
**REPORT FOR CRTC 2018-0046-7:
APPLICATION TO DISABLE ON-LINE
ACCESS TO PIRACY SITES**

Prepared for Public Interest Advocacy Centre (PIAC)

By

Ariel Katz

Associate Professor, Innovation Chair—Electronic Commerce
Faculty of Law, University of Toronto

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I.	Introduction and Summary of Opinion	2
II.	Qualifications and Experience	5
III.	Summary of Alleged Harms	7
IV.	The Basic Economics of Copyright and Broadcasting	8
V.	The Basic Economics of Piracy	11
A.	What causes mismatch between demand for content and its legal supply?.....	13
1.	Copyright-related market power	13
2.	Market power beyond that inherent in copyright and piracy	14
B.	Intermediaries’ Market Power Can Harm Users and Creators	18
VI.	Is piracy harmful, to what and to whom?	18
1.	Not all piracy necessarily results in revenue loss to content distributors (a).....	20
2.	Even if piracy harms content distributors, it does not necessarily lead to lower revenue to content owners (b)	22
3.	Even if piracy reduces the incentive to create new content, the social gains from greater access of existing content might outweigh those harms (d)	23
4.	Piracy might benefit content distributors and content creators.....	23
a)	Sampling and discovery	23
b)	Demand signalling	24
c)	Network Effects	25
d)	Indirect appropriability	27
5.	Piracy might harm content distributors but benefit content creators	27
6.	Even if piracy reduces distributors’ or creators’ profit, the amount, speed, and quality of new content could still increase.....	28
a)	Many of the same technologies that help pirates also help creators	28
b)	Narrowing windows and the New Golden Age of TV	31
VII.	Does the Application Materials Support the Claimed Harms?.....	37
VIII.	Is blocking of “piracy websites” effective?	46

IX.	Will the proposed website blocking benefit Canadian creators and will it spur Canadian creativity?.....	51
	a) No indication Canadian content is pirated disproportionately more than other content	52
	b) There is no basis to the believe that the proposed blocking regime will result in greater Canadian creative output but good grounds for concern that the opposite would happen.....	54
	c) The proposed regime, might, under some circumstances enrich some Canadians (not necessarily writers or artists) but for the wrong reasons.....	55
X.	Conclusion	56

I. INTRODUCTION AND SUMMARY OF OPINION

1. The Public Interest Advocacy Centre (PIAC) has requested me to prepare this Report in connection with the Application and assess the Applicants’ claims in light of the best available theoretical and empirical evidence. More specifically, to determine whether the academic literature and the Application itself substantiate the alleged harms of piracy and the efficacy and benefits of the proposed website blocking remedy.

2. The logic that animates the Application is straightforward: “[i]nvesting in programming is already risky, and becomes increasingly unviable if even the rare hit cannot be effectively monetized because it is pirated online.”¹ This logic is not only intuitively appealing but also theoretically sound, so long as sufficient attention is given to the key words *if* and *because*. To the extent that unauthorized use of copyrighted content undermines the producer’s ability to appropriate the returns from its creation, more piracy, even though it increases access to works, *might* be overall harmful *if* it reduces the incentive to create content in the first place.²

3. It is *possible* that piracy harms legitimate distributors such as licensed BDUs or OTT digital services. Indeed, in the recorded music industry, the advent of digitization, broadband internet, and the emergence of peer-to-peer file-sharing was correlated with a sharp decline in record labels’ sales and revenue. Even though establishing causation and determining the magnitude of the decline that can be attributable to piracy has been challenging and controversial, “[a]s the evidence

¹ Application Pursuant to Sections 24, 24.1, 36, and 70(1)(a) of the Telecommunications Act, 1993 to Disable On-line Access to Piracy Sites, 29 January 2018 [Application], para 5.

² Paul Belleflamme & Martin Peitz, “Digital Piracy: Theory” in Martin Peitz & Joel Waldfogel, eds, *Oxford Handbook of the Digital Economy* (Oxford University Press, 2012) at 493.

has developed, most scholars in this area now agree that the unpaid consumption made possible by digitization is responsible for the lion's share of the revenue reduction in the music industry."³ But although record labels' sales and revenue declined, neither movies, books, nor television have experienced a similar revenue crisis.⁴ Therefore, while it is *possible* that piracy harms legitimate content distributors (and potentially lowers content creators' revenue by extension), such an outcome is not necessary, inevitable, or can be simply assumed. Nor such an outcome should, from a policy perspective, be presumed.

4. In fact, the best available evidence does not support the Applicants' claims about the alleged harms to legitimate content distributors, let alone harms leading to the Application's parade of horrors. On the contrary, "more money is flowing into content creation than ever before".⁵

5. But even *if* piracy harms content distributors, and even *if* it leads to lower revenue for creators, it only *might* harm the creation of new content. A causal connection between lower revenue and a dwindling flow of quality content, while plausible, is neither necessary or inevitable, nor should it be simply assumed or presumed, because as I explain in greater detail below, both theory and evidence indicate that piracy may cause no such harms, and under some conditions might—counterintuitively—lead to low prices, greater choice, higher quality of service and increased production of quality content.

6. For example, even in the recording industry, record labels' revenue crisis has not slowed down the flow of new music, nor did it lower its quality. On the contrary, even though record labels' revenue has declined, the flow and quality of new music have not.⁶ And across the entire creative industries, digitization and related technological advancement have ushered in a golden age of music, movies, books, and television.⁷ There is even some new evidence indicating that

³ Joel Waldfogel, "How Digitization Has Created a Golden Age of Music, Movies, Books, and Television" (2017) 31:3 J Econ Perspect 195 at 197.

⁴ *Ibid* at 197–98.

⁵ Gillian Doyle, "Digitization and Changing Windowing Strategies in the Television Industry" (2016) 17:7 Telev New Media 629 at 633.

⁶ Joel Waldfogel, "Copyright Protection, Technological Change, and the Quality of New Products: Evidence from Recorded Music since Napster" (2012) 55:4 J L Econ 715.

⁷ Waldfogel, *supra* note 3.

Canadian content is doing particularly well globally, making Canadian creators even stronger beneficiaries of this golden age.⁸

7. The Application rings loud alarm bells about piracy's devastating harms to content creation, but the Applicant's sweeping claims about harms of harms are as broad as the evidence they provide to substantiate them is thin.

8. The Application proposes a mechanism for the grant of what is effectively an extrajudicial injunction, against non-infringing parties, granted on the basis of allegations of copyright infringement which would not have been proven in court. Canadian law does not recognize such a remedy, nor does it contemplate it. There is no need to speculate whether there would ever be any harm that could justify such an extraordinary remedy, because even if there could be, the Application fails to make the case for it.

9. The rest of this Report proceeds as follows: Part II describes my qualification and experience. Part III summarizes the main harms alleged by the Applicants. Part IV provides an introductory overview to the economics of copyright and broadcasting and Part V explains the basic economics of piracy and its causes. Part VI asks whether piracy is harmful and to whom. It addresses four related topics and explains why:

- Not all piracy is harmful to content distributors or creators as well as why piracy, in some circumstances, might benefit them;
- Even if piracy reduces distributors' or creators' revenue, it might not necessarily reduce their profit and even if it does, the reduction might not necessarily decrease the amount or quality of new works;
- Quantity and quality of creative content could increase even if distributors' or producers' profit margins decline; and
- There are strong reasons to believe these dynamics explain the current golden age of music, movies, books, and TV, the Applicants' alarmist claims notwithstanding.

⁸ Joel Waldfogel, Luis Aguiar & Estrella Gomez-Herrera, *Does Digitization Threaten Local Culture? Music in the Transition from iTunes to Spotify* (2017) (manuscript).

Part VII explains why the Application does not support the claim harms and Part VIII demonstrates why the Application fails to show that the proposed website blocking mechanism would be an effective and efficient way to reduce piracy. That part also explains why the proposed blocking regime is likely achieve very little gains while inflicting disproportionate harms. Part IX asks whether the proposed website blocking benefit Canadian creators and will it spur Canadian creativity. Part X concludes by explaining why the proposed website blocking mechanism is not only antithetical to the goals of the *Telecommunications Act* and the *Copyright Act* but is also likely to impose limitations on freedom of expression that could not be demonstrably justified in free and democratic society.

10. In a nutshell, the Applicants frame piracy as a problem of lawlessness, to which tougher law and stronger enforcement are the only or best solution. Sound theory and evidence do not support this common perspective. True, some people who engage in piracy break the law, but the main drivers of piracy are availability and affordability of legal access to content. Canada does not have a lawlessness problem; it has a competition problem that reduces the availability and affordability of legal access to content. The rest of this Report explains why this is the case.

II. QUALIFICATIONS AND EXPERIENCE

11. I am a tenured Associate Professor at the Faculty of Law University of Toronto where I also hold the Innovation Chair in Electronic Commerce. I was appointed to this position in 2004, first as an Assistant Professor, and since 2009 as Associate Professor. I also served as Director of the Center for Innovation Law and Policy, at the Faculty of Law, University of Toronto (CILP) between 2009 and 2012. My formal qualifications are: LLB (Hebrew University, Jerusalem) 1997, LLM (Hebrew University, Jerusalem) (*magna cum lauda*) 2001, SJD (University of Toronto) 2005 (*Hartle Award for Outstanding Graduate Scholarship*).

12. My general area of research involves intellectual property law, its interface with competition law, and their respective effects on innovation, with allied interests in electronic commerce, the regulation of international trade and particularly the intersection of all these fields. My research has mostly applied economic perspective to those topics, but recently I also began approaching those topics from a constitutional perspective. I regularly teach courses on these topics at the Faculty of Law, University of Toronto.

13. More specifically, I have studied, written, taught and presented on a wide range of topics including network effects and software piracy, intellectual property and market power, abuse of dominance, parallel importation, pharmaceuticals regulation, information asymmetry and trademarks. A considerable part of my work involves questions of copyright law and competition policy in digital products and online markets.

14. My work has been cited by the Supreme Court of Canada,⁹ by the Supreme Court of Israel,¹⁰ and by the Australian Law Reform Commission.¹¹ It has also influenced reform recommendations made by the European Commission,¹² and I was also invited last year by the U.S. Copyright Office to discuss extended collective licensing in a Roundtable on Orphan Works and Mass Digitization. I intervened and co-wrote facts in two recent Supreme Court cases, *Alberta (Education) v. Access Copyright*,¹³ and *CBC v. SODRAC*.¹⁴ I have also helped formulate, and signed, several *amicus briefs* filed with the US Supreme Court, and the US Courts of Appeal.¹⁵

15. I am one of the founding members of Authors Alliance, an organization that promotes authorship for the public good by supporting authors who write to be read, and who embrace the unprecedented potential digital networks have for the creation and distribution of knowledge and culture.¹⁶

16. I am also a member of the Society for Economic Research on Copyright Issues (SERCI) and the host of this year's SERCI Annual Congress which will be held in Toronto in July 2018.

⁹ *Entertainment Software Association v Society of Composers, Authors and Music Publishers of Canada*, [2012] 2 SCR 34 (SCC).

¹⁰ CA 5365/11 *ACUM - Association of Composers and Music Publishers in Israel v General Director of the Antitrust Authority* (3 September 2013) (Supreme Court of Israel) (in Hebrew). Online: <<http://elyon1.court.gov.il/files/11/650/053/a09/11053650.a09.htm>>

¹¹ Australian Law Reform Commission, *Copyright and the Digital Economy* (2014). Online: <http://www.alrc.gov.au/sites/default/files/pdfs/publications/final_report_alrc_122_2nd_december_2013_.pdf>

¹² Tilman Luder, "The Next Ten Years in EU Copyright: Making Markets Work" (2007) 18 *Fordham Intell Prop Media & Ent LJ* 1, at 51.

¹³ *Alberta (Education) v Canadian Copyright Licensing Agency (Access Copyright)*, [2012] 2 SCR 345 (SCC) (available on <http://canlii.ca/t/fs0v5>).

¹⁴ *Canadian Broadcasting Corp v SODRAC 2003 Inc*, [2015] 2015 SCC 57 (available on <http://canlii.ca/t/gm8b0>).

¹⁵ *Impression Products v. Lexmark Intern.*, 137 S Ct 1523 (2017); *American Broadcasting Cos, Inc v Aereo, Inc*, 573 US ___ (2014); *FTC v Actavis, Inc*, 570 US ___ (2013); *Kirtsaeng v John Wiley & Sons, Inc*, 568 US ___ (2013); *Authors Guild, Inc v HathiTrust*, 755 F 3d 87 (2nd Cir 2014); *Cambridge University Press v Patton*, 769 F 3d 1232 (11th Cir 2014).

¹⁶ "About Us | Authors Alliance", online: <<http://www.authorsalliance.org/about/#mission>>.

17. In preparing this Report, I have reviewed the Application and its supporting documents, as well as academic studies, media and other reports, referenced within this Report. The assumptions I rely upon are set out in the Report. My CV is attached as **Exhibit “A”**.

III. SUMMARY OF ALLEGED HARMS

18. According to the Applicants, the proposed website blocking mechanism is necessary because “Piracy is a large and growing problem that *threatens the massive employment, economic, and cultural contributions* of Canada’s film, television, and music industries.”¹⁷ The CRTC’s intervention is necessary because internet piracy, the Applicant say, not simply makes it more difficult “to build the successful business models that will meet the evolving demands of Canadians, support Canadian content production, and contribute to the Canadian economy” but indeed make those endeavours impossible.¹⁸

19. The victims of piracy, say the Applicants, are many. At the forefront stand “legitimate distributors such as licensed BDUs or over-the-top (“**OTT**”) digital services” who feel the harms of piracy “first and most directly”.¹⁹ Next in line are Canadian creators who are “robbed” of “the financial and other intangible benefits of the creation of cultural content”.²⁰ Their alleged plight further “threatens the viability of Canada’s cultural sector” and puts “the expression of uniquely Canadian perspectives and identities” at peril.²¹

20. But the claimed train of devastation does not stop there. Piracy also “results in millions of dollars in lost tax revenues for the government”²² and it exposes consumers of pirated content to myriad dangers, ranging from malfunctioning devices, to more serious “privacy risks, hacking, identify theft, and malware.”²³ And if those harms were not bad enough, piracy also “undermines consumer confidence in the communications system and digital marketplace” and it even harms

¹⁷ *Application, supra* note 1, para 1.

