of copyright collectives include: the Canadian Copyright Licensing Agency ('**CANCOPY**'), the Society of Composers, Authors and Music Publishers of Canada ('**SOCAN**'), and the Union des Écrivaines et Écrivains Québécois ('**UNEQ**').¹²⁵ Copyright collectives and other institutions enable the collection and distribution of creators' fees. State-run institutions serve a "linkage function"¹²⁶ by setting and implementing fees and royalties.

The Canadian Copyright Board was established in 1989 by Bill C-60. The Copyright Board was the successor of the Copyright Appeal Board ('**CAB**'), which was created in 1936. The CAB functioned essentially as an administrative body which regulated the rates that collectives could charge for the use of works included in their portfolios. Along with subsuming this role, the Copyright Board was given five areas of jurisdiction.¹²⁷ The CAB is a relatively small body, consisting of not more than five members, and having a

¹²⁵ Other examples of copyright collectives in the United States and Canada include: the Copyright Clearance Centre, online: <www.copyright.com/Help/ECCSFAQ.htm>; the Publication Rights Clearing House & Copyright Clearance Centre, online: <www.nwu.org/prc/prccc.htm> and <www.nwu.org/prc/prcabout.htm>; and CARFAC, online: <www.carfac.ca>.

¹²⁶ *Supra*, note 10 at 104.

¹²⁷ These are outlined in the Act as: 1) establishment of tariffs levied for re-transmission of distant TV and radio signals; 2) establishment of tariffs for the public performance of musical works; 3) adjudication of disputes between licensing bodies and users of their works relating to rates; 4) deciding applications for licences to use published works of unlocatable copyright owners; and 5) setting compensation rates for formerly protected acts in countries that later join the Berne Convention, UCC or the agreement establishing the WTO. See generally: Copyright Board Canada, *Annual Report 1995-1996* (Ottawa, 1996) at 5.

staff of only six employees.¹²⁸ With the passing of Bill C-32, the Board's mandate was further widened. For example, it can now establish tariffs regarding neighbouring rights.

2.9 New Focus on Intellectual Property Rights in Canada and U.S. Influence over Canadian IP Policy

Until recently, issues revolving around IPRs and IP policy have generally remained in the obscure backwaters of political and economic debate in Canada. Although Canada has been linked to international IP treaties for over 70 years, IP has not been traditionally perceived as a major economic focus point for Canadians. Popular wisdom holds that the keys to Canadian prosperity, and the preferred policies and policy levers, were seen historically to reside in other realms. These realms include natural resources, Keynesian macroeconomic policy, tariffs, subsidies, and research and development spending.¹²⁹ Indeed, "Canadian IP policy and institutions have been so obscurely buried in the layers of other policy and institutional topsoil that there is not even a basic map of the core Canadian policy institutions and interests."¹³⁰

This tendency to overlook IPRs as a key economic and political issue in Canada is changing as the federal government begins to reconsider and revisit its conceptions of appropriate IP policy. There appears to be an emerging tendency in Canada to adopt American IP policy rather than develop a strong, independent sense of suitable policies for Canada – Canada is becoming a policy-taker, rather than a policy-maker when it comes to IPRs. However, there is an ever-increasing emphasis on the IP protection function in both Canadian and U.S. IP policy. This is so especially in the realms of

¹²⁸ See generally: Copyright Board Canada, *Submission of the Copyright Board on Bill C-32, An Act to Amend the Copyright Act, to the Standing Committee on Canadian Heritage* (3 September 1996).

¹²⁹ *Supra*, note 10 at 8.

¹³⁰ *Supra*, note 10 at 5.

patents and copyright. The pro-protectionist stance is driven mainly by U.S. industry lobbies with IP protection interests. These industries are backed by the American government, which sees such industries as areas where U.S. economic advantage and political power can be maximized in international trade and economic relations.¹³¹ Both Canada and the U.S. follow the utilitarian model of copyright, under which economic interests dominate and are often pursued at the expense of long-term productivity or social interests. The utilitarian model also recognizes a need for compromise, and involves the reconciliation of the need to protect the interests of copyright proprietors, and the public need for access to creative works. This compromise is now skewed towards copyright holders, as the strengthening of copyright protection and broadening of holders' rights are seen as ways to maximise returns on economic investment. The social interests of promoting public education and creative exchange are falling away to these financial interests.

Despite an initial resistance to such American pressures, the Canadian government eventually took the stance that the adoption of IP policies mimicking the American model was in the "national interest in the new innovation age."¹³² It is clear then that the crucial engine for change to IPRs in Canada was initialized by the United States, and has come ultimately from U.S. corporate and political forces seeking to strengthen IP protection at the expense of IP dissemination.¹³³

Recent changes in American IP policy have also added to the push for IPRs reform. For example, the interest-group politics of trade and intellectual property policy shifted

¹³¹ *Supra*, note 10 at 8 (emphasis added).

¹³² *Supra*, note 10 at 8.

¹³³ *Supra*, note 10 at 8.

towards an even stronger protectionist stance. Interest groups representing copyright holders and creators are ever stronger as against pro-user lobbyists. Also, leadership changes in the U.S. Patent and Trademark Office ('USPTO') shifted that agency's focus to become more copyright-centred.¹³⁴ It remains questionable whether policies that embody an entrenched American protectionist stance will indeed benefit Canada, or whether they serve merely to strengthen American interests.

Global changes in IP policy at the broadest level are also brought about by the changing roles and importance of bodies such as WIPO and the General Agreement on Tariffs and Trade 1994-World Trade Organization ('GATT-WTO'). As the governing structure of international agencies such as these is composed of signatory member national governments, there is a political flavour to the policies of such agencies. The parties comprising these governing structures bring with them not only an interest in the body and its success, but also a concern for the strategic interests of their respective country or government. Members may also bring to the table the concerns of a specific home ministry or agency from which they come within a national government.¹³⁵ One can assume that major players such as the U.S. would act to implement pro-protectionist policies that work to their benefit.

Formation of regional IP institutions such as the European Patent Office ('EPO') has also had a global impact on IP policy. The EPO is regulated under the European Patent

¹³⁴ See generally supra, note 10 at 182. The USPTO administers the laws relating to patents and trademarks; advises the Secretary of Commerce, the President of the United States, and the administration on patent, trademark, and copyright protection; and also advises the Secretary of Commerce, the President of the United States, and the Administration on the trade-related aspects of intellectual property. (Online, United States Patent and Trademark Office <<http://www.uspto.gov/web/menu/intro.html>>.)

¹³⁵ Supra, note 10 at 75. See also: Paul Taylor, *International Organization in the Modern World* (London: Pinter, 1993); and Paul Taylor and A.J.R. Groom, eds., *International Institutions at Work* (London: Pinter, 1988).

Convention ('EPC') and has 32 member states.¹³⁶ The EPC area forms the largest single patent region in the world. Under a single grant procedure, the EPO allows one to obtain patent protection in a potential market of over 500 million people. Clearly a regional body such as this has the clout to affect global changes in IP policy, and presumably it would act to implement policies in other states or organizations that support its particular politics. Regional institutions such as the EPO are extremely influential, as they not only act to standardize IP laws across member countries, but also act to consolidate the power of member countries into one body. The EPO as a single entity would have greater influence and could exude greater political pressure over the formation of IP policy than a single member country on its own. Formation of institutions such as the EPO also has an exclusionary effect on non-member countries. A non-member state may experience economic ramifications – for example, a company may be less willing to invest in a non-member country if it cannot obtain an appropriate level of patent protection there. Therefore there may be some subtle economic pressure to join the regional IP body as well.

Policy issues surrounding copyright law have emerged as a key focus point out of the budding overall awareness of IPRs in Canada. With advancing technologies, industry pressure, and media attention bringing the digital copyright debate into ever-sharper

¹³⁶ *Convention on the Grant of European Patents* (European Patent Convention) of 5 October 1973, as amended by the Act revising Art. 63 European Patent Convention of 17 December 1991, and by decisions of the Administrative Council of the EPO of 21 December 1978, 13 December 1994, 20 October 1995, 5 December 1996 and 10 December 1998. Available online: European Patent Office <<http://www.european-patent-office.org/legal/epc/>>. The Administrative Council of the EPO invited ten Central and Eastern European Countries to accede to the EPC in July 1999: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. All of these countries will be members by mid-2004, as well as Malta and Iceland, such that the EPO will then comprise 32 member states. Further, Extension Agreements have been signed with Albania, Croatia, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Serbia and Montenegro, so that these countries will become member states of the EPO in due course. (Online, European Patent Office <<http://ceec.european-patent-office.org/>>.)

focus, copyright aspects of IP policy have assumed a higher priority concern than other forms of IP. Copyright issues and politics are arguably the main driving force in international IP politics.¹³⁷ Hence, they are crucial to understanding changes made during the 1990s to international IP agencies, which in turn have affected Canada's system of IP governance. The application of copyright to recorded entertainment, software and electronic commerce is at the forefront of the international policy debate on copyrights.¹³⁸ Digital technologies and the Internet raise crucial issues surrounding the rights to reproduction and dissemination of copyrighted works.¹³⁹ Included amongst these issues is the question of what policy trade-offs should be made to fairly accommodate both creator and users interests in the digital era.

As in other areas of IP, creator interests are in ascendancy over user interests in copyright policy. The protection function is presently dominant over the dissemination function in IP institutional politics and interest-group relations. This dominance of the protection function is harmful, as it seriously underplays the importance of other emerging interests for whom IP dissemination and access is crucial, but whose voice has not yet been found in the IP policy process. This is partly because of their inherent political weaknesses of IP users, and partly because of the complex nature of how innovation is viewed in practical terms. Further, control over IP policy in Canada is concentrated in Industry Canada and DFAIT, where IP protection and trade-related IP norms are "all-pervasive."¹⁴⁰

¹³⁷ *Supra*, note 10 at 7.

¹³⁸ *Supra*, note 57 at 57.

¹³⁹ See the following sources for a general discussion: the White Paper, *supra*, note 15; Department of Justice, Industry Canada and Canadian Heritage, *Symposium on Digital Technology and Copyright* (Ottawa, Minister of Public Works and Government Services Canada, 1995).

¹⁴⁰ *Supra*, note 10 at 8-9.

2.10 Conclusion

The Internet has grown from a research project initiated by the U.S. Department of Defence to an indispensable communication tool – a tool which is notoriously difficult to regulate, which is not controlled by any single organization, and whose content is practically impossible to monitor. Nevertheless, it has a wide array of benefits, and most of us have come to rely on its provision of speedy access to a huge range of information and extensively use its communication methods such as email. Digital technologies have also sparked many controversies, such as that surrounding MP3s and their use, and the legality of file-sharing networks. At the heart of such controversies are major industry stakeholders, which stand to suffer financial losses or win gains,¹⁴¹ depending on the direction in which IP policies are developed. Many of these industry stakeholders, such as motion picture studios or record labels, are based in the U.S. and find a huge market there. As such, the 1990s have been witness to a U.S.-led effort to strengthen IPRs and tailor them to better suit the prevailing industries.

The discussion above has revealed that the dominant players amongst the core IP agencies in Canada are CIPO, Industry Canada and DFAIT. These agencies are marked by their tendency to favour creator interests over user interests. IP policy has been slow to evolve in Canada because it was simply not seen as a high priority policy by key industrial policy-makers in the federal government until the 1980s – a surprising phenomenon considering how lucrative the IP industries are. Despite the greater political prominence that IP now has than in earlier decades, it is still not at the very highest levels of policy consciousness in Canada.

¹⁴¹ See *supra*, notes 4, 5, 6, and 7.

The recent focus on IP policy – and especially on copyright policy – in Canada can be attributed to global pressures arising mainly from a U.S.-led agenda to strengthen IPRs in the knowledge economy. It should be noted that the recent changes and redefined IP trade-offs are *not* the product of some set of immutable laws of economics. Although intellectual property rights and policies are clearly influenced by economics and changing technologies, they are also “the product of pressure by interests, the articulation of new ideas about what policy reality is, and the preferences and inertial forces within IP institutions.”¹⁴² These global pressures reveal Canada as a policy-taker, rather than a policy-maker, in matters of IP. In many instances, Canada has responded to pressures to adjust its IP laws to the exigencies of the information age by adopting American IP policy. American IP policy takes a strongly protectionist stance, especially in areas of copyright (this is discussed in detail in Section 4.4 below), since its economic interests are benefited by such a view. This led to a further shift towards a protectionist stance within Canadian IP institutions at the cost of IP dissemination and users’ rights.

¹⁴² *Supra*, note 10 at 180.

CHAPTER III Major Initiatives Regarding Digital Copyright

3.1 Introduction

Over the course of the last decade, revolutionary changes in technology have permitted the creation of a global network of networks, known as the Internet. The Internet is now a crucial communication tool, serving as a fundamental means for the distribution of digitized information. The physical constraints of print media slow down the dissemination of copyrighted works because of the slower processes of writing, typesetting, printing, shipping, and vending. These activities are all streamlined on the Internet; they can occur as quickly as the author can upload the material or the user can click on her mouse. The Internet has the potential to empower both authors and users to take greater advantage of works online. It gives creators the potential for greater control over the dissemination of their works and allows more individuals to publish their works. It also gives users choice and access to a huge array of works that may not otherwise be available to them. The result is that both groups stand to simultaneously benefit and suffer disadvantage: “[T]he Internet allows more individuals to publish their work; thus, it creates more opportunity for *copyright and copyright infringement*.”¹⁴³

The increased opportunity for developments in both copyright and copyright infringement – what may be referred to as a “copywrong”¹⁴⁴ – brings with it the need for

¹⁴³ TyAnna K. Herrington, *Controlling Voices: Intellectual Property, Humanistic Studies, and the Internet* (Carbondale and Edwardsville: Southern Illinois University Press, 2001) at 16.

¹⁴⁴ The term “copywrong” is used by Siva Vaidhyanathan in his book *Copyrights and Copywrong: The Rise of Intellectual Property and How It Threatens Creativity* (New York: New York University Press, 2001).

a re-examination of the role of copyright and its application to digital works in the knowledge economy. This throws the law into a state of uncertainty, such that both users and creators of copyrighted works may be confused regarding their respective rights:

The need to respond to ever-changing technologies over the last century has added to the detail and complexity of copyright regimes around the world, including Canada's *Copyright Act*. Nonetheless, stakeholders have informed us that *a source of some infringement lies in misunderstandings or differences in opinion about the scope of certain rights and exceptions. By the same token, rules that are unclear may have a chilling effect on legitimate uses of works that are nonetheless permitted under copyright law.*¹⁴⁵

The need for some kind of action on the part of the federal government to address these issues is well documented. The protracted response time of the federal government to the issues surrounding digital copyright regulation is in accordance with the slow rate at which IP policy historically evolved in Canada (as discussed in the previous section). The following section surveys some of the domestic and international initiatives to address digital copyright issues. International initiatives include the WIPO Copyright Treaty¹⁴⁶ ('WCT'), and the WIPO Performances and Phonograms Treaty¹⁴⁷ ('WPPT') (collectively, the '**WIPO Treaties**'). The American DMCA, which implements the WIPO Treaties in the U.S., is also considered. Within Canada, the role of the Information Highway Advisory Council ('IHAC') is outlined, as well as various consultation papers and studies issued by the federal government.

¹⁴⁵ Canada, Intellectual Property Policy Directorate of Industry Canada and Copyright Policy Branch of the Department of Canadian Heritage, *Consultation Paper on Digital Copyright Issues* (Ottawa: Industry Canada, 2001) (the '**Consultation Paper**') at 1. An overview of submissions received by the Canadian government regarding this paper may be found online: Industry Canada <http://www.strategis.ic.gc.ca/epic/internet/incrp-prda.nsf/vwGeneratedInterE/h_rp01105e.html> (accessed April 2004) at 13 (emphasis added).

¹⁴⁶ *WIPO Copyright Treaty*, 20/12/1996 (CRNR/DC/94, December 23, 1996), online: World Intellectual Property Organization <<http://www.wipo.int/documents/en/diplconf/distrib/94dc.htm>>.

¹⁴⁷ *WIPO Performances and Phonograms Treaty*, 20/12/1996 (CRNR/DC/95, December 23, 1996), online: World Intellectual Property Organization <<http://www.wipo.int/documents/en/diplconf/distrib/95dc.htm>>.

The various government papers and reports discussed below have publication dates ranging from 1994-2002. The discussions in these papers, and other papers mentioned throughout the thesis, focus on choices. There are choices to be made regarding the way that technology will be designed, developed and innovated; choices among possible applications and the outcomes of certain applications; and choices about the balance between competing interests that needs to be struck by copyright law to best achieve its policy goals. Many of these papers discuss these choices and make their recommendations at a time when the Internet was not the well established and widespread communication tool that it is now. It was viewed as a new and novel communication method, and its potential implications on copyright law were highly suspect. The very nature of the Internet was seen as ubiquitous, borderless, fleeting, transient, intangible – but above all, unregulable. Some of the papers discussed, for example the White Paper, are written with a panicked subtext, that the Internet will result in rampant and uncontrollable IPRs infringement that will threaten our economic foundations.

As the publication dates become more current, ICTs are viewed less as a threat and more as an opportunity. The Consultation Paper, published in 2001, states: “[ICTs and the Internet] are presenting an important opportunity for more and more Canadians to make their presence felt, both in Canada and worldwide, whether it be in terms of culture, identity or commerce.”¹⁴⁸ The more recent papers also include a focus on the need to ensure that there is an adequate Internet infrastructure in place so that Canadians can

¹⁴⁸ *Supra*, note 145 at 1.

fully benefit from its economic and cultural implications.¹⁴⁹ However, although the perceptions of digital technologies in the more recent papers are more balanced and realistic, they nonetheless tend to follow the logic of the earlier documents.¹⁵⁰

3.2 Domestic Initiatives: The Information Highway Advisory Council

The discussion of major responses to the digital copyright dilemma begins domestically with the formation of IHAC. The discussion begins here, as the formation of IHAC may have been the first official federal response to the Internet. Comprised of both public and private sector experts, IHAC was established in December 1994, by the then Minister of Industry, the Honourable John Manley. As a result, the federal government committed itself to formulating solutions to copyright issues as they relate to the Internet, and to determining which amendments, if any, needed to be made to the Act. Recognizing that "copyright is a fundamental component of any policy and/or legislative framework that will guide the development of the Information Highway,"¹⁵¹ IHAC in turn created a number of subcommittees and working groups, including a subcommittee on copyright. The formation of IHAC lead directly to the debate regarding whether or not Canada should act to implement the WIPO Treaties into domestic law.¹⁵² In 1995, IHAC released its final report, entitled *Connection, Community, Content: The Challenge of the*

¹⁴⁹ For example, *supra*, note 145 at 2-3

¹⁵⁰ For example, the 2001 Consultation Paper, *supra*, note 145 follows the logic of the Subcommittee Report (1995), *supra*, note 18 and the IHAC reports (1995 and 1997), *infra*, notes 153 and 159.

¹⁵¹ *Supra*, note 145 at 8.

¹⁵² Canada participated throughout the preliminary preparatory work and sees itself as having "played a leading role" in the WIPO Diplomatic Conference on Certain Copyright and Neighbouring Rights Questions, held in Geneva, December 2-20, 1996 (see *supra*, note 153 at 10). The treaties came into force three months after thirty formal accessions or ratifications (around March 2002). A list of countries party to the treaty may be found at the WIPO website, online: World Intellectual Property Organization <<http://www.wipo.int>>.

Information Highway: Final Report of the Information Highway Advisory Council ('the Final IHAC Report').¹⁵³

The Final IHAC Report made a number of recommendations, which included the acknowledgement that the *Copyright Act* applies to the digital environment.¹⁵⁴ In the governmental response¹⁵⁵ to the Final IHAC Report, it was stated that the ministers of the departments of Industry and Canadian Heritage would work closely with stakeholders to resolve outstanding copyright issues related to the Internet, and to reach a determination as to whether there is a need to revise the present Act further.¹⁵⁶ The federal government also created a Task Force on Digitization to address key issues, including copyright, relating to the digitization of works held by the federal government.¹⁵⁷ Some of the recommendations found in the Final IHAC Report were implemented by *An Act to amend the Copyright Act*, S.C. 1997, c. C-24 (Bill C-32).¹⁵⁸

The term of IHAC's original mandate was extended to allow it to monitor the federal government's progress in implementing its recommendations. IHAC then published a second "final report" in 1997 entitled, *Preparing Canada for a Digital World: Final*

¹⁵³ Canada, Information Highway Advisory Council, *Connection, Community, Content: The Challenge of the Information Highway: Final Report of the Information Highway Advisory Council* (Ottawa: Industry Canada, 1995).

¹⁵⁴ *Supra*, note 153 at 113.

¹⁵⁵ See Industry Canada, Information Highway Advisory Council Secretariat, *Building the Information Society: Moving Canada into the 21st Century* (Ottawa: Industry Canada, 1996), online: Industry Canada <http://strategis.ic.gc.ca/pics/ih/21st_e.pdf> (accessed April 2004).

¹⁵⁶ *Supra*, note 155 at 14.

¹⁵⁷ See: Canada, The Federal Task Force on Digitization, *Towards a Learning Nation: The Digital Contribution – Recommendations Proposed by the Federal Task Force on Digitization* (Ottawa: Industry Canada, 1997), online: National Library of Canada and National Archives of Canada <<http://www.collectionscanada.ca/8/3/r3-407-e.html>> (accessed April 2004).

¹⁵⁸ For example, one of the key recommendations found in that report (*supra*, note 153 at 114) was Rec. 6.3(c): the Act should be amended to include statutory damages based on the United States model. This recommendation was implemented, and as a result the *Copyright Act* now provides for statutory damages for copyright infringement.

*Report of the Information Highway Advisory Council.*¹⁵⁹ It was this report which recommended that Canada should “move quickly to respond to [WIPO’s] 1996 Copyright and Performances and Phonograms Treaties,”¹⁶⁰ and recommended implementation of the treaties. These treaties are discussed in more detail in the following section.

3.3 International Initiatives: the WIPO Treaties and the Canadian Response

Acknowledgement of computer programs as literary works was first seen in multilateral agreements such as the North-American Free Trade Agreement (‘NAFTA’) and the WTO-TRIPS Agreement. As these agreements were negotiated before a new generation of ICTs permeated the consumer market sufficiently so as to provide a reasonably efficient means of exchanging more than bare text and simple graphics, they failed to adequately address the problems surrounding the application of copyright to the Internet.¹⁶¹ Accordingly, the WTO concluded two treaties in December 1996 – the WCT and WPPT – to focus on the challenges posted to copyright by networked technologies.

Canada became a signatory to both of the WIPO Treaties in December 1997, but has not yet ratified them. The treaties therefore do not form part of Canadian copyright law, but may guide or influence its development and amendment. The United States implemented the WIPO Treaties in 1998 through the DMCA. In the EU, the WIPO Treaties are being implemented via the EU Directive on Copyright and Related Rights in the Information

¹⁵⁹ Canada, Information Highway Advisory Council, *Preparing Canada for a Digital World: Final Report of the Information Highway Advisory Council* (Ottawa: Industry Canada, 1997).

