

Cash For Content: Profiting from Copyright on the Internet

Lisa Macklem

Controlling content in the age of the Internet has been an ongoing struggle for copyright owners. Meanwhile, users of copyrighted material have never had access to so much material so easily. Technology providers have helped to facilitate the exchange of content. The courts have emphasized that copyright is technologically neutral and regulation stresses net neutrality, yet technology providers continue to push the boundaries to secure their own economic futures. The film and television industry is an important stakeholder in these struggles, and the industry wields enough economic clout both north and south of the Canadian/American border to have its influence felt in both jurisdictions, and indeed, around the world. Copyright law is predicated on the balance of owners' and users' rights and a balance between encouraging further creation and innovation with rewarding the initial creation and innovation. When the Internet is involved, it becomes more difficult to ensure that each side's rights are being protected. According to Murray and Trosow, "Copyright law is supposed to be technologically neutral: it should treat material on the Internet the same way as it treats any other material."¹ Michael Geist points out that the Supreme Court of Canada made its position on technological neutrality clear in the decisions of 2012: "copyright law should not stand in the way of technological progress and potentially impede the opportunities for greater access afforded by the Internet through the imposition of additional fees or restrictive rules that create extra user costs."² Described in this way, technological neutrality sounds very much like it supports the same principles of copyright as net neutrality supports. However, the *Aereo* decision highlighted some of the problems with treating material delivered via the Internet in a like fashion.

The Internet also introduces a potential third stakeholder in the balancing act between owners and users with technology providers. Is regulation of the medium – the Internet – necessary to ensure statutory rights? The Federal Communications Commission (FCC) describes its Open Internet policy as foregrounding net neutrality and that policy ensures that "broadband

¹ Laura J Murray and Samuel E Trosow. Canadian Copyright: A Citizen's Guide. 2nd ed. Toronto: Between the Lines, 2013 at 134.

² Michael Geist. The Pentalogy. At ix.

providers cannot block, throttle or create special ‘fast lanes’ for that content.”³ Most recently, the American government has used the analogy of comparing the Internet to any public utility to justify the FCC’s recent regulatory changes. Rulings by the CRTC in Canada also support the concept of net neutrality. The FCC states that its “Open Internet rules are designed to protect free expression and innovation on the Internet and promote investment in the nation’s broadband networks.”⁴ This would seem to favor users’ rights and affordable access to content. Recent cases, including *American Broadcasting Companies Inc. v Aereo, Inc., F/K/A Bamboom Labs, Inc.*, 134 S. Ct. 2498, 2507 (2014) in the United States and *Entertainment Software Association v. Society of Composers, Authors and Music Publishers of Canada*, 2012 SCC 34, [2012] 2 SCR 231 in Canada, emphasize technological neutrality in their decisions. On both sides of the border, the move of traditional television and other entertainment into the digital environment has spurred litigation and regulatory change. This paper will examine how technology providers fit in to the traditional landscape of copyright, primarily thought of in terms of owners’ and users’ rights. Do technology providers deserve a piece of the copyright pie for helping to foster innovation and creativity?

This paper will focus on the roles of net neutrality and technological neutrality as attempts to maintain the status quo between users and owners of copyrighted works in the digital environment. The first part of this paper will look at the traditional tensions of copyright, particularly in light of content delivery via the Internet. The second part will look at the economic factors at play. Next, the paper will examine the principal of technological neutrality, and the fourth section will focus on commitments to net neutrality. Finally, the fifth section will examine how these issues have played out in the courts. The conclusion will assess whether current approaches to copyright are still promoting traditional rationales or whether a new approach needs to be found that better incorporates content delivered via the Internet.

Basic Tensions in Copyright and Internet Law

Copyright is predicated on a balance of rights that both rewards creators and encourages further innovation and creation. The shift of traditional media such as film and television to the

³ FCC: Consumer Help Center. <https://consumercomplaints.fcc.gov/hc/en-us/articles/204231404-Open-Internet>

⁴ *Ibid.*

online environment has created a number of challenges to copyright law in terms of the technology used to facilitate that move. Trisha Meyer points out that “there is a clash between the approaches that copyright and the Internet take toward information: copyright protects while the Internet distributes.”⁵ Copyright and Patent Law in particular were crafted to help foster creation and innovation. These concepts were considered important enough to be entrenched in the American Constitution: “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”⁶ Justice Binnie writing the judgment for the Supreme Court of Canada in *Theberge v Galerie D'Art* stated,