¹⁸ *Ibid*, para 3.

¹⁹ *Ibid*, para 6.

²⁰ *Ibid*, para 5.

²¹ *Ibid*.

²² *Ibid*, para 7.

²³ *Ibid*, para 8.

consumers who obtain their content from legitimate sources because piracy supposedly raises the price they pay.²⁴

21. Finally, “piracy also undermines innovation and the digital economy” because “successful innovation in the digital economy will take place in markets that effectively mitigate the impact of copyright theft.”²⁵

22. The proposed website-blocking mechanism, say the Applicants, will effectively stem the tide of piracy to the benefit of all.

IV. THE BASIC ECONOMICS OF COPYRIGHT AND BROADCASTING

23. The cost structure of many creative works shares some similarity with the cost structure of broadcasting distribution and telecommunication transmission of those works. Creating creative content, like deploying telecommunications facilities, involves high up-front fixed costs. However, once a work has been created, the marginal cost of reproducing or communicating it is often negligible. Similarly, once broadcasting distribution facilities have been set up, the cost of communicating works to additional customers is negligible. In the same vein, the costs of internet distribution have dramatically declined to the point where distribution is virtually costless to customers who already have an internet connection.

24. The existence of products or services with a cost structure such as this one presents a policy dilemma: maximizing social welfare entails that the product or service should be provided at price that equals to the marginal cost of delivering it. However, in the long-run the upfront fixed costs must be recovered in order for product or service to continue to be supplied.

25. In the case of many telecommunication services, the cost of building the telecommunication facilities would often limit the number of competitors who can profitably serve any particular market to one or very few, resulting in “natural monopolies” who face no or very limited competition and therefore can set prices substantially above marginal cost. The regulatory challenge lies in setting conditions that would induce service providers to invest in setting up and improving their facilities without unduly exercising their market power. Ideally, setting the price

²⁴ *Ibid.*

²⁵ *Ibid*, para 9.

at a level corresponding to average cost might seem optimal, but determining what this price is could be easier said than done. In the past, the common regulatory response to this challenge used to be price regulation. The modern approach to the regulation of natural monopoly, however, tends to prefer greater reliance on market mechanisms to constrain monopolists' market power.²⁶

26. In the case of creative works, without copyright protection anyone who is willing to incur the marginal cost of reproducing a copy or communicating one would be free to do so. However, facing competition from others who did not have to incur the fixed cost of production, the author may not be able to recoup the fixed cost of production. By granting the author a set of exclusive rights, the law prohibits others from making certain reproductions or communications of the work, which in turn allows the owner of the copyright to set a higher than marginal cost price.

27. However, while the absence of copyright might lead to socially suboptimal production of creative works, the grant of copyright, one solution to this problem, could result in suboptimal dissemination and use of creative works. This suboptimal dissemination and use stems both from the power to set prices above marginal cost and from the various transaction costs involved in securing permission from the owner of the copyright.

28. This trade-off between incentive and access represents the perennial dilemma of copyright law and policy, namely how to find a “balance between promoting the public interest in the encouragement and dissemination of works of the arts and intellect and obtaining a just reward for the creator.”²⁷ As the Supreme Court explained, “[t]he proper balance among these and other public policy objectives lies not only in recognizing the creator’s rights but in giving due weight to their limited nature.”²⁸

29. The limited nature of copyright takes many forms. For example, the bundle of exclusive rights that comprise copyright does not encompass every possible use of a work, only those specifically enumerated in the statute, and even uses that have been specifically enumerated would not be covered by the copyright if they can be considered fair dealing or otherwise excluded from

²⁶ The *Telecommunications Act*, SC 1993 C38 [*Telecommunications Act*], s 7(f), reflects this approach.

²⁷ *CCH Canadian Ltd v Law Society of Upper Canada*, [2004] 1 SCR 339 (SCC), para 10; citing *Théberge v Galerie d’Art du Petit Champlain inc*, [2002] 2 SCR 336 (SCC) (available on <http://canlii.ca/t/51tn>), paras 30–31.

²⁸ *Théberge v Galerie d’Art du Petit Champlain inc*, [2002] 2 SCR 336 (SCC) (available on <http://canlii.ca/t/51tn>), para 31.

the scope of the copyright under specific exceptions.²⁹ Thus, uses not covered by the copyright could be freely engaged in at the socially optimal level.

30. Significantly, copyright does not include the exclusive right to read, listen, or watch a work. Therefore, it is not an infringement of copyright to read a book, even if the particular copy is an infringing one, it is not an infringement to listen to an infringing copy of a sound recording, and it is not an infringement to watch a movie that has been communicated to the public by telecommunication without the permission of the copyright owners. The person who communicated the work to the public, the *communicator*, might be liable for copyright infringement, which would reduce the supply of such communications, but the Parliament has never chosen to make the *communicatee*, the viewer, liable.

31. In many cases, creative works could be partial substitutes for each other. As a result, market competition also plays an important role in limiting the amount of market power that the copyright in any individual work may allow its owner to exercise. Thus, competition between works helps avoid over-compensation and ensure that the author's reward is "just".³⁰ For example, as successful an author as JK Rowling may be and as desirable as her Harry Potter are, her works still need to compete with other works. This market competition between works may allow her to obtain reward that will be commensurate with the degree that readers find her work more desirable relative to other works.³¹ If she tried charging a price higher than that, readers would choose other works that might not be perfect substitutes but good enough. While some markets for creative works, like local news, are primarily local, the markets for other creative works are increasingly global. On the one hand, this could increase competition between works, but it can also allow popular ones to achieve tremendous worldwide success.

32. The economics of broadcast distribution present similar policy trade-offs. The combination of large fixed costs and negligible marginal costs limit the number of BDUs that can efficiently and profitably compete with each other in any given location. As a result, BDU may often be able to exercise market power and offer their services at socially suboptimal price and quantity levels.

²⁹ *Ibid*, para 32.

³⁰ *Ibid*, para 31.

³¹ Ariel Katz, "Commentary: Is Collective Administration of Copyrights Justified by the Economic Literature?" in Marcel Boyer, Michael Trebilcock & David Vaver, eds, *Competition Policy and Intellectual Property* (Toronto, ON: Irwin Law, 2009) at 460.

Accordingly, the perennial policy challenge for regulators is how to ensure that a profit-seeking BDU does not set prices too high so as to price too many Canadians out of the market but also how to avoid the temptation of forcing the BDU to set long-term unsustainable lower than average cost prices.

V. THE BASIC ECONOMICS OF PIRACY

33. The economics of both copyright and telecommunications suggest that the market price of content will exceed marginal cost but also be set higher than the long-term efficient rate of average cost. If content providers could implement perfect price discrimination, they would be able to supply the entire demand, serving all consumers along the demand curve. However, perfect price discrimination is impossible to implement. More feasible forms of price discrimination could increase legal supply of content but because they are imperfect they would still price-out some consumers whose willingness or ability to pay falls below the provider's market price. This results in some mismatch between supply and demand.

34. The gap between the price of legally supplied content and the marginal cost of distributing that content creates an opportunity to profit from unauthorized supply of content at a lower price than that charged by the legitimate provider.

35. I have avoided using the term "piracy" in the preceding paragraphs because piracy does not have a distinct legal meaning and because the term connotes unlawfulness. However, copyright law does not give a copyright owner exclusive rights to control *every* use of their work and every aspect of its distribution. Rather, the law explicitly and consciously contemplates many unauthorized but perfectly lawful uses of content. Therefore, not every unauthorized use is an infringing use and not every unauthorized use deserves the colloquial title of piracy. Moreover, as noted above, even if an infringing copy or infringing communication to the public of a work have been made, reading, watching, or listening to the work is not an infringement. That said, in the subsequent paragraphs, I will use the term "piracy" to describe the broader phenomenon of unauthorized and unlawful use, irrespective of whether any specific element of the activities discussed would necessarily infringe copyright.

36. Understanding the demand for unauthorized works requires focusing on the consumers' options and how they choose among them. Consumers have access to a wide range of partially

substitutable creative content from both legal and unauthorized sources. Many sources are free, such as over-the-air TV (OTA) or ad-supported streaming sites. Other sources rely on a subscription fee granting unlimited access to the provider's library of content, creating no marginal cost to consuming additional works. Still other sources provide access on a pay-per-view basis. The sources are of varying quality, convenience, and prices.

37. In general, a potential user's decision to buy, pirate, or not consume content at all would depend on the cost and benefit of obtaining the content from legal sources relative to the cost and value of that content from pirate sources as well as the cost and benefits of all sources of other content.

38. The benefit of legal consumption includes, beyond the intrinsic value of the work, considerations like the quality, reliability, and the user-friendliness of the legal provider's user interface relative to those offered by the pirate source, as well as on ethical considerations such as the expected impact of the individual's decision on creators, or of acting in accordance with the law. As a result, consumers will generally place a higher value on content obtained from legal sources even if the quality of the content from pirate sources were the same. The cost of legal consumption includes, of course, the price the consumer has to pay the legal supplier, but also some opportunity costs. The higher the price of legal consumption is, the less money the consumer will have available for other expenses.

39. Therefore, the relative prices and costs of legal consumption and piracy would determine the size of each. All things equal, increase in the price of legal consumption will reduce the number of consumers paying for content and will tend to increase piracy, while lowering the price of legal supply or increasing the cost of piracy (e.g., by imposing greater penalties) will tend to reduce piracy. Similarly, if content providers improve their quality of service, are willing to invest in developing or acquiring technologies that make content more convenient to access through online streaming, and make it available for online streaming immediately, piracy can be reduced.

40. Blocking access to unauthorized distributors of copyrighted works makes those sources slightly less reliable and less convenient. As will be discussed below, the evidence suggests that this may slightly reduce demand for piracy.

41. The preceding discussion might give the impression that operators of pirate services can grow so long as there is sufficient demand for their services. This is not the case. Since providing these services is typically illegal, there is a limit on the size of this activity: the more people are engaged in that illegal activity, the more likely they are to get caught.³² Therefore, even though pirate suppliers do not have to incur the cost of producing the content or of acquiring permission to use it (and hence operate at a cost advantage relative to the legal suppliers) they also operate at some cost disadvantage. The risk of attracting legal scrutiny limits pirate suppliers' ability to advertise their product and market them in the most efficient ways, or otherwise realize economies of scale to their fullest. In other words, piracy is not scalable: the cost advantage of not paying for content could give small pirates an edge, but at some point, illegality becomes a handicap.

42. Competition between legal suppliers is another factor that indirectly impacts the extent of piracy. More competition between legal suppliers will result in lower prices for legally purchased content, as well as an increase in the variety of content that can be purchased legally. All things equal, more competition between legal suppliers will lead to less piracy.

A. What causes mismatch between demand for content and its legal supply?

1. Copyright-related market power

43. Copyright is designed to allow its owner to charge a price that exceeds marginal cost. Therefore, by design, copyright law creates mismatch between legal supply and market demand. On the demand side, people who are willing to pay more than the marginal cost of distribution but less than the prevailing price will be inefficiently priced out of the market as a result of the right holder's exercise of market power. Since compliance with any legal rule is rarely if ever perfect, the gap between demand for content and the price of its legal supply will prompt some people to offer copyrighted works at prices between the marginal cost and prevailing price offered by the right holder.

44. Mismatch between demand and legal supply can also result from the transaction costs involved in establishing legal distribution of content. If the transaction costs involved in lawfully supplying small geographical or niche taste markets exceed legal supplier's expected revenue from

serving those markets, the supplier will not provide the content. Even if the expected revenue from serving such markets is higher than the cost of acquiring it, the opportunity cost of serving such markets might drive the supplier to prefer serving other and more lucrative markets. In those situations piracy will be consumer's only way of accessing the content.

45. While copyright can be a source of market power, competition between copyright owners would normally restrain such market power, drive prices down and force them creators to differentiate their offering and serve more niche markets, resulting in an increase in lawful supply and decrease in piracy. On the other hand, should competition between copyright owners (or between downstream intermediaries) decrease, they would be able to exercise greater market power, charge higher prices and lower the legal supply of content. Piracy, as a result, may increase.

2. Market power beyond that inherent in copyright and piracy

46. Content providers often have greater power than that related directly to the copyright in any individual work. Whenever this happens, increase in piracy can be expected. In many creative industries, market concentration tends to be high, with a few "majors" who own, or at least administer large portfolios of copyright.³³ As a result, the amount of market power resulting from aggregation of copyright portfolios can exceed the market power that the owner of any of those work could exercise in a less concentrated market.³⁴

47. In addition, some aspects of copyright are not only highly concentrated but outright monopolized by copyright collectives. Even though the Copyright Board regulates copyright collectives' prices, their prices are almost by definition higher than they would be in a competitive market for the simple reason that if copyright owners did not expect to earn more by collectively administering their copyrights, they would not have set up those collectives.

48. High concentration and low competition in many aspects of Canada's telecommunications and broadcasting sector are another source of market power that can be expected to raise the price of legal content, reduce its supply, and contribute to higher rates of piracy. Concentration in all

³³ Ariel Katz, "Copyright Collectives: Good Solution But for Which Problem?" in Harry First, Rochelle C Dreyfuss & Diane L Zimmerman, eds, *Working Within the Boundaries of Intellectual Property: Innovation Policy in the Knowledge Society* (Oxford: Oxford University Press, 2009) at 400.

³⁴ Gideon Parchomovsky & R Polk Wagner, "Patent Portfolios" (2005) 154:1 U Penn L Rev 1 at 7.

aspects of Canada's media markets is very high.³⁵ High concentration in subscription TV directly affect the price of content available through subscription TV, and to the extent that piracy is a substitute to content available through subscription TV, high price for subscription TV may increase the amount of piracy.

49. While broadcast TV can be watched for free, high concentration among broadcasters means less content that can be viewed for free and can result in higher licensing fees that BDUs have to pay broadcaster for non-local retransmission of such content.

50. High concentration in internet access and wireless impact legal consumption of content and piracy indirectly. Since internet access (wired or wireless) with a high usage allowance is required for accessing content over the internet, the two are complementary goods. Therefore, if the price of internet access with a high usage allowance increases, the willingness to pay for legal online access to content decreases. In principle, increase in the price of internet access should also affect the demand for illegal access to content, but since the price of illegal content is lower than the price of legal content (and less bandwidth might be required for the lower-quality content available from some pirate services), an increase in the price of internet access with a high usage allowance will tend to depress demand for legal online access to content more than it would depress the demand for illegal content. Overall, the effect could be increase in piracy as consumers who face higher internet access prices restrict their purchases of legal content and shift to illegal services.

