Western University
Scholarship@Western

FIMS Library and Information Science Publications | Information & Media Studies (FIMS)

6-2-2011

Supporting Alternative Incentive Mechanisms for Digital Content: A Comparison of Canadian and US Policy

Michael B. McNally
The University of Western Ontario, mmcnally@ualberta.ca

Follow this and additional works at: http://ir.lib.uwo.ca/fimspub

Part of the Library and Information Science Commons

Citation of this paper:
McNally, Michael B., "Supporting Alternative Incentive Mechanisms for Digital Content: A Comparison of Canadian and US Policy" (2011). *FIMS Library and Information Science Publications.* Paper 22.
http://ir.lib.uwo.ca/fimspub/22

Supporting Alternative Incentive Mechanisms for Digital Content: A Comparison of Canadian and US Policy

Author: Michael B. McNally, Doctoral Candidate, Faculty of Information and Media Studies, University of Western Ontario

Date and Version History: Version 1.0, May 30, 2011

Abstract

This paper compares the Government of Canada's copyright focused approach for encouraging the production of digital content with the U.S. Government's adoption of a range of incentive systems for the production of content through a content analysis of government policy papers. The first part of the paper examines Canadian policy outlined in the *Improving Canada's Digital Advantage* consultation paper and the proposed amendments to the Copyright Act (Bill C-32). The paper argues the government is overly reliant on copyright to encourage the production of creative digital content. Though Bill C-32 would expand the definition of fair dealing and create a user generated content exception, the effectiveness of these measures is severely limited by through the proposed protections for technological protection measures. The second part of the paper examines innovative alternatives to copyright that are being promoted by the U.S. government. The Obama Administration's Open Government Directive not only provides citizens with access to government data, but also calls on federal departments to use prizes to encourage innovative uses of the data. The U.S. National Institutes of Health has taken a leading role in promoting open access publication of research funded with federal monies by requiring deposit of publications resulting from research in the open access repository PubMed Central. The paper concludes by positing that Canada's digital economy strategy would be strengthened by providing federal support for alternatives to intellectual property such as open data and open access and lessening the focus on copyright as an incentive digital content production.

Note: The abstract for the paper was written prior to the introduction of the Government of Canada's Open Data Portal and the defeat of the Government in March 2011 triggering an election and causing Bill C-32 to die on the order paper. The paper has been written to reflect these changes.

Introduction

Intellectual property (IP) rights have taken on increasing prominence over the past 50 years, particularly as Western nations and the United States in particular have seen a transformation of their economies away from manufacturing and towards services, finance, entertainment and research intensive sectors such as pharmaceuticals and high technology. As a result a variety of IP rights have been strengthened and expanded to protect these information intensive industries creating an expansionary IP regime. Concomitant with the ratcheting up of intellectual property laws have been dramatic advances in information and communications technologies that allow

the rapid creation and distribution of intellectual goods. Groups and individuals can create, manipulate and publish materials with relative ease and this has facilitated growth in a number of alternatives to IP.

Policymakers in both Canada and the United States are responding to the challenges and opportunities involved with the production of intellectual goods by crafting various policies to support alternative systems for the production and distribution of digital content. The United States, where the expansionary IP trends are most pronounced, has taken a leadership role in promoting open data and open access. On the other hand Canada has tended to play the role of laggard rather than leader, and is now only starting to catch up to the U.S. both with respect to expanding IP protection and supporting alternatives.

The policy environment is also dynamic and quickly evolving. In the first five months of 2011 in Canada alone, the government introduced its own open data site and a proposed copyright amendment died with the defeat of the government. This paper examines the evolving government policies in Canada and the U.S. with regards to IP and its alternatives looking specifically at government policies to support open access scholarly publishing, open government data and user-generated content. Although the U.S. has tended to take a leadership role in developing policies to support alternatives to IP both countries can draw on the experiences of each other to craft policies for intellectual goods that reflect the range of motives that encourage the production of such goods and minimize the danger of over-emphasizing exclusionary rights.

The paper begins with an examination of the expansionary tendencies in IP law and the rise of alternatives to IP. It then focuses on the current Canadian situation looking at the government's attempts to modernize copyright law, the recently announced open data portal and support for open access. The third part of the paper examines relevant developments with respect to open access and open data before concluding with recommendations to ensure that both countries develop policies that promote progress in the arts and sciences and facilitate innovation.

The Expansionary Intellectual Property Regime and the Increasing Prominence of Alternatives to IP

Beginning in the late 1970s and early 1980s and continuing until today there has been a marked increase in the protection of intellectual property rights. The expansionary IP regime has been most pronounced in the United States, although a series of international treaties have ensured the strengthening of IP rights on a global scale. Patents and copyrights, two of the oldest and most well established IP mechanisms, have been expanded in scope to cover new areas of intellectual work, while the terms of protection afforded by such rights have also increased. In addition new *sui generis* IP rights, such as the protection for semiconductor layouts and ship hull designs among others, have been established to protect a variety of intellectual goods not covered by traditional IP mechanisms. Finally penalties for infringement have also been significantly

increased, and with specific reference to copyright new protections have been crafted that aim to prohibit technological devices and services that facilitate infringement. While the U.S. has been at the forefront of the expansionary IP regime, the Agreement on Trade Related Aspects of Intellectual Property (TRIPS)[1] from 1994, the two 1996 treaties negotiated by the World Intellectual Property Organization (WIPO), the WIPO Copyright Treaty (WCT)[2] and WIPO Performances and Phonograms Treaty (WPPT)[3], and a number of bilateral trade agreements have attempted to harmonize global IP protection along U.S. standards.

The United States' emergence as the global leader in IP protection does not reflect its historical position specifically with respect to copyright. Although the U.S. did play a leading role in pushing for international protection of patents in the 1870s and 1880s (which resulted in the *Paris Convention for the Protection of Industrial Property*[4] (1883)), it failed to join the 1886 *Berne Convention for the Protection of Literary and Artistic Works*[5] which established an international framework for copyright protection. In 1976 the U.S. substantially overhauled it copyright legislation with the passing of a new Copyright Act.[6] The most notable change was a switch from a term of protection of 28 years for copyrighted works, with the option of a signal renewal for an additional 28 years, to an extension of the term to the life of the author plus an additional 50 years. Although providing the potential for significantly longer terms of protection, this change simply brought the U.S. term of protection in line with the term established by the 1971 version of the *Berne Convention*, a treaty that the U.S. had still not signed. While the 1976 Copyright Act can be viewed as simply an attempt to catch up with other nations, it does mark the beginning of the expansionary period, with over 60 amendments to the Copyright Act from October 1976 through to October 2009.[7] In 1980 Congress expanded copyright protection to include software premised on the idea that software code represented a literary work.[8] In 1988 the U.S. passed the Berne Convention Implementation Act to facilitate its entry into the Berne Convention a year later.[9] The scope of copyright law was again expanded in 1990 with the passing of the Architectural Works Copyright Protection Act that provides protection for the design of architectural works.[10] The expansionary trends in copyright continued in the Clinton