The *Copyright Act* is usually presented as 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 (or, more accurately, to prevent someone other than the creator from appropriating whatever benefits may be generated).⁷

Binnie goes on to stress the need for finding a balance between allowing for a just reward for the creator and allowing for the user to be able to do what he or she wants to with his or her purchase – to ‘get their money’s worth’ if you will. In addition, as Vaver points out, “On the economic plane, patents and copyrights are supposed to encourage work to be disclosed to the public to increase society’s pool of ideas and knowledge.”⁸ Jenny Lynn Sheridan states that “[t]o advance the public good of copyright, namely encouragement of learning and advancement of knowledge, the access to all material is required *ex ante* to the creation process, rather than a portion of it *ex post* to the creation process.”⁹ These tensions between owners’ and users’ rights and between rewarding creation and promoting innovation have existed as long as Intellectual Property rights have.

Both Canadian and American Copyright regimes can be traced back to the Statute of Anne in 1710.¹⁰ Prior to the Statute of Anne, book publishers had been granted a series of monopolies beginning in 1557 because of the introduction of the printing press: “To aid in controlling a dangerous new technology, [the Crown] granted a publishing monopoly... to the

⁵ Trisha Meyer. “Graduate Response In France: The Clash of Copyright and the Internet.” *Journal of Information Policy* 2 (2012) at 107.

⁶ American Constitution, Article I, Section 8, Clause 8.

⁷ *Theberge v Galerie d'Art du Petit Champlain Inc* [2002] 2 S.C.R. 336, 2002 SCC 34 at para 30.

⁸ David Vaver. *Copyright Law*. Toronto: Irwin Law, 2000 at 9.

⁹ Jennifer Lynn Sheridan. “Knowledge Principle.” *VAND J ENT & TECH L.* 17:1 39 at 78.

¹⁰ See both Vaver *ibid.*, and *supra* note 1.

Stationers' Company, a group of London printers and booksellers who could be relied upon to censor works in exchange for large profits.”¹¹ The Crown was interested in preventing the spread of seditious works. As becomes apparent in tracing changes to Copyright Law, there were other forces at work in addition to basic economics driving changes. In 1710, the Enlightenment in England helped to spur a greater emphasis on author's rights. These translate into owner's rights, but still give first sale to the author, who can license rights to others. Posner points to the differences between “tangible” property and intellectual property:

the differences are so great that the very term “intellectual property” disguises some compelling reasons for not regarding inventions, trade names, trade secrets, and expressive media, such as movies and novels, as property at all, but rather as *sui generis* fruits of mental inquiry and creation, sometimes requiring legal protection, but legal protection unlike that given to tangible property.¹²

Posner's use of tangible to distinguish “physical” property from intellectual property is somewhat problematic when one considers the requirements within the US *Copyright Act* for copyrightable works: “Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression.”¹³ This passage from the *Copyright Act* also highlights the importance of technology to facilitate that fixation, and hence, the integral role that technology plays. Posner is writing about American Copyright law. In Canada, the fixation requirement comes from case law rather than statute, but is nonetheless, still an important consideration.¹⁴

The fixation in a tangible medium like a book or DVD seems more like “real” property because one can hold them in one's hand. Posner goes on to differentiate intellectual property from physical property: “Intellectual property is an example of what economists call a ‘public good,’ meaning a good that can be consumed without reducing any other person's consumption of it. Physical property is much more like a private good.”¹⁵ “Real” property, like a parcel of land, is a single thing but Intellectual Property differs through mass production, and hence the right to control copying of the original. Jonathan M Rotter suggest that copyright “protects art

¹¹ Murray and Trosow, *ibid.*, at 17.

¹² Richard A Posner. *Economic Analysis of Law*. 9th ed. New York: Wolters Kluwer Law & Business, 2014 at 401.

¹³ 17 US Code §102(a). Posner uses *sui generis* in its more generic sense of “its own kind or class; unique or peculiar” rather than the term of art specific to Intellectual Property law. Black's Law Dictionary. 8th ed. Toronto: Thompson, 2004 at 1475.

¹⁴ *Supra* note 1 at 42.

¹⁵ *Supra* note 11 at 402.

from the technology of mass reproduction.”¹⁶ In Rotter’s discussion of art, he emphasizes that “protection here is not a function of the status of the work as art, but as the status of the work as expression.”¹⁷ The move to digital distribution over the Internet differs from the distribution of the content on DVDs by removing that physical object. Technology can challenge the perceptions of the fixation. Fear of technology and monopolies are still problematic today in relation to copyright. Technology that allows for mass production, like the printing press in 1557 or the Internet today, threaten owners ability to control and thereby profit from their Intellectual Property.