51. By contrast, lower internet access prices will increase the demand for online content, including legal online content. More demand for online content will increase the supply of legal online content. Over time, the increase in supply of legal online content could decrease the demand for illegal online content but it can also decrease the demand for traditional and highly-profitable subscription based services offered by BDUs and prompt more people to cut the cord.

52. Vertically integrated broadcasting and telecommunications service providers respond to the threat of cord-cutting in various ways. One such response is offering substantial bundling discounts for TV subscriptions, high-speed high-cap internet plans, and often wireless and home phone services. Such bundling can raise barriers to entry or expansion by independent internet

³⁵ *Media & Internet Concentration, 1984-2016* (The Canadian Media Concentration Research Project, 2017).

service providers, independent broadcasting distributors, and independent online services. Such bundling creates a collective action problems for consumers: even though collectively consumers might be better off without bundling because unbundling will increase competition across all of those services over time, a rational individual consumer might still find the bundle more attractive. The result is lower competition between legal providers and as a corollary increase in piracy. Indeed, regulatory intervention to remove the anti-competitive aspects of bundling could also have the salutary effect of reducing piracy.

53. Licensing terms between content owners and BDUs can also lead to lower competition, higher prices for legal content, and increase in piracy. For example, until 2015, HBO programs were available in the US only to cable subscribers, typically as a premium channel. Even when HBO launched HBO Go app, which allowed subscribers to stream its programs and watch them on their computers or mobile devices, the option was only available to cable subscribers. In 2015, however, HBO realized that by limiting its content only to premium cable subscribers it had been missing out many potential customers³⁶ and that it could capture more of the value of its programs (which, as noted below, has been driven in part by piracy) by offering its content online as well. Following a successful trial in Europe,³⁷ HBO launched HBO Now in the US. The move proved successful. By 2018, HBO's standalone service has attracted more than 5 million subscribers in the US who represent about 10 percent of its US customers.³⁸

54. While the main target of HBO Now were customers who did not subscribe to cable (and therefore were not generating cable providers any revenue), cable providers have been concerned that the move may harm them in the future because together with services such as Netflix and other

³⁶ "HBO Go Without Cable In 2015: Plepler On Subscription-Free Streaming | Deadline", online: <<http://deadline.com/2014/10/richard-plepler-time-warner-investor-day-hbo-ceo-presentation-851815/>>. See also Brian Stelter, "You can now sign up for HBO without having cable", (7 April 2015), online: *CNNMoney* <<http://money.cnn.com/2015/04/07/media/hbo-now-launches-streaming-tv/index.html>>. ("In the interview, [HBO's CEO] referenced the '10 to 11 million broadband-only homes in the United States' that previously couldn't pay for HBO because the channel was bundled with cable. 'That was just too big an audience for us not to go after. That's part of what informed this,' he said.").

³⁷ "HBO Now", (2 February 2018), online: *Wikipedia* <https://en.wikipedia.org/w/index.php?title=HBO_Now&oldid=823698377>.

³⁸ "HBO's Online Channel Surpasses 5 Million U.S. Subscribers", *Bloomberg.com* (1 February 2018), online: <<https://www.bloomberg.com/news/articles/2018-02-01/hbo-s-channel-for-cord-cutters-surpasses-5-million-subscribers>>.

standalone streaming services, HBO Now could allow a growing number of customers to gain legal access to sufficient content and forego cable TV's mega bundles altogether.³⁹

55. HBO Now is not available in Canada. According to media reports, a 2015 deal between Bell Canada and HBO gave Bell exclusive rights over HBO's content in Canada. The deal has delayed the possibility of an HBO standalone service in Canada "well through 2020".⁴⁰ Likewise, OTT providers such as Netflix cannot offer certain programs in Canada because Canadian BDUs, such as Bell, have been willing to pay the content owners more in return to exclusivity.⁴¹

56. Why would HBO agree to such exclusivity HBO and forego the opportunity to offer in a Canada a service that proved profitable elsewhere? Two answers seem likely. One is that Bell might have exercised its market power and forced HBO into such exclusivity. Another is that Bell has been willing to pay HBO amounts that exceed what HBO could expect to earn if it offered its standalone service in Canada.

57. The preceding analysis provides several pieces, which, put together, can explain why piracy has become an attractive option for many Canadians. Canadians have opted to engage in piracy not because Canada has a lawlessness problem but because it has a competition problem in the legal provision of content.

58. The ability to stream high-quality video over the internet has created an alternative method to TV programming which could increase competition and decrease broadcasters and BDUs market power. But to fully undermine BDUs' market power, consumers must be able to access to sufficiently attractive selection of programs. The more content is available lawfully online, and the cheaper internet access is, the bigger is the competitive threat to BDUs' market power.

59. In sum, BDUs can prevent, or at least slow down, the growth of competition in several ways: they can slow down supply of legal content through rival services by acquiring exclusive rights to distribute it in Canada, and they can maintain higher internet access prices by controlling

³⁹ "HBO Go-It-Alone: There Goes the Cable Bundle? - The Atlantic", online: <<https://www.theatlantic.com/business/archive/2014/10/hbo-go-it-alone-there-goes-the-cable-bundle/381489/>>.

⁴⁰ "Bell secures full Canadian HBO rights in deal with Corus", online: <<https://www.theglobeandmail.com/report-on-business/bell-secures-full-canadian-hbo-rights-in-deal-with-corus/article27375345/>>.

⁴¹ "Accessing U.S. Netflix is 'stealing,' new Bell Media president says", online: <<https://www.theglobeandmail.com/report-on-business/bell-media-president-urges-behavioural-shift-to-prevent-stealing/article24783094/>>.

internet access and wireless services, and slow down competitive entry into those services by bundling them with subscription TV with internet access and wireless. Foreseeably, these anti-competitive practices increase the price of legal access to content and as a corollary increase the demand for content from unauthorized sources. To some extent, consumers' willingness to seek out content from illegal sources constrain these practices, which means that piracy makes all consumers better off. Alternatively, regulators can intervene to remove these anti-competitive practices. Such intervention could also have the salutary effect of reducing piracy, which would not only make consumers better off but also producers of content.

B. Intermediaries' Market Power Can Harm Users and Creators

60. Copyright is designed to encourage creativity and reward creators by giving them an ability to exercise some market power, provided their new work is sufficiently better than other works with which the work competes. This benefits creators and benefits users in the long run.

61. But creators often cannot distribute their works directly to users and typically depend on various types of intermediaries who can do that more efficiently by economizing on various economies of scope and scale.

62. When intermediaries have market power they can exercise it to the detriment of both creators and users. They can charge downstream users supra-competitive prices, thus pricing some users out of the market and reducing the consumer surplus of those who stay in the market. They can also exercise monopsony power vis-à-vis creators and reduce the number of works they buy or commission from creators and pay a lower price for the content they buy compared to what they would do in a more competitive market.

VI. IS PIRACY HARMFUL, TO WHAT AND TO WHOM?

63. Piracy, while improving welfare from a static efficiency perspective, might be overall harmful if it reduces the incentive to create content in the first place.⁴²

⁴² Belleflamme & Peitz, *supra* note 2 at 493.

64. In other words, even though unauthorized use of content reduces the deadweight loss associated with the grant of copyright and therefore, in and of itself, is not harmful, piracy can be a problem if the following four conditions apply:

- (a) it results in lower revenue for content distributors (such as BDU);
- (b) which results in lower revenue to those who created the content;
- (c) the reduced revenue reduces the incentive to create new content; and
- (d) the loss from (c) is greater than the gains from increased access to content.

65. The Application strongly asserts, but fails to demonstrate, that TV piracy results in (a), (b), and (c). Moreover, even if the assertion is correct, the Application fails to consider whether the unauthorized use leads to (d). In addition, it consistently conflates (a) with (b).

66. While the concern that unauthorized use of copyrighted works *could* be harmful to their creators is theoretically sound, economic theory as well as copyright law also recognize that those harms do not necessarily imply harm to the public. Indeed, copyright law, by refraining from granting copyright owners control over all possible uses of their works, recognizes that not all unauthorized use leads to (a), (b), or (c), and that even if it does, it does not necessarily lead to (d). In other words, copyright law recognizes that the social gains from utilizing works, even if not authorized by the copyright owner, could outweigh the owner's losses.

67. As the Supreme Court noted in *Théberge* “it would be as inefficient to overcompensate artists and authors ... as it would be self-defeating to undercompensate them”⁴³ because “[e]xcessive control by holders of copyrights and other forms of intellectual property may unduly limit the ability of the public domain to incorporate and embellish creative innovation in the long-term interests of society as a whole, or create practical obstacles to proper utilization.”⁴⁴

68. Moreover, the literature on the law and economics of copyright provides no support to the Applicant's assertion that piracy will result in harms to creators and the public:

- Not all piracy necessarily results in revenue loss to content distributors (a);

⁴³ *Théberge v. Galerie d'Art du Petit Champlain inc.*, *supra* note 28, para 31.

⁴⁴ *Ibid*, para 32.

- Even if piracy harms content distributors, it does not necessarily lead to lower revenue to content creators (b);
- Even if it leads to lower revenue to content creators, it does not necessarily decrease the amount of new content or its quality (c);
- Even if piracy reduces the amount of new content, the social gains from greater access of existing content might outweigh those harms (d).

69. Moreover, the literature shows that:

- Piracy might benefit content distributors and content creators;
- Piracy might harm content distributors but benefit content creators;
- Piracy might reduce distributors' or creators' profit but (counterintuitively) lead to increase in the amount, speed, and quality of new content. I will address each of these points below.

1. Not all piracy necessarily results in revenue loss to content distributors (a)

70. In many instances piracy does not substitute for paid consumption and therefore will not result in any harm to content distributors and therefore will not diminish their payments to content creators. For example, users might obtain content from unauthorized sources because content owners or existing legal distributors do not offer this content at all. In such cases, piracy may exist but it is non-substitutive. It does not and cannot harm the content owners or the distributors. It creates absolute social gain and measures to block it will create net social loss.⁴⁵

71. As I note below, there are strong indications that this type of non-substitutive piracy constitutes is significant. For example, one of the reports which the Applicants rely on heavily notes that

After the news, the most significant channels in terms of overall bandwidth usage are international channels. The top channels vary from network-to-network (and even from neighborhood-to-neighborhood) because of shifting demographics, but

⁴⁵ As a matter of law, while copyright owners might decry it a "piracy", under some circumstances unauthorized use of this kind, which benefits users without harming copyright owners, may be considered fair dealing and therefore not an infringement of copyright.

as an example, two of the top five channels on a network in a major North American city were channels originating from Southeast Asia.⁴⁶

72. Although BDUs offer some international channels they typically offer them “as a bolt-on to an existing television package” for an additional fee.⁴⁷ In any event, a Canadian subscriber who wishes to watch international content may not be able to access it legally. Even if she is willing to pay for it, it may not be available because BDUs and other providers do not offer every TV show or movie from anywhere in the world. Illegal pirate website that offer such content may be infringing copyright, but the piracy is still non-substitutive.

73. Even if distributors make the content available, not all unauthorized access to it reduces distributors’ revenue. Recall that in order profitably to produce content and communicate it by telecommunication, its market price cannot fall below average cost. Hence, if users’ willingness or ability to pay is above marginal cost but below average cost, then such piracy does not substitute for paid consumption. Accordingly, such piracy is socially efficient. It expands access to content without causing any harm to its creators or distributors.

74. When content owners or distributors have market power they will maximize their profit by charging a monopoly price for the content which will exceed even the average cost expected to determine long-term prices in monopolistic competition. Any piracy by users whose willingness or ability to pay is lower than the monopoly price will not harm content creators or distributors because it is not substitutive, for the same reasons already discussed. Indeed, any piracy by users who would be willing to pay a price the equals or exceeds the average cost of the content’s creation and distribution but falls below the monopoly price is the copyright owners’ and the distributors’ own making. They could have reduced piracy while remaining profitable by lowering the price. If they choose not to because charging a higher price yields even greater profit, then piracy by users who are priced-out of the market as a result causes them no harm.

75. The only piracy that could decrease content distributors’ revenue (and possibly, but not necessarily, harm content owners) is piracy by users who but for the availability of pirated content would be willing to pay the monopoly price charged by the distributors.

⁴⁶ Sandvine, *2017 Global Internet Phenomena Spotlight: Subscription Television Piracy* (2017) at 11.

⁴⁷ *Ibid.*

76. Content distributors can respond to such substitutive piracy in several ways: they could improve their services (offer better technology, better customer service, or increase the selection and quality of the content they distribute) while keeping the same price, or they can reduce their price. Both options will reduce the price/quality of their legal services compared to the price/quality of piracy. Alternatively, they can do nothing, and accept the fact that they would lose some of their paying customers.⁴⁸

77. Obviously, all three options would entail lower profit: either because revenue will decrease or because costs will increase. However, so long as piracy does not compel content distributors to lose revenue or incur costs that would undermine their long-term profitability, all three responses, while reducing content distributors' profit, could increase social welfare.

78. It is unlikely that copyright infringement will result in a distributor raising its prices or reducing quality of its services. Presumably, if the distributor could have profitably raised its prices or lowered the quality of its services it would have done that already. Any further price increase or quality degradation will only cause the distributor to lose even more paying customers. Conversely, even if blocking piracy websites did increase demand for the same content through legal sources and thereby reduced distributors' average costs, there is no guarantee that a distributor would choose to lower prices or increase quality of services. Rather, because the reduction of piracy makes the demand for the distributor's content less elastic, the distributor might rationally choose to raise prices and decrease quality of service.

2. Even if piracy harms content distributors, it does not necessarily lead to lower revenue to content owners (b)

79. Piracy, even if it reduces content distributors' profit, may not have any impact on the amounts they pay content owners. If the distributor has market power, it will already be exercising that market power by paying content creators/owners the lowest price the content owners are willing to accept. Provided that purchasing and distributing content remains profitable, the distributor will continue to purchase the same content at the same prices. Furthermore, even if piracy leads to lower revenue to content producers, it may not necessarily result in less content or worse content.

⁴⁸ Belleflamme & Peitz, *supra* note 2 at 493.