---

[1] *Agreement on the Trade Related Aspects of Intellectual Property* (TRIPS), 1994: http://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm
[2] *WIPO Copyright Treat*, 1996: http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html
[3] *WIPO Performances and Phonograms Treaty*, 1996: http://www.wipo.int/treaties/en/ip/wppt/trtdocs_wo034.html
[4] *Paris Convention for the Protection of Intellectual Property*, 1883/1979: http://www.wipo.int/treaties/en/ip/paris/trtdocs_wo020.html
[5] *Berne Convention for the Protection of Literary and Artistic Works*, 1886/1979: http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html
[6] An Act for the general revision of the Copyright Law, title 17 of the United States Code, and for other purposes, 1976, Pub. L. No. 94-553.
[7] United States – Copyright Office, *Circular 92: Copyright Law of the United States and Related Laws Contained in Title 17 of the United States Code*, (2009), iii-x: http://www.copyright.gov/title17/circ92.pdf
[8] The Bayh-Dole Act, 1980, Pub. L. No. 96-517.
[9] Berne Convention Implementation Act, 1988, Pub. L. No. 100-568.
[10] Architectural Works Copyright Protection Act, title VII of the Judicial Improvements Act, 1990, Pub. L. No. 101-650.

administration. The 1997 No Electronic Theft Act (NET Act), enhanced protection for copyright by allowing for criminal prosecution (as opposed to solely civil remedies) for copyright infringement that occurred with a motive of profit or gain.[11] Statutory damages for infringement were increased two years later in with the passage of the Digital Theft Deterrence and Copyright Damages Improvement Act,[12] and again in 2008 with the Prioritizing Resources and Organization for Intellectual Property (PRO-IP) Act.[13] Although the increases in scope and penalties for infringement represent important dimensions of the expansionary regime the two most significant changes a represented by two well-known pieces of legislation from the end of the 20th century. The 1998 Sonny Bono Copyright Term Extension Act (CTEA), which is also known pejoratively as the Mickey Mouse CTEA, further lengthened the term of protection by an additional 20 years.[14] In 1998 Congress also crafted legislation that created a new layer of IP protection on top of copyright. The Digital Millennium Copyright Protection Act (DMCA), passed to implement the WCT and WPPT, brought a number of revisions to U.S. copyright law including changes that criminalized the circumvention of technological protection measures including digital rights management systems.[15] Viewed collectively these changes represent a considerable strengthening of copyright protection. The expansionary trends present in copyright have also been reflected in U.S. patent law; scope has been expanded to include microorganisms,[16] lower level life forms (such as the Harvard/Onco-mouse)[17] and business methods including those embodied in software,[18] the term of protection has been extended from 17 to 20 years,[19] and exceptions for infringement including research done by academics has been minimized.[20]

The expansionary trend most pronounced in the U.S. have been reflected elsewhere. Before the 1998 CTEA, the Council of European Communities passed a directive that suggested that members should harmonize the term for copyright protection at 70 years,[21] and this was reaffirmed by the Council of the European Union in 2006.[22] The E.U. has also crafted protection

[11] No Electronic Theft (NET) Act, 1997, Pub. L. No. 105-147.
[12] Digital Theft Deterrence and Copyright Damages Improvement Act, 1999, Pub. L. No. 106-160.
[13] Prioritizing Resources and Organization for Intellectual Property (PRO-IP) Act, 2008, Pub. L. No. 110-403
[14] Sonny Bono Copyright Term Extension Act, 1998, Pub. L. No. 105-298
[15] Digital Millennium Copyright Act, 1998, Pub. L. No. 105-304.
[16] *Sidney A. Diamond, Commissioner of Patents and Trademarks v. Ananda M. Chakrabarty, et al.*, 447 U.S. 303 (1980).
[17] Philip Leder and Timothy A. Stewart, 1980, Transgenic Non-human Mammals, U.S. Patent 4,736,866, filed June 22, 1984, and issued April 12, 1988.
[18] *State Street Bank & Trust Co. v. Signature Financial Group, Inc*,, 149 F. 3d 1368, (Fed. Cir., 1998).
[19] Uruguay Round Agreements Act, 1994, Pub. L. No. 103-465.
[20] *John M. J. Madey v. Duke University*, 307 F. 3d 1352, (Fed. Cir., 2002).
[21] Council Directive 93/98/EEC of 29 October 1993 harmonizing the Term of Protection of Copyright and Certain Related Rights, 1993, O.J. L290-9.
[22] Directive 2006/116/EC of the European Parliament and of the Council of 12 December 2006 on the Term of Protection of Copyright and Certain Related Rights, O.J. L372-12.

for databases,[23] and passed anticircumvention legislation to conform to the WCT and WPPT.[24] The TRIPS agreement requires its 153 members to protect software in copyright laws[25] and provide patent protection in all fields of technologies with only limited exceptions.[26] Mexico has even lengthened its term of protection for copyright to life of the author plus 100 years, outdoing the U.S. by 30 years.[27] Although the expansionary trends have manifested themselves differently in various nations, there has been a clear tendency towards greater IP protection, which is most pronounced in the U.S.

By contrast Canada has been less enthusiastic at embracing expansionary trends in IP. The copyright term remains at 50 years.[28] Despite three attempts, one by the Martin Liberals in 2005,[29] and two by the Harper Conservatives (2008[30] and 2010[31]), Canada has not passed amendments to its copyright legislation to enact the WCT and WPPT which it signed in 1997.[32] Canada's failure to implement these treaties along with a perception of soft enforcement have resulted in the United States Trade Representative (USTR) placing the Canada on its Priority Watch List for IP rights protection for three straight years.[33] Canada's lack of enthusiasm for strengthening IP laws has also been reflected in the area of patents. While numerous nations granted the Harvard Mouse patent (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, and the United States, along with similar patents issued in Japan and New Zealand), Canadian officials refused the initial patent application on the Harvard Mouse resulting in a protracted legal case that culminated in a Supreme Court of Canada decision in 2002.[34] As a result of the Supreme Court decision the patent ultimately issued to the Harvard inventors of the transgenic mouse covered fewer claims that the U.S. and other foreign patents.[35] Canadian

---

[23] Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the Legal Protection of Databases, 1996, O.J. L77-20.
[24] Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonization of Certain Aspects of Copyright and Related Rights in the Information Society, 2001, O.J. L167-10.
[25] TRIPS, Art. 10.1.
[26] TRIPS, Art. 27
[27] Decreto por el que se reforma la Ley Federal del Derecho de Auto del 30 abril de 2003[Decree Amending the Federal Copyright Law of April 30, 2003].
[28] Copyright Act, (R.S.C., 1985, c. C-42), s. 6.
[29] An Act to Amend the Copyright Act (Bill C-60), 38th Parl. 1st Sess., 2005 [not passed into law].
[30] An Act to Amend the Copyright Act (Bill C-61), 39th Parl. 2nd Sess., 2008 [not passed into law].
[31] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010 [not passed into law].
[32] World Intellectual Property Organization (WIPO), "WCT Notification No. 2: WIPO Copyright Treaty Signatories," 1998: http://www.wipo.int/treaties/en/notifications/wct/treaty_wct_2.html; and, WIPO, "WPPT Notification No. 1: WIPO Performances and Phonograms Treaty Signatories," 1998: http://www.wipo.int/treaties/en/notifications/wppt/treaty_wppt_1.html
[33] United States – Office of the United States Trade Representative, *2011 Special 301 Report*, (2011), 27-28: http://www.ustr.gov/webfm_send/2841
[34] *Harvard College v. Canada (Commissioner of Patents)*, [2002] 4 S.C.R. 45, 2002 SCC.
[35] Philip Leder and Timothy A. Stewart, 1985, Transgenic Animals, Canadian Patent 1341442, filed June 21, 1985, and issued Oct 7, 2003.