Trisha Meyer identifies four basic rationales for copyright: natural law, cultural works are “intrinsically linked” to the creator; just reward for labor; stimulus for creativity; and social requirements to spread creations for the enrichment of both the creator and society in general.¹⁸ She also points out that “Holders and users of copyright will have very different definitions of where this balance between interests lies.”¹⁹ Meyer also points out that “copyright has steadily increased in importance because information is a valuable economic asset.”²⁰ Economic incentives are at odds with the traditional impetus of the Internet which was initially designed to facilitate communication within academic and military communities. According to Meyer, the four rationales for the Internet are pursuit of science, technology sharing, social interaction and symbolic belonging, and entrepreneurship.²¹ This fourth sphere unlike the previous three introduces an economic element to the Internet, which began as a free and open space through which to communicate. Meyer points out that “[t]ensions arise between social and economic uses of the Internet, in particular when it may not be economically efficient or profitable to maintain an open, cooperative, flexible, and decentralized space.”²² However, the basic tenants of copyright and the Internet begin at odds. Copyright relies on protection while the Internet encourages distribution of information. Increasingly, however, the Internet has been seen

¹⁶ Jonathan M Rotter, “Law, Economics, Technology, and the Social Construction of Art.” *The Journal of Arts Management, Law, and Society*. 37.4 281 at 295.

¹⁷ *Ibid.*, at 286.

¹⁸ *Supra* note 5 at 109.

¹⁹ *Ibid.*

²⁰ *Ibid.*, at 112.

²¹ *Ibid.*, at 110-1.

²² *Ibid.*, at 111.

primarily through the fourth rationale as a vehicle of commerce and entrepreneurship, making economics an important factor in its use too.

A Closer Look at Economics, the Law and Copyright

Economics is more than simply the study of wealth transfer, making economic influences on technology and the law difficult to unpack. Cole and Grossman point out that “[t]o the extent that economics is a study of human behavior, decision making , or choice, it is easy to see that incentives for behaving (or not behaving) in a certain way, or for making one choice or decision rather than another, is of central importance.”²³ Trosow points to “the interdependent relationship between law, technology, and society, [in which he is] not sure where to place the consideration of economic issues.”²⁴ Schumpeter placed technology at the centre of his economic theory and states that “crises may or may not be capable of a purely economic explanation.”²⁵ According to Posner, it is useful to make the assumption, “that human beings are rational maximizers of their satisfactions. This implies that people respond to incentives so that if a person’s surroundings change in such a way that he could increase his satisfaction by altering his behavior, he will do so.”²⁶ People may adopt new technology for numerous reasons, other than monetary ones, such as that technology increases their satisfaction by providing information more quickly and conveniently or because it connects them to others who have already adopted that technology. In the realm of entertainment content on the Internet, a person may choose to pirate material if that material is less expensive to obtain or is the only way that they can access that material. Increasingly, people are “cutting the chord” and not subscribing to traditional cable companies. They still want to obtain that content, however.

Both Posner and Schumpeter provide useful touchstones for looking at the intersection of technology and economics. Posner outlines four fundamental principles of economics: the law of

²³ Daniel H Cole and Peter Z Grossman. *Principles of Law & Economics*. 2nd ed. New York: Wolters Kluwer, 2011 at 1.

²⁴ Samuel Trosow. “Law and Technology Theory: Bringing in Some Economic Analysis.” *Bulletin of Science, Technology & Society*. 30.1 (2010) at 31.

²⁵ Joseph A Schumpeter. *The Theory of Economic Development*. New Brunswick, NJ: Transaction Publishers, 1983 at 218. Crisis occur during the cycles of development when the general equilibrium of the economic system is disrupted.

²⁶ *Supra* note 12 at 4-5.

demand, opportunity cost, the tendency of resources to gravitate toward their most valuable use, and equilibrium. Schumpeter posits that “[e]conomic processes are accordingly divisible into three different classes: into the processes of the circular flow, into those of development, and into those which impede the latter’s undisturbed course.”²⁷ Salzberger describes Schumpeter’s theory as being more evolutionary than “the traditional neoclassical microeconomics equilibrium paradigm.”²⁸ While the two theories mesh well, it is necessary to consider them separately.