80. Depending on how much market power the content producer possesses, lower revenue may or may not reduce its willingness to invest in new or better content. Just like content distributors, content producers can respond to piracy by doing nothing and accepting lower revenue, they can keep the level and quality of production the same and but reduce the price they charge for their content, or they can reduce other expenses. So long as the expected return from investing in new content is higher than the expected returns from other investment opportunities available to them, producers will continue to produce content even if they make less profit.

3. Even if piracy reduces the incentive to create new content, the social gains from greater access of existing content might outweigh those harms (d)

81. When a content owner charges a price that is substantially above marginal cost, price reduction at the margin can result in significant improvement in social welfare (through the reduction of deadweight loss) with only negligible impact on the incentive to create.⁴⁹ As a result, piracy may, within limits, entail net benefits to society.

4. Piracy might benefit content distributors and content creators

82. Not all piracy harms content creators and creators. In fact, under some common circumstances, piracy can help them.

a) Sampling and discovery

83. First, cultural goods such as music and movies belong to the category of “experience goods”, for which the quality or suitability can only be observed by users after purchase. Unauthorized access to content can allow users to discover new content and sample it before buying it legitimately later (or before buying more works by the same creator or additional

⁴⁹ Ian Ayres & Paul Klemperer, “Limiting patentees’ market power without reducing innovation incentives: The perverse benefits of uncertainty and non-injunctive remedies” (1999) 97:4 Mich L Rev 985 at 989 (explaining, while discussing patents, that “Small restrictions in the patentee’s monopoly market power are efficient - even if these restrictions reduce the patentee’s expected profits. The reason is that the last increment by which an unconstrained patentee chooses to increase price hurts society much more than it helps the patentee. Because an unconstrained patentee maximizes profits by choosing the quantity or price that reaches a flat point - what mathematicians call a stationary point - on the profit surface, small changes away from the profit-maximizing price or quantity will have only second-order effects on profits. But small decreases in price will have first-order effects on the deadweight loss - so that reductions in price have larger impacts on welfare than profits”).

episodes in a TV series).⁵⁰ Sampling, by reducing consumer uncertainty, can be especially beneficial to creators of new or niche works rather than “superstars.”⁵¹

84. Sampling effect is consistent with the findings, confirmed in many empirical studies, that heavy consumers of piracy are also the heaviest consumers of legitimate online content.⁵²

b) Demand signalling

85. Since piracy indicates a mismatch between demand for content and its legal supply, its presence can signal to content providers that there is market demand that they currently do not serve. Piracy can send a strong signal to content providers that the demand for certain programs might be higher than they might have assumed, or that the technology they employ does not meet some users’ preferences, or that the prices that they charge are too high. As one example discussed in more detail below, rather than signalling the lawlessness of Canadian teenagers, the piracy of “Goon” could have signaled that teenagers wanted to be able to watch the movie without being accompanied by someone over the age of 18. Instead of blaming his audience, the producer could have released the movie online at a reasonable price and captured their demand.

86. The 2017 Sandvine Global Internet Phenomena Report, which the Application relies on, makes a similar point explicitly: “By inspecting unencrypted channels, CSPs [communications service providers] gain a more complete perspective on how subscribers are viewing pirated content ...; from a market research perspective, CSPs can also use this insight to identify channels that are in high demand and aren’t available via any licensed means in a CSP’s region.”⁵³ Netflix also concluded “that the best way to play the game with pirates is to exploit the free market research which provides a ‘very accurate picture of what people are demanding’ and simultaneously to deal with piracy is to compete by offering a better overall experience.”⁵⁴

⁵⁰ Belleflamme & Peitz, *supra* note 2 at 499–502.

⁵¹ *Ibid* at 500.

⁵² Brett Danaher, Michael D Smith & Rahul Telang, *Website Blocking Revisited: The Effect of the UK November 2014 Blocks on Consumer Behavior*, SSRN Scholarly Paper ID 2766795 (Rochester, NY: Social Science Research Network, 2016) at 11.

⁵³ Sandvine, *supra* note 46 at 7.

⁵⁴ Gilles Grolleau, Sana El Harbi & Insaf Békir, “Playing with pirates: how companies can win the endgame” (2016) 37:3 J Bus Strategy 30 at 33.

87. Of course, if all piracy were substitutive to paid consumption, such information would be of little practical value for content providers. However, only a small subset of all piracy is substitutive. In fact, even the study by Danaher et al, which the Application relies on heavily as evidence of the effectiveness of website blocking, shows that the increase in site visits to legal subscription based and ad-supported sites was just 8.8 percent of the reduction in visits to pirated sites. Even the most favourable interpretation of these findings indicates that the consumption of pirated content by the vast majority of the consumers had not been substitutive to legal consumption.⁵⁵

c) Network Effects

88. Many markets for creative works exhibit “network effects” in which the value of the work depends not only on its intrinsic qualities, but also on the number of other people consuming it.⁵⁶ Well documented in the case of information technology and software products,⁵⁷ similar effects exist in the case of cultural goods such as music, books, or movies.⁵⁸ “This happens because an important part of what people derive from cultural goods is ‘relevant social interactions.’”⁵⁹ “We do not want to read books nobody else reads, we do not want to see movies nobody else sees. We want to discuss, rave, slaughter and define ourselves by the things we like.”⁶⁰

89. “As in the case of information technology, cultural goods may have direct network effects, whereby the value of the work increases with the number of other people consuming it because of the opportunities to interact and exchange views with other people, just as having the same software or hardware platform allows consumers to exchange files with each other. Cultural goods also may have indirect effects, whereby the increased number of users induces the development of complementary products and services such as compatible software and hardware, support services

⁵⁵ Danaher, Smith & Telang, *supra* note 52 at 18.

⁵⁶ Ariel Katz, “Substitution and Schumpeterian Effects Over the Life Cycle of Copyrighted Works” (2009) 49:2 *Jurimetrics* 113 at 127; Belleflamme & Peitz, *supra* note 2 at 502; Joshua Gans, *Information Wants to Be Shared* (Harvard Business Review Press, 2012) at 5.

⁵⁷ Ariel Katz, “A Network Effects Perspective on Software Piracy” (2005) 55:2 *U Toronto LJ* 155.

⁵⁸ Katz, *supra* note 56 at 127; Belleflamme & Peitz, *supra* note 2 at 502; Gans, *supra* note 56 at 5.

⁵⁹ Ariel Katz, “Substitution and Schumpeterian Effects Over the Life Cycle of Copyrighted Works” (2009) 49:2 *Jurimetrics* 113 at 127, *citing* Cass R Sunstein & Edna Ullmann-Margalit, “Solidarity Goods” (2001) 9:2 *J Polit Philos* 129 at 138.

⁶⁰ Martin Kretschmer, George Michael Klimis & Chong Ju Choi, “Increasing Returns and Social Contagion in Cultural Industries” (1999) 10:1 *Br J Manag* 61 at 63.

and literature in the case of information technology, comparable to commentary, critique, parody, academic courses, and fan clubs in the case of cultural products.”⁶¹

90. The increase in value and attractiveness resulting from network effects does not depend on whether the use has been authorized or not. Therefore, authorized or unauthorized access and use, legal or not, paid for or not, all increase the value of the work through network effects. If no user ever pays, directly or indirectly, then the copyright owner will not be able to benefit from the increase in the work’s value. But if only some users do not pay, then network effects could result in an increase in the willingness to pay by users who do pay. It follows that in the presence of network effects imperfect enforcement of copyright protection may, in some market environments, be beneficial both to content creators, distributors, and all users.⁶²

91. HBO’s *Game of Thrones*, illustrates this point. In 2012, the show’s second season ranked as “the most illegally downloaded TV series”.⁶³ It has been estimated that the *Thrones*’ second season finale was illegally downloaded 4.3 million times worldwide, quite a large number considering that the show had around 10 million viewers on average across all HBO platforms.⁶⁴

92. Yet, such extensive piracy had not really bothered HBO. In an interview with *Entertainment Weekly*, its programming president Michael Lombardo was quoted saying: “I probably shouldn’t be saying this, but it is a compliment of sorts. . . . The demand is there. And it certainly didn’t negatively impact the DVD sales. [Piracy is] something that comes along with having a wildly successful show on a subscription network.”⁶⁵ Lombardo expressed greater concern with the poor quality of some illegal copies. “One of my worries is about the copies [downloaders are] seeing. . . . The production values of this show are so incredible. So I’m hoping that in the purloined different generation of cuts that the show is holding up.”⁶⁶ According to another report, the show’s director David Petrarca told participants in a writers festival at the

⁶¹ Katz, *supra* note 56 at 128.

⁶² Belleflamme & Peitz, *supra* note 2 at 503.

⁶³ “HBO: ‘Game of Thrones’ piracy is a compliment”, online: *EW.com* <<http://ew.com/article/2013/03/31/hbo-thrones-piracy/>>.

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

University of Western Australia that “illegal downloads did not matter because such shows thrived on "cultural buzz" and capitalised on the social commentary they generated.”⁶⁷

d) Indirect appropriability

93. Under some circumstances, piracy can be beneficial to content providers if the ability of some users to share the content they buy with others increases their willingness to pay for content. More generally, indirect appropriation may happen if there is complementarity between unpaid copying and a product or service that must be paid for.⁶⁸

94. For example, substitutive TV piracy over the internet might decrease the demand for subscription to cable, IPTV, or satellite TV, but increases the demand for high-speed broadband internet connection and bandwidth and for wireless mobile devices capable of playing high-quality video and wireless data plans. Since major Canadian BDUs also provide internet and wireless services, any piracy-related losses to their TV services are offset, at least in part, by the increase in demand for their internet and wireless services.

95. The availability of piracy might have decreased the demand for cable subscription, but it also increased the demand for services such as Netflix.⁶⁹ Therefore, reduced revenue to content creator from one source could increase revenue from another.

5. Piracy might harm content distributors but benefit content creators

96. When intermediaries, such as BDUs, have market power they can exercise it to the detriment of both content creators and users. They can charge downstream users supra-competitive prices, thus pricing some users out of the market and reducing the consumer surplus of those who stay in the market. They can also exercise monopsony power vis-à-vis creators and reduce the number of works they buy or commission from creators and pay a lower price for the content they buy compared to what they would do in a more competitive market.

97. Even though creators do not get paid when their works are pirated, piracy can assist them to get discovered by fans, noticed by gatekeepers, and increase the value of their works through

⁶⁷ “Downloads don’t matter”, (26 February 2013), online: *The Age* <<https://www.theage.com.au/entertainment/tv-and-radio/downloads-dont-matter-20130226-2f36r.html>>.

⁶⁸ Belleflamme & Peitz, *supra* note 2 at 506.

⁶⁹ Grolleau, El Harbi & Békir, *supra* note 54 at 33.

network effects, which, in turn, could result in greater bargaining power when they negotiate with gatekeepers.

6. Even if piracy reduces distributors' or creators' profit, the amount, speed, and quality of new content could still increase

98. The present Application and most policy debates about piracy are based on three related assumptions: one, that piracy always harms content creators by reducing their revenue, two, that lower revenue means lower profit, and three, that reducing content providers' profitability will result in reduce the amount or quality of new works. The previous section discussed the first assumption and explained why piracy may not necessarily harm content creators, and might, under some condition, even benefit them. This section explains why piracy, even if it reduces content providers' revenue does not necessarily lead to a reduction in the amount or quality of new works, and might indeed result in an increase in the amount and quality of new works.

a) Many of the same technologies that help pirates also help creators

99. First, many of the same technological advancement that reduced the cost of unauthorized copying, distribution, and transmission of digital content: digital processing, storage, and communication, have also reduced the cost of producing, distributing, and transmitting content legally. Therefore, even if technology-driven piracy results in fewer sales or forces content providers to lower their prices, it may not necessarily result in lower profit when costs decrease as well.⁷⁰ Indeed, contrary to the Applicant's alarmist message, digitization (including the piracy that it has enabled) did not result in any crisis in the production of new quality creative content. On the contrary, "all media industries experienced good technological news in the form of cost reduction. That is, digitization has brought substantial reductions in the costs of production, distribution, and promotion of new products in music, books, movies, and television."⁷¹

100. One benefit of digitization has been the emergence of distribution models with an "infinite shelf space", which makes it possible to profit not only from the rare blockbuster but also from the long tail of small niche markets.⁷²

⁷⁰ Joel Waldfogel, "Digital Piracy: Empirics" in Martin Peitz & Joel Waldfogel, eds, *The Oxford Handbook of the Digital Economy* (2012) at 532–33.

⁷¹ Waldfogel, *supra* note 3 at 198.

⁷² *Ibid* at 201.

101. Another important aspect of the combination of reduced cost of production, distribution, and promotion, relates to the inherent unpredictability of a work's quality of success. Unpredictability, or the "nobody knows anything" principle, has been an inherent feature of creative products, with evidence suggesting that roughly 5–10 percent of new creative products generate revenue in excess of their costs.⁷³ Traditionally, this unpredictability presented a risk, which producers reduced by limiting the amount of works in which they would be willing to invest and choosing the projects that they believed were more likely to succeed commercially. Cost reduction has lowered the risk and enabled producers "to take more draws from a lottery of possible winners"⁷⁴ and "[g]iven unpredictability, some proportion of the additional draws will deliver some additional high-quality products, which, in turn, could raise the quality of the choice set facing consumers."⁷⁵

102. Theory would predict and empirical findings affirm that this has indeed been the case. The number of new products has increased; the total crop of new products, including new products of the type that would have been produced earlier, as well as products made possible only by cost reduction, has become more appealing to consumers than earlier vintages; and the quantity and share of products that would formerly not have been brought to market which have become successful is substantial and growing.⁷⁶

103. These effects have occurred across all media types. In television, digitization has ushered in a "golden age". Indeed, "The vast wasteland of television has been replaced by an excess of excellence."⁷⁷

104. In theory, two factors could have countered these positive developments. First, a greater flow of new content implies greater competition between works. Given unpredictability of success, more competition could reduce the expected return for any new work and therefore slow down investment. Second, the same or very similar cost reduction properties of digitization also apply

⁷³ *Ibid* at 202.

⁷⁴ *Ibid*.

⁷⁵ *Ibid*.

⁷⁶ Joel Waldfoegel, "The Random Long Tail and the Golden Age of Television" (2017) 17 *Innov Policy Econ* 1 at 3–4; Waldfoegel, *supra* note 3 at 202.