officials have also resisted allowing business methods patents; however, a recent Federal Court decision from late 2010 appears to open the doors for such patents.[36]

Finally, it must be noted that the expansionary IP regime has also attracted significant criticisms and numerous alternative methods for facilitating the production and distribution of intellectual goods have taken on increasing prominence. Inspired by the concepts of traditional commons such as grazing land and fish stocks a number of scholars have suggested that the expansionary IP regime represents a second enclosure – similar to the historical enclosure of common land in England – limiting access to collective knowledge resources.[37] Others have approached the problem from the opposite direction noting that too many overlapping IP rights end up undermining the policy goal of innovation creating what Shapiro calls a 'patent thicket'[38] and Heller and Eisenberg have dubbed a 'tragedy of the anticommons.'[39] Several alternatives such as open source software (OSS), open access scholarly publishing, and open educational resources use the default rights provided by the copyright system and licensing systems such as Creative Commons[40] to ensure that works are made accessible. In a similar vein the last few years have seen a flourishing of an open data movement. In open data projects governments make available datasets they hold in a machine readable format and allow users to not only view and use the information but repurpose and transform it into new useful information sources and services. A number of organizations ranging from governments to private foundations have taken renewed interest in prizes as a mechanism for encouraging inventive and creative behaviour. Two prominent examples include the X-Prize foundation which offered the $10 million (USD) Ansari X-Prize for spaceflight,[41] and the U.S. Department of Energy's L-Prize that aims to create more energy efficient light bulbs that is backed by a $10 million (USD) cash prize and a lucrative federal procurement agreement.[42] Artists and creators are also using new technologies to distribute their works in a variety of ways. Several artists have experimented with voluntary donation as an alternative remuneration scheme with bands such as Radiohead[43] and Nine Inch

---

[36] *Amazon.com Inc., v. Canada (Attorney General and the Commissioner of Patents)*, 2010 FC 1011, [2010] 4 F.C.R. 541.

[37] The list of scholars drawing on the commons analogy is extensive, for one of the best and earliest treatments of the subject see James Boyle's *Shamans, Software and Spleens: Law and the Construction of the Information Society* (Cambridge, MA: Harvard University Press, 1996). Other prominent scholars to draw on the idea include Lawrence Lessig, Yochai Benkler, and Elinor Ostrom.

[38] Carl Shapiro, "Navigating the Patent Thicket: Cross Licenses, Patent Pools and Standard Setting," *Innovation Policy and the Economy*, 1, (2000), 120.

[39] Michael A. Heller and Rebecca S. Eisenberg, "Can Patents Deter Innovation? The Anticommons in Biomedical Research," *Science*, 280(5364), (1998), 698; and, Michael Heller, *The Gridlock Economy: How too Much Ownership Wrecks Markets, Stops Innovation, and Costs Lives*, (New York: Basic Books, 2008), 18.

[40] Creative Commons, "About the Licenses," (n.d.): http://creativecommons.org/licenses/

[41] X Prize Foundation, "Ansari X Prize," (2011): http://space.xprize.org/ansari-x-prize

[42] United States – Department of Energy, *Bright Tomorrow Lighting Competition (L-Prize)*, (2009), 1: http://www.lightingprize.org/pdfs/LPrize-Revision1.pdf

[43] Josh Tyrangiel, "Radiohead Says: Pay What You Want," *Time Magazine*, 1. Oct. 2007: http://www.time.com/time/arts/article/0,8599,1666973,00.html

Nails[44] releasing an album on a pay what you want basis and Stephen King's failed attempt to write a novel (*The Plant*) based on a voluntary donation model.[45] The rise of user-generated content (UGC) over a variety of media types has demonstrated that for many creators the joy of creating and sharing cultural materials is far more important than using proprietary rights to extract the market value of their works. During Canada's ongoing copyright modernization debate, the Songwriters' Association of Canada has proposed an ISP (internet service provider) levy that would generate funds to support recording artists and in exchange grant Canadian's the write the copy and share music.[46] Across a range of types of intellectual goods all kinds of alternatives to traditional IP devices are being developed and cultivated as ways to produce and distribute information products.

Despite the increasing appeal of many of these alternatives to IP, a cautionary note is required. Simply put the title 'alternatives to IP' is misleading and without careful consideration can be problematic. It represents a heterogeneous group of systems for incentivizing and facilitating the production of intellectual goods some of which are fundamentally opposed to traditional IP mechanism, while others simply represent alternative business or remuneration models. Even free and open source software, which are usually treated as a single kind of alternative, share important differences with free software as conceived by Richard Stallman being ideologically opposed to the proprietary model in contrast to open source proponents who favour their approach on more because of the practical advantages of the OSS model.[47] TPMs, DRMs and restrictive licensing agreements, which are often used to strengthen IP mechanisms, can be seen be construed as alternatives as they could on their own replace the current copyright system. Furthermore, it can be argued that even though some alternatives emphasize the importance of non-pecuniary incentives and the limitation of exclusionary rights, the greatest benefactor of the intellectual goods produced and placed in a shared commons are private corporations which can exploit the unpaid labour of others.[48]

Though some inherent problems exist in aggregating various alternatives to IP, it is still important to examine how these alternatives are resisting (or in some cases facilitating) the

---

[44] Jeff Leed, "Nine Inch Nails Fashions Innovative Web Pricing Plan," *New York Times*, 4 Mar. 2008: http://www.nytimes.com/2008/03/04/arts/music/04nine.html

[45] Linda Harrison, "Stephen King Reveals *The Plant* Profit," The Register, 7 Feb. 2001: http://www.theregister.co.uk/2001/02/07/stephen_king_reveals_the_plant/

[46] Songwriters Association of Canada, "The Songwriters Association of Canada's Proposal to Monetize the Non-commercial Sharing of Music," (2011): http://www.songwriters.ca/proposaldetailed.aspx

[47] Richard Stallman, "Why Open Source Misses the Point of Free Software," (2011): http://www.gnu.org/philosophy/open-source-misses-the-point.html

[48] Gary Hall, *Digitize This Book: The Politics of New Media, or Why We Need Open Access Now*, (Minneapolis: University of Minnesota Press, 2008), 187-193; Michael Gurstein, "Open Data: Empowering the Empowered or Effective Data Use for Everyone?" *First Monday*, 16(2), (2011): http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3316/2764 ; Klaus Hoeyer, Mette N. Svendsen and Lene Koch, "OECD Guidelines on Open Access: Commercialization in Disguise?" *Trends in Biotechnology*, 26(9), (2008), 461;and, Vincent Manzerolle, "Mobilizing the Audience Commodity: Digital Labour in a Wireless World," *Ephemera: Theory & Politics in Organization*, 10(3/4), (2010), 461: http://www.ephemeraweb.org/journal/10-3/10-3manzerolle.pdf

expansionary trends of IP. In this regard it is important to examine the increasing role governments, which are the source of IP rights, are playing in promoting alternative measures.