¹⁶⁰ *Supra*, note 159 at 20.

¹⁶¹ *Supra*, note 145 at 9.

Society ('the Copyright Directive').¹⁶² The Copyright Directive was adopted by the EU's Council of Ministers in April 2001 and is being implemented by member states.¹⁶³

In 1998, the federal government first conducted an in-depth study of the WIPO Treaties by hiring two private sector copyright experts to review the *Copyright Act* in light of the WIPO Treaties and to suggest appropriate revisions required for treaty compliance.¹⁶⁴ This was done in response to IHAC's final 1997 report, which recommended implementation of the WCT and WPPT. A key finding in the Commissioned Report was the fact that the public was unsatisfied with its current participation level in copyright law reform, and that it wanted more input into the revision process. The Commissioned Report concluded that, while the Act would need to be amended for full treaty compliance, it already established a framework that complied with the bulk of the treaty provisions. Many industry stakeholders were keen to proceed with the Commissioned Report's recommendations and pushed for speedy treaty implementation and ratification. However, others sought more consultation and public dialogue. There was concern that bare treaty implementation "involved *no consideration* of the needs of institutions that *use* copyright materials consistent with other important public policy objectives (e.g.,

¹⁶² Directive 2001/29/EC of the European Parliament and of the Council of the European Union of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society O.J. L. 167/10, 22/06/2001, online: EUROPA <<http://europa.eu.int>>.

¹⁶³ The European Council claims that implementation of the WCT "will help ensure a balanced level of protection for works and other subject matter, while allowing the public access to material available via networks." (European Council, Council Decision 00/278 of 16 March 2000 on the approval, on behalf of the European Community, The WIPO Copyright Treaty, and the WIPO Performances and Phonograms Treaty, [2000] O.J. L. 89/6.)

¹⁶⁴ The departments of Industry Canada and Canadian Heritage commissioned two private sector copyright experts to provide their opinion on revisions that would need to be done to the Act to comply with the WIPO treaties, should Canada decide to ratify them. The conclusions were published in: Johanne Daniel and Lesley Ellen Harris, Industry Canada, *The Implementation of the WIPO Copyright Treaty (Discussion Paper)* (Ottawa, Industry Canada, 1998), online: Industry Canada <www.strategis.ic.gc.ca/SSG/ip01038e.html> ('the Commissioned Report').

educational institutions, libraries, museums, archives, etc.).”¹⁶⁵ In other words, the concerns and needs of the institutions representing broad public user interests were under-represented or not considered at all.

3.4 The Consultation Paper on Digital Copyright

In June 2001, the Canadian federal government issued its Consultation Paper on Digital Copyright¹⁶⁶ (**‘the Consultation Paper’**). The Consultation Paper lays out several critical issues involved in reforming copyright to address digital technologies. It discusses the liability of ISPs for copyright infringement and also deals with the implementation of the WIPO Treaties. It states that the purpose of the Consultation Paper is to initiate discussion on the issues arising at the intersection of the digital environment and the *Copyright Act*. It is interesting to note that this paper was published in June 2001, and yet it represents “a *first* step in initiating discussion on a copyright framework that helps to promote dissemination on-line of new digital content, for and by Canadians.”¹⁶⁷

The key issues identified in the Consultation Paper are whether or not:

- the *Copyright Act* should be amended to allow a specific right for on-demand communication (i.e. a “making available” right);
- legislative action needs to be taken to “deter” the circumvention of technological measures designed by rights holders to protect copyrighted works (the WIPO Treaties both contain virtually identical articles which obligate member states to implement domestic measures to prevent the circumvention of technological

¹⁶⁵ *Supra*, note 145 at 11 (emphasis added).

¹⁶⁶ *Supra*, note 145.

¹⁶⁷ *Supra*, note 145 at 1 (emphasis added).

measures used to protect copyrighted works – see art. 11 of the WCT,¹⁶⁸ and art. 18 of the WPPT.¹⁶⁹);

- legislative measures are needed to deter tampering with rights management information (again, the WIPO Treaties contain virtually identical articles obligating member states to implement domestic measures to prevent tampering with rights management information – see art. 12 of the WCT,¹⁷⁰ and art. 19 of the WPPT); and
- legislative measures are needed to address the uncertainty associated with the liability of network intermediaries in relation to copyrighted materials over digital networks.

The Consultation Paper discusses the possibility and impacts of introducing a making available right to the Act.¹⁷¹ Such a right would embody the right to authorize the appearance of works or protected subject matter within the networked environment. The notion of a making available right emerged during the negotiations leading to the conclusion of the WIPO Treaties. Another concern arising here involves the issues

¹⁶⁸ Article 11 reads: “Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty of the Berne Convention and that restrict Acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.”

¹⁶⁹ Article 18 reads: “Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by performers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict Acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.”

¹⁷⁰ Article 12 of the WCT provides in relevant part: “Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention: (i) to remove or alter any electronic rights management information without authority; (ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.” Article 19 of the WPPT contains nearly identical language.

¹⁷¹ *Supra*, note 145 at 15-16.

stemming from an “on-demand” communication right. An on-demand service allows paying consumers to access and download works (such as music, video, pictures and text) from the service, at the time and location they chose. Since the Internet permits users to make copies of works with no loss of quality from the original, some right holders may be concerned that once their works, performances or sound recordings are available online, the opportunity for containing unauthorized dissemination is greatly impaired.¹⁷² Theoretically, an on-demand service may alleviate this concern somewhat, as the users who choose to use that service would be paying for at least one copy of the downloaded information (e.g. an MP3). However, unless some form of copy control was built into the downloaded file, an on-demand service would not prevent subsequent copies of the MP3 from being made.

The WCT functions to extend the exclusive right of authors to communicate their works to the public to all categories of works.¹⁷³ This right of communication to the public explicitly includes the right to make works available to the public in such a way that the public can access them from a place and at a time individually chosen by them, clearly capturing the making available of works online and an on-demand communication right.

¹⁷² See Industry Canada and Department of Canadian Heritage, *Focus Paper: Consultation Meetings on Digital Copyright Issues March-April, 2002* (2002, Ottawa: Industry Canada and Department of Canadian Heritage) at 1, available online: Industry Canada <<http://strategis.ic.gc.ca/epic/internet/incrp-prda.nsf/vwGeneratedInterE/rp00841e.html>> (accessed April 2004).

¹⁷³ Art. 8 of the WCT reads in part as follows: “[A]uthors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.” Arts. 10 and 14 of the WPPT create making available rights for performers and producers of phonograms. Australia has responded by introducing a technology-neutral right of communication to the public, which encompasses the right to make available copyrighted works online. The communication right is an exclusive right of the copyright owner, and will subsist in all protect subject matter. Protected subject matter includes literary, dramatic, musical and artistic works, as well as sound recordings, films and broadcasts. Published editions, however, are not protected. (See the *Copyright Amendment (Digital Agenda) Bill* – passed by the Australian Parliament in Spring 2001).

The departments of Industry Canada and Canadian Heritage are of the view that the right to authorize communication to the public includes a making available right in respect of authors.¹⁷⁴ For now, neither department supports an amendment of the Act to include an explicit making available right for authors. Such a right would arguably be superfluous, as the Act gives rights holders control over when their works are first distributed to the public. For works fixed in physical form, this is achieved through first publication and reproduction rights (as set out in s. 3 of the Act). For works not fixed in physical form, control may be achieved via the reproduction right coupled with the right to authorize communications to the public.

The Consultation Paper recommends that any legislative framework established to address digital copyright should be technologically neutral, to the extent possible. The Consultation Paper highlights the importance of passing legislation that establishes technologically neutral principles, rather than reactive legislation that responds to particular technological challenges.¹⁷⁵ Such legislation has the clear advantage of being suitable for application to future technological developments and transmission methods, which may presently be unforeseen. It would also reduce the frequency of Act review or amendment, which is usually a slow and reactive process that may not be commenced or implemented until after the new problem has become widespread. Technological neutrality would help to alleviate the unpredictable and volatile nature of the development of new ICTs. However, it should be noted that even a technologically

¹⁷⁴ *Supra*, note 172 at 1. This sentiment that the communication right presently embodied in the Act is sufficiently broad to encompass such a making available right for authors and their successors is echoed *supra*, note 145 at 18. Further, in its *Tariff 22* decision, *supra*, note 35, the Copyright Board of Canada concluded that an on-demand communication right is contained within the right to authorize communication of a work to the public by telecommunication.

¹⁷⁵ *Supra*, note 145 at 15.

neutral communication right would not solve some of the problems associated with online copyright infringement (for example, identifying the infringing party, tracking infringing copies, and jurisdictional and conflict of laws issues).

An example of the problems associated with correctly identifying the infringing party was demonstrated in the recent case of *BMG v. John Doe*.¹⁷⁶ In that case, the plaintiffs (the largest music producers in Canada) brought a motion to seek disclosure from five Canadian ISPs of the identity of 29 unnamed users. The 29 users allegedly infringed the plaintiffs' copyright in sound recordings under the Act through file sharing programs (especially Kazaa) on the Internet. The plaintiffs claimed that they traced the infringement to Kazaa usernames of the 29 individuals. In his judgement, Finckenstein J. refused to grant the motion for disclosure of the defendants' personal information. It was found that there was no evidence of a connection between the online pseudonyms and the IP addresses to which MP3 files were downloaded. Therefore there was no clear and comprehensive evidence which would compel the disclosure of the account holder of a particular IP address. Further, it was found that there was no evidence of copyright infringement (alleged under ss. 18(1), 27(1), 27(2)(b) and 27(2)(d)). Section 80(1) of the Act provides that:

Subject to subsection (2), the act of reproducing all or any substantial part of (a) a musical work embodied in a sound recording...onto an audio recording medium for the private use of the person who makes the copy does not constitute an infringement of the copyright in the musical work, the performer's performance or the sound recording.)

This led Finckenstein J. to conclude that "*downloading a song for personal use does not amount to infringement*...No evidence was presented that the alleged infringers either distributed or authorized the reproduction of sound recordings. They merely placed

¹⁷⁶ *Supra*, note 38.

personal copies into their shared directories which were accessible by other computer users via a P2P service.”¹⁷⁷ Finckenstein J. also stated that establishing facilities to allow copying does not amount to authorizing infringement: “I cannot see a real difference between a library that places a photocopy machine in a room full of copyrighted material and a computer user that places a personal copy on a shared directory linked to a P2P service.”¹⁷⁸ It is interesting that the Federal Heritage Minister Helene Scherrer is already assuring the music industry that she will “as quickly as possible, make changes to our copyright law.”¹⁷⁹ The Minister was responding to the challenge posed by the *BMG v. John Doe* ruling.

3.5 American Initiatives: The Digital Millennium Copyright Act

In 1998, the U.S. passed the infamous DMCA. Title I of the DMCA implements the WIPO Treaties. This title of the DMCA makes technical amendments to American copyright law so that the WIPO Treaties can be appropriately referenced, and also creates two new prohibitions in Title 17 of the U.S. Code. One prohibition relates to the circumvention of technological measures used by copyright holders to protect their works (s. 1201); the other relates to tampering of copyright management information (s. 1202). Section 1202 prohibits the unauthorized alteration of information identifying a work, its author, the copyright owner and any terms and conditions of use. Section 1201 is discussed in greater detail in the following section. Civil and criminal penalties for violation of both provisions were also added to Title 17 U.S.C.

¹⁷⁷ *Supra*, note 38 at paras. 25-26 (emphasis added). See also *Copyright Board of Canada, Private Copying 2003-2004 decision*, 12 December 2003 at 20.

¹⁷⁸ *Supra*, note 38 at para. 27.

¹⁷⁹ As quoted in Doug Beazley, “Facing the Music” *The Edmonton Sun* (3 April 2004), online: CANOE <<http://www.canoe.com/NewsStand/EdmontonSun/>>.

For the time being, the Canadian government has chosen not to introduce any amendments to Canadian copyright law that are comparable with the DMCA. This may be to the benefit of Canadian copyright users. The DMCA has been widely criticized as not only being overly protectionist, but also containing a host of private side deals.¹⁸⁰

3.6 The Anti-Circumvention Provisions of the DMCA

The key provision contained in the DMCA which is especially detrimental to users is the provision relating to the legal protection of technological measures used to protect digital IP. Protection technologies vary greatly and include devices such as passwords, encryption, and confirmation measures such as signatures and watermarks. The level of protection provided by technological measures also varies greatly. As new technologies are developed, the catalogue of protection technologies will range from those that protect copyrights by preventing unauthorized uses to complete access systems that integrate watermarking technologies and electronic rights management systems.¹⁸¹

Section 1202 addresses the act of circumvention itself. The DMCA divides technological measures into two categories, those relating to preventing *copying* of a work,¹⁸² and those relating to preventing *access* to a work. Confusingly, the DMCA prohibits the circumvention of technologies designed to protect *access* to a work, but **not** those designed to protect *copying* of a work. Circumvention of a “technological protection

¹⁸⁰ For example, see *supra*, note 65 at 143.

¹⁸¹ *Supra*, note 145 at 21.

¹⁸² “Copying” in the context of this provision refers to the exercise of *any* of the exclusive rights of an author under s. 106 of the American Copyright Act. For example, a technological measure designed to prevent unauthorized distribution or public performance of a work is also caught under s. 1201. (See U.S., U.S. Copyright Office, *Digital Millennium Copyright Act of 1998 U.S. Copyright Office Summary* (December 1998), online: U.S. Copyright Office <<http://www.copyright.gov/legislation/dmca.pdf>> at 4, footnote 2.) One can see how wide the ambit of this provision is. The DMCA was originally designed to target piracy of copyrighted works on the Internet – e.g. unauthorised copying of MP3 files. The wording used here clearly goes beyond what would be necessary to prevent such piracy.

measure that effectively controls *access* to a work” (s. 1202) is prohibited. There is only a very narrow list of exceptions to the anti-circumvention provisions contained in the DMCA. Section 1201 includes narrow exceptions for law enforcement activities, radio and TV broadcasters, cable systems, computer software publishers (they are allowed to circumvent access control technologies in order to analyze a computer program to enable the creation of a compatible program), and libraries (they are allowed to circumvent controls for the sole reason of browsing a protected work to decide whether to purchase it).

Further, the manufacture and provision of “any technology, product, service, device or component” designed to circumvent *either* category of technological measure is also prohibited: s. 1201(b)(1)(A) DMCA. To be illegal, the device or service must fall within one of the three following categories listed in s. 1201: (1) the device or service is “primarily” designed or produced to circumvent (therefore a device that serves several functions, one of which may be circumvention, would be illegal); (2) other than circumvention, the device or service has only a “limited” commercially significant purpose or use (what amounts to “limited commercially significant purpose” is unclear); or, (3) the device or service is marketed for use in circumvention (on a bare reading of this section, the device does not then actually have to function – it only needs to be “marketed” as being capable of circumvention).

The anti-circumvention provisions found in s. 1202 of the DMCA are of strikingly wide ambit – note that it is mere *access* that is the focus of this section. Historically, accessing a copyrighted work was not considered an infringement under any copyright law. One cannot help but wonder when the American public agreed to give copyright holders the

right to dictate when they could read or view a work. For example, under the access anti-circumvention provisions, it would be illegal to open an online publication or database with a borrowed password.¹⁸³ However, borrowing a print copy of the publication from a friend would not be illegal. This result is counter-intuitive, as both activities produce the same result of the borrower being able to temporarily access and read the publication.

Another example of an activity which is surprisingly rendered illegal as a result of the access anti-circumvention provisions of the DMCA is related to DVDs. For example, a consumer purchases a DVD manufactured only to play on DVD players manufactured in region one.¹⁸⁴ However, she owns a DVD player manufactured and sold in region three. The DVD cannot be played on the region three player, and it is now seemingly useless to the consumer. To counter this, the consumer uses a widely distributed software utility that allows one to view a DVD movie on a player from a different region. Under the anti-circumvention provisions of the DMCA, this would be an illegal activity because the consumer is circumventing technology to *access* a work – even though the consumer is the legal owner of the DVD and the player, and the circumvention is for private (i.e. non-commercial) use.

But since the DMCA does not prohibit an individual from circumventing *copy*-protection technology, she may still individually do so, provided her purpose is otherwise a lawful one. The U.S. Copyright Office explains the distinction thusly:

¹⁸³ *Supra*, note 65 at 144.

¹⁸⁴ “Regional Code Enhancement” is now provided by DVD players. This prevents consumers from watching a DVD sold in another region. It is difficult to see what function, if any, Regional Code Enhancement serves for the consumer. It does, however, allow movie studios to maximise their profits by staggering the release dates of movie titles on VHS and DVD in different regions, following the schedule of their cinema releases. Effectively, what Regional Code Enhancement does is prevent consumers from watching a film before it is released in their region.

This distinction was employed to assure that the public *will have the continued ability to make fair use of copyrighted works. Since copying of a work may be a fair use under appropriate circumstances, section 1201 does not prohibit the act of circumventing a technological measure that prevents copying.* By contrast, since the fair use doctrine is not a defense to the act of gaining unauthorized access to a work, the act of circumventing a technological measure in order to gain access is prohibited.¹⁸⁵

Therefore the logic behind the copy/access distinction is to ensure that some semblance of the right to fair use is preserved. However, it must be borne in mind that the DMCA includes a restriction on the making, selling and distribution of circumvention devices. If a consumer wishes to make fair use of a work, they may do so only if they invent their own way of getting around the protection technology. This requirement cripples the fair use right to the extent that it is rendered a virtually useless exception to copyright infringement to the average copyright consumer who lacks technological expertise. If the individual consumer purchases a copy-controlled CD and wants to make a back-up copy for private use (which is a legal activity), she must find a way to do so by herself. Since distributing software that has the ability to circumvent protection technologies (even *copy* protection technologies) is illegal, the consumer cannot use commercially produced software to deflect the copy protection to burn the backup copy. To refrain from any infringing acts, the consumer theoretically now has to write her own circumvention software before making the copy (being careful, of course, not to let anyone else have access to it). One must ask if the real politick of the copy/access distinction found in the anti-circumvention provisions is truly the protection and preservation of a consumer's right to fair use. It seems more realistic to see the distinction as an attempt to embody a *token* fair use right so that the writers of the DMCA have some rhetoric (however weak) that they can use to deflect the criticisms of users' rights lobbyists. The DMCA is designed to exclude the majority of copyright users from ever exercising the fair use

¹⁸⁵ *Supra*, note 185 at 4 (emphasis added).

privilege as it relates to s. 1201. If a right is so narrow as to be virtually useless to the majority of consumers (that is, any consumer who lacks the requisite technological expertise to create their own *copy* anti-circumvention device), then it is a nominal right only. And a nominal right is a far cry from any real preservation or consideration of the need to balance copyright holders' and users' rights.

Further contributing to the confusion surrounding the anti-circumvention provisions is the DMCA's silence regarding how far the *access* anti-circumvention provision extends. If access is defined as *initial access* only, then the copy/access distinction almost makes sense (keeping in mind that s. 1201 of the DMCA is completely unconcerned with its near-total erosion of fair use). But if access is defined to include initial access and all *subsequent actions to gain access* to a work, then the copy/access distinction is redundant. Such a definition of access effectively subsumes circumvention of copy protection, since one will need to gain access to a work in order to make use of it – whether the use is fair or not.¹⁸⁶

3.7 Criticisms of the Anti-Circumvention Provisions and the DMCA

From the brief discussion above of the DMCA's anti-circumvention provisions, one can already see that they are riddled with problems. A closer examination reveals that the provisions are so expansive and prejudiced in favour of copyright holders, that they challenge the core copyright principle of maintaining a balance between copyright users and holders. As there are increasingly more technologies available to prevent online copyright infringement, and increasing international support for such technologies, there

¹⁸⁶ *Supra*, note 65 at 144.

will be an increasing pressure and urgency to define the legal status of such protection measures in Canada. The anti-circumvention provisions of the DMCA and their possible impacts on Canadian copyright policy are discussed in this section.

Firstly, before Canada considers the implementation of similar provisions, it must be questioned whether copyright law is the most appropriate vehicle to protect such technological measures. While the U.S. Copyright Office categorizes the provisions relating to circumvention of protection technologies as mere “technological adjuncts to the exclusive rights granted by copyright law,”¹⁸⁷ in Canada there is concern that the Copyright Act “may not be the proper instrument for protection measures that, *prima facie*, are extraneous to copyright principles.”¹⁸⁸

These provisions are extraneous to Canadian copyright principles for several reasons. The Act was designed to protect copyrighted *works*. However, legal protection of anti-circumvention provisions relates not to works, but to *technological measures in relation to works*. The result is that digital works are shrouded in three levels of protection: firstly by copyright laws against unauthorized uses; secondly by any technological measures used by the copyright holder; and finally by the anti-circumvention laws. Offering legal protection of such technologies amounts to over-protection, and extends the traditional boundaries of copyright law to new layers of protection that were not intended by the Act and are not supported by Canadian IP policy. It has been recognized in Canada that, “the prohibition on circumvention devices and services could have the effect of *overriding the traditional contours of copyright protection that emphasize a balance between the rights*

¹⁸⁷ *Supra*, note 185 at 3.

¹⁸⁸ *Supra*, note 145 at 21.

of creators and the interests of users.”¹⁸⁹ A blanket prohibition such as that found in the DMCA potentially blocks *all* types of use and access to works, regardless of whether or not that use or access infringes copyright.¹⁹⁰ The result is that users have narrower rights with respect to digital works than to works expressed in a printed or tangible form. The three levels of protection of digital works are in sharp contrast to the one level of protection generally granted to printed works, which are usually only protected by copyright laws against unauthorized uses.

One may argue that, since digital works are somewhat easier to reproduce than print works (although copying technologies such as photocopying, scanning or faxing make it relatively easy to reproduce print media), they necessitate these extra layers of protection. However, one must examine an anti-circumvention policy in the overall context of copyright law as a whole, keeping in mind the need to balance copyright holders’ and users’ rights – rather than further eroding or hobbling users’ rights on the theory that it somehow prevents piracy. If the conclusion is that digital works are so different from printed works that they demand this extra protection, then they should be classified as a different type of work (instead of simply falling within the existing qualities of literary, artistic or musical works), and *sui generis* protection should be implemented (discussed below in Chapter 4). Most Canadian commentators and governmental sources agree that the present Act is adequately equipped to cover the protection of copyrighted works in digital form. Granting digital works an additional two layers of protection than that enjoyed by print works could only amount to over-protection.

¹⁸⁹ *Supra*, note 145 at 22 (emphasis added).