⁷⁷ Joel Waldfoegel, "The Random Long Tail and the Golden Age of Television" (2017) 17 *Innov Policy Econ* 1 at 23; citing David Carr, "Barely Keeping Up in TV's New Golden Age", *N Y Times* (9 March 2014), online: <<https://www.nytimes.com/2014/03/10/business/media/fenced-in-by-televisions-excess-of-excellence.html>>.

to the dissemination of pirated content, narrowing the quality and timing gap between legally purchased content and pirated content. Hence, producers face two greater sources of competition: more competition from other new works and more competition from pirated versions of their works. Both sources of competition could, in theory, have the effect of countering the dynamic discussed in the previous paragraphs. And while from a legal perspective the two sources of competition are distinct—the former legitimate and the latter is not—from an economic perspective their potential impact on investment is the same. Both sources of competition threaten to reduce the revenue from any successful new production and hence to reduce the expected *ex ante* return on the investment. If so, then producers should be expected to invest less and concentrate only on works with the highest likelihood of commercial success, i.e., return to or maintain the “wasteland of television”.

105. So far, the evidence shows that the effect of cost reduction has been greater than the potentially investment depressing impact of competition. However, it is entirely possible that greater competition, from legitimate sources and illegitimate ones, has *accelerated* the production of new quality content, instead of slowing it down. In other words, rather than deterring investment, lower expected profit has accelerated it. This might seem counterintuitive, but such possibility is theoretically sound and there is some evidence consistent with it.

106. Economists Lahiri and Dey provide some examples: Facing piracy rates estimated to be between 30 and 50 percent in some European countries, HBO responded “by churning out new high-quality contents in different European languages. ... HBO’s innovative offerings have reduced piracy and brought in new subscribers.”⁷⁸

107. “Valve, a video game manufacturer, has also adopted a similar strategy. Since releasing its game Team Fortress 2 in 2007, it has made frequent quality enhancements, including addition of new weapons and avatars, available only to legal consumers. This strategy has encouraged enthusiastic gamers, who have a strong preference for the latest version, to switch to legal downloads.”⁷⁹

⁷⁸ Atanu Lahiri & Debabrata Dey, “Effects of Piracy on Quality of Information Goods” (2013) 59:1 Manag Sci 245 at 245–46.

⁷⁹ *Ibid* at 246.

108. To confront the threat of counterfeit disks and illegal torrent sites, Hollywood producers began offering high-definition legal downloads of its movies immediately following their releases in theaters.⁸⁰ “Many consumers want new movies as soon as they are released; to them, quality is synonymous with immediate availability. If legal downloads are made available soon enough, they would not wait for the same content to be available through illegal torrent sites or counterfeit DVDs.”⁸¹

109. To mitigate piracy in Europe, American TV networks used a similar approach and reduced the time lag between the American and European releases of their shows.⁸²

110. Between 2006 and 2010, Electronic Arts, an American video game developer, increased its R&D investment both nominally and as a percentage of revenue, while piracy rates were increasing from 35 to 42 percent.⁸³

111. Hollywood producers also began tightening the timing gaps between a US and global release in order to mitigate piracy. Warner Bros., for example, released *Sisterhood of the Traveling Pants* on DVD in China simultaneously with the US theatrical release. Although the release of DVD could help spread HD copies more quickly around the world, this concern does not seem to have hindered the film’s success.⁸⁴

b) Narrowing windows and the New Golden Age of TV

112. Traditionally, producers and distributors of audiovisual content have used “windowing” strategies to maximize the return on their works. They have carefully segmented global audiences by platform and territory, and rolled out content across domestic and international markets through a series of sequential release “windows.” Careful management of timing and other conditions surrounding the delivery of content to differing segments allowed content providers to effect scarcity and to build demand for their products.⁸⁵

⁸⁰ *Ibid.*

⁸¹ *Ibid.*

⁸² *Ibid.*

⁸³ *Ibid.*

⁸⁴ Heritiana Ranaivoson et al, *Analysis of the Legal Rules for Exploitation Windows and Commercial Practices in EU Member States and of the Importance of Exploitation Windows for New Business Practices*, A study prepared for the European Commission DG Communications Networks, Content & Technology (2014) at 55.

⁸⁵ Doyle, *supra* note 5 at 630.

113. Digitization and growth of the internet have disrupted this traditional windowing strategy. These developments have created new opportunities to commercially exploit content and added now windowing opportunities. However, windowing strategy has become more challenging, first because the landscape has become more complex,⁸⁶ but also because the increased competition among the various distribution channels made it more difficult to maximize profit by exploiting market power in each segment.⁸⁷

114. As one would expect, this increase in competition among distributors led to greater competitive offering to consumers, leading to increased demand for content, and “more money is flowing into content creation than ever before”.⁸⁸ Moreover, the need of establishing a distinctive market position has driven emergent services such as Netflix or Amazon Video to invest in “big statement” programs, which fueled demand and money into high-quality productions.⁸⁹ These developments have often been referred to as the New Golden Age of TV.⁹⁰

115. The fact that more money is flowing into content creation does not necessarily mean that all players are getting richer. Indeed, greater competition among distributors might increase their demand for new content. Competition among them might increase the market while at the same time reduce the profit available to any of them by making it more difficult to earn supra-competitive rents on a regular basis. In the same vein, greater demand for content might generate greater opportunities for creators but those opportunities could also attract more creators resulting in greater competition among them. Even if the pie might be larger than before, the slices available for any individual player might nonetheless be thin. As one executive explained:

Never before has there been so many places to sell to but obviously it is one pie that is being split in many different directions. We get lots of actors and writers saying “Well, now you have got Netflix which is an OTT you should be paying more.” We are going “No, because that revenue is also taking away from other streams and it is not all incremental.”⁹¹

⁸⁶ *Ibid* at 635.

⁸⁷ *Ibid* at 634.

⁸⁸ *Ibid* at 633.

⁸⁹ *Ibid* at 635–36.

⁹⁰ Ian Leslie, “Watch it while it lasts: our golden age of television”, (13 April 2017), online: *Financial Times* <<https://www.ft.com/content/68309b3a-1f02-11e7-a454-ab04428977f9>>.

⁹¹ Doyle, *supra* note 5 at 694.

116. Piracy has also been a major contributor to the narrowing of traditional windowing strategies because it has eroded the exclusivity principle on which the release windows system was grounded.⁹² The difficulty to control the exploitation of content across and between windows and has prompted many TV rights owners to shorten delays between releases to different segments of the market. In some cases where content is perceived as being at very high risk of widespread piracy (e.g., the *Game of Thrones* series), windows collapsed altogether and content providers have moved to releasing their programs simultaneously across outlets and platforms worldwide.⁹³

117. Why would content creators increase the amount and quality of content in the face of the threat of piracy? As a BBC executive explained,

Speed to market is the answer to that. The quicker that you can get your content out, the less the risk of piracy.⁹⁴

118. Economists Lahiri and Dey explain why the intuition that profit-reducing piracy would impact content quality does not always hold, and why piracy could lead to more and better content. Since piracy, especially when the quality difference between legal and illegal consumption is not large, presents a form of market “competition” to the content provider, the producer increases the quality of the legal version to differentiate the product from its pirated version and secure consumers who value quality highly. As a result, when copyright compliance level decreases, the producer finds it optimal to increase its investments toward building a higher-quality product *despite making lower profits*.⁹⁵

119. Crucially, according to Lahiri and Dey, the lower is the cost of piracy, and the smaller is the quality difference between the legal and the pirated content, the stronger becomes the producer’s incentive to differentiate the legal product from the pirated one.⁹⁶ The point is not that the lower quality of the pirated content does not harm the producer because it is not a sufficiently close substitute, nor is the point that piracy could benefit the producer because of network effects,⁹⁷

⁹² Ranaivoson et al, *supra* note 84 at 27.

⁹³ Doyle, *supra* note 5 at 634.

⁹⁴ *Ibid.*

⁹⁵ Lahiri & Dey, *supra* note 78 at 251.

⁹⁶ *Ibid.*

⁹⁷ *Ibid* at 252.

or otherwise. Their model shows that piracy can result in more and better works—the very goals that copyright law seeks to accomplish—even if it reduces the producer’s profit.

120. In fact, the possibility that the present golden age is driven by increased competition follows a well-known strand in the economic literature on innovation, often associated with Nobel laureate Kenneth Arrow. Arrow challenged the view, associated with Joseph Schumpeter, that large firms and monopolists might be more innovative than firms in competitive markets. Under that view, monopolists will be the drivers of innovation because they earn profit that allow them to innovate, they have established reputation and distribution systems and business relations that allow them to better market their innovations, and protection from competition ensures they would be able to appropriate the value of their innovations.⁹⁸ Arrow suggested that while a monopolist might have the capacity to innovate, it often has less to gain from innovation. The monopolist could make a substantial investment in dramatic improvement only to realize that it does not get much additional business because it already has most of the available and profitable business.⁹⁹ By contrast, had a competitor come up with the same innovation, it could expect to earn more because its innovation would allow it to capture much of the business previously conducted by its rivals.¹⁰⁰

121. Put differently, “a firm that faces less pre-innovation competition and, thus, faces a more steeply downward-sloping demand curve, has a greater legacy flow of economic profits, which it has an incentive to protect by slowing its innovative effort. In other words, a firm that faces less competition has less need to work hard to escape competition.”¹⁰¹ By contrast, a firm that faces intensive competition and thus earning no or only meager economic profits would face a strong incentive to innovate in order to do better and escape the competition. Of course, such a strategy would only make sense if the firm can expect to have an ability to earn *some* economic profits during the post-innovation period. This observation does not imply that stronger intellectual property rights are the key to more innovation because they would allow firms to appropriate more of the social benefits of their new products. As Jonathan Baker explains,

⁹⁸ Jonathan Baker, “Beyond Schumpeter vs. Arrow: How Antitrust Fosters Innovation” (2007) 74:3 Antitrust L J 575 at 578.

⁹⁹ *Ibid.*

¹⁰⁰ *Ibid.*

¹⁰¹ *Ibid* at 579–80.

Even in an industry in which innovators would expect to keep only a fraction of the benefits of their new ideas to society—perhaps because rival imitation would be rapid, brands are weak, first movers gain only limited benefits relative to followers, new ideas are rapidly and widely disseminated, or intellectual property protections are narrow—innovation incentives may be strong. This would occur if the incentive to escape current product market competition . . . is more powerful than the fear of post-innovation product market competition . . . in the decision-making calculus of potential innovators.¹⁰²

122. The key point is that in a competitive environment, unless the firm has no prospect of profiting from its investment in innovation whatsoever, it will invest in innovation so long as innovation might allow it to earn a little more profit than doing nothing. And if its rivals are doing the same, it will invest in innovation not necessarily because it expects riches, but because it might be the only way to survive. The legal status of the competition—whether it is legitimate competition or piracy—may not matter much. Even if the law allows the firm to stop the competition from pirates, this cannot stop legitimate competition. Either way, the best response might be churning new products, earn as much as you can within whatever narrow window before rivals imitate you or outperform you, and move on to the next new product.

123. Traditionally, production in television industry revolved around firms with substantial market power and a steady flow of economic profits generated by carefully managed windowing strategies. This has been true for broadcasters as well as BDUs. The following quote from British television executive describes what Arrow would have predicted:

The down side of . . . SVODs is that it is getting harder for old-fashioned heritage business models like ours, which is based on audience and advertising, to continue to make that same level of investment in that type of content. We can't afford to pay the price that Netflix will pay for content . . . Our model is very simple—we get X number of viewers. We know that with around X million viewers, we will sell this much advertising. Therefore we can afford to pay a certain amount of money [for content]. Whereas for [SVODs] it is about marketing . . . So from a viewer point of view, I am not necessarily sure that is a good thing.¹⁰³

124. Digitization has disrupted this legacy business model. Competition from legitimate sources such as Netflix and illegitimate ones such as pirate streaming services, have undermined broadcasters' and BDUs' legacy business models, and forced upon them a new reality to which

¹⁰² *Ibid* at 580–81.

¹⁰³ Doyle, *supra* note 5 at 638.

they have not been accustomed to. There is no evidence that broadcasters or BDUs are incapable of adapting or that this new competitive environment has devastated them, but transitioning from business models in which advertisement-based or subscription-based economic profits are almost guaranteed regardless of the selection of quality of content to a new competitive environment is a challenge that any legacy business model would preferably like to avoid or delay.

125. Competition has increased the size of the overall pie: more content is being produced, disseminated, and watched. More money is flowing into production. But in a competitive market, a larger pie does not necessarily translate into higher profit for each individual player, let alone to players that have dominated the field previously.

126. Piracy is facilitating the transition into a more competitive industry where the secure flow of legacy profits is no longer guaranteed. Piracy does that by reducing cord cutters' opportunity cost. According to the CRTC, approximately 50 percent of Canadians subscribe to Netflix, while 76.2 percent of households still subscribe to BDUs.¹⁰⁴ This indicates that the content available from legal online services, such as Netflix, is still limited and does not function as a full substitute to the mega-bundles of BDUs. The success of Netflix as well as that of HBO Now in the US on the one hand, and the growth of subscription-based piracy services on the other, strongly indicate that cord-cutters might not be willing to pay the existing prices that BDUs charge, but they are willing to pay money for online access to the content they desire. However, so long as the content available from legal online services is limited, cord-cutting may allow consumers to save money but it also cuts them from content they wish to watch.

127. Piracy enables consumers to reduce the opportunity cost of cord cutting. And as the number of cord cutters grows, online content providers are likely to produce or acquire more content, thus reducing BDUs' and other incumbents market power. Piracy accelerates this transition by acting as a temporary bridge. The bridge is temporary because piracy has an inherent scalability limitation.¹⁰⁵ Just as online piracy of music stopped being regarded as a major problem as the

¹⁰⁴ Canadian Radio-television and Telecommunications Commission (CRTC), *Communications Monitoring Report 2017: Broadcasting sector overview* (2017) at 195, 203.

¹⁰⁵ *Supra*, para 41.

number and quality of legal offering has grown,¹⁰⁶ so video piracy will likely become marginalized once legal offerings increase.

VII. DOES THE APPLICATION MATERIALS SUPPORT THE CLAIMED HARMS?

128. The Application rings loud alarm bells about piracy’s devastating harms to content creation, but Applicant’s sweeping claims about harms of harms are as broad as the evidence they provide to substantiate them is thin.