Contrasting Canadian and U.S. Policies for Intellectual Goods

In contrasting U.S. and Canadian policies it is important to note that key differences exist with respect to comparing different IP rights. Though many areas of the two nation's IP laws have been harmonized by both TRIPS and NAFTA (the North American Free Trade Agreement),[49] there are several notable differences. With respect to copyright, the term of protection in Canada is 20 years shorter, and Canada has still not implemented the WCT and WPPT that carry a number of obligations most significant of which is providing protection for TPMs. Another important difference is that information produced by the U.S. federal government is not given copyright protection,[50] unlike Canada where federally produced material is protected by Crown Copyright.[51] While these differences are important, they do not preclude comparison of the two countries copyright regimes, and in fact comparison can be used for insightful analysis.

Comparing the two countries patent systems is a more precarious proposition because the U.S. Patent and Trademark Office (USPTO) is the world's primary destination for patent applications. While the terms of protection (20 years) are the same,[52] and scope of patent protection becoming increasingly harmonized given the Federal Court decision opening the door to business method patents in Canada, a significant discord exists between the amount of patenting activity that takes place in the two countries. In 2009 the Canadian Intellectual Property Office received 37,477 patent applications and granted 19,497 patents, while the U.S. Patent and Trademark Office received 456,106 applications and approved 167,349 patent applications.[53] Furthermore, as the world's premier destination for inventors the USPTO faces a substantive backlog of applications that have yet to be examined, which as of April 2011 stands at 706,778 applications.[54] A second significant difference is that the share of patent applicants in the United States is split evenly between domestic and foreign applicants, while in Canada the vast majority of patent applications (over 86%) come from foreigners.[55] The staggering volume of U.S. patent applications has led the USPTO to develop alternative mechanisms for dealing with the backlog problem including Project Exchange which allows for expedited examination in specific cases,[56] and the Peer-to-Patent partnership with the New York Law School that allows individuals

---

[49] North American Free Trade Agreement (NAFTA), 1993, Chpt. 17: http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/nafta-alena/texte/chap17.aspx?lang=en
[50] 17 U.S.C. § 105.
[51] Copyright Act, (R.S.C., 1985, c. C-42), s. 12.
[52] 35 U.S.C. § 154(a)(2); and, Patent Act, (R.S.C., 1985, c. P-4), s. 45(2).
[53] WIPO, "Statistics on Patents," (2010): http://www.wipo.int/ipstats/en/statistics/patents
[54] United States – United States Patent and Trademark Office (USPTO), "Patent Dashboard," (2011): http://www.uspto.gov/dashboards/patents/main.dashxml
[55] WIPO, "Statistics on Patents," (2010): http://www.wipo.int/ipstats/en/statistics/patents
[56] USPTO, "Project Exchange – Patent Application Backlog Stimulus Reduction Plan," (2011): http://www.uspto.gov/patents/init_events/PatentStimulusPlan.jsp

outside the USPTO to help identify the state of current knowledge in a field (prior art).[57] Finally, because of economies of scale, U.S. federal departments and agencies are in a superior position to offer prize programs such as the Department of Energy's L-Prize and National Aeronautic and Space Administrations' (NASA) Centennial Challenges.[58]

Given the substantive differences between the two countries patent systems, the paper will proceed with an examination of government policies supporting alternatives to copyrights with a specific focus on government support for user generated content, open access scholarly publishing and open data.[59]

Canada's Digital Economy Strategy - *Improving Canada's Digital Advantage*

Before examining Canadian policies on alternatives to copyright, it must be noted that one of the significant differences between the Canadian and U.S. copyright systems, and the issue that has most upset the USTR, will likely be eliminated. Despite three failed attempts at implementing the two WIPO treaties signed in 1996, the Conservative government now backed with a majority mandate has stated that it will re-introduce the most recent Copyright Modernization Act (Bill C-32) from the previous Parliamentary session.[60] The election pledge follows a string of similar statements evincing the influence of the expansionary trend on the government. In the 2010 Speech from the Throne where the government committed itself to "strengthen laws governing intellectual property and copyright."[61] Though the unveiling of the government's Digital Economy Strategy was delayed with the spring 2011 election, the consultation paper on the strategy, *Improving Canada's Digital Advantage*, released by the government in May 2010, repeated the Throne speech pledge to strengthen IP laws.[62] It also noted that modernized copyright legislation was necessary to "maximize creativity, innovation and economic growth;"[63] however, the government did endorse the idea of providing access to publicly funded research data.[64]

---

[57] USPTO, "Peer-to-Patent," (2011): http://www.peertopatent.org/

[58] National Aeronautic and Space Administration (NASA), "Centennial Challenges," (2011): http://www.nasa.gov/offices/oct/early_stage_innovation/centennial_challenges/index.html

[59] For those interested in a comparison of support for open source software, James Lewis at the Center for Strategic and International Studies has produced a series of comprehensive reports documenting open source policies from national and subnational governments around the world (James Lewis, Government Open Source Policies," Center for Strategic and International Studies, (2010): http://csis.org/files/publication/100416_Open_Source_Policies.pdf).

[60] Conservative Party of Canada, *Here for Canada: Stephen Harper's Low-Tax Plan for Jobs and Economic Growth*, (2011), 15: http://www.conservative.ca/media/ConservativePlatform2011_ENs.pdf

[61] Canada, *Speech from the Throne 2010: A Stronger Canada. A Stronger Economy*, (2010), 7: http://www.speech.gc.ca/grfx/docs/sft-ddt-2010_e.pdf

[62] Canada, *Improving Canada's Digital Advantage: Strategies for Sustainable Prosperity*, (2010), 8: http://de-en.gc.ca/wp-content/uploads/2010/05/Consultation_Paper.pdf

[63] Canada, *Improving Canada's Digital Advantage: Strategies for Sustainable Prosperity*, (2010), 14: http://de-en.gc.ca/wp-content/uploads/2010/05/Consultation_Paper.pdf

[64] Canada, *Improving Canada's Digital Advantage: Strategies for Sustainable Prosperity*, (2010), 14: http://de-en.gc.ca/wp-content/uploads/2010/05/Consultation_Paper.pdf

Given two failed attempts at copyright modernization by the Harper government and an election promise to reintroduce the most recent proposed copyright amendments it appears reasonable to assume that any new copyright bill will be closely modeled on last year's Bill C-32 – an assumption that one of Canada's foremost scholars on information policy, Michael Geist, also makes.[65] Under the system devised in Bill C-32 circumventing a technological protection measure even if for a legitimate, non-infringing, fair-dealing purpose, would still have been an actionable offense.[66] While the government claimed that Bill C-32 represented a balanced approach going so far as to create a new government website, balancedcopyright.gc.ca,[67] the digital lock provisions in section 41 of the bill resulted in criticisms from range of interested groups and individuals.[68] Craig noted that far from being balanced the bill would have granted too much power to copyright holders ultimately undermining the purpose of the copyright system itself.[69] Geist's analysis of the WIPO internet treaties suggests that Canada had significant leeway in implementation and did not need to provide such restrictive protection for TPMs.[70] Finally several commentators including the New Democratic Party (NDP) and the Canadian Library Association highlighted the expansionary approach to Bill C-32 noting the government adopted the "maximalist" approach.[71] Although it is unclear if a reintroduced version of the Copyright Modernization Act will directly copy the language in Bill C-32, given the election pledge by the Conservatives it appears that protection for TPMs is a near inevitability. The government's action and rhetoric demonstrate that it is clearly interested in ameliorating its perceived status as IP laggard, and while the ratcheting up of IP rights benefits rights holders, the strengthening of exclusionary rights intellectual works possess a clear potential to limit access to creative and artistic works.