¹⁹⁰ For a discussion on the difficulties associated with some technological devices that cannot distinguish between legitimate and illegitimate uses of works, see Harold Smith Reeves, “Property in Cyberspace,” (1996) 63 U. Chi. L. Rev. 761.

Further, the effects of any provisions regulating circumvention are unpredictable, and the Intellectual Property Policy Directorate of Industry Canada and the Copyright Policy Branch of Canadian Heritage both recognize that, “there is *no clear sense* of what impact technological measures will have on copyright legislation.”¹⁹¹ This lack of clarity is exacerbated by the rate at which the technology underlying protection measures is changing.

Copyright stakeholders may be concerned with the lack of anti-circumvention legislation in Canada, but both the Intellectual Property Policy Directorate of Industry Canada and the Copyright Policy Branch of Canadian Heritage state that the introduction of such legislation must be considered against the specific backdrop of Canadian copyright laws. Canadian copyright laws impose limitations on copyright to serve important public policy objectives and to strike a balance between holders and users: “Any attempt to affect that balance may require a reconsideration of the current extent of the exceptions provisions.”¹⁹² This is so because the anti-circumvention provisions are so skewed in favour of copyright holders’ rights, and so detrimental to the existing exceptions provisions, that they change the policy balance completely. It may not be possible to establish an anti-circumvention legal framework that addresses all activities that challenge technological protections, while maintaining the current policy balance of users’ and holders’ rights:

Such a change [of introducing anti-circumvention provisions] in the *Copyright Act* could potentially result in a new right of access, *the scope of which goes well beyond any existing right, and would represent a fundamental shift in Canadian copyright policy. It could serve to transform a measure designed for protection into a means of impeding legitimate uses.* In essence, a change of this nature would be tantamount to bringing within the realm of

¹⁹¹ *Supra*, note 145 at 23 (emphasis added).

¹⁹² *Supra*, note 145 at 24.

copyright law, matters (e.g., restrictions on use) which may be more properly within the purview of contract law.¹⁹³

Besides precipitating a fundamental shift in Canadian IP policy, another difficulty associated with anti-circumvention regulation is that devices that are suited to infringing uses are also usually equally suited to non-infringing uses – e.g. a device used to circumvent a measure that prevents unauthorized copying will not distinguish between materials that continue to benefit from copyright protection from those that have fallen into the public domain.¹⁹⁴ This leads to situations where authorized access to a work is impeded. For example, if a consumer buys a DVD copy of the movie “Birth of a Nation” and takes it home to watch, the consumer will find that the movie is protected by digital rights management technology and anti-access protection technology. The movie has been in the public domain since the 1930s, yet the consumer cannot make fair use of it because of the protection technologies. She cannot take parts of “Birth of a Nation” and parody it, satirize it, chop it up, or make a scholarly work out of it.¹⁹⁵ The consumer would be able to engage in these activities if she had a VHS copy, but not if she had a DVD copy. Further, once VHS is phased out and only DVD or digital versions of movies are available, the work will not be in the public domain at all – and again the public will be denied fair use and access to what is rightly theirs. This situation does not make sense – essentially, what the DMCA does in a situation like this is provide copyright protection for *technological work*, rather than for *creative content*.

One may argue that, because the creator of the DVD exerted the effort of taking the original celluloid version of “Birth of a Nation” and transferring it to DVD, he should be

¹⁹³ *Supra*, note 145 at 24 (emphasis added).

¹⁹⁴ *Supra*, note 145 at 24.

¹⁹⁵ This example is based on an example used in McLaren, *supra*, note 82.

rewarded for that effort – that somehow he has improved upon the quality of the original or done something to make it different.¹⁹⁶ It is true that his effort should be rewarded, but not at the expense of denying access to a work which is in the public domain. And if such effort should be rewarded, it should be rewarded in a commercial sense. It should not be rewarded by copyright law stepping outside of its rightful boundaries to give protection to technological work. Such an approach allows corporations and other copyright holders to take public domain works hostage – they simply transfer an existing work onto a digital medium, slap some protection technologies on it, and can now dictate who has access to the work and how it is used. However, it seems that proponents of the anti-circumvention provisions are willing to impede or eliminate users' rights in situations such as this, as long as the technology is correctly applied “most” of the time.

Some copyright stakeholders will certainly consider such protective technological measures to be an important set of tools available to them for preventing the unauthorized uses of their copyrighted materials, and for securing their continued ability to negotiate the terms and conditions under which such materials may be further disseminated,¹⁹⁷ and will fight to have such technologies protected by Canadian copyright laws. However, the current policy balance struck between IP rights holders and IP users in Canada would almost certainly be upset if the DMCA and WTO models were followed in this regard. While granting copyright owners broad new rights, the DMCA provides for only an extremely narrow list of exceptions in s. 1201 to the anti-circumvention provisions mentioned above. This list discourages the inference that general exceptions and

¹⁹⁶ One must wonder, however, if a corporate copyright holder would consciously carry out such an act with this reasoning in mind. It would probably not make that sophisticated an argument until it came time to litigate. Rather, the corporation may employ a mentality of “give us the ability to legally guard our protection technologies, or we won’t give you DVDs.”

¹⁹⁷ *Supra*, note 145 at 20-21.

privileges, such as fair use, apply to the digital environment. The DMCA allows copyright owners almost complete control over the balance between their rights and users' rights. As long as the rights holder encases their digital IP in an envelope of technological protection, they can set and enforce any restrictions they chose on access and use. This clearly jeopardizes the scope of users' rights.

Besides the anti-circumvention provisions, the DMCA as a whole has rightly attracted its fair share of criticism on several different grounds. A criticism of the DMCA may find its seeding ground in the creation and writing of the DMCA. An examination of the process through which the DMCA was written reveals that its provisions are the result of a long and complex multiparty negotiation in which large industry players and stakeholders lobbied against each other for the inclusion of favourable provisions. This is problematic for several reasons.¹⁹⁸ Firstly, legislation written via the process of multiparty negotiation is tailored to suit the *status quo* while being hostile to potential new competitors. This is detrimental because competition is generally seen as a beneficial free-market force, as evidenced by the presence of anti-trust laws.¹⁹⁹ Such legislation results in competition in

¹⁹⁸ See generally *supra*, note 65 at 144-145.

¹⁹⁹ The habit of using IPRs to limit competition without violating the provisions of antitrust law is a longstanding tradition and popular "secondary use" for IPRs. For example, the history of patents suggests that IPRs can be used for a multitude of purposes. Many corporations initially adopted a stance that was resistant to the idea of the sanctity of IPRs (now most corporations adopt the opposite view). Prior to 1873, most large firms were consumers, rather than producers of new technology. They relied upon the work of independent inventors, whom the patent system was supposedly intended to protect. The railroad industry was especially infamous for its exploitation of the patent rights of independent inventors. The railroads routinely prevailed in court, and even on the odd occasion when damages were awarded to an inventor, the railroads still saved money by paying the infrequent damage awards rather than paying for use of the patent. The American *Sherman Antitrust Act of 1890* then precipitated a curious change in the attitude of corporate entities towards IPRs. This Act forbade corporations from engaging in horizontal mergers, and consequently many firms had to look to in-house research and development to promote their own corporate growth. The corporations then discovered that their newfound IPRs could be used to limit competition without violating the Sherman Antitrust Act, and became vigilant enforcers of patents. It has been stated that, "At times when intellectual property rights are convenient for those who wield the most power in society, supporters of intellectual property rights pretend that the protection afforded by patents offers a rare combination of efficiency and morality. At other times, when intellectual property rights

the new online economy shifting from the Internet into the courtroom. The big names in e-commerce can be found waging battle in the courtroom, with IP laws as the corporate weapon of choice. Intellectual property has been described as “the Web’s war zone,” and since 1995, federal lawsuits in the United States over copyrights, patents, and other forms of IP have risen 10 times faster than other cases brought under federal law, topping over 8,200 cases in 1999.²⁰⁰ Clearly Internet companies are entitled to protect their copyright and other IP online, but if a few big companies control the key methods of doing business online, then future start-ups could find themselves spending more time navigating the legal thicket than participating actively in the market – “Manufacturers and developers of new technology and copyright owners have a tendency of finding themselves on collision courses, and often their wreck occurs in the courtroom.”²⁰¹

In this regard, the DMCA serves to strengthen the economic positions of organizations such as the RIAA and further entrenches the current pro-protectionist power balance amongst copyright stakeholders. Legislation such as this also tends to be counterintuitive, as practical or logical solutions are abandoned in favour of those that appropriate value

inconvenience. powerful interests, they are dismissed out of hand. This hypocrisy continues today...as many of the staunchest corporate defenders of intellectual property rights stand frequently accused – often with good cause – of violating the intellectual property rights of others.” *supra*, note 9 at 20-21 (see also pp 14-15, 19). See also: Steven W. Usselman, “Patents, Engineering Professionals, and the Pipelines of Innovation: The Internalization of Technical Discovery by Nineteenth Century American Railroads,” in Naomi R. Lamoreaux, Daniel M.G. Raff, and Peter Temin, eds. *Learning by Doing in Markets, Firms, and Countries* (Chicago: University of Chicago Press, 1999) at 68-74; and David C. Mowery and Nathan Rosenberg, *Paths of Innovation: Technological Change in 20th Century America* (Cambridge: Cambridge University Press, 1998) at 14. James Boyle also traces the process by which the original patent model, which envisioned the individual inventor as beneficiary, was transformed to accommodate corporations as inventors – a transformation which occurred conveniently to rescue corporations from the constraints of antitrust laws: James Boyle, *Shamans, Software and Spleens: Law and the Construction of the Information Society* (Cambridge: Harvard University Press, 1996).

²⁰⁰ Timothy J. Mullaney and Spencer E. Ante, “Info Wars,” *Business Week* (June 5, 2000): EB 107-EB 116.

²⁰¹ H. David Starr, “Are the New Devices for Recording Music off the Internet Legal?” (1999) 3 Copyright & New Media Law Newsletter, Issue 3, at para. 1.

for the benefit of the major stakeholders. This is done at the expense of the public at large:

*There is no overarching vision of the public interest animating the [DMCA]. None. Instead, what we have is what a variety of different private parties were able to extract from each other in the course of an incredibly complicated four-year multiparty negotiation [through which the DMCA was written]. Unsurprisingly, they paid for that with a lot of rent-seeking at the expense of new upstart industries and the public at large.*²⁰²

Secondly, the legislation tends to be long and overly detailed, sacrificing clarity for complexity and over-inclusiveness. The DMCA has been branded “long, internally inconsistent, difficult even for copyright experts to parse and harder still to explain.”²⁰³

The DMCA does nothing to improve “copyright law’s general level of incomprehensibility,”²⁰⁴ and instead serves to exacerbate it. While copyright experts may find the DMCA to be an unnecessarily long and cumbersome piece of legislation, its complexity is especially problematic for laymen who are not familiar with legal terminology. “It is difficult to establish a law if it would require behaviour that is contrary to everyday practice.”²⁰⁵ Although ignorance of the law is not an excuse for its infringement, the DMCA imposes liability on ordinary citizens for violations of provisions that they have no reason to suspect are part of the law. For example, the DMCA makes non-commercial and non-infringing behaviour illegal on the theory that that will help to prevent piracy. Clearly the DMCA defies what are generally considered the hallmarks of quality legislation and Canadian lawmakers would be wise to avoid the protectionist principles it embodies.

²⁰² *Supra*, note 65 at 144-145 (emphasis added).

²⁰³ *Supra*, note 65 at 144-145.

²⁰⁴ *Supra*, note 65 at 145.

²⁰⁵ *Supra*, note 143 at 83.

3.8 Conclusion

The discussion in this chapter focussed on various initiatives taken at the domestic and international levels to address the difficulties associated with the application of traditional copyright law to digital IP, and the reform of copyright law to better accommodate digital IP. At the international level, the IP community has responded with the WIPO Treaties. The reactions in Europe and America, both of which implement the WIPO Treaties via domestic legislation, were discussed along with the Canadian reaction to the digital copyright dilemma.

The USA reacted hastily to the networked environment, and used the DMCA to fortify copyright law in every possible way against the perceived threats of the Internet. However, the Canadian Legislature has not presently made sweeping revisions to copyright law in Canada that can be compared to the DMCA. It appears that Canada is taking the approach of first evaluating international experiences relating to digital copyright law amendment, and then introducing changes – which will hopefully reflect specifically Canadian IP policy.

Implementing a distinctively Canadian copyright policy will hopefully avoid overly protectionist legislation such as the DMCA, which is riddled with private side-deals and structured to the obvious benefit of large industry stakeholders. The focus of the criticism aimed at the DMCA has been the anti-circumvention provisions contained therein. Currently Canada does not have any comparable provisions contained in its legislation. The passing of the DMCA appears to have been incited by a type of panic to ensure that copyright law would continue to thrive in the face of the new technological challenge represented by the Internet.

Although reform to IP law and policy in Canada has surfaced somewhat from the backwoods of policy-driven political and economic debate, it cannot be said that copyright law as it applies to the Internet is clear or definite. "In the 1990s, IP has ridden the conceptual coat tails of innovation policy to greater political-economic prominence, but innovation policy...*is hardly a beacon of clarity* as the new Millennium begins."²⁰⁶ It goes without say that, in order to maximize the effectiveness of any law or policy – copyright included – its meaning and application must be clear, predictable and efficient: "[I]n order for Canada to be an important player in the emerging digital economy, current efforts need to be further bolstered by certain amendments to the *Copyright Act* to ensure that, on a practical level, the Act *continues to be meaningful, clear and fair*."²⁰⁷

²⁰⁶ *Supra*, note 10 at 8 (emphasis added).

²⁰⁷ *Supra*, note 145 at 4 (emphasis added).

CHAPTER IV Application of the Right of Reproduction to Internet Browsing

As stated at the outset of this thesis, the focus of the research problem at hand is the application of the right of reproduction, found in s. 3 of the Act, to Internet browsing. Section 3(1) of the Act lays out what constitutes copyright in a work and what economic rights are accorded to the holder. It reads in part:

For the purposes of this Act, "copyright," in relation to a work, means the sole right to produce or *reproduce* the work or any substantial part thereof *in any material form whatever*...if the work is unpublished, to publish the work or any substantial part thereof, and includes the sole right...to authorize any such acts. (Emphasis added)

In order to determine if an activity (such as Internet browsing) amounts to copyright infringement, it is necessary to examine this section and the exclusive rights granted therein in more detail.

4.1 "Any material form"

Section 3(1) of the Act contains the words "in any material form whatever." On a *prima facie* reading of the section, the Act applies to works expressed in digital form. The Final IHAC Report²⁰⁸ confirms this assertion. One of the most important conclusions found in that report was the recognition that the Act applies in the digital environment. Recommendation 6.2 of the Final IHAC Report ('Rec. 6.2') provides: "The current categories of works contained in the *Copyright Act* sufficiently identify works produced and used in a digital environment and should not be amended or eliminated."²⁰⁹

²⁰⁸ *Supra*, note 153.

²⁰⁹ *Supra*, note 153 at 113.

However, this conclusion pre-supposes that the digitization of a work does not in itself amount to the creation of a new work which falls outside the ambit of the *Copyright Act*, and arguably demands *sui generis* protection. It appears that the purpose of Rec. 6.2 was to give assurance that *sui generis* protection for digital works is neither required nor appropriate. The implication is that the digitization of a work, in itself, will not generally give rise to the creation of a new work, but instead results simply in the expression of a copyrighted work in a different form.

Alternately, it can be argued that, while expressing a work in digital form does not create a new work of itself, works expressed in digital form are so vastly different in nature from print/analog works that they demand *sui generis* protection. The key difference between printed and digital works is the ease with which digital works may be reproduced, with no loss of quality from the original, and at very little cost. Digitization results in the spawning of a strange, new hybrid form of communication: while many digital communications are literary in form, in actual substance they are more akin to an oral communication (e.g. chat room conversations). The result is a communication which is literary in form, but oral in substance. However, unlike most other laws, copyright usually celebrates form over substance.²¹⁰

Whether the digital environment has actually spawned a new category of work was also discussed in the Subcommittee Report.²¹¹ The Subcommittee took the same view as IHAC, that digitization of a work merely constitutes the expression of copyright subject-matter in a different format.²¹² The Subcommittee stated that it was unaware of any new

²¹⁰ Vaver, *supra*, note 29 at 27.

²¹¹ *Supra*, note 18.

²¹² *Supra*, note 20, Chpt 3 at 6.

categories of works that would not fit within the existing definitions of literary, artistic, dramatic or musical works as currently contained in the Act.²¹³ Some cases refer to digital works as works expressed in “non-traditional forms.”²¹⁴ Given that the Act protects works in any material form whatever, the creation of a *sui generis* right for works in digital format may be unnecessary. A much closer examination of the differences between digital works and traditional printed works would be needed to determine if, for example, a new statute specifically addressing copyright in digital works would be justified.

The assumption in advocating *sui generis* protection for digital works is that the boundaries of existing copyright doctrines will be defied; or that the new candidate for protection is so strikingly different that it requires separate legal treatment. Such apprehensions are not new, and they have been voiced repeatedly whenever a new technology perceived as threatening to copyright law has emerged: photography, radio, photocopying, motion pictures, sound recordings, telecommunication, and so on. In each instance, the copyright system has managed, over time, to incorporate the protection of the new medium of expression within the existing framework.²¹⁵

However, while digital works may fit within the existing wording of the act (“in any material form whatsoever”), the application of the law to digital works does not produce similar results, as compared with works expressed in traditional print form. It also produces different results when evaluated in light of copyright’s policy goals. Works

²¹³ *Supra*, note 20, Chpt 4.

²¹⁴ In *Guillot v. Istek Corp* (2001), 14 C.P.R. (4th) 67, [2001] F.C.J. No. 1165 (QL) [*Guillot* cited to FCJ], Hugessen J refers to “non-traditional forms of creation, production, copying or reproduction” in the context of links and an article posted on an Internet website (at para.8).

²¹⁵ Arthur R. Miller, “Copyright Protection for Computer Programs, Databases, and Computer-Generated Works: Is Anything New Since CONTU?” (1993) 106 Harv. L. Rev. 977 at 982.

expressed in digital form display sufficiently different characteristics than print works, so that the reasoning behind the maintenance of technologically neutral wording begins to detract from the social utility to an extent greater than the benefits offered by technological neutrality.²¹⁶ That is, the fact that copyright is founded on the proposition that reproduction is the fundamental right embodied in copyright is incompatible with the way that digital technologies function. This idea is explored further in Section 4.6.

With its lack of amendment of the definitions of copyrightable works, the federal government of Canada appears to tacitly support the Subcommittee's and IHAC's conclusions that digital works do not militate *sui generis* protection. The recent Consultation Paper, issued by the departments of Industry Canada and Canadian Heritage, echoes this view. It was stated in the Consultation Paper that, despite the radical novelty of the Internet, the Act has already developed into a flexible instrument capable of responding to many of the challenges of the digitally networked environment.²¹⁷ It may even be detrimental to the Canadian technology sector if the Act was now amended: "it may be that amendments made to the [Copyright] Act at this time could have the inadvertent effect of working against a Canadian presence [in the information technology sector] if technologies develop along particular or unpredictable pathways."²¹⁸ Further, the above discussion of the DMCA (which was passed specifically to address works expressed in digital form) served to illuminate some of the difficulties associated with granting digital works special protection.

²¹⁶ Handa, Sunny. *Copyright Law in Canada* (Markham, ON: Butterworths, 2002) at 448.

²¹⁷ *Supra*, note 145 at 5.

²¹⁸ *Supra*, note 145 at 5.

4.2 “Reproduction”

Section 3(1) of the Act gives a copyright holder the exclusive right to reproduce a work, or a substantial portion thereof. It is specifically this portion of the provision that raises the bulk of concerns associated with what constitutes copyright infringement in the context of Internet browsing, and sparks the debate over the ability of a browser to access a webpage without infringement. When a user engages in Internet browsing, and she wishes to view a specific website, the user's browser sends a request over the Internet to a web server for the desired HTML file. The web server in turn sends a *copy* of the file to the user's browser, which then interprets and displays the file on the user's screen.²¹⁹ It is important to note that it is a *copy* of the file that is transmitted to the user – the original remains on the web server. The copied file is stored temporarily or cached in the Random Access Memory ('RAM') of the user's computer. A copy may even be cached in the hard disk of the user's computer to allow faster access to the particular webpage at a later date. The dilemma may be summarized thusly: the problem for copyright with the way the Internet works, is that the user's computer makes a temporary copy of a page to enable it to be viewed. Additionally, the source files must be accessible and therefore, by the nature of the technologies, easy to copy.²²⁰

The Subcommittee Report considered this issue and concluded that “browsing on the Information Highway entails the making of a copy; in order to browse, the work must be

²¹⁹ See Jim Carroll and Rick Broadband, *Canadian Internet Handbook* (Scarborough: Prentice Hall Canada, 1994) at 67ff for more detail.

²²⁰ Further, “It is not simply the case that text of a web page can be highlighted and copied or then pages themselves printed. It is just as easy to copy the whole structure and source files as well. If you have access to the Internet, click on ‘view source’ to see the actual coding and files used to publish a page.” (Easton *supra*, note 78 at para. 11.)

accessed.”²²¹ Further, “*any act of accessing a work constitutes a reproduction, even if it is a temporary or ephemeral fixation. As such, browsing a work or a substantial portion of a work is subject to the right of reproduction.*”²²² The question that flows logically from this statement is whether reproductions made in the course of Internet browsing are infringing copies, or whether liability may be avoided under some exception such as fair dealing or implied licence. Since browsing is subject to the right of reproduction, it would appear then that, on its face, copies made in the course of Internet browsing are infringing copies. The Subcommittee’s conclusion regarding browsing is examined in greater detail in the following section.

4.3 Copies made During Internet Browsing

The task of analyzing the Subcommittee’s conclusion on the application of s. 3 of the Act to Internet browsing is not a straightforward one. This is because the Subcommittee Report does not lend insight into its own reasoning on this point, and puts forth no justification regarding its conclusions on the application of s. 3 of the Act to Internet browsing. The sources relied on by the Subcommittee in writing its report must therefore be examined to unravel the chain of reasoning.

The Subcommittee Report states that its views regarding browsing are “based on the United States Model.”²²³ The U.S. White Paper²²⁴ contains language that, if interpreted strictly, prohibits access to intellectual property on the Internet even though the same

²²¹ *Supra*, note 20, chpt 3, at 11.

²²² *Supra*, note 20, chpt 3, at 11 (emphasis added).

²²³ The Subcommittee Report, *supra*, note 18, Recommendation 6.3.