129. Part C(b) of the Application, titled “The Harm Caused by Internet Piracy” details the claimed harms of piracy. From use of the past tense in the title (“caused”) one would expect the Application to provide evidence for those harms, which allegedly have already occurred. It does not. Instead, the Application moves to making a general statement—now in present tense—that “Piracy causes significant harm to Canada’s social and economic fabric, including the broader Canadian economy, the telecommunications system, the cultural sector, the broadcasting system, and consumers.”¹⁰⁷

130. However, the only information that the Applicants offer in the subsequent paragraph pertains to the size of the industry, the number of people it employs, its contribution to Canada’s GDP, etc, followed by the claim that “Left unchecked, piracy will dramatically erode the contribution of these companies and their employees to Canada’s digital and creative economies.”¹⁰⁸ Note the transition to future tense (“will dramatically erode”). The Applicants do not provide any evidence demonstrating that piracy *has already eroded* or is *presently eroding* the contribution of these companies and their employees to Canada’s digital and creative economies (let alone *dramatically*), only an assertion that it *will dramatically erode* them.

131. But if the reader expects to find any empirical basis and a sound line of reasoning establishing causal connection between piracy and the anticipated *dramatic* harms, the reader is bound to be disappointed. The attempt to substantiate the empirical prediction appears in the subsequent paragraph: “It [i.e., piracy] does so by denying rightsholders . . . the compensation they are entitled to seek in the market for the hard work, creativity, expertise, and resources they have

¹⁰⁶ *Connecting with Music: Music Consumer Insight Report* (IFPI, 2017).

¹⁰⁷ *Application*, *supra* note 1, para 33.

¹⁰⁸ *Ibid*, para 34.

invested in their works.”¹⁰⁹ Note how instead of proof, what we have is a normative claim: no proof that piracy has *reduced* or *will reduce* rightholders’ compensation and no estimate on the size of such reduction, only a normative claim that piracy denies compensation that rightholders are *entitled* to.

132. The Application continues:

This negatively affects their earnings and profitability, leading to reduced employment and fewer opportunities for writers, producers, composers, performers, costume designers, and other content creators to make their living producing content. By denying content creators fair compensation for their work, piracy also reduces the ability of content creators and other rightsholders to develop, produce, and disseminate new content, undermining Canada’s social fabric.¹¹⁰

133. These are mere statements about plausible effects of piracy, but they provide no proof that piracy has caused or will cause such effects. Piracy *could* negatively affect earning and profitability; it *might* lead to reduced employment and fewer opportunities for writers; it *might* reduce the ability to develop, produce, and disseminate new content. But it might not. As I discussed earlier, piracy can have no such negative impacts, it might have positive impacts; it might reduce earning and profitability without decreasing the creation of new content and it might even reduce earning and profitability and drive content creators to produce more content. Other than merely stating that these are the effects of piracy, the Application is devoid of any evidence showing that these are indeed its effects or providing any details on the size or severity of those harms.

134. The same conflation of assertion and proof continue in the subsequent paragraphs. The only concrete example the Applicant provide as evidence is a media report in which

Canadian film producer Don Carmody describes the piracy of his film *Goon* as like nothing he had experienced in four decades of filmmaking. He estimates that the film lost at least \$1 million of potential box-office sales in Canada to piracy and likely millions of more in subsequent DVD or download sales.¹¹¹

¹⁰⁹ *Ibid*, para 35.

¹¹⁰ *Ibid*.

¹¹¹ *Ibid*, para 40.

135. Setting aside the obvious point that a single anecdote can hardly be probative of a general phenomenon, neither the media report nor the Applicants tell us what is the basis for the estimated losses, how the quantum of losses had been calculated and the causal connection between piracy and those estimated losses. As noted above, piracy might decrease sales but it might not.

136. Moreover, not only this anecdote fails to establish causation or provide basis from which causation could be soundly inferred, the story even fails to show correlation. Let us delve into the story itself: the producers had high expectations from the film. Although they expected it to “beat *Bon Cop, Bad Cop*,” the Canadian movie that still holds the record for domestic sales”,¹¹² that didn’t happen. “After its first week in theatres, though, *Goon*’s audiences dwindled alarmingly” the reporter writes. “Carmody heard that to get around the Restricted rating adolescents bought tickets to *The Muppets* and walked into his movie instead.” But “Carmody believed his real problem, though, was something else entirely, piracy. “All of a sudden, we started noticing tweets from people selling the movie. ‘Free download: *Goon*.’ ‘*Goon*: \$2.’ ... *Goon* was being pirated like nothing Carmody had experienced in four decades of filmmaking.”¹¹³

137. We also learn from the report that the producers expected the movie to be popular among teenagers, and young male audience in particular; that *Goon* was released in Britain more than a month ahead of North America and although Carmody feared that it would be bootlegged, “things went off without a hitch. It was in North America where things went awry.”¹¹⁴ We further learn that the American distributor, but not the Canadian, decided to make the film available via cable providers in the US simultaneously with its theatrical release as a premium pay-per-view for \$30.¹¹⁵

138. According to the IMDb (the Internet Movie Database), *Good* was rated R in the US, 18A in English Canada (13+ in Quebec), and 15 in the UK. Put together, these facts suggest that rather than a cause of dwindling sales, piracy was the result of the inability to watch the movie legally. Recall that the target audience of the movie was teenagers, and young male in particular. In the UK, where the movie was rated 15, many of them could watch it in the theatre, and “things went

¹¹² “Movie studios fighting Bit Torrent, but can they win?”, online: <<http://www.canadianbusiness.com/technology-news/battling-bit-torrent/>>.

¹¹³ *Ibid.*

¹¹⁴ *Ibid.*

¹¹⁵ *Ibid.*

off without a hitch”. In Canada, where the movie was rated 18A, which would have prevented a large segment of the target audience from seeing the movie in the theatre unless they brought with them a parent. Even if parents were willing to go, being accompanied by a parent might not be the preferred way for a teenager to watch a movie with “violence and profanity escalated for a jaded 21st-century young male audience”. The option of pay-per-view for \$30, probably beyond reach for many teenagers, was not even available in Canada. Apparently, the film’s main audience in Canada was mostly barred from the watching it legitimately when demand was at its highest point: if you were a teenager (unless you and your parent agreed to watch together a movie that both of you would probably prefer to watch alone) you either had to commit a minor fraud (buying a ticket to *The Muppets* in sneaking into *Goon*) or to downloading it illegally.

139. Now, I would not claim that my explanation is necessarily more correct from the one the Applicant’s cite, and even if it is, it does not tell much about the general phenomenon of piracy and whether it harms the production of movies.

140. However, even if piracy was proven to have caused *Goon*’s dwindling sales, the empirical work on the effects of piracy on the movie industry does not support drawing any inference from this incident. As noted earlier, piracy may or may not harm sales, and may or may not reduce the incentive to invest in the production of new movies. In any event, even if piracy harmed Mr. Carmody, it has not deterred him from producing additional films,¹¹⁶ nor has it deterred the writers of *Goon* to write and produce a sequel last year,¹¹⁷ or deterred other producers. As noted, movie production has not slowed down, and like all other media markets, has experienced a golden age.¹¹⁸

141. The Applicants offer some additional figures attempting to establish causal connection between piracy and harm to BDUs. They fail. In paragraph 43 they claim:

Lawful television subscriptions are declining in Canada. According to CRTC data, cable, satellite, and IPTV BDUs in Canada collectively have lost subscribers every year since 2012, losing more than 400,000 total over that time despite the number of occupied private dwellings increasing by approximately 700,000 during the same period. While it is impossible to determine precisely how many of these 1.1 million households are lost subscribers due to piracy, the experience of relevant members of the coalition with their customers confirms that consumers

¹¹⁶ “Don Carmody”, online: *IMDb* <<http://www.imdb.com/name/nm0138502/>>.

¹¹⁷ Jay Baruchel, *Goon: Last of the Enforcers* (2017).

¹¹⁸ Waldfogel, *supra* note 3.

who engage with piracy sites are many times more likely to cancel legal services or never subscribe to them in the first place than are those that do not engage with piracy sites.

142. This statement is deficient and misleading. The Applicants are correct that “it is impossible to determine precisely how many of these 1.1 million households are lost subscribers due to piracy”, except that BDUs did not lose 1.1 million subscribers during this period. They only lost 400,000. The additional figure of 700,000 represents the number of occupied private dwellings in Canada that were added during the period. But there is no basis for saying that BDU lost 1.1 millions subscribers. They only lost 400,000. The Applicants do not provide any information about who the occupants of those additional dwellings. Maybe all of those occupants are cord-cutters who would subscribe to cable if piracy websites were blocked, or maybe all of the occupants of these new dwellings are existing subscribers who moved to a new home. Without more, this figure is useless and cannot be used to inflate the number of actual lost subscriptions from 400,000 to 1.1 million.

143. An inability to determine the number of subscribers lost to piracy *precisely* does not mean that it is impossible to provide credible estimates. If piracy had been a cause for an exodus of subscribers, jeopardizing BDUs sustainability, then presumably BDUs would have been able to provide more informative data. Instead, all they say is that in their experience (i.e., “trust us”) consumers who engage with piracy sites are more likely to cancel their subscriptions or never subscribe in the first place. This sounds plausible, but also trivial. The Applicants do not tell how many subscribers they are talking about, and more importantly, why those subscribers left in the first place and would it take to retain or bring them back. In fact, the literature on piracy often finds that the heaviest users of pirate services are also heavy users of legal online services.¹¹⁹ These findings suggest that many of them would willingly increase the consumption of content from legal sources if prices were more affordable or offerings more attractive.

144. But the data does not show any sign of alarm. According to the CRTC, “Over the last five years, the number of BDU subscribers decreased on average by 0.9% annually.”¹²⁰ The CRTC attributes the decline to “Popular online video services [that] are providing Canadians with more

¹¹⁹ Danaher, Smith & Telang, *supra* note 52 at 11.

¹²⁰ Canadian Radio-television and Telecommunications Commission (CRTC), *supra* note 104 at 192.

choice of where, when and how to access these programs. These services include both free and paid services and are offered by independent non-affiliated services such as Netflix and Youtube as well as traditional BDUs.¹²¹ The CRTC does not consider piracy as a driver worth mentioning. In any event, the decline affected mainly cable and DTH satellite BDUs. By contrast, IPTV providers have seen significant increases in the number of subscribers and revenue.¹²²

145. In the same vein, in their recent Annual Reports, both Rogers and Bell do not consider piracy as a source of any major and imminent risk. For example, Rogers notes that “The number of pay television households in Canada continues to decline. Other video offerings available to consumers (for example, direct-to-consumer subscription and free services), as well as piracy, have contributed to this trend. If this decline continues, it could have a material adverse effect on our results of operations.”¹²³ The major source cause of such decline is the availability of alternative legal offerings, and piracy is clearly a secondary factor. If piracy presented a more serious risk, securities law would require much greater disclosure to investors. Interestingly, Rogers seems to be much more concerned about unauthorized access to cable boxes and modem, and the breaking of the encryption of its signals than the use of piracy websites.¹²⁴

146. According to Bell, “The traditional TV viewing model (i.e. the subscription for bundled channels) is challenged by an increasing number of legal and illegal viewing options available in the market offered by traditional, non-traditional and global players, as well as developing cord-cutting and cord-shaving trends.” Bell mentions those as a “changing customer behaviour” risk. But when it discusses the potential impact of this risk it does not mention illegal viewing at all. Rather, it states that its “market penetration and number of TV subscribers could decline as a result of broadcasting distribution undertaking (BDU) offerings and an increasing number of domestic and global unregulated OTT providers. The proliferation of IP-based products, including OTT

¹²¹ *Ibid.*

¹²² *Ibid.*

¹²³ “2017 Annual Report”, online: *Rogers Investment Relations* <<https://investors.rogers.com/2017-annual-report/>> at 77.

¹²⁴ *Ibid* at 74.

content offerings directly to consumers, may accelerate the disconnection of TV services or the reduction of TV spending.”¹²⁵

147. The CRTC data provide a few additional insights. First, while the number of total subscribers across all BDUs have declined, the number of subscribers to IPTV is steadily increasing. Therefore, BDUs provide IPTV seem able to attract new customers despite the challenges of increased competition from other legitimate or illegitimate content providers.¹²⁶

148. Second, since the growth of legitimate online video services is more likely to contribute to subscription cancellations than piracy, it can only be a cause of a fracture of less than 1 percent decline in the number of subscribers—hardly an indicator of an impending crisis.

149. Third, the number of subscribers who cancel their subscription or those who would not subscribe is a very limited measure for determining the impact of piracy. For example, a BDU that increases its prices could expect to see some cancellations.¹²⁷ Some would not have cut the cord if piracy were not available, while others might start obtaining content from pirate sources but would cut the cord anyway. In the latter case, piracy would be the effect of the cancellation, caused by the price increase, not the cause of the cancellation.

150. In paragraph 44, the Applicants provide an estimate of an annual loss of between \$220 million and \$350 million annually, on the assumption that “one third of the lost or never obtained subscriptions are in part attributable to piracy.” The calculation seems to be the following: the number of lost subscribers (1.1 million) / 3 X annual subscription revenue per customer. However, the number of lost subscribers is 400,000, not 1.1 million, which immediately reduces the estimated loss to between \$80 million and \$128,000. Moreover, the Applicants do not provide any basis the assumption that a third of the lost subscriptions is attributable to piracy, and even under their assumption, this third of lost subscriptions is only “in part attributable to piracy”, but they do not tell us whether piracy was a decisive factor. Obviously, the figures would look quite different

¹²⁵ “Bell Canada Enterprises: Annual Report”, (2017), online: <<http://www.bce.ca/investors/AR-2017/2017-bce-annual-report.pdf>> at 71.

¹²⁶ Canadian Radio-television and Telecommunications Commission (CRTC), *supra* note 104 at 192.

¹²⁷ Sophia Harris, “Cable TV price hikes could spark more cord-cutting | CBC News”, (8 February 2016), online: *CBC* <<http://www.cbc.ca/news/business/cord-cutting-rogers-1.3435432>>.

if piracy was responsible for 0.1, 1, or 5 percent of subscriber losses, all of which could be equally valid to assume in the absence of any evidence.