---

[65] Michael Geist, "What Comes Next for Canadian Copyright Reform: Speculating on Three Scenarios," (2011): http://www.michaelgeist.ca/content/view/5796/125/

[66] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 41.

[67] Canada, "Government of Canada Introduces Proposals to Modernize Copyright Act," (2010): http://www.ic.gc.ca/eic/site/crp-prda.nsf/eng/h_rp01149.html

[68] Michael Geist, "Introduction," in *From "Radical Extremism" to "Balanced Copyright": Canadian Copyright and the Digital Agenda*, Michael Geist (ed.), (Irwin Law, Toronto, 2010), 3.

[69] Carys Craig, "Locking Out Lawful Users: Fair Dealing and Anti-Circumvention in Bill C-32," in *From "Radical Extremism" to "Balanced Copyright": Canadian Copyright and the Digital Agenda*, Michael Geist (ed.), (Irwin Law, Toronto, 2010), 179.

[70] Michael Geist, "The Case for Flexibility in Implementing the WIPO Internet Treaties: An Examination of the Anti-Circumvention Requirements," in *From "Radical Extremism" to "Balanced Copyright": Canadian Copyright and the Digital Agenda*, Michael Geist (ed.), (Irwin Law, Toronto, 2010), 246.

[71] New Democratic Party (NDP), "Moore Has His Facts Wrong on Copyright: New Democrats Call for International Opinion on Restrictive Digital Locks," (2010): http://www.ndp.ca/press/moore-has-his-facts-wrong-on-copyright ; Canadian Library Association (CLA), *Protecting the Public Interest in the Digital World: The Views of the Canadian Library Association / Association cannadienne des bibliotheques on Bill C-32, An Act to Amend the Copyright Act*, (2010), 3: http://www.cla.ca/Content/ContentFolders/NewsReleases/2010/Bill_C-32_CLA_Brief_final.pdf ; Blayne Haggart, "North American Digital Copyright, Regional Governance, and the Potential for Variation," in *From "Radical Extremism" to "Balanced Copyright": Canadian Copyright and the Digital Agenda*, Michael Geist (ed.), (Irwin Law, Toronto, 2010), 62.

User Generated Content and Copyright Modernization

Though Bill C-32 clearly reflected an expansionary approach to intellectual property, it did contain a number of provisions that would have benefited users. Fair dealing exceptions to infringement, currently limited to research, private study, news and criticism,[72] would have been expanded to include education, parody and satire.[73] New exceptions would also have been created for format shifting of audio materials,[74] and time shifting,[75] and limited back-up copying.[76] The bill also contained a significant new exception for individuals producing user-generated content.[77] The category of UGC, "content that is voluntarily developed by an individual or a consortium and distributed through an online platform,"[78] represents a wide variety of content production from individuals contributing to wikis or crafting their own blogs to the creation of video mash-ups on YouTube. Though much UGC is original in nature, Bill C-32 would have allowed for the creation of new content from existing content.[79] The creation of a UGC exception would have been a progressive recognition of the increasing importance of such content and made Canada a global leader providing statutory protection for UGC.[80]

The proposed UGC exception was not without its own shortcomings manifested in four conditions required to qualify for the exception. Works would have to be non-commercial in nature to qualify,[81] although Gervais has noted that it is unclear if this would include materials posted on YouTube as it relies on advertising revenue.[82] The commercial / non-commercial dichotomy is particularly problematic, and a superior system could focus on the level of tranfomativity and encourage the use of copyrighted source material where a substantive transformation occurs creating an 'original' new work.[83] A second limitation requires that the resulting UGC not have an adverse effect on the exploitation, potential exploitation or potential

---

[72] Copyright Act, (R.S.C., 1985, . C-42), s. 29.
[73] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.
[74] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.22.
[75] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.23.
[76] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.24.
[77] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.21.
[78] Samuel E. Trosow, Jacquelyn Burkell, Nick Dyer-Witherford, Pamela McKenzie, Michael B. McNally, Caroline Whippy and Lola Wong, *Mobilizing User-Generated Content for Canada's Digital Advantage*, (2010), 10: http://ir.lib.uwo.ca/fimspub/21/
[79] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.21(1).
[80] In the United States there has not been a legislation to deal with UGC; however, there has been a number of legal cases on the issue (Len Glickman and Jessica Fingerhut, "User Generated Content: Recent Developments in Canada and the US" presented at The Law Society of Upper Canada Entertainment and Media Law Symposium, 16 Apr. 2011: http://www.casselsbrock.com/files/file/docs/UGC%20PAPER%20-%202011%20-%20CBB%20Report.pdf), and the European Union has conducted a consultation on creating a UGC exception, though it concluded that no action was to be taken (Commission of the European Communities, *Communication from the Commission: Copyright in the Knowledge Economy*, COM (2009) 532 Final, (2009), 15: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0532:FIN:EN:PDF
[81] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.21(1)(a).
[82] Daniel Gervais, "User-Generated Content and Music File Sharing: A Look at Some of the More Interesting Aspects of Bill C-32" in *From "Radical Extremism" to "Balanced Copyright": Canadian Copyright and the Digital Agenda*, Michael Geist (ed.), (Irwin Law, Toronto, 2010), 473.
[83] Trosow et. al., Mobilizing *User-Generated Content for Canada's Digital Advantage*, 41.

market of the original work.[84] This limitation invites abuse by rights holders as they can always claim that UGC impinges upon 'potentials' for their work. Taken collectively these limitations would render the UGC exception nugatory. Furthermore, under the Bill C-32 approach if the UGC creator obtained the materials for their content by violating a TPM they would be guilty of circumvention even if they qualified for the UGC exception. The government should be commended for recognizing that UGC is an increasingly important form of content production, and one that typically occurs at the margins of the copyright system; however, as drafted in Bill C-32 the UGC exception falls short. Hopefully when the government reintroduces copyright legislation it corrects these deficiencies to ensure a balanced approach and one that doesn't over-emphasize the maximalist/expansionary tendencies.