²²⁴ *Supra*, note 15.

intellectual property would be accessible without infringement if it were in the form of print media. In its discussion of the right to reproduce a work, the White Paper states:

Indeed, because of the nature of computer-to-computer communications, [the right of reproduction] will be implicated in most NII [National Information Infrastructure] transactions. For example, when a computer accesses a document resident on another computer, the image on the user's screen exists – under contemporary technology – only by virtue of the copy that is *reproduced* in the user's computer memory. It has long been clear under U.S. law that the placement of copyrighted material into a computer's memory is a reproduction of that material (because the work in memory may then be, in the law's terms, "perceived, reproduced, or...communicated...with the aid of a machine or device").²²⁵

The White Paper cites several authorities for this principle, including a 1978 report²²⁶ and the cases of *MAI Systems Corp v. Peak Computer Inc.*²²⁷ and *Advanced Computers Services of Michigan v. MAI Systems*²²⁸ (together, the '*MAI cases*'). The White Paper then goes on to identify a list of acts, which in the opinion of the U.S. government, all fall within the scope of the right of reproduction. Included in this list is the placement of works into a computer, whether on a disk, diskette, ROM, or other storage device, or in RAM for more than a very brief period.²²⁹ When such an activity occurs, a copy is deemed to have been made. On its face, the White Paper therefore prohibits the mere act of opening and reading a file found on the Internet because this act requires making a copy of the original work. The White Paper cites *MAI v. Peak* as authority.

²²⁵ *Supra*, note 15 at 64-65 (emphasis in original, references omitted).

²²⁶ National Commission on New Technological Uses of Copyrighted Works (CONTU), *Final Report of National Commission on New Technological Uses of Copyrighted Works* (Washington, DC: Library of Congress, 1978) (the '*CONTU Report*'). This report states: "[T]he application of principles already embodied in the language of the [current] copyright law achieves the desired substantive legal protection for copyrighted works which exist in machine-readable form. The introduction of a work into a computer memory would, consistent with the [current] law, be a reproduction of the work, one of the exclusive rights of the copyright proprietor" (at 40, *ac cited supra*, note 15 at 65).

²²⁷ 991 F. 2d 511 (9th Circuit, 1993) ('*MAI v. Peak*').

²²⁸ 845 F. Supp. 356 (E.D., V.A., 1994) ('*ACSM v. MAI*').

²²⁹ *Supra*, note 15 at 65-66. Other activities which, if unauthorized, would infringe a copyright holder's reproduction right include: scanning a printed work into a digital file; digitization of works such as photographs, motion pictures or sound recordings; uploading or downloading a digitized file from a user's computer to a BBS or other server; and transferring a file from one networked computer to another.

Although the White Paper was published in September 1995, its protectionist stance reverberates in the current legislative environment, and is evidenced by the continuing expansion of copyright protection in the U.S.²³⁰ Examples of this trend include the *No Electronic Theft Act (1998)*²³¹ (which criminalizes copyright violation), and the *Sonny Bono Copyright Extension Act (1999)*²³² (which extends the current copyright protection for an extra twenty years, granting most works copyright protection for the author's life plus 70 years).

As stated, the Subcommittee drew on the U.S. White Paper in making the conclusions found in its final report. Under U.S. law, a work must be "fixed in any tangible medium of expression" to attract copyright protection.²³³ A tangible medium is defined as one from which the work may be "perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."²³⁴ "Copies" are defined as "material objects...in which a work is fixed by any method now known or later developed, and

²³⁰ *Supra*, note 143 at 12-13.

²³¹ *No Electronic Theft Act* 105 P.L. 147; 111 Stat. 2678; 1997 Enacted H.R. 2265; 105 Enacted H.R. 2265 ('NET Act'). The NET Act was signed into law by former President Bill Clinton on December 16, 1997. The NET Act was presented as "closing a loophole" in the American criminal law – under the old statutory scheme, people who intentionally distributed copied software over the Internet did not face criminal penalties if they did not profit from their actions. The NET Act broadens the definition of "financial gain" in section 101 of Title 17 of the United States Code to include the receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works. Unsurprisingly, the NET Act was strongly opposed by academic groups and scientific communities, while strongly backed by the entertainment and software industries. Note the strategic use of the word "theft" in the NET Act. One author puts forth the following opinion: "Unfortunately, not everyone is familiar with the legal distinctions between so-called intellectual property and everyday tangible property, which means that, thanks to misunderstandings about the operation of and policies behind copyright law, there will be more and more claims that online infringement, especially unintentional or unknowing infringement, of intellectual property amounts to 'online theft or fraud.' Sadly, these claims will be used not only to justify ill-considered expansions of the copyright laws, but also for expansions of law enforcement authority generally" (*supra*, note 28 at 171).

²³² See *supra*, note 17.

²³³ 17 United States Code sec. 102(a) (1988 & Supp. V 1993).

²³⁴ 17 United States Code sec. 102(a) (1988 & Supp. V 1993).

from which the work can be perceived, reproduced, or otherwise communicated.”²³⁵ To be fixed, the work must exist in its physical form “for a period of more than transitory duration.”²³⁶ The White Paper considers copies of files made during browsing and stored in a hard disk cache or in RAM to be reproductions for copyright purposes. It follows that disk or RAM caching (either of which may occur during Internet browsing) without a copyright holder’s permission would *prima facie* amount to copyright infringement. As mentioned above, the White Paper relies on the *MAI* cases to justify its conclusions regarding reproductions made during browsing. These cases held that a copy made in a computer’s RAM is fixed and constitutes a reproduction for purposes of the U.S. Copyright Act. The White Paper supports the application of this conclusion to Internet transmissions.

4.4 The *MAI* Cases

The *MAI* cases hold that a digital work (e.g. software) embodied in a computer’s RAM is sufficiently fixed to be a reproduction for Copyright Act purposes. As will be discussed, an in-depth reading of the Act and an examination of its legislative history reveal that the intention behind the fixation requirement is to avoid capturing ephemeral works such as those expressed in RAM. The analysis in the *MAI* cases regarding fixation of works expressed as RAM embodiments is also flawed. Further, the categorization of a RAM copy as a reproduction is also contrary to copyright policy, as the purpose behind the fixation requirement was not adequately considered in the requirement’s application to RAM copies. The *MAI* cases have been widely criticized, and rightly so. Critics of the

²³⁵ 17 United States Code sec. 101 (1988); definition of “copies.”

²³⁶ 17 United States Code sec. 101 (1988); definition of “fixed.” A work may be fixed by writing, engraving, perforating, punching, sculpting, or any other means of physically inscribing the work onto a material object, either graphically or in symbols. This is not an exhaustive list.

MAI cases have made many arguments against the finding that RAM copies are reproductions. It has been argued that a RAM embodiment is not sufficiently fixed to constitute a reproduction; that a defence such as fair use should apply; that this amounts to copyright misuse, or that copying is an essential step in use of a program under s. 117(1) of the U.S. *Copyright Act*.²³⁷

In *MAI v. Peak*, it was held that a MAI software licence did not allow the loading of software into one of MAI's computers by Peak. Peak was a third-party computer maintenance company. The court found that the loading of copyrighted computer software from a storage medium into the memory of a central processing unit ('CPU') causes a copy to be made.²³⁸ The court held that "a copy made in RAM is 'fixed' and qualifies as a copy under the *Copyright Act*."²³⁹

The second case relied on by the White Paper, *ACSM v. MAI*, was decided a year after *MAI v. Peak*. The District Court of Virginia ruled that transferring a program or information into the RAM of a computer constitutes making a copy, thus representing a copyright infringement. The plaintiffs argued that the nature of RAM is so ephemeral and transitory, that it precludes a finding that a "copy" of the program is made when it is transferred from a permanent memory source to the computer's RAM.²⁴⁰ The plaintiffs also asserted that the threshold for fixation was not reached because the information in

²³⁷ For example, see: Ira L. Brandriss, "Writing in Frost on a Window Pane: E-mail and chatting on RAM and copyright fixation," (1996) 43 *Journal of the Copyright Society of the USA* 237; Jessica Litman, "The exclusive right to read," (1994) 13 *Cardozo Arts & Ent. L. J.* 29; Kristen J. Mathews, "Misunderstanding RAM: Digital Embodiments and Copyright" (1997) *B.C. Intell. Prop. & Tech. F.* 041501, online: Boston College <http://www.bc.edu/bc_org/avp/law/st_org/ip/f/articles/content/1997041501.html>; and Bradley J. Nicholson, "The Ghost in the Machine: *MAI v. Peak* and the Problem of Copying in RAM" (1995) 10 *High Tech. L. J.* 1.

²³⁸ *MAI v. Peak*, at 518.

²³⁹ *MAI v. Peak*, at 519.

²⁴⁰ *ACSM v. MAI* at 362.

RAM disappears once a computer is switched off, and is only truly copied if a user actively directs the information to be permanently retained. The court rejected these arguments and held that the U.S. Copyright Act “*does not require absolute permanence for the creation of a copy.*”²⁴¹ The test for whether a copy is made is if the information is “sufficiently *permanent or stable* to permit it to be perceived, reproduced, or otherwise communicated for *a period of more than transitory duration.*”²⁴² This wording is from the definition of “fixed” found in s. 101 of the U.S. Copyright Act. That section states that a work is “fixed” in a “tangible medium of expression” when its embodiment in a “copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.” A RAM copy would only meet this test if it was applied very strictly, and if the widest possible definitions of the terms “permanent or stable” and “transitory duration” are used. However, this approach lacks both common sense and context. Further, in *MAI v. Peak*, the court openly refused to consider where along a time continuum a fixation is said to have occurred. It failed to consider the second part of the s. 101 definition of fixed, that a reproduction must exist for a period of more than transitory duration. The duration issue was considered in *ACSM v. MAI*, where the court found that an embodiment in RAM is a reproduction if it lasts for “minutes or longer.”²⁴³ The court appeared to arbitrarily choose this time scale, and provided no explanation or basis for its decision. It did not discuss RAM copies lasting less than “minutes.” These deficiencies are further discussed below.

²⁴¹ *ACSM v. MAI* at 363 (emphasis added).

²⁴² *ACSM v. MAI* at 363 (emphasis added).

²⁴³ *ACSM v. MAI* at 363.

In Canada, the case of *Apple Computer, Inc. v. Mackintosh Computers Ltd.*²⁴⁴ considered the impacts of copyright law on computer software. *Apple Computer* was upheld at both the Federal Court of Appeal and Supreme Court of Canada levels.²⁴⁵ It was held in *Apple Computer* that software embodied in ROM chips (Read Only Memory – a chip containing permanent information about basic instructions needed to start a computer) is a work protected by s. 3 of the Act. Reed J. recognized the difference between RAM and ROM. She noted that while ROM was “permanent in nature,” RAM was “volatile,” since information stored in RAM is lost when a computer’s power source is switched off.²⁴⁶ However, her ruling in *Apple Computer* concerned only ROM. As such, there is no Canadian case law that serves as authority for the conclusions made in the Subcommittee Report concerning reproductions made during browsing.

The Subcommittee Report states that, “In some countries, *accessing* a work in a digital environment is considered a reproduction, even where the work is temporarily stored in the...RAM of a computer.”²⁴⁷ Since the Subcommittee Report relies on the White Paper, and the White Paper relies on the *MAI* cases, it seems then that the conclusions concerning browsing found in both reports base their legitimacy on the decisions in the *MAI* cases being good law. It has been stated by some that the conclusion that RAM copies constitute fixation is “eminently defensible,”²⁴⁸ and the White Paper describes the

²⁴⁴ (1986), [1987] 1 FC 173, (1986) 28 DLR (4th) 178 (FCTD) (*‘Apple Computer’*) followed in BC in *Candour Group Enterprises Inc. v. Argon Financial Consultants Inc* (1989), 26 C.I.P.R. 89, [1989] B.C.J. No. 1580 (BCSC).

²⁴⁵ At the Supreme Court of Canada level, see [1990] S.C.J. No. 61, [1990] 2 S.C.R. 209; at the Federal Court of Appeal level, see [1988] F.C.J. No 237, (1988) 91 N.R. 154.

²⁴⁶ *Apple Computer* at 10.

²⁴⁷ *Supra*, note 20 at 43 (emphasis added).

²⁴⁸ This statement was made by David Nimmer, “Brains and other paraphernalia of the digital age,” (1996) 10 Harvard Journal of Law & Technology 1-46 as cited in Donald Fishman, “Copyright in a Digital World: Intellectual Property Rights in Cyberspace,” in Susan J. Drucker and Gary Gumpert, eds., *Real Law @ Virtual Space: Communication Regulation in Cyberspace* (Cresskill, New Jersey: Hampton Press Inc,

MAI v. Peak ruling as “quite unexceptional.”²⁴⁹ Nevertheless, several objections may be raised to the *MAI* cases. It must firstly be questioned whether the controversial ruling in *MAI v. Peak* is a correct rule of law itself; and secondly, whether it ought to be applied to Internet communications.²⁵⁰ Regarding the first issue, there is ample authority and legislative history to the contrary. Further, custom, practice and common sense reject the claim that a temporary RAM copy made in order to view a web page or software could constitute copyright infringement. Regarding the second issue, critics state that only mechanical, positivist reasoning could elevate the *MAI* cases to a decisive authority upon which to found a new legislative regime for digital works. It should also not be applied to Internet communications for policy reasons. As yet, the *MAI* cases have not been followed in any Canadian jurisprudence.

4.5 The Fixation Requirement

Under the American *Copyright Act*, “fixation” is a requirement for two provisions.²⁵¹ Firstly, a work must be fixed to be eligible for copyright protection. Secondly, a copy of a work must be fixed to be considered an infringing reproduction. As stated above, a work is “fixed” in a “tangible medium of expression” when its embodiment in a “copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more

1999) 205 at 219. This policy is said to be defensible on the basis that 100 separate users may tap into a computer and make copies of the RAM-only text, and this overall pattern directly implicates the copyright owner’s reproduction right (Nimmer at 11).

²⁴⁹ *Supra*, note 15 at 65, footnote 204.

²⁵⁰ Lisa Anne Katz Jones, “Is Viewing a Web Page Copyright Infringement?” (1998) 4 Appeal 60-71 at para. 13.

²⁵¹ 17 U.S.C. ss. 101, 102.

than transitory duration.”²⁵² The phrase “tangible medium of expression,” found in the definition of fixed, mirrors the language used in s. 102 of the U.S. Copyright Act. Section 102 lays out the requirements for copyrightability under American law. This language is not used in the reproduction provisions. The definition of fixed is therefore more suited to the minimum requirements needed to attract copyright protection, rather than to those for reproduction. However, the s. 101 definition of fixed has long been applied to both the copyrightability requirements and the reproduction provisions. The 1978 CONTU Report and both the 1975 and 1976 House and Senate Reports apply the s. 101 definition of fixed in their discussions of the reproduction provisions.²⁵³ While the application of the fixed definition to both provisions is not problematic on its face, complications arise because the same *interpretation* of the fixed definition is applied to both provisions.²⁵⁴ The two provisions serve distinct purposes. Accordingly, their fixation requirements should be interpreted differently using a contextual approach.

The purpose behind the fixation requirement in both provisions is to ensure that the expression, or physical embodiment, of a work lasts through time. In the context of copyrightability, the purpose is to ensure that the physical embodiment of a work lasts long enough to need protection.²⁵⁵ In exchange for this protection, the author has contributed something of lasting value to society. Fixation also facilitates the enforcement of a copyright proprietor’s rights by allowing exact identification of the

²⁵² *Supra*, notes 233 and 242.

²⁵³ H.R. Rep. No. 1476, 94th Cong., 2d Sess. 62 (1976); S. Rep. No. 473, 94th Cong., 1st Sess. 57-58 (1975).

²⁵⁴ These provisions have been interpreted interchangeably by courts and law makers: Mathews, *supra*, note 237 at para. 5.

²⁵⁵ H.R. Rep. No. 1476, *supra*, note 253 at 52-53; S. Rep. No. 473 *supra*, note 253 at 104-105; Brandriss, *supra*, note 237 at 242-245.

copyrighted work.²⁵⁶ In the context of the minimum requirements needed to attract copyright protection, fixation should be interpreted as a requirement that the work last long enough to need protection and to be identifiable. In the context of reproduction, the fixation requirement is meant to ensure that a copy is actually made, so that the copyright holder suffers the “harm” of an infringement of their exclusive right to make reproductions. Otherwise, copyright protection is not needed, as reproductions that do not harm the copyright owner do not deter from the incentive to create new works. The CONTU Report states that copyright should not grant anyone more economic power than necessary to perpetuate the incentive to create new works.²⁵⁷ It can therefore be said that the rationale behind the fixation requirement in the context of reproduction is to require that a reproduction last a sufficient time, so as to be harmful to a copyright proprietor. Under the utilitarian approach to copyright law used in the U.S., harms and benefits are usually measured in terms of economic losses or gains. Here, it is difficult to see how copies made in RAM are harmful to a copyright owner. The “harm” being done is a nominal or legal harm only. A copyright holder does not stand to suffer economic loss due to RAM copies made for the purposes of viewing a work expressed in digital form.

The definition of fixed imposes two requirements: 1) the expression must be “permanent or stable;” and 2) it must be so for a “period of more than transitory duration.” The first arm examines the nature of the expression. The second arm can be said to measure the permanence or stability of the work in reference to its duration. These two requirements must be examined jointly, as they are inextricably linked and one reflects the other.

²⁵⁶ Mathews, *supra*, note 237 at para. 5.

²⁵⁷ *Supra*, note 226 at 29.

Regarding the requirement for permanence or stability, it seems counter-intuitive that a copy stored in RAM is permanent or stable enough to be considered a fixation of a work. The nature of RAM must be explored further to fully understand why this is. Technically, the term "computer memory" refers only to RAM, but in its common usage it is often used to concurrently refer to both hard drive memory and floppy disks (semi-permanent and permanent storage forms) *and* RAM. Such ambiguous use of terminology has contributed to copyright law's incorrect treatment of RAM, because lawmakers and courts have not consistently used these terms when discussing computer memory. Oftentimes the distinction between hard drive memory and RAM is blurred or not made at all. This is the case in some of the sources relied on by the White Paper, such as the CONTU Report. The CONTU Report states: "The text of the new copyright law [referring to the 1976 U.S. Copyright Act] makes it clear that the placement of a copyrighted work into a computer – or, in the jargon of the trade, the "inputting" of it – is the preparation of a copy."²⁵⁸ However, the CONTU Report does not clarify whether it is referring to RAM or hard disk, and was written before hard drives were common and so the distinction between memory types was not well known. In the early 1970's, when the 1976 Act was being drafted, computer technology was still new, and not fully understood by lawmakers and the courts. Even today, courts may not fully understand all of the technicalities associated with computers. In a 2001 Canadian case it was stated:

The technology involved in Internet publication is *not a matter of judicial notice or knowledge*. Many of the words used to describe what appears to be happening on the screen in front of one are quite obviously metaphors and the Court cannot assume that they accurately describe what is actually taking place. Since copyright is itself a statutory (and highly technical) right, it is only appropriate that where technical and non-technical forms

²⁵⁸ *Supra*, note 226 at 55.

of creation, production, copying or reproduction are in issue, the Court should receive proper technical guidance.²⁵⁹

Thus to this day, the technicalities associated with many computer technologies are not fully understood by courts. In the U.S., the failure to appreciate the complexity of computer memory and the judicial confusion regarding RAM copies has carried through from the 1970's through to present day cases. For example, *Religious Technology Ctr v. Netcom Online Communications Servers*²⁶⁰ relied on the *MAI* cases to support its ruling that works embodied on a hard disk were reproductions. The *MAI* cases considered only RAM copies. The court clearly failed to distinguish between RAM and hard disk.

RAM and hard disk are distinct and must be treated so under copyright law. It is not contentious that hard drive copies or ROM embodiments are sufficiently fixed so as to constitute a reproduction. A work may be fixed by being digitally encoded, as magnetic storage is considered to be sufficiently stable to constitute fixation.²⁶¹ However, both secondary and primary data in RAM is stored electronically – *not* magnetically, as on a hard disk. The zeroes and ones that compose the digital data stored in RAM are merely high or low electronic field states.²⁶² This is why RAM copies disappear when power to a computer is switched off – the registers can no longer sustain the high electronic field states and the data is lost. Hard disk and ROM copies remain stored on a computer for a period of more than transitory duration. They exist until they are actively deleted. RAM copies are the opposite. They cannot be described as permanent or semi-permanent in the same sense that ROM or hard disk copies can. They can only be described as being

²⁵⁹ *Guillot, supra*, note 214 at para. 8 (emphasis added).

²⁶⁰ 907 F. Supp. 1361 at 1367-68, (N.D. Cal 1995).

²⁶¹ *Stern Electronics, Inc. v. Kaufman*, 669 Federal Reporter 2d 852, 855 (2d Circuit 1982); *Williams Elecs., Inc. v. Artic International, Inc.*, 685 F. 2d 870 at 874 (3rd Cir. 1982).

²⁶² Thomas C. Bartee, *Computer Architecture and Logic Design* (New York: McGraw-Hill, 1991) at 244-315.

transient and volatile. RAM is designed to maximize a computer's processing speed at the expense of storage ability, moving data quickly through a computer's processor so that instructions can be rapidly implemented.

Further, the use of computer memory varies greatly between computers, depending on the operating system and software being used, and the type of digital work being accessed. Different types of digital data are treated differently in RAM according to the file type, the computer's architecture, and the instructions of the relevant program being used.²⁶³ This differing treatment affects the transience, and therefore the duration, of a RAM copy. Courts have failed to grasp this subtle complexity. It is generally thought that a program remains in RAM as long as it is running. This is not so. Firstly, if a system uses virtual memory, portions of a program not in immediate use may be stored in a temporary file on the hard drive instead of in RAM. Secondly, when a file is opened (i.e. loaded into RAM), the application being used governs how much of the file is loaded into RAM. Because the RAM may only embody currently used portions of a program means that the RAM copies last for less time – each RAM portion of a program lasts only as long as it is in immediate use, not as long as the entire program is in use.²⁶⁴ RAM copies are therefore so transient that they may be lost as soon as the next action in a program's use is carried out. They do not necessarily last until the program is closed; and while RAM copies are definitely lost when a computer's power source is turned off, they may be long gone before this even happens. RAM copies may therefore exist for less than a second, several seconds, a minute, or several hours. Since s. 101 of the U.S. *Copyright Act* states that a fixation must exist for more than a period of transitory duration, it seems

²⁶³ *Supra*, note 262.

²⁶⁴ Mathews, *supra*, note 237 at para. 10.

contradictory to maintain the view that all RAM copies are fixed. Even the threshold of “minutes” laid down in *ACSM v. MAI* is arguably not long enough to elevate a RAM copy to the level of duration required under s. 101. Also, the volatile nature and transience of RAM embodiments makes them arguably too ephemeral and impermanent to meet the fixation requirement needed to define them as copies for copyright purposes.