151. Paragraph 45 further demonstrates the amateurish nature of the Applicants' figures. Based on the figures reported by the cited Sandvine report, they estimate the revenue loss to BDUs as approximately \$500 million annually, a figure they claim is "broadly consistent" with the figures they provided in paragraph 44, except that \$500 million is hardly consistent with \$220 or \$350 million—it is about twice the average of those two figures. Recall that the range of \$220 or \$350 million is based on a severely inflated number of lost subscribers. Compared to the figures based on the actual number of lost subscribers, this "broadly consistent" figure approximately five times larger than the previous.

152. Moreover, the estimate is based on the Sandvine study which estimated that there are about 7 million subscribers to piracy streaming services in North America. Neither the Sandvine report nor the Applicant provide any information on how this number has been calculated. But even assuming that this number is accurate, we do not know who those people are, how many of them are former subscribers of legal services, how many of them subscribe to both (e.g., pay \$10 a month to a piracy service to supplement their existing legal service subscription), how many of them would never subscribe to BDUs' services, or how many of them would continue subscribing if BDUs lowered their prices or improved their offerings, the extent to which BDUs, who are often internet access and wireless providers, recover some of those losses through higher revenue from internet access, which is necessary for online piracy, and so on.

153. Most importantly, even if we accept the Applicant's figure as accurate estimates of the losses to BDUs attributable to piracy, those figures say nothing about the how those losses translate to a reduction in revenue to creators, and more importantly, to a decrease in the amount and quality of new creative content, Canadian or otherwise.

154. Faulty, partial, misleading, or baseless as the Applicants' evidence may be, this is the best evidence which the Applicants, who know the ins and outs of their industry more than anyone else, have chosen to provide or have been able to produce. This is it is quite telling. As the Supreme Court explained twice in recent years, if copyright owners had evidence that unauthorized use has affected their markets negatively, it would have been in their interest to tender it. When they fail

to furnish such evidence, it is proper for a fact-finder to draw an inference that the claimed harm did not occur.¹²⁸

155. Finally, a central justification for the Applicants' proposal is the claim that existing remedies against infringers of copyright are ineffective, and that obtaining relief against those operating piracy sites can be exceptionally difficult because they those operators can frequently conduct their activities with total anonymity, communicate with one another, and with their customers, online using false names and providing no identifying information, and because the operators of piracy websites are often located in jurisdictions where conventional legal action may not be a viable option.¹²⁹

156. These arguments sound superficially compelling, although the Applicants fail to provide any information to substantiate them. Yet, these arguments expose some unexplained internal contradictions. Besides the fact that the common myth of online anonymity has been replaced with a growing reality of surveillance,¹³⁰ it is hard to reconcile the picture of operations conducted in remote countries by individuals who are unknown and untraceable, with the repeated claim that piracy in Canada "is a major and urgent threat to Canada's social and economic fabric". It seems curious that on the one hand a threatening number of Canadians manage to enter into business transactions with pirate operators (not simply locating their content, but paying monthly subscription fees or paying for advertising space), while those service providers can remain unknown and untraceable: accounts need to be opened, payments debited and credited. Maybe these tensions can be explained, but the Application does not do that.

157. But on a more general level, the argument ignores piracy's inherent scalability limitation.¹³¹ A pirate operator might be able to earn a living while constantly changing identities and being on the run—criminals have done that since the dawn of civilization and they can inflict harm while doing that. However, very soon, if they want to grow their business, they discover that run the risk of being more and more noticeable, traceable, and within the reach of the law.

¹²⁸ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 27, para 72; *Alberta (Education) v. Canadian Copyright Licensing Agency (Access Copyright)*, *supra* note 13, para 35.

¹²⁹ *Application*, *supra* note 1, paras 53–56.

¹³⁰ Straith Schreder, "On the internet, no one knows you're doggo", online: *Internet Citizen* <<https://blog.mozilla.org/internetcitizen/2018/02/16/irl-on-the-internet-no-one-knows-youre-doggo>>.

¹³¹ *Supra*, para 41.

VIII. IS BLOCKING OF “PIRACY WEBSITES” EFFECTIVE?

158. The Applicants claim that blocking access to “piracy websites” is an effective tool for combatting piracy, and that similar regimes to the one they propose “have been widely adopted internationally because they have been proven to work.”¹³² But before it can be determined whether the proposed solution is effective, a rational policy-maker must ask “effective in doing what?”. Let us assume that the proposed regime will completely block all access to piracy websites and will only block pirated content (i.e., zero false negatives and zero false positives). If that were the case, we could declare that the regime effectively block access to pirated content, but unless the policy-maker is interested in blocking access to pirated content for the sake of blocking access to pirated content, it is far from clear that even such an effective regime is worth implementing.

159. Copyright law does not exist for the purpose of blocking access to works. On the contrary, as the Federal Court of Appeal noted recently,

“[c]opyright protection exists because we find the works it protects valuable. There are many ways in which they may be valuable—encouraging learning, spreading knowledge, fostering creativity, exciting discussion, providing enjoyment, triggering reflection and promoting human flourishing . . . It is because of all of these potential benefits that we both desire to encourage copyright protected works and also desire to provide wide access to them.”¹³³

160. A regime that effectively block access to works might seem like an odd way to encourage wide access to them. The tension could be easily reconciled if blocking merely channels access to legal sources and away from illegitimate ones without changing the amount or type of works access whatsoever. The tension might also be reconciled if, despite the fact that blocking might prevent access by some people to some works, it would lead to greater consumption of works from legal sources, which, in turn increase the overall number, type, and quality that is produced and accessed by others, and if failing to block some people from accessing some works, the overall number, type, and quality of works would decline.

161. An effective blocking regime can effectively deny access to work without any countervailing benefits. This would be the case whenever piracy is non-substitutive, i.e., when

¹³² *Application, supra* note 1, para 68.

¹³³ *Re: Sound v Canadian Association of Broadcasters*, 2017 FCA 138 (available on <http://canlii.ca/t/h4k0m>), para 90.

people access content that is not available legally, not available at a price they can afford paying (or a price that exceeds their expected utility), or not available in a format suitable to the purpose for which they want to use the work.

162. An effective blocking regime can prevent some substitutive piracy (i.e., piracy by people who otherwise would have the ability and willingness to pay for the work) but nonetheless harmful if it blocks more non-substitutive piracy than it prevents substitutive piracy, or if the social cost of the blocked access is larger than the benefits from the reduction in substitutive piracy.

163. The issue in the present Application is not whether copyright should exist and enforced. Rather, the issue is whether the Applicants made the case for *additional* enforcement measures in the form of the proposed blocking regime. In the absence of credible evidence that piracy indeed prevents the goals of copyright law from being attained and that blocking access to piracy websites is the most effective and least harmful method of advancing those goals, an effective blocking regime could be no more than an effective regime for discouraging learning, restricting knowledge, hindering creativity, silencing discussion, denying enjoyment, suppressing reflection and impeding human flourishing. The Applicant provided no credible evidence of benefits from blocking.

164. Next, the Applicants do not suggest that their proposed regime is effective in the sense discussed in the previous paragraphs (i.e., 100 blocking with no false negatives). Blocking access to piracy websites will unlikely *eliminate* piracy, because as long as the mismatch between demand for content and price and availability of lawful content persists, there will be demand for content from unlawful sources. Rather than eliminating piracy, the main result of blocking some websites might simply be shifting the demand to others without necessarily shifting demand to legal sources. Again, whenever piracy is non-substitutive, e.g., when people access pirate content not available from legal sources or not available but unaffordable, blocking piracy websites will unlikely shift demand to legal sources.

165. However, the blocking of some websites will increase the time-cost of accessing pirate sources relative to legal ones, and therefore, at the margin, could decrease demand for content from pirate sources and shift it to legal ones, at least for some consumers who engage in substitutive piracy. While some of them might seek other pirate sources, others might be persuaded to avoid the inconvenience (and the ethical or legal cost) and switch to legal ones.

166. The Application cites several sources suggesting that website blocking has been proven effective. Most of those finding, even if accepted as reliable at face value, only show that website blocking is effective in blocking access to the blocked websites and was correlated with a much less significant decrease in total access to piracy websites. But as noted above, blocking access for the sake of blocking access cannot be justified. Website blocking could only be justified if it shifts demand from pirate website to legal ones, and the benefits of the increase in legal consumption (in terms of the goals of copyright law) outweigh the harms of denying people access to works.

167. Therefore, from a public policy perspective, causal connection between website blocking and a corresponding increase in legal consumption must be regarded as a necessary condition before the adoption of blocking regime can be seriously considered (although by no means a sufficient condition). The two studies by Danaher et al., mentioned in paragraph 68 of the Application, are the only evidence showing some increase in legal consumption as a result of website blocking. However, a closer look at those studies shows they weaken the Applicants' case rather than support it.

168. First, the two studies are based on two blocking events in the UK. One in November 2013 and another one a year later. As valid as their findings might be, it is hard to know what are the long term effects of those blockings and whether the change in consumer behaviour was long lasting or only temporary.

169. Second, without more information about piracy patterns and what drives it in the UK and Canada, it is hard to tell whether the evidence from the UK could be a good predictor of the impact of blocking in Canada. For example, if prices of legal content in Canada are higher relative to consumers' disposable income than they are in the UK, or if less content is available legally in Canada than in the UK, blocking in Canada can be expected to result in a lower increase in legal consumption. If Canada's population is more diverse and a larger share of consumers who consume pirated content consists of individuals who access pirate website to watch content from their home countries, then blocking will be expected to result in a lower increase in legal consumption than that observed in the UK. In the same vein, UK copyright law does not provide for statutory damages, while they are available in Canada and the US.¹³⁴ Therefore, if the

¹³⁴ Pamela Samuelson, Phil Hill & Tara Wheatland, "Statutory Damages: A Rarity in Copyright Laws Internationally, But For How Long?" (2013) 60 J Copyright Soc'y USA 529 at 535.

Applicants are correct in their assumption that tougher remedies should deter piracy then it is possible that those who are engaged in piracy in North America are much more committed to it than those in the UK and therefore blocking might be less effective here. Without more comparative information about the determinants of piracy the utility of the studies from the UK is limited.

170. Third, at the authors note, the impact of the second blocking was less significant than the first, suggesting that there may be diminishing returns to blocking as consumers who continued to access pirate website after the blocking may be more dispersed, might have greater technological savvy or lower willingness to pay for legal content.¹³⁵ Another possibility might be that the consumers who were not deterred by the blocking were mainly accessing content that they cannot get legally elsewhere. Indeed, these finding indicate that more website blocking might prevent more non-substitutive piracy than deter substitutive piracy.

171. Fourth, the authors' conclusion that the findings that blocking increased legal consumption "demonstrate that piracy does indeed displace usage of legal paid streaming sites"¹³⁶ requires qualification. For example, suppose I was planning to go see a movie instead of staying home and read a book but a winter storm prevents me from going to the cinema so I stay home and read a book. It might be true that I increased my consumption of books as a result of being unable to watch the movie, but it would be inaccurate to describe what happened as "going to the movies displaces legal book reading". A more accurate description is "being unable to satisfy my first choice I opted to my second choice". It is possible that people choose to consume content from pirate sources because they wish to avoid paying for that content, but it is also possible that people prefer the content from the pirate source because their most preferred content is not available from the legitimate source. Blocking them from accessing their preferred content might drive them to consume the legal (yet less desirable) content, but it does not mean that they would have pirated their preferred content if it were available from the legal source.

172. Indeed, the authors observe that

¹³⁵ Danaher, Smith & Telang, *supra* note 52 at 6.

¹³⁶ Brett Danaher, Michael D Smith & Rahul Telang, *The Effect of Piracy Website Blocking on Consumer Behavior*, SSRN Scholarly Paper ID 2612063 (Rochester, NY: Social Science Research Network, 2015) at 26.

consistent with prior literature, the heaviest pirates are also heavier users of legal sites than the lighter pirates, reflecting the fact that individuals with strong preferences for consumption of television and movies tend to consume more television and movie content, through both pirate and legal channels. The question is whether these heavy pirates would have higher legal consumption in the absence of piracy, or in this case whether removing access to some of the piracy sites can induce these heavy pirates to make more use of legal channels.¹³⁷

173. The authors find that blocking access to pirate websites has resulted in 6 percent increase in legal visits to subscription-based sites among former visitors to the block websites,¹³⁸ but from a policy perspective this might be an answer to the wrong question. If the heaviest pirates are also the heavier user of legal sources then this is a strong indication that the pirated content that they consume heavily is not a substitute to the content that they consume legally. If it were, it would make little sense to incur the cost of finding and accessing pirated content when the subscription fees they already pay provide them just-as-good a content. It is also a strong indication that they would be willing to pay for the pirate content if it were legally available. Therefore, if finding that blocking their access to the pirate sources causes them to increase consumption from the services they subscribe to cannot be seen as a welfare enhancing move.

174. Finally, the findings of Danaher et al., instead of proving the effectiveness of website blocking, demonstrate how crude and disproportionate a solution website blocking is. They estimate that the blocking

caused a reduction of about 25,800 pirate site visits in our sample, while causing 1,350 more visits to ad-supported sites and 925 more visits to subscription based sites than would have otherwise been observed. This implies a conversion ratio of about 8.8%, that is, about 8.8% of thwarted piracy visits resulted in visits to legal ad-supported or subscription based video sites.¹³⁹

175. In other words, a conversion ratio of 8.8 percent means that to generate an additional legal consumption of one work, access to nine works needs to be denied. It also strongly suggests that more than 90 percent of the piracy in that sample was non-substitutive and only less than 10 percent was potentially substitutive. Since non-substitutive piracy could not be considered harmful, a measure that prevents nine benign acts to generate one desired act is incredibly inefficient. To

¹³⁷ Danaher, Smith & Telang, *supra* note 52 at 11.

¹³⁸ *Ibid* at 17.

¹³⁹ *Ibid* at 18.

illustrate, if imposing a stronger penalty on one offender (say a tax evader) would deter nine others and drive them to comply, such a stronger penalty would be considered effective. But if nine offenders have to be punished more severely to increase compliance by a single offender, saying that the measure would be effective requires much more careful analysis of costs and benefits. More on point, suppose a study finds that out of ten people who borrow books from libraries, one person, who otherwise would buy a book, borrows and copies it. A proposal to implement measures that would prevent the nine people from borrowing books in order to generate a single additional sale would seem to make little sense. Moreover, the study does not show there was any increase in demand for the same content. The increase in demand may be entirely attributable to increased use of existing subscriptions generating no revenue and increased use of free ad-supported services generating minimal revenue for different creators.