Open Government in Canada Data.gc.ca

While Canada has a chance to take the lead on UGC, with respect to creating and maintaining an open data project much work is needed, though recent developments do offer some positive signs. On March 17, 2011 the Government of Canada made an important, though limited, step in providing alternative policy mechanisms to encourage the production of digital content. Then Treasury Board President Stockwell Day unveiled the federal government's open data portal – data.gc.ca.[85] Though currently offered only as a pilot project data.gc.ca provides access to over 260,000 government datasets; however the overwhelming majority (99.7%) are geospatial datasets which were previously available through Natural Resources Canada's existing open data services, GeoGratis and GeoBase (which also includes several provincial departments in its partnership).[86] The portal provides access to 780 general sets, and more important than the access to such sets is the ability for citizens to repurpose such data for new uses. The licensing terms specifically grant the individuals who use such data any resulting IP rights, though the government retains all IP rights in the original data itself.[87] While this represents a laudable policy development, Canada has lagged behind numerous other nations in offering such a portal (including Australia, Denmark, Estonia, Finland, Germany, Greece, Hong-Kong, Ireland, Italy, Moldova, New Zealand, Norway, Spain, Timor-Leste, the United Kingdom and the United States).[88] Furthermore, the usefulness of the available data is limited by a clause in section 3.4 that limits one's ability to identify individuals, families, households, organizations and businesses.[89] The restrictions found in section 3.4 are not found in the GeoGratis License

---

[84] An Act to Amend the Copyright Act (Bill C-32), 40th Parl. 3rd Sess., 2010, s. 29.21(1)(d).
[85] Canada, *Open Data Pilot Project* (2011): http://www.data.gc.ca
[86] Canada, *Open Data Pilot Project* (2011): http://www.data.gc.ca ; Canada – Natural Resources Canada (NRC), "Welcome to GeoGratis," (2011): http://geogratis.cgdi.gc.ca/geogratis/en/index.html ; and, GeoBase, "Home," (2011): http://www.geobase.ca/geobase/en/index.html
[87] Canada, "Government of Canada Open Data License Agreement for Unrestricted Use of Canada's Data," (2011), s. 2: http://www.data.gc.ca/default.asp?lang=En&n=46D15882-1
[88] United States – Data.gov, "Open Data Sites: International Open Data Sites," (2011): http://www.data.gov/opendatasites
[89] Canada, "Government of Canada Open Data License Agreement for Unrestricted Use of Canada's Data," (2011), s. 3.4: http://www.data.gc.ca/default.asp?lang=En&n=46D15882-1

Agreement used by Natural Resources Canada.[90] However, the government has demonstrated that the license is an evolving document as the most draconian clause – one which prevented uses of the data that may bring disrepute or prejudice to the government (formerly sec. 5.3) – has been eliminated.[91]

A second more crucial problem is not immediately obvious – though the 780 general datasets available certainly have a variety of uses there is no substantive Treasury Board mandate that compels government departments and agencies to make their data available.[92] Less than a dozen federal departments and agencies are contributing to the open data project,[93] and three of these departments (Library and Archives Canada, Transport Canada and the Treasury Board of Canada Secretariat) are contributing less than five datasets each.[94] The lack of support for the project is reflected in its lack of growth; the number of available general use datasets has shrunk marginally from 782 at launch to the current number of 780.[95] To be successful open data projects require that the datasets be produced in machine readable formats, and this may represent an additional time and cost for departments and agencies to undertake. Without mandating open data it is unclear to what degree government bodies will have the necessary incentive to contribute to data.gc.ca

Although data.gc.ca represents an excellent first-step in opening government data for innovative uses, it is unfortunately only a first step. The license requires further development, but more importantly the government needs to show a clear commitment to the portal by mandating that future datasets be prepared in a machine readable format for inclusion on the site.

CIHR and Open Access

One of the central principles behind open data – that taxpayer subsidized data should be available without cost – has also created a push for the outputs of taxpayer funded research, particularly in the sciences, to also be available without cost. Although there a wide range of open access models,[96] there is an important role for governments to play in creating policies that

---

[90] NRC, "GeoGratis License Agreement for Unrestricted Use of Digital Data," (2007): http://geogratis.cgdi.gc.ca/geogratis/en/licence.jsp

[91] David Eaves, "Canada Launches data.gc.ca – What Works and What Is Broken," (2011): http://eaves.ca/2011/03/17/canada-launches-data-gc-ca-what-works-and-what-is-broken/

[92] The Treasury Board does have some limited categories of data the must be disclosed under Proactive Disclosure policies (Canada – Treasury Board of Canada Secretariat, "Proactive Disclosure," (2006): http://www.tbs-sct.gc.ca/pd-dp/index-eng.asp).

[93] Canada – Treasury Board of Canada Secretariat, "Minister Day Launches Open Data Portal," (2011): http://www.tbs-sct.gc.ca/media/nr-cp/2011/0317a-eng.asp

[94] Canada – "Browse Datasets by Department," (2011): http://www.data.gc.ca/default.asp?lang=En&n=6E81B685-1

[95] State Government of Victoria – eGovernment Resource Centre, "Government of Canada – Open Data, (2011): http://www.egov.vic.gov.au/focus-on-countries/north-and-south-america-and-the-caribbean/canada/government-initiatives-canada/government-and-politics-canada/government-information-and-data-canada/government-of-canada-open-data.html

[96] John Willinksy, *The Access Principle: The Case for Open Access Research and Scholarship*, (Cambridge, MA: MIT Press, 2006), 212-13.

ensure that publicly funded research outputs including scientific papers and conference papers are accessible. UNESCO (The United Nations Educational, Cultural and Scientific Organization) has placed specific emphasis on government supported open access policies as a way to improve the global flow of information, facilitate information and encourage socio-economic development.[97] Canada has only undertaken tepid support for ensuring that federally funded research is made openly accessible. The federal government's three primary academic funding bodies – NSERC (Natural Sciences and Engineering Research Council of Canada), SSHRC (Social Sciences and Humanities Research Council of Canada) and CIHR (Canadian Institutes of Health Research) – support open access publishing to various degrees. Collectively the three organizations have a guiding principle that notes, "Publically funded research should be as accessible as possible in order to maximize the economic, social, cultural and health benefits for Canadians."[98] Although this principle recognizes the importance of openly accessible research, it fails to both elaborate further on how research can be made accessible and more importantly require it. NSERC's funding guidelines note that a variety of publication mechanisms exist and suggests note that each has various advantages, but fails to even recommend open access publishing.[99] In 2004 SSHRC declared that it supported open access in principle, and in 2006 it began an awareness raising program on open access; however, like NSREC no substantive policy to ensure publically funded materials are made available exists.[100] CIHR has demonstrated the most enthusiasm for open access publishing. Its *Policy on Access to Research Outputs* from Sept. 2007 states:

> Grant recipients are now required to make every effort to ensure that their peer-reviewed publications are freely accessible through the Publisher's website (Option #1) or an online repository as soon as possible and in any event within six months of publication (Option #2).[101]

In contrast with NSERC and SSHRC, CIHR has clearly taken a leadership role; however, the policy still falls slightly short of requiring open access. Although none of the three agencies have required research publications to be made in an openly accessible format, both SSHRC and CIHR do have policies to ensure that research data is made available to other researchers.[102]

---

[97] United Nations Educational, Scientific and Cultural Organization (UNESCO), "Open Access to Scientific Information," (2011): http://www.unesco.org/new/en/communication-and-information/access-to-knowledge/open-access-to-scientific-information/