The CONTU Report, which is relied upon by the White Paper and which American courts regard as a form of legislative history,²⁶⁵ describes a situation where a work is seen under copyright law to have lost its ability to be copied, and is therefore no longer an infringement. The CONTU Report states: “Only when the program is inserted, instruction by instruction, into the processing element of the computer and electrical impulses are sent through the circuitry of the processor to initiate work is the ability to copy lost.”²⁶⁶ Interestingly, this is precisely what happens when data is embodied in RAM, where data is sent through a CPU. This statement implies that RAM copies would not be considered reproductions. However, as the CONTU did not appear to have a proper understanding of computer memory, this statement cannot be relied on. It only shows that, even in 1978 when the CONTU Report was published, there was an intention that fleeting embodiments such as RAM copies were not meant to be considered reproductions.

Thus far, it has been shown that courts not only confuse hard disk, ROM, and RAM, but they also fail to apply a contextual treatment to RAM copies. Depending on the architecture and peculiarities of the relevant computer or program, a portion of a digital

²⁶⁵ Melville B. Nimmer and David Nimmer, *Nimmer on Copyright: A Treatise on the Law of Literary, Musical and Artistic Property, and the Protection of Ideas*, looseleaf (New York: Matthew Bender, 1996) at para. 8.08 [B][1].

²⁶⁶ *Supra*, note 226 at 56.

work in RAM may last only as long as it is in immediate use, and not as long as a program is open, or a computer is turned on. A RAM copy in a computer may therefore be more transient than a RAM copy in a case precedent.

Another point on which the *MAI* cases are disappointing is the faulty reasoning used in interpreting the line of authority used to justify the conclusion in *MAI v. Peak* that RAM copies are sufficiently fixed. As mentioned above, Peak's argument that a RAM copy is not fixed was rejected because the court found that there were no material facts or precedent to support this proposition. Interestingly, the court also acknowledged that there was a lack of authority for the assertion that a RAM copy is "fixed," yet it nevertheless managed to find support for this conclusion in three authorities.²⁶⁷ A close examination of each authority reveals that it was relied on incorrectly. The first authority in this line was *Apple Computer Inc. v. Formula International Inc.*²⁶⁸ *MAI v. Peak* focussed on that case's discussion of the defence found in s. 117 of the U.S. Copyright Act (the section allows copies of a computer program to be made if the copying is an essential step in using the program or for archival purposes). In the *Formula International* case, the court rejected the defendant's s. 117 defence. The defendant's copying of a program onto permanent silicon chips was not an essential step as required under s. 117, because the defendant could have instead copied the program into RAM, *without making a permanent copy.*²⁶⁹ The court stated: "This would be only a *temporary fixation*. It is a property of RAM that when the computer is turned off, the copy of the

²⁶⁷ *MAI v. Peak*, at 519.

²⁶⁸ 594 F. Supp. 617 (C.D. Cal. 1984) ('*Formula International*').

²⁶⁹ *Formula International*, *supra*, note 268 at 622 (emphasis added).

programs recorded in RAM is lost.”²⁷⁰ The court in *MAI v. Peak* focussed on the use of the phrase “temporary fixation” and thereby construed *Formula International* as authority that a RAM copy is fixed, albeit only a temporary fixation. However, when the passage from *Formula International* is read in context, it is revealed that the court there intended to use a RAM copy as an example of a transient or ephemeral copy, in contrast to a fixed copy such as a permanent embodiment fixed in a floppy disk. The passage from *Formula International* quoted in *MAI v. Peak* therefore does not stand for the proposition that a RAM copy is sufficiently fixed so as to be a reproduction.

Next, *MAI v. Peak* cites the case of *Vault Corp. v. Quaid Software Ltd.*²⁷¹ In *Vault*, the s. 117 defence was used successfully, and it was found that the copies in question were not infringing copies. The relevant copies were RAM copies, but the defendant did not argue that a RAM copy was not a reproduction. As such, the court did not discuss or analyze the law behind fixation or reproduction.²⁷²

Thirdly, the court in *MAI v. Peak* cited the CONTU Report in support of its conclusion that RAM copies are sufficiently fixed so as to be reproductions for copyright purposes. As already discussed above, the CONTU Report does not state this conclusion. It fails to distinguish between different computer memory types, and was written before hard drives were common. Further, the context of the CONTU Report reveals that it probably referred to semi-permanent storage and not RAM.²⁷³

²⁷⁰ *Formula International*, *supra*, note 268 at 622 (emphasis added).

²⁷¹ 847 F. 2d 255 (5th Cir. 1988) (*‘Vault’*).

²⁷² *Vault*, *supra*, note 271 at 261.

²⁷³ CONTU Report, *supra*, note 226 at 56; Mathews, *supra*, note 237 at para. 29.

The next case in this troubling line of authority was heard in California approximately one month after *ACSM v. MAI*. In *Triad Systems Corp. v. Southeastern Express Co.*,²⁷⁴ the defendant company serviced the plaintiff's computers. During service calls, it would load software into RAM. *Triad* does not cite *ACSM v. MAI*, but it does cite *MAI v. Peak*, *Vault*, and the CONTU Report. *Triad* found that the relevant RAM copies were reproductions.²⁷⁵ The court rejected the defendant's argument that RAM embodiments did not last long enough to be deemed fixed. As in *MAI v. Peak*, the *Triad* court neglected the second requirement of s. 101 of the U.S. Copyright Act that the copies must last for "a period of more than transitory duration." The court dismissed this requirement, stating: "The copyright law is not so much concerned with the temporal 'duration' of a copy as it is with what that copy does, and what it is capable of doing while it exists. 'Transitory duration' is a relative term that must be interpreted and applied in context" (at 16-17). However, the court in *Triad* failed to progress to a contextual analysis of duration. Thus overlooking the duration requirement and stating that regardless of how long a RAM copy exists, the court found that: "an ephemeral RAM copy of [the plaintiff's] operating system software is the functional equivalent of a longer lasting copy in other computer systems. As a result, the kind of temporal distinction [the defendant] is attempting to draw is not probative of the fixation question" (at 16-17). The court in *Triad* appears to have dismissed the duration requirement because a RAM embodiment could exist for any amount of time, again treating the classification of RAM copies in an inappropriate way.

²⁷⁴ 1994 U.S. Dist. LEXIS 5390 (N.D. Cal. March 18, 1994) ('*Triad*'). The White Paper also includes *Triad* and *Vault*, along with the *MAI* cases and the CONTU Report, as the authorities for the proposition that RAM copies are reproductions (*supra*, note 15 at 65, footnote 202).

²⁷⁵ *Triad* at 12-17.

Moreover, the legislative history of the 1976 U.S. Copyright Act implies that its intent was to avoid giving protection in just such instances. The U.S. House of Representatives stated that works are *not fixed* if they are “purely *evanescent or transient*...such as those projected briefly on a screen, shown electronically on a television or cathode ray tube, *or captured momentarily in the ‘memory’ of a computer.*”²⁷⁶ Further, the same Congressional Report states, in reference to fixation as it applies to reproduction, that the “showing of images on a screen or tube would not be a violation” of the reproduction right.²⁷⁷ It is also interesting to note that no court which has considered whether RAM copies are reproductions has cited this Congressional Report. Since the duration of RAM copies varies greatly, perhaps the White Paper relies on the possibility that copies may exist for several hours or days to justify its conclusion. It is a more justifiable proposition that a RAM copy which exists for 24 hours or a few days is a reproduction, than a RAM copy which exists for mere seconds. However, it would remain unclear why the duration of the existence of copies is the turning point in the analysis. Regardless of whether a RAM copy exists for “minutes” (as laid out in *ACSM v. MAI*), a day, or seconds, it is still subject to the same level of volatility and impermanence. No matter how long the RAM embodiment exists, it is nevertheless lost when the computer on which it resides is turned off, if not sooner.

It should be noted that Title III of the DMCA, the *Computer Maintenance Competition Assurance Act of 1998*, somewhat limits the scope of the *MAI v. Peak* ruling. This Act amends s. 117 of the U.S. Copyright Act. The amendment allows the lawful owner or

²⁷⁶ House of Representatives Reports No. 1476, 94th Cong., 2nd Sess. at 52-3. Reprinted in (1976), U.S.C.C.A.N. at 5666-67.

²⁷⁷ *Supra*, note 276 at 53.

lessee of a "computer machine" to authorize an independent service provider (a person unaffiliated with either the owner or lessee of the machine) to activate the machine for the sole purpose of servicing its hardware components.²⁷⁸ However, this amendment does *not* address the general question of temporary copies.²⁷⁹ Further, American courts have traditionally interpreted the s. 117 exceptions narrowly. For example, in *Sega Enterprises Ltd. v. Accolade Inc.*,²⁸⁰ it was held that copying a computer program into memory in order to disassemble it was a use that "went far beyond that contemplated by CONTU and authorized by s. 117."²⁸¹

4.6 Implications of the *MAI* Cases

The implications of the *MAI* cases are problematic for several reasons. Firstly, they mean that any Internet communication could potentially become an infringement. Secondly, they invert they invert the economic power structure of the copyright framework, such that creators are given control over the *use* of their work, and not merely over its creation and distribution. Thirdly, the *MAI* cases do not look beyond the existence of RAM copies to their use and actual effect on the rights of copyright owners and users. Finally, it should be questioned whether reproduction is still an appropriate way of measuring infringement in the digital environment. These concerns are addressed in turn below.

The rulings in the *MAI* cases have serious implications when applied to the Internet. Many Internet communications and activities involve the making of RAM copies, for

²⁷⁸ 144 Cong. Rec. S11890 (daily ed., Oct. 8, 1998) (statement by Sen. Leahy); U.S., U.S. Copyright Office, *Digital Millennium Copyright Act Section 104 Report* (August 2001), online: U.S. Copyright Office <http://www.copyright.gov/reports/studies/dmca/dmca_study.html> (the '**Section 104 Report**').

²⁷⁹ The Section 104 Report, *supra*, note 278 at 30.

²⁸⁰ 977 F.2d 1510 (9th Cir. 1992).

²⁸¹ *Supra*, note 280 at 1520.

example browsing, real-time chat and email transmissions. The *MAI* cases mean that these RAM copies, made in the course of normal Internet use, would be reproductions for copyright purposes and therefore potentially infringing copies. In the American case of *Religious Technology Ctr v. Netcom Online Communications Servers*,²⁸² the *MAI* cases were applied to Internet browsing, and the court stated in *dicta*: "browsing technically causes an infringing copy of digital information to be made in the screen memory [i.e. the screen RAM]."²⁸³ The court went on to acknowledge that this result is the functional equivalent of creating an exclusive right to read. Consequently the court predicted that a defence, such as fair use, would apply.

As stated in *Religious Technology Ctr v. Netcom Online Communications Servers*, the interpretation of browsing as reproduction amounts to a right to control reading. The U.S. Supreme Court has stated that, when technological advancements render the copyright law ambiguous, one should consult the basic purpose of the Copyright Act,²⁸⁴ which is to promote the progress of science and the useful arts.²⁸⁵ This is achieved by balancing creators' and users' rights. The U.S. Supreme Court further found that when balancing the interests of providing incentive and ensuring public access to works, the public good is to be the ultimate aim of copyright law. The intention of the U.S. Congress in enacting the *Copyright Act* was not to create an exclusive right to read. This is a deviation from the intent of American copyright law, whose express purpose is to encourage the creation of new works for the public's edification.²⁸⁶ This is also a deviation from Canadian copyright law, which also does not have the purpose of granting copyright holders the

²⁸² *Supra*, note 260.

²⁸³ *Supra*, note 260 at 1378.

²⁸⁴ See *Sony Corporation of America v. Universal City Studios Inc.*, *supra*, note 103 at 431-32.

²⁸⁵ *Supra*, note 109.

²⁸⁶ United States Constitution, Art. 1, sec. 8, Cl. 8.

right to control reading. The creation of an exclusive right to read gives creators control over the *use* of their work, and not merely over its creation and distribution.²⁸⁷ As already stated above, the CONTU Report affirms that copyright should not grant anyone more economic power than necessary to perpetuate the incentive to create new works.²⁸⁸ Granting copyright holders power over the use of their works and control over the right to read clearly goes beyond the scope of the amount of economic power necessary to provide an incentive to create and distribute works.

If the Canadian Legislature or courts take the view that browsing amounts to a reproduction, then this would unnecessarily fetter users' ability to access and view works on the Internet. Curiously, the Subcommittee took the opposite view, stating in its final report that, "the limitation to users' ability to access works is not, in the context of browsing, a major issue." Unless the Subcommittee's view on this matter is read subject to an implied licence to make copies necessary for Internet browsing, it is difficult to see how this statement is true. The Internet is a tool for education, research, communication, entertainment and dissemination of information. All of these activities, in varying degrees, are carried out via browsing – to limit the ability of users to browse would be to limit access to works. The quick and inexpensive access provided by the Internet to a vast array of information is the essence of its worth. To hold that a user was to infringe copyright by making unauthorized reproductions every time she browses would be to render the Internet useless to the average user concerned with copyright infringement.

²⁸⁷ For example, see Nicholson, *supra*, note 237; Brandriss, *supra*, note 237 and Litman, *supra*, note 237.

²⁸⁸ *Supra*, note 226 at 29.

Regardless, the Subcommittee concluded that copyright owners are able to authorize the digital reproduction of their works in advance, and negotiate fees accordingly: "It should be left to the copyright owner to *decide whether and when browsing should be permitted and what, if any, economic value should be attached to the act of browsing.*"²⁸⁹ Technology now permits copyright owners of works in digital format to monitor and meter the consumption of their works. One can immediately conceive what a lucrative opportunity this presents to lawyers, various collectives, and clearinghouse arrangements designed to collect licence fees. Every piece of information on the Internet could potentially come with a price tag. By applying to the Internet a very broad definition of copying, such that *mere use* amounts to copying, every use of information on the Internet becomes a licensing opportunity: "the information highway will turn into a toll highway."²⁹⁰ In discussions such as this, it is important to remember the fact that copyright law provides a balance between the rights of authors, owners and the public. The use of pay-per-view technologies and encryption or protection technologies reinforces the economic aspects of copyright and takes away the ability of the public to view and review before buying.²⁹¹ It remains unclear how any legislative reforms based on the *MAI* cases would accommodate exceptions to copyright infringement such as fair dealing.

Implementation of browsing on a pay-per-view basis also creates a two-tier system, where those with the requisite finances are able to have access to better and more information than those who do not. In a free society, it is not required that every citizen

²⁸⁹ See *supra*, note 20, chpt 3, at 11-12 (emphasis added).

²⁹⁰ *Supra*, note 250 at para. 22.

²⁹¹ Easton, *supra*, note 78 at para. 29.

have the same economic resources, but we have held to the principle that every citizen should have at least something like the same access to basic informational resources. It is crucial for users to be able to access such resources, as they provide the ability for each citizen to educate herself about the world, to use the facts of the world, which no one owns or should own, to better her situation.²⁹² The greatest interest at stake here is the interest in a free and open society of ensuring that everyone has access to the facts, regardless of their economic backgrounds: "We should regard our nation's investment in the knowledge of its citizens, and in their ability to participate knowledgeably in an open society, as the highest and most precious intellectual property we can ever protect."²⁹³ One American Judge has even stated: "the noblest of human productions – knowledge, truths ascertained, conceptions and ideas – become, after voluntary communication to others, free as the air to common use."²⁹⁴

Most IP lawyers are hired by clients who are copyright holders, such as authors, movie studios, record labels and software producers whose interest is in protecting their work. The forgotten, unrepresented party in copyright cases is the public, comprised of individuals, students, librarians, critics, journalists, scholars and anyone else who partakes in our culture. All of these parties need access to information in order to obtain and to contribute to the body of creative works in existence and to add to the knowledge base. However, where highly paid lawyers and lobbyists are hired to represent commercial and corporate copyright holders, the public has no representation or organizational body to support its interests. The lawyers and legislators instinctively

²⁹² *Supra*, note 28 at 168.

²⁹³ *Supra*, note 28 at 169.

²⁹⁴ *International News Service v. Associated Press* (1918) 248 U.S. 215 at 250 per Louis Brandeis J, dissenting.

protect their clients' copyright holder interests with a tendency to support a protectionist trend, and these are the people who influence developments in copyright law. Copyright owners have asserted rights to control unauthorized copies, to control unauthorized access, to control Internet hyperlinks to unauthorized copies; to control devices and methods that might help make unauthorized copies or gain unauthorized access, and to control links to sites offering devices and methods for making unauthorized copies or gaining unauthorized access.²⁹⁵ They must not be given the right to control reading. The public's interest in maintaining access to information to support learning and to serve as a basis of free speech must not be ignored. A well-balanced copyright law is needed to ensure that our national culture will be able to develop in a way that reflects the public character of all of society rather than only its corporate representatives.²⁹⁶

Next, in light of these concerns, the purpose behind copyright law's prohibition of infringing copies must be examined. Since copyright law aims to provide an incentive for society to create new works, it bans the making of copies without the copyright owner's permission. The logic is that infringing copies cause harm to the copyright owner by competing with legitimate copies and therefore threaten the copyright owner's profits or ability to maximise their economic returns. Due to this harmful effect, infringing copies not otherwise justifiable under law should be prevented. The corollary to this is that if a reproduction does not harm the copyright holder, then it does not deter creation, and therefore should not be prohibited. Even in the *Triad* case, with its misguided understanding of RAM copies, the court recognized: "The copyright law is not so much concerned with the temporal 'duration' of a copy *as it is with what that copy does, and*

²⁹⁵ *Supra*, note 65 at 194.

²⁹⁶ *Supra*, note 143 at 3.

what it is capable of doing while it exists."²⁹⁷ RAM copies do not threaten the benefits that a copyright holder may potentially derive from her work.

For example, in the case of loading software into a computer and thereby making RAM copies (as was the case in *MAI v. Peak*), the resultant RAM copies are clearly not a threat to a copyright holder's ability to economically exploit her work. In order to create a RAM copy of software, the user must first have a permanent copy of the software. In this case, the copyright holder has already benefited from the sale of the permanent copy. If a user is wrongfully using a copy that is not theirs, then this is a software licensing issue and not a copyright issue. Software manufacturers and corporations should not be allowed to use copyright as the weapon of choice to enforce software licences. In the same software example, theoretically one could load the software into a portable device such as a laptop and then distribute the RAM copies to others. The policy that RAM copies are reproductions is said to be defensible on the basis that 100 separate users may tap into a computer and make copies of the RAM-only text, and this overall pattern directly implicates the copyright owner's reproduction right.²⁹⁸ However, regardless of how many copies are made, the original RAM copy and all the distributed copies would nonetheless be lost once power ran out and would be useless – a RAM copy cannot survive without a constant electricity source, and has no market value in and of itself. The only way such redistribution would be harmful to a copyright owner is if a RAM embodiment was used to make an infringing permanent copy. However, this act itself would be the infringement, and *not* the making of the RAM copy – a distinction which is key in this context. A RAM copy has only one reasonable use: it is the only way that a

²⁹⁷ *Triad* at 16 (emphasis added).

²⁹⁸ Nimmer, *supra*, note 248 at 11.

digital file can be used or read.²⁹⁹ In this way, RAM embodiments do not harm copyright holders, but help them by making their works expressed in digital form readable and therefore useful. A work expressed in digital form cannot be read or used without the making of a RAM copy, and so RAM copies also benefit society by allowing others to use and enjoy works expressed in digital form. If society were denied the right of being able to use a digital work they have rightly purchased for fear of copyright infringement, no one would purchase it.

It can also be argued that fixation (i.e. permanence and stability), rather than duration, is the pivotal issue in the analysis of RAM copies as reproductions. Due to the far-reaching implications that the *MAI* cases have on several Internet activities, the real issue here transcends the technical questions surrounding the stability of RAM copies. In the digital age, the real question that can be posed is whether the requirement for fixation as a condition of reproduction has the same meaning and importance as it has in the context of creation of a work.³⁰⁰ Indeed, it can be questioned whether the demand of fixation has any meaning at all in this context. What is needed is a way of framing the reproduction issue that takes into account how the information is used: "The test of reproduction, as the software courts [sic] have suggested, should be simply usefulness to the reproducer."³⁰¹ As already mentioned above, when a copy does not harm the copyright owner, it should not be considered an infringing copy. For example, when a photocopier is used to duplicate a book, or when a CD is illegally copied, this is a harmful activity because it increases the number of usable copies in existence without compensating the

²⁹⁹ Mathews, *supra*, note 237 at para. 39.

³⁰⁰ *Supra*, note 237 at 240.

³⁰¹ *Supra*, note 237 at 275-276.

copyright holder. Such copying potentially reduces sales and undermines the ability of the copyright holder to earn a living or maximise profits, thereby reducing the incentive to create new works. However, since a RAM copy has no market value, it is not causing such harm. The existence of the RAM copy is merely a by-product of the way that digital communication works. Therefore, the usability of a copy and its potential for diminishing the potential revenues of copyright holders, and thereby incentive to create and distribute works, must be taken into account when assessing whether a copy is an infringing reproduction in the context of digital communication.

Further, adopting rules which disable new technologies or impact their usefulness is unlikely to be a good policy choice in the long term. The goal of copyright law is not to hamper the progress, development and market penetration of new technologies. Clearly, the present market-leaders in copyright-affected industries have a vested interest in maintaining the present set of overly protectionist and pro-holder copyright rules. Their business practices and models are based on the present copyright regime, and their profit stream is dependent on a favourable application of the copyright law as it currently stands. This is why cases such as *MAI v. Peak*, *BMG v. John Doe*, *Triad* and *Formula International* are tried; why Acts such as the DMCA, Sonny Bono Act and NET Act are passed; and why people like Sarah Ward, and 261 other individuals, are sued by record labels such as Sony Music Entertainment, BMG Music, Virgin Records America, Interscope Records, Atlantic Recording Corporation, Warner Brothers Records, and Arista Records. Cases and Acts such as these function to mould the law to suit the present stakeholders in the copyright-affected industries. Additionally, the maintenance of the current copyright regime and its arguably outdated rules distort the marketplace for

new technology, at least in the short term. In the long term, this may influence how and if new technology develops, and how new players and industries compete in the markets for those technologies in the future. Such tactics delay the replacement of the current industry leaders in the information and entertainment markets with new industry leaders – at least until the current industry leaders can catch up with the new technologies and exploit them. However, adopting rules which do not hamper emerging technologies, but instead promote them, would result in a good policy choice with beneficial results for the community at large and not just the affected industries. For example, allowing for some copyright infringement exceptions, such as an exception for RAM copies, would have the benefit of promoting industries which make products that employ RAM embodiments. Competition is increased, driving new products to be imagined, created, tested, distributed and marketed. Society is benefited by the resulting scientific progress.