176. In sum, if the policy goal were to block access to creative content for the sake of reducing access to creative content then website blocking might be a somewhat effective way to accomplish that. If the purpose of the proposed website blocking access is to generate more revenue to BDUs by converting pirates to paying consumers, then website blocking seems like a very ineffective way to do that. If the goal of website blocking is encouraging the production of more and better content, then there is no evidence to support it. By contrast, if the goal of website blocking is to strengthen BDUs' dominance and protect them from the need to retain their existing customers or attracting new ones by offering more and better content on more competitive terms, then it might help accomplish this goal, at least temporarily.

IX. WILL THE PROPOSED WEBSITE BLOCKING BENEFIT CANADIAN CREATORS AND WILL IT SPUR CANADIAN CREATIVITY?

177. The Application advances the narrative that piracy harms Canadian creators and therefore discourages the production of Canadian creative content. As a corollary, it argues that implementing the proposed website blocking regime will benefit Canadian creators and encourage the production of Canadian creative content.

178. I assume that, besides obvious political reasons, the Applicant emphasize the alleged impact of piracy on “jobs and economic and cultural output in Canada’s creative economy”¹⁴⁰ in order to dress their proposal as one pertaining to the goals of the *Telecommunications Act* and the mandate of the CRTC, yet the proposal does not suggest that the regime would apply only to pirated Canadian content.¹⁴¹ However,

- there is no indication Canadian content is pirated disproportionately more than other content;
- there is no basis to believe that the proposed blocking regime will result in greater Canadian creative output but good grounds for concern that the opposite would happen;
- the proposed regime, might, under some circumstances enrich *some* Canadians (not necessarily writers or artists) but for the wrong reasons;

I address those issues in turn.

a) No indication Canadian content is pirated disproportionately more than other content

179. The Applicants does not argue that Canadian content is pirated disproportionately more than other content, nor do any of the industry studies they rely on make such a suggestion. Moreover, common sense suggests that Canadian content is less likely to be pirated. First of all, all content broadcast by Canadian broadcasters can be received freely at high definition. Accordingly, most Canadians who want to watch free Canadian content need no more than a TV receiver and a simple antenna. Increasingly, many broadcasters also make many of their programs available for free streaming in Canada through their websites.

180. Second, BDUs offer a disproportionate number of Canadian channels even on their basic packages, which means that even subscribers to the basic and cheapest packages would be able to access legally a lot of Canadian content.

¹⁴⁰ *Application, supra* note 1, para 101.

¹⁴¹ Indeed, for copyright law purposes, the identity of the creator or the owner of the copyright and whether they are Canadian or not matters very little. By and large, copyright applies equally to all works from any “treaty country”, and a corner stone of international copyright law is the principle of “national treatment”, which requires any signatory to a treaty not to discriminate against works made by nationals, citizens, or residents of other treaty countries, *Copyright Act*, RSC 1985, c C-42, online: <<http://www.canlii.org/en/ca/laws/stat/rsc-1985-c-c-42/latest/rsc-1985-c-c-42.html>>, s 5.

181. Third, all things equally Canadian creators are more likely to produce content that Canadians might want to watch, and if they do, they should find it easier to distribute in Canada. Therefore, all things equal, Canadian content is more likely to be available legally in Canada. For example, nearly 50 percent of Canadians watch TV through Netflix, and it stands to reason that Netflix would be interested in streaming in Canada programs that Canadians are interested at, and the transaction costs associated in acquiring the rights to do that should be lower relative to foreign content.

182. Fourth, Canadian Content requirement increase the amount of Canadian content available through broadcasters and Canadian cable channels and thereby reduces that amount of non-Canadian content broadcast or distributed through these channels. Indeed, it stands to reason that as a result of CanCon policies, Canadian consumers watch more Canadian content than they might otherwise choose and that in many cases the desire to watch non-Canadian content contributes, in part, to why some of them choose to consume content from pirate sources.

183. According to the Sandvine report, which the Application relies on, the most common programs streamed through piracy websites are premium television, live sports, news, and international/expatriate content. Unfortunately, Canadian content does not dominate premium television. *Game of Thrones* is often mentioned as the most pirated TV show,¹⁴² not *Corner Gas*.¹⁴³ “International/expatriate” content in Canada is, by definition, not Canadian.

184. It seems plausible that when Canadian consumers pirate live sports, many of the matches that the watch might involve Canadian teams, although this type of programming, while very lucrative to broadcasters and BDUs, does not seem to be the focus of the Applicants’ stated concerns.

185. According to Sandvine, “the top bandwidth-consuming channels on every network examined are 24/7 cable news channels.”¹⁴⁴ Sandvine hypothesizes that news channels have relatively steady traffic rates throughout the day because they are usually watched “in locations

¹⁴² Sandvine, *supra* note 46 at 7.

¹⁴³ A Beaverton article wittingly made a similar point recently. See “CRTC rules that 20% of illegal torrents must be CanCon”, (15 November 2017), online: *The Beaverton* <<https://www.thebeaverton.com/2017/11/crtc-rules-20-illegal-torrents-must-cancon/>>.

¹⁴⁴ Sandvine, *supra* note 46 at 11.

like waiting rooms, office lobbies, or bars where a television is installed to help distract clients while they are waiting for an appointment.”¹⁴⁵

186. Sandvine does not name any of the Canadian news channels among those most pirated. It is possible that this merely reflects that its study refers to North America and that in Canada, the most pirated news channels are Canadian, but this is merely speculation. In any event, Sandvine only mentions that 24/7 news channels are the top consumers of bandwidth, but this merely reflects the facts that they are designed to be turned on for many hours, often broadcasting content in a loop. This finding does not mean that they attract the largest number of pirate viewers or that their piracy has resulted in major revenue losses to BDUs. But even if this were the case, their main content, TV news, is typically a by-product of the production of newscasts produced by their Canadian parent broadcasters for their national or local newscasts, packaged with low-cost traffic updates, weather news, or financial news. 24/7 cable news channels in Canada must be a low cost, low risk revenue source for the broadcasters who produce them and the BDUs that distribute them, but even if they are heavily pirated, it is hard to see how this might impact the production of news, let alone impact the production of drama, comedy, or documentaries.

b) There is no basis to believe that the proposed blocking regime will result in greater Canadian creative output but good grounds for concern that the opposite would happen.

187. As detailed in Part VI, there is no necessary causal link between piracy and reduction in creative output or its quality—not even between piracy and lower revenue. Piracy, of course, could have those effects, but the Application does not provide any evidence that it does. On the other hand, television executives, journalists, and critics note repeatedly that we are in the midst of a golden age of TV. Peer-reviewed and independent studies not only confirm those findings but also explain their causes. Therefore, even if the proposed website blocking regime could effectively block people from accessing pirated content, at most, it might result in a minor increase in BDUs’ revenue, but whether such minor increase in BDUs’ revenue would turn the current golden age into a “platinum age” is not even mere speculation. Fantasy might be more apt a description.

¹⁴⁵ *Ibid.*

188. Moreover, piracy itself might have been a contributor to the current golden age rather than detractor. Recall that piracy has an inherent scalability limitation,¹⁴⁶ and when practiced in moderation can have positive effect for creators, producers, and even distributors.¹⁴⁷

189. Furthermore, piracy is a source of competition that, when practiced in moderation, can help reduce various gatekeepers' market power and compel them to produce or distribute more content, lower their prices, improve their services, and more generally keep all players on their toes—forcing them to keep creating and innovating.¹⁴⁸

c) The proposed regime, might, under some circumstances enrich some Canadians (not necessarily writers or artists) but for the wrong reasons

190. Since piracy has not caused any of the devastating harms alleged by the Applicants, the best explanation for the present Application is that BDUs and other incumbents understand that piracy is facilitating the transition into a more competitive industry where their secure flow of legacy profits is no longer guaranteed.¹⁴⁹ Blocking piracy websites has very little to do with encouraging creative output and very much to do with attempting to delay the transition to a more competitive environment that has already benefitted creators and viewers and will continue to do so. The main thing that the proposed regime might accomplish is bring back “the vast wasteland of television”, which has been very profitable for BDUs and broadcasters.¹⁵⁰

191. Admittedly, when BDUs make more profit, some of it trickles down to Canadian creators in the form of Canadian production funds.¹⁵¹ However, if the goal is to increase those contribution by thwarting the growth of a superiorly competitive environment, then this logic could also extend to blocking competition from legal online services who do not make the same contributions, or to exempting BDUs from the *Competition Act* and permit them to fix prices.

¹⁴⁶ *Supra*, para 41.

¹⁴⁷ *Supra*, Part VI.4.

¹⁴⁸ *Supra*, Part VI.6.b).

¹⁴⁹ *Supra*, paras 126-127.

¹⁵⁰ Carr, *supra* note 77.

¹⁵¹ *Application*, *supra* note 1, para 47.

X. CONCLUSION

192. In 1403, a group of manual scribes, illustrators, bookbinders, and booksellers who worked near St Paul’s Cathedral in London, England formed a guild in 1403. They were known as “stationers” because unlike many other tradespeople they worked at a fixed location. Seven decades later, the printing press arrived to England. For the stationers, its arrival was a blessing and a curse. A blessing because no longer they needed laboriously to transcribe books by hand, and could easily increase production, and expand their markets; a curse because any other printer could equally expand into theirs. Responding to numerous petitions, a Royal Charter from 1557 established the Company of Stationers, and granted its members collective monopoly over the book trade. This monopoly, however, was not granted gratuitously. In Britain (as in elsewhere in Europe), the monarchs and the Church were interested in controlling the dissemination of new, and as far as they were concerned, seditious, ideas, so in return for a lucrative monopoly, the Company of Stationers was, for the next century and a half, expected to ensure that only books that were licensed by the appropriate state or church authorities would be sold.¹⁵²

193. Five centuries later, the arrival of digitization has presented broadcasters and BDUs a similar blessing and a curse: a blessing because it has dramatically reduced the cost of producing content, deliver it to consumers, and allows them to expand their markets; a curse because many more content producers or distributors can do the same and compete with them.

194. If the goals of the *Copyright Act* or the *Telecommunications Act* were limiting access by Canadians to creative works, then the proposed blocking regime could make some sense as the control of the book trade in the sixteenth century did.

195. But in the twenty-first century, blocking access to works is no longer a desirable policy objective. In fact, any law enacted or regulation promulgated with such a goal in mind would be an unconstitutional limitation on freedom of expression. As the Federal Court of Appeal noted recently,

¹⁵² Lyman Ray Patterson, *Copyright in Historical Perspective* (Vanderbilt University Press, 1968); Mark Rose, *Authors and owners :the invention of copyright* (Cambridge, Mass.: Harvard University Press, 1993); Joseph Loewenstein, *The Author’s Due: Printing and the Prehistory of Copyright* (University of Chicago Press, 2002); Adrian Johns, *Piracy: the intellectual property wars from Gutenberg to Gates* (Chicago: The University of Chicago Press, 2009).

“[c]opyright protection exists because we find the works it protects valuable. There are many ways in which they may be valuable—encouraging learning, spreading knowledge, fostering creativity, exciting discussion, providing enjoyment, triggering reflection and promoting human flourishing ... It is because of all of these potential benefits that we both desire to encourage copyright protected works and also desire to provide wide access to them.”¹⁵³

196. The Application proposes that the CRTC establishes a new independent organization, the “Independent Piracy Review Agency” or “IPRA”, whose role will be “to consider applications from rightsholders and other applicants regarding the addition of a website to the list of piracy sites, receive and review evidence from the applicant, the alleged piracy site, and ISPs, hold an oral hearing by teleconference if required, and then submit a recommendation to the Commission on whether to add that site to the list of sites to which ISPs are required to disable access.”¹⁵⁴ Establishing such a regime is necessary, they maintain, because piracy threatens to undermine Canada’s social fabric along with a long list of harms.

197. To convince the CRTC that their proposal advances the goals of the *Copyright Act* and the *Telecommunications Act*, the Applicants rings loud alarm bells about piracy’s devastating harms to content creation, but the breadth of their sweeping claims about harms stands in stark contrast to the dearth of evidence they provide to substantiate them.

198. As I have explained in this Report, as a matter of theory, piracy *might* result in such harms. However, such an outcome is neither necessary nor likely. As a matter of fact, there is no credible evidence indicating that such harms have occurred or will likely occur. In fact, the best available evidence shows that we are in the midst of a golden age of movies, music, books, and television. More and better works are produced, more people watch them, and more money is flowing into their production than even before. Not only did piracy not hinder these developments, but it might also have contributed to them for the reasons that I have explained above.

199. Digitization and related technological advancements resulted in a more competitive environment for content creation, dissemination, and consumption, and have spurred the current golden age of creative production. Competition from legitimate sources such as Netflix and illegitimate ones such as pirate streaming services, have undermined broadcasters’ and BDUs’

¹⁵³ *Re:Sound v CAB*, *supra* note 133, para 90.

¹⁵⁴ *Application*, *supra* note 1, para 74.

legacy business models, and forced upon them a new reality to which they have not been accustomed to. There is no evidence that broadcasters or BDUs are incapable of adapting or that this new competitive environment has devastated them, but transitioning from business models in which advertisement-based or subscription-based economic profits are almost guaranteed regardless of the selection of quality of content to a new competitive environment is a challenge that any legacy business model would preferably like to avoid or delay.

200. While piracy has not resulted in any reduction in the production of content (and is unlikely to do so), piracy is facilitating the transition into a more competitive industry where the secure flow of legacy profits is no longer guaranteed, by reducing consumers' opportunity cost of cord cutting. And as the number of cord cutters grows, online content providers are likely to produce or acquire more content, thus reducing BDUs' and other incumbents market power. Piracy accelerates this transition by acting as a temporary bridge. The bridge is temporary because piracy has an inherent scalability limitation. Just as online piracy of music stopped being regarded as a major problem as the number and quality of legal offering has grown, so video piracy will likely become marginalized once legal offerings increase.

201. The proposed website blocking will not eliminate piracy, but it might slow down the growth of competition and prolong the ability of dominant incumbents to earn legacy economic profit. From their perspective, attempting to delay competition as much as possible makes perfect sense. Just like their ancestors from near St Paul's Cathedral, they would like to enjoy the blessing of the new technologies and minimize the curse of competition. But from a public policy perspective it does not.