[98] Canada, "Access to Research Results: Guiding Principles," (2010): http://www.science.gc.ca/default.asp?Lang=En&n=9990CB6B-1

[99] Canada – Natural Sciences and Engineering Research Council of Canada (NSERC), "Policy and Guidelines on the Assessment of Contributions to Research and Training," (2009): http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Policies-Politiques/assesscontrib-evalcontrib_eng.asp#1

[100] Canada – Social Sciences and Humanities Research Council (SSHRC), "Policies: Open Access," (2010): http://www.sshrc-crsh.gc.ca/about-au_sujet/policies-politiques/open_access-libre_acces/index-eng.aspx

[101] Canada – Canadian Institutes of Health Research (CIHR), *Policy on Access to Research Outputs*, (2007), s. 5.1.1: http://www.cihr-irsc.gc.ca/e/documents/cihr_policy_on_access_to_research_outputs_e.pdf

[102] SSHRC, "Policies: SSHRC Research Data Archiving Policy," (2010): http://www.sshrc-crsh.gc.ca/about-au_sujet/policies-politiques/statements-enonces/edata-donnees_electroniques-eng.aspx ; and, CIRH *Policy on*

Finally, although Canadian theses and dissertations are not necessarily publically funded Library and Archives Canada's Theses Canada program has taken some step towards ensuring its materials are available electronically. Currently the option of electronic submission of theses and dissertations is only available to for universities that allow for electronic submission;[103] however, in May 2010, Theses Canada stated that by 2014 it will move to a model based solely on digital acquisition allowing all theses to be available via digital repositories.[104]

To date Canada has failed to make significant inroads into ensuring that when academics receive taxpayer dollars they reciprocate by making their published research findings freely accessible. The benefits of open access also extend beyond the country's borders and help to address the global imbalance in information flows where access to most traditionally published scholarly materials is limited to those institutions which can afford subscriptions. Researchers themselves must also take an interest in supporting open access including advocating for and accepting funding guidelines that require open access publication as openly accessible publications result in the valuable, non-pecuniary academic rewards of a wider audience of readers, more citations and increased impact factor.[105]

Assessing Canadian federal government support for alternatives to IP one is left with the impression that much more needs to be done. Support for open data and open access are limited and can be expanded greatly, while Canada could be a leader in creating a copyright exception to facilitate UGC production there is no certainty in this regard, and based on the previous copyright bill the UGC provisions are limited by their own exceptions and the pervasive anticircumvention measures.

Open Government Directive

The U.S. situation with respect to open access, open data and UGC differs sharply. At the legislative level UGC has failed to resonate with Congress; however, it should be noted that the concept of transformativity is central to American fair use doctrine.[106] With respect to federal support for open access and open data the U.S. government invested considerable efforts in supporting these mechanisms particularly the later. Data.gov the U.S. federal open data portal

---

Access to Research Outputs, (2007), s. 5.1.2: http://www.cihr-irsc.gc.ca/e/documents/cihr_policy_on_access_to_research_outputs_e.pdf

[103] Canada – Library and Archives Canada – Theses Canada, "About Electronic Theses," (2010): http://www.collectionscanada.gc.ca/thesescanada/027007-9000-e.html

[104] Canada – Library and Archives Canada – Theses Canada, "What's New," (2010): http://www.collectionscanada.gc.ca/thesescanada/027007-3300-e.html

[105] Devon Greyson, Heather Morrison and Andrew Waller, "Open Access in Canada: A Strong Beginning," *Feliciter*, 56(2), (2010), 60; Ben Wagner, "Open Access Citation Advantage: An Annotated Bibliography," Issues in Science and Technology Librarianship, 60, (2010): http://www.istl.org/10-winter/article2.html ; and, Alma Swan, *The Open Access Citation Advantage: Studies and Results to Date*. Technical Report, School of Electronics and Computer Science, (2010), 2-3: http://eprints.ecs.soton.ac.uk/18516/2/Citation_advantage_paper.pdf

[106] 17 U.S.C. § 107; and, Pierre N. Leval, "Towards a Fair Use Standard," *Harvard Law Review*, 103, (1990), 1111 and 1127.

was launched in May 2009; however, it included only a meager 47 datasets.[107] Despite the slow start, the portal has grown quickly, backed by a December 2009 the Open Government Directive from the Executive Office of the President.[108] Based on the three principles of transparency, participation and collaboration the directive compels U.S. federal departments and agencies to contribute to an open data project.[109] Like the Canadian portal the vast majority of the 389,713 datasets available are geospatial, but data.gov includes 3320 general datasets.[110] More importantly data.gov includes numerous advanced features. Over 1000 apps developed by both the government agencies and private individuals are available through the portal that allow citizens to use the data in informative, value-added ways.[111] For example, the most popular app this year is the Environmental Protection Agency's RadNet Monitoring Data that maps the agencies radiation monitoring stations and provides information on detected radiation levels.[112] The site also contains a mechanism that allows citizens to suggest what datasets they want to have included, and provides statistics on the fulfillment of requests to date.[113] The combination of extensive data holdings, a mandate for federal departments and agencies to make their data available, readily included apps and mechanisms to allow citizens to request additional datasets evince what a mature open data platform should look like. The U.S. government represents a model for others with regards to open data.

Although the U.S. has demonstrated leadership in the area of open data, it continues to strive to improve data.gov. Later this year the portal will be redesigned to make it easier to use for lay citizens, app programmers and the contributing departments and agencies.[114] The new portal will integrate visualization tools allowing users to quickly create charts and maps without requiring other software.[115] Although it remains to be seen how successful the potential improvements to data.gov will be, what is clear is that even in its current state, the U.S. open government site is definitively superior to its Canadian counterpart. There is one significant potential problem with data.gov – stable funding in the face of mounting U.S. federal debt. The 2011 U.S. Government Budget cut the appropriation for the Electronic Government Fund, which finances Data.gov,

---

[107] United States – The Whitehouse, "From Data to Apps: Putting Government to Work for You," (2011): http://www.whitehouse.gov/blog/2011/05/20/data-apps-putting-government-information-work-you

[108] United States – Executive Office of the President, *Open Government Directive*, (2009): http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-06.pdf

[109] Executive Office of the President, *Open Government Directive*, (2009), 1(d) and 1(e): http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-06.pdf

[110] United States – Data.gov, "Raw Data," (2011): http://explore.data.gov/catalog/raw/

[111] Data.gov, "Data.gov," (2011): http://www.data.gov/

[112] United States – Environmental Protection Agency, "EPA's RadNet Monitoring Data," (2011): http://www.epa.gov/japan2011/rert/radnet-data-map.html

[113] Data.gov, "Suggest Other Datasets," (2011): http://www.data.gov/suggestdataset

[114] Socrata, *Data.gov Platform Overview*, (2011): http://www.socrata.com/wp-content/uploads/2011/03/Data.Gov-Platform-Overview-1.8.pdf

[115] Socrata, *Creating an Engaging Citizen Experience*, (2011): http://www.socrata.com/wp-content/uploads/2011/03/Creating-an-Engaging-Citizen-Experience-V1.8.pdf

from $35 million (USD) to $8 million.[116] Vivek Kundra, the Federal Chief Information Officer, has noted that data.gov will not be affected, though planned enhancements may be delayed as other programs funded from the Electronic Government Fund will be cut.[117] While data.gov appears to have escaped any deleterious effects from this year's budget cuts, stable funding is central to ensuring the sites continued success.