Returning to the original issue of fixation and its need as a precondition to the existence of a reproduction, it may be questioned whether reproduction is still an appropriate way to measure infringement in the digital era. The right to reproduce a copyrighted work, found in s. 106(1) of the U.S. Copyright Act and s. 3 of the Canadian Act, has long been termed the fundamental copyright right. The name of this type of IP – *copyright* – implies this. It is therefore convenient, and instinctive, to view the proliferation of copying technology as threatening to copyright at its core. Many scholars and lawmakers argue that, no matter how the copyright law is revised, the copyright owner's ability to control the making of every single copy must be retained. Further, some argue that this is

especially true where copies are digitally created and the ability to make perfect copies on a mass scale exists.³⁰²

However, the right to make copies is only fundamental to copyright law in a historical sense: “When the old copyright laws fixed on reproduction as the compensable (or actionable) unit, it was not because there is something fundamentally invasive of an author’s rights about making a copy of something.”³⁰³ Rather, the reason behind this is that copies generally existed as an obvious physical manifestation, making them easy to locate, identify, and count. This made copying a useful benchmark for determining when a copyright owner’s rights had been infringed. Multiple reproduction was a primarily commercial activity, and did not occur on a daily basis in the private home. Another important reason for the use of copying as the compensable unit is that unauthorized copies could be prohibited without interfering with users’ rights to read, view, hear, purchase or use digital copyrighted works. Nowadays, copying is an incidental phenomenon to the acts of reading, viewing, purchasing or using digital works – such as in the case of RAM embodiments. Tracking such copies can be nearly impossible. Even if every such copy could be tracked, copying is no longer an effective way to measure “harm” done to a copyright holder, as not all of these copies (and indeed, very few of them) will result in a tangible injury to the copyright owner. There may be a *legal* injury, because of the now ill-suited way in which the law is constructed and measures injury, but not an *actual* injury, in the sense of lost profits or diminished incentive to create. Further, categorizing digital reproductions as infringing copies impedes the public’s

³⁰² For example, Jane C. Ginsburg, “From Having Copies to Experiencing Works: The Development of an Access Right in U.S. Copyright Law” in Hugh Hansen, ed. *U.S. Intellectual Property: Law and Policy* (New York: Sweet & Maxwell, 2000) as cited in *supra*, note 65 at 177.

³⁰³ *Supra*, note 65 at 177.

ability to read, view, purchase, use, share, learn from or reuse works in digital form. It is therefore not useful to measure infringement of digital works in terms of reproduction. "The centrality of copying to use of digital technology is precisely why reproduction is no longer an appropriate way to measure infringement."³⁰⁴ Copying has become an almost-meaningless activity in this context, and therefore harm to copyright holders should not be measured by it.

Such a non-sensical approach to copying and what constitutes copyright infringement also has the downfall of being hard to enforce. The reason is that the general public does not expect or understand why an activity such as viewing a website, and consequently making a RAM copy, is an infringing activity. The rules of copyright law are complicated and ban activities which a layperson would not expect to be infringing activities. "The law, in essence, says *not* 'thou shalt not copy,' but 'thou shalt not copy certain works, under certain circumstances, which may change from time to time'."³⁰⁵ Consequently, the public does not follow such laws. It is hard to follow a law which you do not understand, do not expect to exist, and which does not make sense. The more complicated and burdensome the law makes it to obey its proscriptions, and the harsher the penalties for non-compliance, the harder it is to enforce. If a law is perceived as being illegitimate, such as the law against making RAM copies as an incidence of digital communication, then less and less people will obey it. Those that do not obey it will not feel as if they have done anything wrong by breaking that law. The more people that break that law, the harder it is to enforce and so the law is only enforced sporadically (for

³⁰⁴ *Supra*, note 65 at 178. Litman goes on to propose that instead copyright holders should be given the sole right to commercially exploit their works, or to authorize the commercial exploitation of their works (at 180ff).

³⁰⁵ Sheldon W. Halpern, "The Digital Threat to the Normative Role of Copyright Law" (2001) 62 Ohio St. L. J. 569 at 574 (emphasis added).

example, as with the case of MP3 peer-to-peer file sharing) by the government or private stakeholders via lawsuits. Further, if a law cannot be effectively enforced, it is useless to the parties whose interests it is supposed to protect.

The Internet makes private infringement of IPRs vastly easier to carry out and correspondingly more difficult to detect and prevent than infringement in a print context. As a result, individual standards of moral and ethical conduct, and individual perceptions of right and wrong, become more important.³⁰⁶ However, individual determinations of moral and ethical conduct require a moral and ethical context. The problem that arises regarding copyright law is the lack of such an underlying clear context – its nature “makes it difficult, if not impossible, to find or to construct an unambiguous moral compass.”³⁰⁷ This is especially so since the aim of copyright law, under the utilitarian approach, is to maximise wealth. It is hard to convince users to follow laws which do not make sense so that they can help to increase the profit share of the affected industry players. Technology only serves to exacerbate the dissonance between legal proscription and normative conduct. Rather than relying on finding and prosecuting claims of copyright infringement, the copyright owner may instead attempt to physically prevent the copying of a work, only to then be confronted with further technological advances designed to defeat the protection scheme. This then spurs the development of new and better protection devices, and so on. Such activity usually takes place in the context of a

³⁰⁶ Committee on Intellectual Property Rights and the Emerging Information Infrastructure, National Research Council, *The Digital Dilemma: Intellectual Property in the Information Age* (2000) at 21, as cited *supra*, note 305 at 572.

³⁰⁷ *Supra*, note 305 at 572. “Copyright no longer has a consistent theory, let alone an ethical position:” Shelly Warwick, “Is Copyright Ethical? An Examination of Theories, Laws and Practices Regarding the Private Ownership of Intellectual Work in the United States” (1999) B.C. Intell. Prop. & Tech. F. 060505, online: http://www.bc.edu/bc_org/avp/law/st_org/iprf/commentary/content/1999060505.html at para. 25.

large class of consumer-infringers who do not consider the copying involved to be an infringing act, or who do not believe that the law should punish their conduct.³⁰⁸ Since there are too many individuals to sue, copyright owners are then left with enforcement strategies limited to threats, litigation, and campaigns designed to “educate” the public to disapprove of unauthorized uses of copyrighted works. Such approaches may be effective to a certain degree against commercial and institutional actors, but are probably not very effective in deterring individual behaviour.³⁰⁹ As such, the only remedy may be to change the bad law into one that makes sense and is functionally meaningful.

4.7 Conclusion

The conclusion of the *MAI* cases that a copy of a work expressed in digital form made in a computer’s RAM is a reproduction for copyright purposes is objectionable on the grounds outlined above. Following the *MAI* cases has several negative implications: firstly, all Internet communications have the potential to be seen as infringements; secondly, the *MAI* ruling amounts to granting copyright holders the right to control use of their works and a right to control reading; thirdly, an examination of the actual uses of RAM copies reveals that they do not harm copyright holders and do not have any market value; and finally, the *MAI* cases raise questions regarding whether reproduction is still a useful unit with which to measure infringement in the digital environment. The widespread application of the *MAI* cases would result in a situation where Internet browsing was carried out on a pay-per-view basis. The ubiquity of digital technologies in the information and entertainment industries, and the rapid penetration of the Internet

³⁰⁸ *Supra*, note 305 at 576.

³⁰⁹ *Supra*, note 65 at 195.

into our daily lives, have already resulted in an increasing amount of information being made available only on a pay-per-view basis. If this trend were to extend to browsing, only those with the appropriate economic means could have access to the full extent of information the Internet has to offer.

The White Paper relies upon the CONTU Report, the *MAI* cases, and the cases of *Vault* and *Triad* to justify its conclusion that RAM copies are sufficiently fixed so as to be considered reproductions. However, none of these sources, nor the legislative history of the 1976 U.S. Copyright Act support this conclusion. Further, there is no Canadian authority which supports the conclusions reached in the *MAI* cases. The decisions also hold little grounding in U.S. law, in light of the relevant Act's legislative history and the intention of the fixation requirement. The discussion above has exposed the cases as weak authorities with flawed reasoning, due to such problems as judicial misunderstanding regarding computer memory. As such, the *MAI* cases are at best tenuous authorities upon which to base the proposition that a RAM copy is a reproduction for copyright purposes. However, since Internet browsing necessarily involves the reproduction of a work (almost always in its entirety), the question arises whether conventional Internet browsing amounts to copyright infringement. This question is explored in the following chapter.

CHAPTER V Internet Browsing as Copyright Infringement

5.1 Possible Types of Copyright Infringement

As discussed above, Internet browsing necessarily involves the making of unauthorized digital copies, which are *prima facie* infringing copies. To determine whether Internet browsing amounts to copyright infringement, the provisions in the Act dealing with infringement must be examined in more detail. Several kinds of infringing activities may occur at once when an unauthorized transmission of a copyrighted work takes place over the Internet. There are three steps to the infringement analysis:

- (1) Possible types of infringement must be examined;
- (2) Potentially liable parties must be identified; and
- (3) The applicability of any available potential defences should be considered.

These steps will be discussed in turn below. There are two broad types of activities that infringe upon a copyright holder's economic rights:

- (1) Direct infringement under s. 27(1) of the Act;³¹⁰ and
- (2) Indirect infringement under s. 27(2) of the Act.³¹¹

³¹⁰ Section 27(1) of the Act provides: "Infringement generally – It is an infringement of copyright for any person to do, without the consent of the owner of the copyright, anything that by this Act only the owner of the copyright has the right to do."

³¹¹ Section 27(2) provides: "Secondary infringement – it is an infringement of copyright for any person to (a) sell or rent out, (b) distribute to such an extent as to affect prejudicially the owner of the copyright, (c) by way of trade distribute, expose, or offer for sale or rental, or exhibit in public, (d) possess for the purpose of doing anything referred to in paragraphs (a) to (c), or (e) import into Canada for the purpose of

Direct infringement involves violating one of the exclusive rights of copyright holders, or authorizing another person to perform an infringing act. Indirect infringement involves performing one of the acts listed in subsection 27(2) of the Act. If an act does not fall within these provisions, then an infringement has not taken place and there is no liability.³¹² Since copies of web pages are made during the course of Internet browsing, these reproductions may constitute direct infringement under s. 27(1) of the Act.

5.2 Potentially Liable Parties

Any Internet transmission involves several participants. Three broad groups of participants may be identified: those posting Internet content, intermediaries (such as ISPs), and end users or recipients.³¹³ A poster is someone who places copyright content on the Internet in such a way that others can access it. A poster may be the rightful copyright holder, in which case the posting would be authorized; or, a poster may be someone whose posting of the work online may be unauthorized. Posting includes putting works on a web page, online database or online library, sending an email, or uploading works to a Bulletin Board.

An end-user or recipient is anyone who receives a work or browses it online. The ICRL Study states that a work, “need not be viewed or heard to be received, since a copy of a work can be downloaded to storage by a recipient computer but never accessed for viewing by its owner or operator.” Intermediaries are those participants that provide a

doing anything referred to in paragraphs (a) to (c), a copy of the work, sound recording or fixation of a performer’s performance or of a communication signal that the person knows or should have known infringes copyright or would infringe copyright if it had been made in Canada by the person who made it.”

³¹² *Apple Computer, supra*, note 244.

³¹³ See Mark S. Hayes, Michel Racicot, Alec R. Szibbo, Pierre Trudel, *Internet Content-Related Liability Study* (February 1997), online: Industry Canada <<http://strategis.ic.gc.ca/SSG/sf03117e.html>> (last accessed February 2003) (‘the ICRL Study’).

link between a poster and a recipient. This includes a wide range of individuals and organizations, which are generally the owners and operators of the hardware and software used by posters and end-users to communicate with each other. This group includes parties like ISPs, telecommunications carriers and BBS sysops.

The role of each participant must be examined to determine if that participant should be liable for any infringing transmission. This may be a difficult endeavour, because there are large variations in the roles taken by various participants at different times in respect of different transactions.³¹⁴ Depending on the exact role of a party, they may be liable either for performing the unauthorized act of reproduction, or for authorizing others to do so. The extent of a participant's liability will no doubt turn on the facts of each case and will depend upon how active that participant's role is.

For example, an ISP may not be found to authorize infringement simply by allowing users to post infringing material on a website. Large commercial ISPs will not be able to effectively monitor all postings going through their systems. To impose such a condition of monitoring would arguably amount to an unreasonable burden on the ISP. This corresponds with the U.K. approach, which appears to be the one favoured by the Copyright Board of Canada. Under this approach, ISPs are entitled to assume that users will act legally. However, a closer examination of the factors surrounding this issue is needed to determine if this should indeed be the case: "Many commentators assume that

³¹⁴ *Supra*, note 313 at Part 4 states that "These characterizations [of those posting content, intermediaries, and end users] are by no means exclusive or watertight. Most Internet participants would at one time or another have been both posters and recipients. Many intermediaries from time to time perform roles as posters or recipients. This should not confuse the issue. *Each infringing Internet transmission must be examined individually to determine what role is played by each participant.* It does not matter, for example, whether an ISP is a poster in respect of non-infringing Internet communications if its role in the infringing Internet communication being examined is that solely of an intermediary." (Emphasis added; footnotes omitted)

such carriers [as ISPs] have no liability for the content of the electronic information which they carry along their systems, but do not analyze critically why this is so.”³¹⁵

5.3 ISP Liability

The issues surrounding ISP liability for copyright infringement have been the subject of much debate. ISPs themselves have expressed many concerns over their potential liability in relation to objectionable or illegal content circulating over their network facilities.³¹⁶

The knee-jerk reaction of many copyright holders is to call for the liability of an intermediary like an ISP. This is because intermediaries are generally easily identifiable entities, compared to the difficult or impossible task of identifying a poster or end-user responsible for online infringement of copyrighted works. Internet communications are largely anonymous, or may occur under an assumed nickname. Even if a copyright holder manages to track an infringing activity to a particular nickname, privacy laws may protect the user’s personal information.³¹⁷ However, although the intermediary or ISP may be easily identified, they may not be legally responsible for the actions of their customers. The true challenge to copyright holders may not be determining which of their rights have been infringed, but rather determining the proper defendant.³¹⁸

As mentioned above, the enforcement strategy of copyright owners regarding their online content so far seems limited to threats, litigation, and campaigns targeted at discouraging unauthorized use and copying of copyrighted works expressed in digital form. Such a strategy may be effective against commercial and institutional actors, but is far less

³¹⁵ *Supra*, note 313, part IV. See for example, *supra*, note 20 at 16; and *supra*, note 24 at 120.

³¹⁶ *Supra*, note 145 at 12.

³¹⁷ See for example the recent case of *BMG v. John Doe*, *supra*, note **Error! Bookmark not defined.**

³¹⁸ Segal, “Dissemination of Digitized Music on the Internet: A Challenge to the Copyright Act” (1995) 12 Santa Clara Comp. & High Tech. L.J. 97 at 124.

useful in deterring individuals from engaging in the undesired behaviour. In the U.S., the music and motion picture industries have concentrated their efforts against commercial actors like intermediaries and ISPs. However, the challenging aspect to this strategy is that while intermediaries are extremely useful in many contexts, they nonetheless remain optional.³¹⁹

Evidentiary issues tied to determining the proper defendant may also prove problematic. It will be difficult to provide positive evidence that a particular poster or user carried out the infringing activity, especially in the context of public or shared computers (e.g. a computer shared by a family of five living together and accessing the Internet via the same computer and account). Additional complications arise when the infringing poster or user does not reside in Canada. Even if the infringer is identified, and all jurisdictional and conflict of laws hurdles are overcome to obtain a judgement, that judgement may be practically unenforceable.

While it may be convenient to hold an intermediary liable for copyright infringement, it seems counter-intuitive that an ISP, which merely transmits electronic data without copying or altering it, should be found liable for authorizing copyright infringement. This would be akin to holding a telephone company liable for defamatory statements made by its customers during ordinary conversations. Society is nervous enough when police wiretap phone lines for crime enforcement purposes; what of a privately owned company that had a *carte blanche* to vet all of our Internet transmissions and invade our privacy? Such a suggestion is unsettling at best.

³¹⁹ *Supra*, note 65 at 195.

Forcing intermediaries to screen all of their customers' transmissions for infringing activity would be tremendously cumbersome. An intermediary would have to analyse the data being transmitted and the role of the poster from both factual and legal standpoints. The sheer bulk of postings would be so enormous, that even intermediary screening would not ensure that the Internet was free of infringing materials. Screening would significantly slow down all communications and limit the scope of information found on the Internet at any given time, rendering two of the Internet's key features nonexistent. The indispensability of the Internet is as unchallenged as the assertion that its speed and the access it provides to a vast array of information are the essence of its worth.

It seems inherently unfair that an intermediary which lacks control over the content of its transmissions (and does not purport to have control over, or vouch for, such transmissions), and acts as a mere conduit which accepts all traffic without discrimination, be held liable for the content of those transmissions. However, if the law continues to develop along the route of finding that intermediaries are not liable for infringing activities, and neither the poster nor the end-user is identifiable, a copyright owner may find herself without any legal recourse, for lack of a defendant. On the other hand, the operator of a newsgroup responsible for vetting or editing content before it is posted online may find himself liable for authorizing copyright infringement. While the issue of ISP liability is a complex and fascinating one, consideration of this issue in greater detail lies beyond the scope of this thesis. The issue of whether Internet browsing constitutes copyright infringement touches individual end-users, as they would be the ones with unauthorized reproductions of web pages on their computers.

5.4 Possible Defences to Infringing Activity

The last step of the infringement analysis is to determine if any potential defences are applicable to the accused copyright infringer. Since viewing a web page requires making multiple temporary copies of copyrighted content, it is necessary to obtain the copyright holder's permission in order to comply with copyright law.³²⁰ Permission to make reproductions to view a website may come from several sources. Presently, Canadian copyright law permits the limited use of copyright materials in two circumstances.

The first defence is that of fair dealing. The fair dealing doctrine allows use of copyright works for private study or research; or for criticism, summary or review (provided the source and author are identified).³²¹ The fair dealing doctrine not only provides a legal exception to the protections established by the Act, but it impliedly supports the protection of the right of public access to information. Fair dealing is a means to ensure that the information which forms the basis of our culture remains accessible for educational purposes, critical comment and news reporting. This defence, however, is not considered here due to its statutory limitations of applicability to use for study, research, criticism, summary or review. Internet browsing here is considered in a broader context, and the Canadian defence of fair dealing is narrower than the American defence of fair use.

The second defence that may be available is one of implied licence. Under this defence, a licence to use the copyrighted work is implied, as the copyright owner has invited users

³²⁰ As stated above, s 3(1) of the Act gives the copyright holder the exclusive right to reproduce a work. As outlined above, when a user is browsing and requests a specific website from a server, the server sends a copy of any relevant HTML and graphics files to the user's computer. At the very least, a copy of the web page must be made in the RAM of the user's computer, otherwise the user's software is unable to interpret and display the web page. Also, browsers will usually cache files in the hard disk of the user's computer.

³²¹ See ss. 29-29.2 of the Act.

to make use of the work in a specific way.³²² Since it has a wider scope, the implied licence defence is better suited to Internet browsing than the defence of fair dealing. It also focuses on the copyright owner's intention in posting her works online, rather than on the intended use of the works. This is desirable since a large portion of Internet browsing has a recreational use, rather than one of the specific uses needed to qualify for the defence of fair dealing.

5.5 Implied Licence

An implied licence arises as a result of specific conduct by the copyright owner – apart from explicit permission – by which the owner “invites” copying or other use of her works.³²³ A copyright owner may deal with a work, or authorize others to deal with a work, in such a way that invites others to make use of it in a certain way. Implied licence can be said to arise when the copyright owner has given an implied consent or licence to such use, even if no specific licence has been given any individual user.³²⁴ This type of conduct of inviting use is prevalent on the Internet. For example, it would be counterintuitive for a copyright owner to create a web page, freely accessible to anyone with Internet access (thereby inviting its use), unless he intended for Internet users to browse his site, knowing that in order to do so the page would have to be copied and displayed on a user's computer. In this case, the copyright owner can be presumed to

³²² A licence is a ‘bare right.’ It is not a proprietary right and a licensee has no right to sue for infringement: *Domco Industries Ltd. v. Armstrong Cork Canada Ltd* (1982), [1982] 1 SCR 907, 136 DLR (3d) 595. A licence is simply a consent to use intellectual property on specific terms. The licensor retains ownership.

³²³ The onus of proving the existence of an implied licence and its operative terms would likely rest with the party alleging the existence of the licence: Skone James EP et al., *Copinger and Skone James on Copyright*, 13th ed. (London: Sweet & Maxwell, 1991) at 224-230. Technically, however, it will be the plaintiff's onus to establish her cause of action by proving that the relevant act was done without licence: *Computermate Products (Aust) Pty. Ltd. v Ozi-Soft Pty. Ltd.* (1988), 83 ALR 492.

³²⁴ Robert T. Hughes, *Hughes on Copyright and Industrial Design* (Toronto: Butterworths, 1997) at 450.

have implied *at least* a limited licence to take the steps that are necessary to view the page.³²⁵

There are presently no legal precedents in Canada dealing directly with the authorization of infringing activities on the Internet. However, it is likely that the concept of an implied licence in the context of Internet browsing will be developed. In the recent Federal Court (Trial Division) case of *Guillot*,³²⁶ it was held that, for any document published on the Internet, there was an implied licence to reproduce or copy to the extent necessary to take communication and make personal use of the document. However, this case cannot be seen as an authority for this proposition, as the issue was not expressly argued at trial. It was the plaintiff's concession that such an implied licence existed.³²⁷ In *Guillot*, the plaintiff was a trademark lawyer who had written and published a number of articles on trademark law. He posted the articles online, along with several links to other sites regarding trademarks. The plaintiff brought an application for a summary judgement, alleging that the defendant company, Istek Corp. (which also created websites), infringed his copyright by posting material on its site that had been substantially reproduced from the plaintiff's site. Guillot alleged that firstly, the defendant's site contained an invitation to any person visiting its site to obtain unauthorized access to and copies of two articles written by Guillot; and secondly, that Istek's site reproduced substantial parts of the plaintiff's compilation of links to other sites. In his short judgement, Hugessen J. concluded, "not without some regret," that he could not safely rule on either issue, as the affidavit evidence was lacking and he was not satisfied that fair or proper judgement

³²⁵ Lewis C. Lee and J. Scott Davidson, *Intellectual Property for the Internet* (New York: John Wiley & Sons, 1997) at 84.

³²⁶ *Supra*, note 214.

³²⁷ *Supra*, note 214 at para. 7.

could be given based thereon.³²⁸ Thus, the issues at bar were not discussed in detail and the case did not contain a proper treatment of the issue of implied licence. Other sources must be examined to determine if such a licence exists.

Existing Canadian case law on implied licence arising under a contract suggests that an implied licence to carry out a certain activity will arise *when the nature of the transaction makes it necessary to do so: Netupsky v. Dominion Bridge Co Ltd.*³²⁹ It is thought that the principle enunciated in *Netupsky* also applies where the licence is gratuitous, for example in cases where the work is supplied knowing that it will be used for a particular purpose.³³⁰ Applying the test from *Netupsky*, our inquiry becomes: Is it necessary to make reproductions of a copyrighted work to carry out Internet browsing; and, is the copyrighted work supplied knowing it will be posted online for Internet browsing? As with all licences, the important factors to consider are the extent of permitted use, the persons entitled to benefit, and the duration of the licence.³³¹

Placement of a copyrighted work as a website on the Internet requires the effort of an author, or her agent, to format the work in a manner consistent with the formatting protocols of the WWW. The properly formatted files must be placed on a web server in such a way that they are among the files that the web server sends to users upon request.³³² It is therefore unlikely that a copyrighted work would be placed on the Internet inadvertently (whether the work is placed on the Internet with the author's permission is a separate question). Since works are not placed on the Internet

³²⁸ *Supra*, note 214 at para. 4.

³²⁹ (1971), [1972] S.C.R. 368 at 375-379, 24 D.L.R. (3d) 484 (*Netupsky* cited to S.C.R.).

³³⁰ Skone James EP et al., *supra*, note 323 at 224.

³³¹ Skone James EP et al., *supra*, note 323 at 224.

³³² F. Lawrence Street, *Law of the Internet* (Charlottesville: Lexis Law Publishing, 1997) at 338-339.

accidentally, the author must have intended for users to copy the website content in the expected manner in order to view the materials.³³³ Courts are likely to interpret the act of posting a work as a website as an implied licence for users to carry out all ordinary activities associated with browsing. This would include permission for the user to engage in all actions necessary to display the website on her computer, including downloading copies of web page files and storing copies in a computer's RAM. Since it is *necessary* for users to make copies of a copyrighted work to browse; and since the copyrighted work would be posted with the *knowledge that it would be copied* by browsing users, the *Netupsky* test for implied licence is satisfied.

The remaining three factors relevant to implied licences must still be considered – extent of permitted use, the persons entitled to benefit, and the duration of the licence. The second and third factors can be quickly dispensed with. Regarding the second factor, those who post works on Internet sites with unrestricted access generally do so with the understanding that the Internet is an open network, granting unlimited access indiscriminately to all users. The Consultation Paper acknowledges that the information posted on the Internet “may be destined to one or a few people or subscribers, or may be made available to the world at large.”³³⁴ The persons entitled to benefit from the implied licence then potentially include the world at large, especially if the website is freely accessible, with no restrictions or technological protections of any kind. Regarding the third factor, duration of licence, the licence would exist as long as the work continued to be posted online under the expectation that users would browse it.

³³³ *Supra*, note 332 at 338-339.

³³⁴ *Supra*, note 145 at 1.

However, the issues surrounding an implied licence quickly become more complicated when the first factor, extent of permitted use, is considered. This issue is centred on the ambiguity that arises regarding what constitutes “browsing.” The Subcommittee noted that it received “widely divergent” views of the definition of browsing when collecting submissions for its final report.³³⁵ Some felt that browsing was the mere act of viewing video or multimedia productions. Others felt that browsing included the right to freely sample any database and extract information, provided that data was not downloaded to a hard drive or printed. It would be beneficial for both copyright holders and users if “browsing” was legislatively or judicially defined, or else the existing problem of what constitutes copyright infringement on the Internet will continue to be exacerbated. The Subcommittee Report recommended that the Act be amended to include a definition of browsing. The suggested definition was: “a *temporary* materialization of a work on a video screen, television monitor, or a similar device...*but not to include any permanent reproduction of the work in any material form.*”³³⁶ This definition would capture the making of RAM copies needed to view the webpage. However, Internet users may make copies that go beyond those necessary to view the materials, and questions then arise regarding the scope of the licence. For example, under an implied licence to browse, is a user also permitted to make permanent copies, print copies, distribute copies to others, or post copies on other websites, including a mirror site or a site that is entirely different?

When information is transmitted via the Internet, the computers that make the transmission possible will temporarily store the information along the route. Website information may be copied onto a mirror site so that the “traffic jam” of many users

³³⁵ See *supra*, note 20, chpt 3, at 11.

³³⁶ *Supra*, note 18, Recommendation 6.4 (**‘Rec. 6.4’**) (emphasis added).

attempting to access the same information can be dispersed over several sites. Making such copies could be considered copyright infringement if it were unauthorized or did not fall within an exception such as implied licence. This would be true even though some of this information is stored only temporarily and is automatically erased after a time.³³⁷ However, this form of temporary storage is essential for the operation of much of Internet software and the important features of the Internet, and helps to speed browsing. It is difficult to see how courts could find an activity such as this to be an infringing act, especially since it substantially increases the functionality of the Internet while causing only a nominal harm to the copyright holder. Further, the temporary nature of these copies would fall within the suggested definition of browsing under Rec. 6.4.

In *Guillot* it was conceded by the plaintiff that the defendant had an implied licence to reproduce the copyrighted works to the extent necessary to take communication and make "personal use" of the document. Hegessen J. noted that there was no convincing evidence that the defendant ever did anything more than what he was impliedly authorized to do.³³⁸ An activity such as making RAM copies necessary to view the webpages would be caught by this, as would the act of inviting others to make use of copyrighted works posted on a webpage other than the inviter's and reproducing links found on another's website.

The extent of permitted use under implied licence also becomes problematic in the context of caching. During browsing, permanent copies of a web page may be made in a cache. Caching, like mirroring, is a technique commonly used to make Internet browsing

³³⁷ *Supra*, note 332 at 338.

³³⁸ *Supra*, note 214 at para. 7.

faster. As mentioned above, when a user requests a website from a web server, the server sends a copy of the relevant HTML file to the user. The HTML file contains the text of the document, but any graphics files are kept as distinct files on the server due to their large size. The browser calls these up individually. The Internet browser may store both the text and graphics files in a cache on a user's computer. It is important to note that both RAM and hard disk space are used for caching (RAM caching speeds the revisiting of websites in one session of browsing; hard drive caching speeds revisiting over several sessions).³³⁹ It is clear that hard disk copies are sufficiently fixed to be considered reproductions,³⁴⁰ and the *MAI* cases held that RAM copies are also reproductions. However, the application of the *MAI* cases in Canada remains indefinite. Since *Apple Computer* recognized that RAM copies are "volatile,"³⁴¹ as opposed to ROM copies, it may very well be that Canadian courts would not consider RAM copies to meet the fixation requirement. While hard disk caching would probably be sufficiently fixed – and would go beyond a "temporary materialization" as required under Rec. 6.4 – one would hope that an implied licence would be broad enough to except cached copies from copyright infringement.

Some authors have expressed the view that a website protected from the general public by a password necessarily implies that those users authorized to access the site are

³³⁹ A user's browsing speed depends on the bandwidth of their Internet connection. The web server may be sending the information at a high speed, but if the user's connection is slower, the information will not be received as quickly and instead will slowly 'funnel' into the user's computer. Caching serves to alleviate this problem, as copies of the requisite files would already be present on the user's hard drive if the site had been visited previously – the bandwidth that was once occupied by transmitting graphics files is freed to download other files. "Recently the European Union considered making the process of web caching (a temporary copy of a web page is stored on the reader's computer for faster viewing) an infringing act. Whilst this would no doubt have been a boon for telecommunications companies it would have meant a radical reform of how the World Wide Web operates" (Easton, *supra*, note 78 at para. 20).

³⁴⁰ *Supra*, note 261.

³⁴¹ *Supra*, note 246.

entitled to save the information in a disk cache and in RAM while viewing the information.³⁴² However, in the situation of websites with unrestricted access that are not protected by some technological device, it is less clear that there is a licence permitting the user to save the information to a permanent disk file.

Further applying the suggested definition of browsing found in Rec. 6.4, it is unlikely that a court would extend an implied licence to include activities such as printing, distributing the copyrighted work, making copies to disseminate the information to other users, or creating derivative works. Activities such as printing clearly result in a “permanent reproduction” of the work. They are also not activities which are *necessary* to the act of browsing, and cannot be considered a necessary causal condition of normal use. Yet it seems illogical to consider that a copyright infringement occurs every time a user prints (i.e. makes a permanent reproduction) a document found on a website. When it comes to the huge copying machine known as the Internet, there is tremendous tension between the copyright law’s monopoly on creating copies and the public’s need to have access to electronic works, making them “copyable” and therefore useful. While a user may not have express permission to print a work in the course of browsing, common sense does provide some guidance here. Most copyright holders would not consider it harmful, or even unusual, for an individual to print an article from the Internet for private use. It is difficult to see how such activity would act to deter the incentive to create. It may be argued that if a user prints a copy of a webpage, he is increasing the amount of usable copies in existence and, instead of purchasing a print copy of the work (assuming one is available for purchase) he simply relies on his own printed version, thereby

³⁴² *Supra*, note 333 at 339.

threatening the copyright holder's ability to maximize her profits. However, it is unlikely that copyright holders would post a work without the expectation that it would be printed or otherwise used by viewers. Further, if the ability to profit from a work was impacted by the act of printing, the work would probably only be made available for viewing after a fee was paid. For example, in the case of an author who wished to publish his book both online and in print, it would be unlikely that the book was made available for free online if the author wished to maximize the number of copies sold. It is more likely that the user would pay a fee to be able to view and download an electronic version. While printing may not be a necessary activity under the definition of browsing in Rec. 6.4, it can be said that most copyright holders will post their works online under the expectation that they will occasionally be printed by browsing users.

5.6 Downfalls to an Implied Licence to Browse

While an implied licence to make copies necessary for browsing will ease users' minds and provide certainty to some extent, it will not provide the assurance that browsing does not constitute copyright infringement in all cases. An implied licence will only be created if a work was made available online with the copyright holder's authority. If a work is posted online without permission, a user may be unknowingly infringing copyright, implied licence to browse notwithstanding. Practically speaking, users may not be able to ever determine if works were posted online with the copyright owner's permission. Even large commercial sites maintained by trusted companies may not have obtained all of the requisite copyright clearances.

For example, while shopping online for a book, a user logs onto a popular book retailer's website. During the course of the transaction, the user browses through several titles, viewing the cover artwork of the books and reading extracts. A copy of all viewed web pages is cached on the user's computer, including copies of the artwork and book extracts. Can the user assume that the online retailer has obtained clearances from all copyright holders involved? If the works were posted illegally, then all copies are pirate and no implied licence arises. But how can the user determine whether this is the case? Indeed, a user may never enjoy the absolute certainty that she is not infringing copyright when browsing the Internet. Whether such a retailer who knowingly posted infringing copies online would be liable for authorization of infringement is another question.

5.7 Conclusion on Implied Licence

The discussion above concluded that an implied licence to make reproductions necessary for Internet browsing would not violate copyright law. Such an implied licence satisfies the test outlined in *Netupsky* for implied licences. Firstly, it is *necessary* to make copies in order to carry out the activity of browsing. Secondly, copyrighted works would be posted online with the *knowledge that they would be copied* in this manner. Some complications arise when additional factors, such as the scope of permitted use of works under such a licence, are considered. However, it is counter-intuitive that someone would post their work on an open network, freely accessible by millions of users, and then would seek to claim that viewing of that work amounts to copyright infringement. The act of posting material online is incongruous with the conclusion that copies made during the course of browsing are infringing reproductions. The presumption online should be one of implied licence, as in the absence of an explicit statement to the contrary, a user

will likely have no practical means of determining if the copyright holder permits browsing (or indeed of determining if a work has been posted online legally). It should also be noted that instances where a user posts her work online but does *not* permit browsing will be rare. The Subcommittee conceded that “[f]or the most part, the copyright owner will have authorized reproduction of a work transmitted electronically, *including for the purpose of browsing*. In those limited cases in which a work is placed on the Information Highway without authorization for browsing, the fair dealing defence may very well be available to the user.”³⁴³ Users may take comfort that browsing – at least under the conservative definition of Rec. 6.4 – will almost never constitute copyright infringement.

5.8 Express Licence

Other solutions, such as express licence and statutory exception, may be suggested as resolutions to the dilemma regarding copies made during Internet browsing. An express licence may be a simple solution to the uncertainty associated with the status of copies made during Internet browsing. While an implied licence logically exists to make such copies, there is still ambiguity concerning its scope. An express licence posted on a website containing copyrighted works solves this dilemma. Copyright infringement depends to a great extent on a holder’s intent in making her work publicly available through the Internet. Conversely, no fault or intent is required on the user’s part to engage in an infringing activity, and a user may have great difficulty in determining what rights she has to use or view a work online. With an express licence, a copyright holder can simply state the conditions under which a user is permitted to browse his site. For

³⁴³ *Supra*, note 20 at 12 (emphasis added).

example, an express licence can stipulate whether a user can copy, save, print, modify or distribute the copyrighted works found on a particular website.

Copyright holders should post clear, bold copyright notices and licence conditions on their sites. Users are generally precluded from exercising any of the exclusive rights of a copyright holder without permission. A conspicuous notice stating this, and other forms of prohibited copying and activities, would put the user on notice and would prevent a user from later attempting to claim that she does not owe damages arising from infringement because of a misunderstanding concerning the scope of an implied licence. Confusion could very easily occur over the scope of an implied licence, and courts will undoubtedly recognize that it is now unclear in most people's minds how far the authority of a recipient of web page material extends, since there is currently no industry-wide common understanding on this point.³⁴⁴

5.9 Statutory Exception

The examination in this thesis of copyright law as it applies to the Internet focuses mainly on copies made during the course of browsing – just one aspect of the many uncertainties raised by the digital environment. Yet it is one problem that can be solved relatively easily with simple statutory amendment. The Legislature could introduce a new exception into the Act which states that copies made in the course of Internet browsing are not infringing copies.

This was the solution adopted by the Australian Parliament, which amended Australian copyright law to better suit the digital environment with the *Copyright Amendment*

³⁴⁴ *Supra*, note 332 at 340.

(*Digital Agenda*) Act 2000 (Cth) ('CADA').³⁴⁵ The CADA introduces a new technology-neutral right of communication to the public into Australian copyright law. This communication right is subject to several exceptions, including exceptions for fair dealing; libraries and archives; educational statutory licences; simulcasting and temporary reproductions. The CADA provides that temporary copies made in the course of the technical process of making or receiving a communication do not infringe a copyright holder's exclusive rights.³⁴⁶ The relevant provision of the CADA reads as follows:

Section 43A: Temporary reproductions made in the course of communication

- (1) The copyright in a work, or an adaptation of a work, is not infringed by making a temporary reproduction of the work or adaptation as part of the technical process of making or receiving a communication.
- (2) Subsection (1) does not apply in relation to the making of a temporary reproduction of a work, or an adaptation of a work, as part of the technical process of making a communication if the making of the communication is an infringement of copyright.

The exception only applies to reproductions which have little or no independent economic significance. The exception is intended to include temporary reproductions made in the course of browsing or viewing copyright material online, and in certain types of caching.³⁴⁷ The exceptions in the CADA are drafted broadly and intended to be flexible.³⁴⁸ This will allow courts to interpret the exceptions as necessary to maintain the balance struck in the print environment between copyright owners and users.³⁴⁹

³⁴⁵ The Digital Agenda Bill received Royal Assent on 4 September 2000, and became the Copyright Amendment (Digital Agenda) Act 2000, Act No. 110 of 2000. The Digital Agenda Act commenced on 4 March 2001.

³⁴⁶ The CADA is available online: Scale Plus Law Resource <<http://scaletext.law.gov.au/html/comact/10/6223/0/CM000070.htm>>.

³⁴⁷ See *Copyright Reform: Copyright Amendment (Digital Agenda) Act 2000*, online, Attorney-General's Department <<http://www.ag.gov.au/agd/seclaw/Copyright%20Amendment%20Act%202000.htm>>.

³⁴⁸ Explanatory Memorandum to the Copyright Amendment (Digital Agenda) Bill 1999, (31 August 1999), online: Parliament of Australia <<http://www.aph.gov.au/legis.html>>.

³⁴⁹ "As far as possible, the proposed exceptions replicate the balance that has been struck in the print environment between the rights of owners of copyright and the rights of users." Hon. Daryl Williams AM,

Canada could introduce a similar exception into the Act. Such an exception, coupled with an appropriate definition of browsing, would adequately address the uncertainty surrounding temporary copies made during browsing and would bring copyright law in line with technological reality. The exception could be sufficiently broad so as to include copies that are cached onto a user's hard disk or even proxy caching. This would be a desirable solution, as it would provide a continued balance between copyright holders, users and the public, while ensuring that the technical processes which underpin the Internet are not jeopardized. Further, as the exception could be limited to apply only to communications which are not infringements, and only to copies which are not economically significant (e.g. RAM copies), the goals of the utilitarian justification for copyright law are maintained.

There was some concern in Australia regarding the temporary reproduction exception and its potential to conflict with the normal exploitation of a work. For example, the Australian Copyright Council ('ACC') felt that the exception might unreasonably prejudice the legitimate interests of a copyright owner, as it may be possible to consume a work simply by looking at it on a screen.³⁵⁰ The ACC asserted that a person could log onto a website and read a work (making temporary reproductions in the process) without ever having to purchase the work, or pay for a licence to view the material. The ACC felt that the exception could destroy the online market for the supply of copyrighted material.³⁵¹ However, these concerns are not valid if the work was posted online with the

QC, MP, Attorney-General, Second Reading Speech, Copyright Amendment (Digital Agenda) Bill 1999, House of Representatives, *Hansard*, 2 September 1999, 7428 at 9748-9.

³⁵⁰ See Australian Copyright Council, *Comments on Draft Copyright Amendment (Digital Agenda) Bill 1999*, online: Australian Copyright Council <<http://www.copyright.org.au/PDF/Submissions/X9903AGEN.pdf>>.

³⁵¹ *Supra*, note 350.

authorization of the copyright owner. The owner would know that the work would be freely accessible to anyone, to view it and use it. The ACC also felt that if the owner of the copyrighted work decided to encrypt the online material with the intention that users would have to pay for on-screen access, a user could bypass the encryption with a circumvention device and read the work for free, then rely upon the temporary reproduction exception to sanction his behaviour. However, the CADA provides corresponding checks and balances to this exception provision. Section 116A of the CADA bans the sale and manufacture of circumvention devices or services (similarly to the DMCA); and ss. 116B, 116C of the CADA prohibit tampering with rights management information. These provisions should help to alleviate concerns that users will rely on a temporary reproduction exception to sanctify activities such as the circumvention of technological protection devices. Further, if such an exception were correctly drafted, it would impliedly exclude its application to such activities. The exception would only apply to temporary or incidental reproductions made in the *ordinary* course of the technical process of making or receiving a communication (or, even more specifically, in the course of browsing). Browsing involving circumvention of a technological protection device would fall outside of this. A corresponding definition of browsing or communication would reinforce the limited application of such an exception. A definition of “technical process” would also need to be provided to avoid any pitfalls surrounding the ambiguity of such a term. It is also clear that the ACC was making these criticisms from a protectionist standpoint. Its comments did not contain an apparent concern for users’ rights – for example, that the public could otherwise be confronted with a pay-per-view Internet if such an exception was not implemented.

A temporary reproduction exception could also address issues surrounding reproductions made during caching. Caching is of considerable significance to the efficiency of the Internet. Any transaction costs to secure licences to cache could be prohibitive to ISPs; and would also raise the cost of Internet access significantly for consumers, who would undoubtedly have to bear the extra cost. Many different types of caching exist – in the context of a personal computer, to cache means to “improve the speed of access to it by moving it nearer to the CPU.”³⁵² It is unclear whether “forward” or “proxy” caching would be caught by a temporary reproduction exception, as it is not entirely incidental, and is often done for economic reasons. This may bring proxy caching outside of the realm of forming part of the “technical process” of making materials available online. Proxy caching involves a deliberate choice on the part of the ISP – the ISP selects specific web sites to be loaded into an ISP’s proxy server, directing traffic away from the main server to the proxy server and speeding Internet access. For example, a “cache server” is a dedicated network server, or a service within the server, that caches web pages to speed up access to information that has already been reviewed by a previous user.³⁵³ Such caching may be categorized as copyright infringement, as it involves an electronic reproduction of a website and storage of that reproduction on a server. ISPs can also engage in permanent proxy caching. This involves storing a popular website on the ISP’s server, allowing customers to access the site easily and quickly.³⁵⁴ Permanent proxy caching provides significant benefits to Internet users, including: increased speed of site access, reduced connectivity times, and improved network capacity. Consumers

³⁵² See Tech Encyclopaedia, online: <<http://www.techweb.com/encyclopedia>>.

³⁵³ See Tech Encyclopaedia, online: <<http://www.techweb.com/encyclopedia>>.

³⁵⁴ See M. Garlick and R. Nicoll, “Proxy Caching – The New Fair Dealing? Proxy Caching Explained” (1999) 3 Telemedia 13.

often use connection speed as a decisive criterion when selecting an ISP, so caching may be of significant commercial benefit.³⁵⁵

Generally, caching is an economically efficient activity: it reduces waiting time and bandwidth requirements, thereby allowing greater efficiency in using finite network resources and reducing costs. The federal government should adopt suitable policies that help ensure this efficiency-enhancing activity is not prohibited by copyright law. A temporary reproduction exception could include wording to include cached copies. For example, it could include the phrase: "other temporary reproductions made to enhance the efficiency of the technical process of making or receiving a communication or as an element of browsing."³⁵⁶ Another option would be to amend the Act to include an exception for caching, provided it was carried out in accordance with industry codes. Industry codes could then provide the means to accommodate the technical detail. However, this has the disadvantage of not being technology-neutral. Alternately, ISPs could also attempt to rely on a fair use or implied licence style defence, leaving it to the courts to develop an exception for proxy caching.

³⁵⁵ Review of intellectual property legislation under the Competition Principles Agreement, Final report by the Intellectual Property and Competition Review Committee to Senator the Hon Nicholas Minchin Minister for Industry, Science and Resources and the Hon Daryl Williams AM QC MP Attorney-General (September 2000), online: Intellectual Property and Competition Review Committee <http://www.ipcr.gov.au/finalreport1dec/introcopy.htm#_Toc498833571>. Note that this type of caching may also have negative implications for owners of rights in websites in terms of: accuracy of the cached site; the effect on advertising revenue measured by the number of 'hits' on a site; the currency of any advertising material displayed on the cached site; and the capacity of the web site owner to implement effective risk management procedures if online liability issues arise. However, technological solutions are available to enable website creators to prevent unwanted caching, or to impose technological restraints on how their sites may be cached.

³⁵⁶ To exclude proxy caching, wording could be used that states that only temporary copies necessarily made in the process of using, or facilitating the use, of a digital work, *and* which do not persist in an end-use form after the use of the work are not infringing reproductions.