NIH and Open Access

Government policies supporting alternative to IP rights are not limited to open data in the U.S. In 2005 the National Institutes of Health (NIH), the primary federal funding agency for research in health and medicine, took significant step in supporting open access. The NIH's 2005 policy "requested" authors to place a final, peer-reviewed manuscript in the NIH's freely available online repository PubMed Central.[118] The policy contained two important caveats; the policy only requested the material, which is a slightly weaker requirement than CIHR's current policy, and deposit in the repository could occur up to twelve months after initial publication – a lifetime in cutting edge health and medical research.[119] Despite these initial limitations, a 2008 revision strengthen the policy by requiring deposit, although the 12 month lag between initial publication and deposit in PubMed Central remains.[120] Unsurprisingly the volume of articles placed in PubMed Central has surged; from May 2005 to May 2008 the average number of articles deposited per month was less than 1000; however, from June 2008 to April 2011 the monthly average increased to nearly 5000.[121] Though the NIH only funds research in one area, it must be noted that its $31.2 billion (USD) research budget[122] is greater than more than 100 different countries entire GDP.[123]

There have also been several Congressional attempts to expand the open access policy at the NIH to other federal departments engaged in extramural research. First proposed in 2006 the Federal Research Public Access Act (FRPAA) would require all federal agencies that fund more

---

[116] Ed O'Keefe, "Budget Cut Could Close the Door on Open Government," *Washington Post*, 14 Apr. 2011: http://www.washingtonpost.com/blogs/federal-eye/post/budget-could-close-the-door-on-open-government/2011/04/13/AFttdXbD_blog.html?wpisrc=nl_fedinsider

[117] Vivek Kundra, as quoted by, Tom Carper, "Press Release: Sen. Carper Releases Administration Response Regarding Cuts to Fund Transparency and Accountability for Federal Government," (2011): http://carper.senate.gov/public/index.cfm/pressreleases?ContentRecord_id=e6f388fa-3810-46e4-bc2d-5742a1edece9

[118] United States – National Institutes of Health (NIH), "Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research," (2005): http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html#Final

[119] NIH, "Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research," (2005): http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html#Final

[120] NIH, "Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research," (2008): http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html

[121] Authors calculations based on data from: NIH, ":NIHMS Statistics: Monthly Aggregate Submission Statistics," (2011): http://www.nihms.nih.gov/stats/

[122] NIH, "About NIH: NIH Budget," (2011): http://www.nih.gov/about/budget.htm

[123] World Bank, "GDP (Current US$), (2011): http://data.worldbank.org/indicator/NY.GDP.MKTP.CD?order=wbapi_data_value_2009+wbapi_data_value+wbapi_data_value-last&sort=asc

than $100,000,000 on outside (academic) research to require materials be made openly accessible and maintain a repository.[124] 10 departments and agencies would have been covered by FRPAA – the Departments of Agriculture, Commerce, Defence, Education, Energy, Health and Human Services, and Transportation along with the Environmental Protection Agency (EPA), NASA, and the National Science Foundation (NSF).[125] Although promising, the bill never moved beyond the Senate Subcommittee on Federal Financial Management, Government Information, and International Security.[126] In the 111th Congressional session (2009-10) the FRPAA was reintroduced in both Senate (Bill 1373) and the House of Representatives (Bills 5037 and 5253), but as in 2006 these bills never moved past their respective Congressional committees/subcommittees.[127] Unfortunately, no version of FRPAA has been introduced in the current Congressional session.

While efforts to broaden the open access policy of the NIH to more federal departments appears stalled, the U.S. should be commended for making accessible the billions of taxpayer dollars of NIH research.

Conclusion: Leading, Lagging and Lesson Learning

Over the past 30 years Canada has lagged behind the U.S. with regards to government policies on both IP and some of its alternatives; however, this laggard status is not in and of itself a problem. Although the expansionary IP trend has and continues to influence Canadian policy, Canadian policymakers can and should use policy differences as a basis for comparison and analysis to craft better policies. The U.S. implemented the WCT and WPPT 13 years ago, and in this time it should be expected that Canadian officials can learn lessons from the DMCA. Data.gov and the NIH's open access policy are far more mature and substantive than their Canadian counterparts, and should be used as examples of best practices to improve the similar Canadian programs. Canada also needs to move from a lesson learning laggard to a leader in intellectual goods policy, and creating legal protection for user-generated content offers the country the chance to do so.

Both Canada and the United States deserve credit for creating policies to support alternatives to IP rights maximization, though in both countries more can be done. The U.S. and the entire globe would benefit by the passing of the Federal Research Public Access Act that would make

---

[124] Federal Research Public Access Act (2006), S. 2695, 109th Congress 2nd Sess., s. 4 [not passed into law].

[125] Peter Suber, "Open Access in the USA," in *Open Access: Key Strategic, Technical and Economic Aspects*, Neil Jacobs (ed.), (Oxford, UK: Chandos, 2006), 158.

[126] United States – Library of Congress, "Bill Summary & Status 109th Congress (2005-2006) S. 2695: All Information," (n.d.): http://thomas.loc.gov/cgi-bin/bdquery/z?d109:SN02695:@@@L&summ2=m&

[127] Library of Congress, "Bill Summary & Status 111th Congress (2009-2010) S. 1373: All Information," (n.d.): http://thomas.loc.gov/cgi-bin/bdquery/z?d111:SN01373:@@@L&summ2=m& ; Library of Congress, "Bill Summary & Status 111th Congress (2009-2010) H.R. 5037: All Information," (n.d.): http://thomas.loc.gov/cgi-bin/bdquery/z?d111:HR05037:@@@L&summ2=m& ; and, Library of Congress, "Bill Summary & Status 111th Congress (2009-2010) H.R. 5253: All Information," (n.d.): http://thomas.loc.gov/cgi-bin/bdquery/z?d111:HR05253:@@@L&summ2=m&

billions in publically funded research available to the public. Canadian officials have taken some important first steps such as creating an open data portal and the CIHR's policy on research outputs; however, these policies must be expanded. The defeat of Bill C-32 offers the government the chance to revisit its proposed copyright legislation and enhance the UGC exception while ensuring that protection for TPMs is limited to only infringing uses.

Policymakers must remember that the purpose of IP is to encourage progress in the arts and sciences and facilitate innovation, not maximize wealth through the granting of exclusionary rights. The expansionary IP regime is based on the false premise that stronger rights create better incentives and therefore more intellectual work. Although a heterogeneous grouping, alternatives to IP demonstrate the multiplicity of incentives involved in the production of intellectual goods. Government policies that encourage innovative uses of government data, the sharing of research knowledge and new avenues of culture expression through user generated content are deserved and required. Governments that undertake policies which unduly privilege private rights holders do so at their own peril and threaten the social goal IP policy.