A statutory amendment has the benefit of recognizing that, in the digital age, there is a fundamental distinction between reading/browsing on one hand, and copying on the other. This distinction may not seem obvious at first, as the acts of reading and browsing digital works involve making copies. The key point is that copies made during the course of browsing or reading a digital work are not "true copies." Rather, they are reproductions which occur because it is not possible to view a document file or image without creating a temporary and ephemeral copy in RAM or other non-permanent form of computer memory. Such embodiments are lost when a computer is switched off, and only retained permanently when a user actively directs them to be. Copies of this nature pose no threat to copyright owners and should therefore not give rise to infringement. As mentioned above in the context of the analysis of the *MAI* cases, the use of a copy must be considered when assessing its potential to threaten copyright law's goals of promoting the creation of new works and allowing copyright holders to maximise their profits, while allowing the public to access creative works. Such copies exist merely as a fact of digital communication and are not harmful to copyright owners. It is important that in the digital environment (as in the print environment), the public's right to "browse" copyrighted material, in order to make an informed decision on its possible use or purchase, should be protected.³⁵⁷ If such automatically generated images were considered to be true reproductions under the control of the copyright owner, the public's right to browse online material would be precluded and copyright owners would effectively be given the right to control reading. A statutory exception helps to find a reasonable balance between

³⁵⁷ National Library of Australia, "Comments on Copyright Reform and the Digital Agenda: Proposed Transmission Right, Right of Making Available, and Enforcement Measures" (1 April 1998), online: National Library of Australia <<http://www.nla.gov.au/policy/copyright.html>>.

the legitimate remuneration rights of copyright owners, and the public benefit derived from the free flow of information, regardless of readers' ability to pay.

There is also some amenability in the U.S. for a statutory exemption for temporary copies. The Section 104 Report³⁵⁸ states that the status of temporary incidental copies should be clarified. Many comments that were received during the preparation of the report included requests for a statutory exemption from the exclusive right of reproduction for temporary incidental copies. Not surprisingly, representatives of copyright-affected industries and copyright holders did not believe that there was a need or basis for an exemption for these types of copies.³⁵⁹ Those arguing in favour of such an exemption asserted that such temporary copies have no economic value; that such an amendment is needed to ensure the promotion and growth of economic commerce; and that the law needed to adapt because of changed circumstances between the time the DMCA was passed and the Section 104 Report was written.³⁶⁰ It is difficult to see how it is not in anyone's interest to resolve such an ambiguity as that arising from the status of temporary copies. This is a clear example of a situation in which legislative actions could effectively resolve any ambiguity and uncertainty.

³⁵⁸ This report was mandated by s. 104 of the DMCA, which states that the Register of Copyrights and the Assistant Secretary for Communications and Information must jointly review the effects of the DMCA on ss. 109 and 117 of Title 17 of the United States Code. The Report was made to Congress 2 years after the DMCA came into effect.

³⁵⁹ Section 104 Report, *supra*, note 278 at 50.

³⁶⁰ Section 104 Report, *supra*, note 278 at 53-57. It was also noted in the report that many commentators argued that the issues surrounding the status of temporary RAM copies were not merely theoretical and were already giving rise to the threat of litigation. For example, one webcaster noted that some music publishers were seeking mechanical royalties for temporary copies made in RAM buffers when music is streamed on the Internet. This was so despite the fact that the performance to which the copy was incidental was fully licensed (at 57).

5.10 Overall Conclusion

*"Our copyright law arises out of a grand compromise, reconciling the need to encourage the creative process by protecting the interests of authors, and the public need for access to the product of the creative process."*³⁶¹

Regardless of which solution is adopted in relation to temporary copies made during the course of Internet browsing – be it a non-regulatory regime or a statutory exception – it will need to balance the competing interests in a flexible and practical way.³⁶² The selected solution should balance the competing interests in a way that is consistent with the goals of copyright law under the utilitarian approach, such as promotion of innovation, dissemination of works, economic exploitation, and public education and access. In order to encourage creation and dissemination of original expression, copyright law accords authors with a bundle of proprietary rights in their works. Then, in order to promote creative exchange and public education, copyright law invites users and subsequent authors to make use of the existing works in ways that fall outside the scope of the copyright owner's exclusive rights. As such, "Copyright law's perennial dilemma is to determine where exclusive rights should end and unrestrained public access should begin."³⁶³

There are two conflicting principles, which need to be balanced in any digital copyright regime. On one hand, there is the need for users to have ready access to information while not infringing copyright, and regardless of their ability to pay – "Users are concerned that 'browsing' through a database may constitute a reproduction and entail

³⁶¹ *Supra*, note 305 at 572.

³⁶² "Scholars agree that at base, copyright law is attempting to effect a balance between the owners of copyright material and those who wish to use the material:" F. Macmillan, "Adapting the Copyright Exceptions to the Digital Environment" (July 1999) 1 D.T.L.J. (No. 2).

³⁶³ Neil Weinstock Netanel, "Copyright and a Democratic Civil Society" (1996) 106 Yale L.J. 283 at 285, as cited *supra*, note 361 at 573.

costs that would not normally be associated with perusing reference works in a traditional library.”³⁶⁴ On the other hand, there is the right of copyright holders to remuneration in order to ensure a viable market for the provision of digital works – “Creators are concerned that despite the potential for easier access, their royalty share will stagnate.”³⁶⁵ There are diverse sets of interests on both the holder and user sides of the copyright interest-group equation, and identifying the core interests involved in the protection versus dissemination trade-off is a complex task. Holder interests centre on creators, those they assign their works to, and collective associations of authors, performers, and musicians who collect and disburse royalties. Other interest groups include: industry players, broadcasters, ISPs, posters of Internet content, libraries, interest groups and lobbyists, universities, computer firms, and the IP professions. The changes in the power structure among such interests, and the role of representational politics for different interests in IP policy institutions, must also be considered.³⁶⁶

The public creates the market that drives the Internet and ensures its growth. However, there are legitimate concerns that the Internet may not be exploited to its full potential if existing legal protections cannot be extended to and assured in cyberspace.³⁶⁷ Users may be reluctant to use the Internet unless the integrity of its content is guaranteed, and works posted online are available under equitable and reasonable terms. It is paramount that

³⁶⁴ *Supra*, note 20, Chpt 4 at 11.

³⁶⁵ *Supra*, note 20, Chpt 4 at 11.

³⁶⁶ *Supra*, note 10 at 9.

³⁶⁷ Intellectual property protection has enormous economic ramifications. To a writer, composer, or artist, their works may represent their livelihood. To a publisher, they are potential profits. To industry, inventions represent the possibility of the creation of enormous wealth, if the right investments of time and money are made. To business generally, their get-up and reputation, and the name and appearance of their goods represent their market position. (See generally McKeough and Stewart, *Intellectual Property in Australia*, 2nd ed. (Sydney: Butterworths, 1997) at 14.) Many industries rely extensively on the formulation of new works and inventions – for example the entertainment and music industry. Any changes to IP protection could be extremely beneficial or fatal to such industries, and would have an economic impact upon business and society generally.

these competing interests be managed in such a way that public welfare continues to be enhanced via the creation and dissemination of works, while ensuring that adequate copyright protection exists on the Internet to maintain an incentive for creation. However, to ensure the potential for economic exploitation of digital works, a shift in the copyright paradigm may be required. For example, it may be necessary for the law to recognize that reproduction is no longer the best way to measure infringement of digital works.

It is recognized in Canada that the protection of content, balanced with the needs of users, is vital to the growth of economic commerce.³⁶⁸ It is clear that the present legal uncertainty in this area is detrimental to developing consumer confidence in new technology. A digital copyright regime based upon recognition of the fundamental distinction between the acts of reading or browsing, and the act of copying, must emerge. It is presently unclear what kind resolution will be adopted in Canada regarding temporary copies made in the course of Internet browsing. If Canada wishes to retain a balance between the rights of users and owners, it should avoid following the U.S. model and the provisions of the DMCA, as the American IP regime has become “overly protectionist by almost any utilitarian standard.”³⁶⁹ It is also unknown what kind of players will emerge in Canadian copyright-affected industries – whether they will be those able to operate in the global market, or global players in the Canadian market, or players who are capable of doing both.³⁷⁰ IPRs must be scrutinized more carefully than ever before, now that IP has become a preferred weapon of choice in the global and national knowledge-based economy, and in the transformation of innovating

³⁶⁸ *Supra*, note 145 at 3.

³⁶⁹ *Supra*, note 57 at 65.

³⁷⁰ *Supra*, note 10 at 189.

institutions.³⁷¹ Fighting against the corporate confiscation of creativity is an uphill battle. Despite the importance of IPRs, many find intellectual property to be a very abstract, and perhaps even forbidding subject, remote from the forefront of public concerns.

It has been questioned whether IRPs are best protected today by a traditional legal mechanism (such as the existing copyright scheme), or whether technological means of protecting IP are more appropriate: "The question that law should ask is what means would bring about the most efficient set of protections for property interests in cyberspace."³⁷² It can be argued that a technological device may be a more efficacious means of protecting IP online than law.³⁷³ The implication of this is that, in certain situations, it makes sense to shift the burden of property protection from the state to private individuals. For example, if I have a valuable bike that I want to store on my property, it is more efficient for me to bear the cost of building a proper storage unit for the bike than to require that the city hire more police to patrol the area where my property is located, or to increase the punishment for those they catch. "The question, then, is always one of balance between the costs and benefits of private protection and state protection."³⁷⁴ IP on the Internet can probably be protected more cheaply by code and

³⁷¹ *Supra*, note 10 at 189.

³⁷² *Supra*, note 14 at 122.

³⁷³ *Supra*, note 14 at 122-123. Lessig gives the following example to illustrate this point: "If, for example, a farmer wants to store some valuable seed on a remote part of his farm, it is better for him to bear the cost of fencing in the seed than to require the police to patrol the area more consistently or to increase the punishment for those they catch. *The question, then, is always one of balance between the costs and benefits of private protection and state protection.*" (*Supra*, note 14 at 122-123, emphasis added). IP on the Internet can probably be protected more cheaply by code and technology than it can by law. The costs associated with copyright law in this context are extremely high. This is because of the costs involved in obtaining and enforcing a judgement; and also because it is hard for the law to distinguish between legitimate and illegitimate uses of cyberspace. Reeves asserts that there are many agents that might use cyberspace – web spiders gathering data for web search engines; browsers searching for specific sites; hackers breaking technological locks to steal IP, etc. It is hard, *ex ante*, for law to differentiate between those agents using cyberspace legitimately and those using it illegitimately: *supra*, note 190.

³⁷⁴ *Supra*, note 14 at 122-123.

technology than it can by law. The costs associated with copyright law in this context are extremely high. This is because of the costs involved in obtaining and enforcing a judgement; and also because it is hard for the law to distinguish between legitimate and illegitimate uses of cyberspace. There are many agents that might use cyberspace – web spiders gathering data for web search engines or searching the net for illegitimate copies of a work; browsers searching for specific sites; hackers breaking technological locks to steal IP, etc. It is hard, *ex ante*, for law to differentiate between those agents using cyberspace legitimately and those using it illegitimately.³⁷⁵

The metaphor of a fence may be used to describe technological means of protecting IP online. Fences create enclosed areas, and by implication, they also create unenclosed areas where users are free to wander and make legitimate uses of any digital IP found there. Information could be fenced off from public access, preventing users from viewing, downloading, or copying it if the copyright holder so desires.³⁷⁶ The fence, if constructed properly, protects the work without having to determine an infringer's identity or location; without needing to determine proper jurisdiction or choice of law;

³⁷⁵ *Supra*, note 190.

³⁷⁶ For example, the Content Protection for Recordable Media ('CPRM') technology jointly created by IBM, Intel, Toshiba and Matsushita Electric. CPRM allows content producers to designate how many times a given file can be copied by a consumer. When a consumer buys and downloads an MP3 from a site employing CPRM, the consumer's MP3 player would use the rights-protection system and the serial number already on her memory card or disk to encrypt the file and create a unique 'key' for it. That key then lets the music player know whether or not the file is stored on an authorized disk or memory chip. When the user wants to listen to her MP3 file, the player checks for the digital key; if everything matches up, the file is decrypted and the music begins to play. The copy-protection system will not work unless it is deployed in the original files, in storage media, and in media players. See *supra*, note 9 at 125-126. Software may be written which regulates whether the holder of the digital information may copy it once, or one hundred times, or whether it may be copied at all.

without facing difficult evidentiary issues in court; without the unreliability associated with legal proceedings and problems with enforcement of judgements.³⁷⁷

While some technological protection for copyrighted works posted online is not objectionable, it is not desirable for this to be the sole method of protection. Several objections can be made here. Firstly, it is inadequate to define IP rights according to notice given by owners to others – basing legal rights on the assertion of legal rights begs the question.³⁷⁸ This allows for the assertion of rights that one does not have; and it fails to accommodate a situation where someone does not assert rights they are entitled to. Secondly, it may not be possible for all users to build an effective fence – the technology may be unreasonably expensive or unavailable altogether. Any requirement for technical measures would have to be tempered by the practicality of implementing those measures.

A third objection can also be raised to the use of technology as the sole protection of IP: legal recourse would never be needed for perfectly effective technical measures.³⁷⁹ Technical measures currently available allow for near perfect protection of copyright works. This proposition may at first sound counterintuitive, as copyright holders are seemingly faced with their worst nightmare yet: an environment where the ability to copy could not be better, and the ability of law to protect IP could not be worse. While it is true that copyright can now be infringed with an unprecedented level of efficiency, and

³⁷⁷ The fence metaphor may be extended even further: "The Internet is like a physical place where people constantly wander in and out of other people's property, typically with the owner's permission. In the real world, fences provide obvious boundaries, which may be otherwise lacking. Fences efficiently coincide with limits of legal liability because fences provide notice that others are meant to be excluded from the property. Liability for climbing over fences is efficient because it is predictable; fences provide notice that property rights have been asserted. Exclusionary technical measures in cyberspace and fences in the real world share the same functions." Ethan Preston, "Finding Fences in Cyberspace: Privacy, Property and Open Access on the Internet" (2000) 6.1 J. Tech. L. & Pol'y 3, online: <<http://grove.ufl.edu/~techlaw/vol6/Preston.html>>.

³⁷⁸ *Supra*, note 377.

³⁷⁹ *Supra*, note 377.

law is indeed ill equipped to protect the vaporous cargo of digital information, IP is not unprotectable in the digital environment:

We are not entering a time when copyright is more threatened than it is in real space. We are instead entering a time when copyright is more effectively protected than at any time since Gutenberg. The power to regulate access to and use of copyrighted material is about to be perfected. Whatever the mavens of the mid-1990s may have thought, cyberspace is about to give holders of copyrighted property the biggest gift of protection they have ever known.³⁸⁰

The structure of the Internet itself can be modified to control the rights that copyright law presently controls in the real world. The software and hardware that make up the Internet confine and regulate it. They dictate the environment of the Internet, and can thereby be used to structure it – effectively, these are the true “laws” of Cyberspace. Whoever controls this structure controls the Internet, and may manipulate it either to the IP holder’s advantage or disadvantage.

Complete control over IP via technology is undesirable because it could annihilate any balance between copyright holders’ and users’ rights, resulting in a “the tragedy of the anticommons.”³⁸¹ The issue of an appropriate balance between competing interests was raised in the Consultation Paper. It was questioned in the Consultation Paper whether, in order to conserve the current contours of Canadian copyright law, rights holders should be placed under a positive obligation to provide access to a person whose use falls within an exception to or limitation on copyright as set out in the Act.³⁸² This question impliedly recognizes that technological controls over works in digital form are such that a very high

³⁸⁰ *Supra*, note 14 at 127.

³⁸¹ This turn of phrase is used by Michael A. Heller and Rebecca S. Eisenberg, “Can Patents Deter Innovation? The Anticommons in Biomedical Research,” *Science*, Vol. 280, No. 5364, May 1, 1998 at 698 as cited *supra*, note 9 at 50.

³⁸² *Supra*, note 145 at 25. The Consultation Paper went on to state: “This question touches on the issue of exemptions, which may require further analysis. The *Copyright Act* includes a private copying regime that could be significantly affected by restrictions that impede the ability to make copies of sound recordings for personal use” (at 25).

level of control over their use can be exerted by copyright holders, impeding copyright users from legitimately exercising their rights. The real question for copyright law in the context of ICTs is not how it can aid technology in protecting IPRs, but rather, is the protection afforded too great? The lesson of the future may be that copyright is protected far too well. Some predict that copyright issues may not centre on *copyright*, but on “*copyduty*” – the duty of owners of protected property to make that property accessible.³⁸³

Since technology has evolved to a level that allows copyright owners to exercise complete control over works expressed in digital form, the law should be conscientious in intervening to curb this control from amounting to control over the rights that a user may legitimately exercise. After all, copyright is intended to be a *limited* monopoly which allows copyright owners to have *limited* control over their works, and the goal of copyright is to preserve an appropriate balance of competing interests. This deliberately imperfect level of control takes on considerable practical significance when examined in the context of the Internet. If the reason that a copyright holder’s control over the use of her works is confined is to enable consumers and future creators to make the broadest possible use of protected works, while remaining consistent with the copyright system’s incentive to create, then digital technology changes very little. The fact that technology now allows copyright holders to exercise more complete control is no reason to modify the copyright law to facilitate it. However, if the goal of copyright law is to place all feasible control over creative works firmly in the hands of copyright owners, then digital

³⁸³ *Supra*, note 14 at 127.

technology offers us the opportunity for the first time to come very close to perfecting the system.³⁸⁴

Undoubtedly, there is some optimal mix of fences and law that efficiently provides effective IP protection – “Both [fences and law] cost money, and the return from each is not necessarily the same. From a social perspective, we would want the mix that provides optimal protection at the lowest cost.”³⁸⁵ Ideally, law and technology would complement each other so that one would step in where the other runs out, always mindful of the balance of competing interests that must be preserved. For example, technology would erect the digital fence protecting IP; law would then step in, when public policy appropriately dictates, to render activities such as hacking through these digital protections illegal. It is arguable that copyright law is now insufficient to protect IP on the Internet, and alternate, more efficacious methods must be instituted to supplement copyright laws. However, we must be wary that this proposition does not get extended so far as to destroy the balance of competing interests of holders, users, and the public. We must especially guard against technologies which enable copyright owners to prevent users from exercising their legitimate rights. Laws which unnecessarily facilitate or strengthen technologies such as these should be avoided. The lessons learned from the DMCA and its widely criticized anti-circumvention provisions should be remembered in this context.

It is clear that digital technologies have impacted our concepts and paradigms of IPRs systems as never before. Property law in all its variations has always found definition in

³⁸⁴ *Supra*, note 65 at 13-14.

³⁸⁵ *Supra*, note 14 at 122.

the physical plane, but digital technology detaches information from the physical plane.³⁸⁶ Such a vast shift of the environment in which a law operates demands that the law and its proscriptions be revisited and re-evaluated in light of these changes. There are good theoretical reasons for believing that in an era of electronic communication our commitment to IPRs should be diminishing. The discussion above on the history of copyright law has shown that it was formed to suit the technology of print. Within that environment, the act of copying was chosen as the basic compensable unit because the printing press made it possible both to fix a text more precisely than ever before, and to produce many identical copies. The act of copying was not chosen because it preserves a sacrosanct right of the copyright owner that can be seen as natural or inviolable. It was chosen because it was the best legal test for determining infringement at the time the copyright law was first formulated. Our cultural and legal assumption that an author should own the expression of her ideas was one which developed slowly throughout the centuries following the invention of printing. It was not print technology itself that gave rise to this assumption. It was promoted for a variety of historical reasons, for example the efforts of the Company of Stationers to preserve their monopoly on the print market.

As such, electronic technology therefore offers the opportunity for a change in our cultural and legal assumption. ICTs challenge our legal system because they make legal outcomes uncertain. Electronic texts are unstable, they are copied as an incident of their communication, and further, they are constituted because of a cooperative relationship between the original author and subsequent readers. Digital technologies afford us the opportunity not only to reconsider reproduction as the benchmark of infringement, but

³⁸⁶ *Supra*, note 12.

also give us the opportunity to question the way we view IPRs and to be increasingly more sceptical of claims by individuals and corporations to own works which are the products of interactions among earlier authors, readers and texts. "As we do more of our work on computer screens, we should be inclined to understand both verbal and audiovisual texts as collective experiences."³⁸⁷

It is a fact of digital communication that every file that is transferred over the Internet is copied in one way or another. Under the present copyright regime, reproduction is the exclusive right of a copyright holder. Thus, there is potential for copyright infringement in every Internet transmission. To anyone accustomed to using the Internet, it is counter-intuitive to think that the mere act of viewing a website amounts to copyright infringement. The adoption of the rule of law found in the *MAI* cases would mean that any Internet activity could potentially amount to a copyright violation, making infringement the rule and not the exception.

The legitimacy of an action depends upon the person granting access to the website or other 'space' on the Internet. The intent of the copyright owner is paramount in determining legitimacy of an activity. When a copyright holder posts her work online, on a website freely accessible to the public, there is an expectation that those browsing the Internet will make use of the work. Making use of the work will definitely include making RAM copies of the work, and may also extend to activities such as printing or downloading. Put simply, the right to browse should be the norm, and the burden to prevent activities associated with browsing should be placed on the owner. It is important that automatically generated images are not considered true copies under the control of

³⁸⁷ *Supra*, note 143, forward by Jay David Bolter at x.

the copyright owner. Otherwise, the public's right to browse online would be precluded and the copyright holder is given control over the right to read. It should be borne in mind that copyright law should not grant any party more power than is necessary to affect its purpose of maintaining an incentive to create while ensuring that there is public access to works. As such, reproductions which pose no threat to copyright owners, and are merely a legal harm rather than an actual harm, should not give rise to infringement. For example, reproductions of works made during the ordinary course of browsing should not attract liability for infringement under the Act.

The debate surrounding the application of copyright law to the Internet is one steeped in policy concerns. An effective resolution of this problem necessarily involves the balancing of users' rights and copyright owners' rights. An implied licence to make copies necessary for browsing would help in preserving the appropriate balance between users' and owners' rights. Without such an implied licence, many uses of the Internet are thrown into legal indeterminacy, rendering application of copyright laws to the Internet more invasive, less efficient and unpredictable. There is a present lack of certainty and clarity on exactly what rights users and holders have concerning copyrighted works posted on the Internet. As a result of this dilemma, there appear to have emerged two camps: those who believe that copyright law as it presently exists is sufficiently equipped to address the digital environment; and those that believe the present copyright scheme is inadequate and that reform is necessary. The writer firmly sides with the second camp.

In his oft-quoted statement, Justice Holmes once wrote:

The life of the law has not been logic; it has been experience. The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy avowed or unconscious, even the prejudices which judges share with their follow-men, have had a

great deal more to do than the syllogism in determining the rules by which men should be governed. The law embodies the story of a nation's development through many centuries, and it cannot be dealt with as if it contained only the axioms and corollaries of a book of mathematics.³⁸⁸

The next few years will be an interesting time in Canadian copyright law reform. Let us hope that such reform is based on both logic *and* experience.

³⁸⁸ O. W. Holmes, *The Common Law* (1881; new ed., ed. by M. DeWolfe Howe, 1963, repr. 1968) (emphasis added).

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