Posner’s theory covers a number of basic economic concepts. The law of demand suggests that “an inverse relation between price charged and quantity demanded” exists so that if the price rises, the quantity decreases, for instance.²⁹ Posner points out that the “Law of Demand doesn’t operate just on goods with explicit prices.”³⁰ There are important factors that will effect the relationship. For instance, inflation will cause the price of all goods to rise without any change to quantity. However, in general, people will pay more to get what they want if that item is hard to get. The price is not simply the monetary amount of the item. One also has to factor in the cost in time and effort to locate a substitute or to acquire the original. Going back to the piracy example, if one cannot find a non-infringing copy at a price one can afford or in the time frame one wants, that person may turn to a cheaper infringing copy.

An alternative price, according to Posner, results from using resources for a secondary purpose: “A social cost diminishes the wealth of society; a private cost rearranges that wealth.”³¹ The Coase Theorem is “the most celebrated application of the opportunity cost in the economic analysis of law.”³² Coase is particularly appropriate in this area because the theorem was originally predicated on the allotment and regulation of radio frequencies – a new technology which impacted the dissemination of copyrighted content, in this case music. Posner explains that Coase’s theorem posits “if transactions are costless, the initial assignment of a property right will not affect the ultimate use of the property.”³³ Coase argued against regulation of the

²⁷ *Supra* note 25 at 218.

²⁸ Eli M Salzberger, ed. *Law and Economics of Innovation*. Cheltenham, UK: Edward Elgar, 2012 at xi.

²⁹ *Supra* note 12 at 5.

³⁰ *Ibid.*

³¹ *Ibid.*, at 8.

³² *Ibid.*

³³ *Ibid.*

technology.³⁴ Elkin-Koren and Salzberger point to one major flaw in Coase's analysis: “[b]y failing to make technology endogenous to the analysis, Coase overlooked the reciprocal relationship between legal rules and technological progress.”³⁵ Trosow points to the potential problems of a “built-in bias in the policy process in favor of overprotection of intellectual assets.”³⁶ In regards to over-regulation, Posner states “[a] different kind of economic rent … is earned by the monopolist, who creates an *artificial* scarcity of his product.”³⁷ Schumpeter, on the other hand, would argue that at least for limited periods, monopolies and oligopolies foster innovation.³⁸

The example of telecommunications companies in Canada can serve as a case in point. The vast expanse of geography that must be served in Canada is an expensive investment for telecommunications companies in regards to infrastructure. In order to recoup their costs, an oligopoly has existed that has meant that there has been no true competition between telecommunication companies. On May 5, 2015 Jean-Pierre Blais, Chairman and CEO of the Canadian Radio and Television Commission (CRTC) released a statement outlining a decision to remove a cap on wholesale wireless roaming rates to “enable market forces to prevail.” Furthermore, Blais indicates that “[i]n arriving at our decision, we found that the market in Canada for wholesale wireless roaming services is not sufficiently competitive. The three major national companies – Bell, Rogers and Telus – collectively possess market power in the national market for wholesale roaming. What’s more, they can use this market power to hold back competition.” Competition allows for “reasonable prices, innovative services and increased choice” for consumers. With the move to digital delivery of content via telecommunications networks, more and more content is being delivered via these networks, making the telecommunications industry an every increasingly important part of the equation. Blais’ decision is concerned with finding a fair market price for consumers while still rewarding innovators:

³⁴ Daniel H Cole and Peter Z Grossman. *Principles of Law & Economics*. 2nd ed. New York: Wolters Kluwer, 2011 at 92.

³⁵ Niva Elkin-Koren and Eli M Salzberger. *Law, Economics and Cyberspace: The Effects of Cyberspace on the Economic Analysis of Law*. Cheltenham, UK: Edward Elgar, 2004 at 101.

³⁶ *Supra* note 24 at 31.

³⁷ *Supra* note 12 at 11.

³⁸ *Supra* note 28 at xi.

Today's decision is about finding the right balance. We want sustainable competition that increases choice for Canadians. But we also need to make sure that wireless companies continue to invest in innovative and high-quality networks. And we want to ensure that smaller companies can compete on a fair playing field with their larger competitors, so that they too can offer innovative products and services.

Balancing competing interests is a major concern of both economics and copyright.

According to Posner, “[a]n equilibrium is a stable point,”³⁹ or as Cole and Grossman describe it the point in markets at which supply meets demand.⁴⁰ There are numerous factors effecting equilibrium, of course, because there is never a perfect meeting of supply and demand or at least not for long.⁴¹ The economic value is the price that someone is willing to pay either to acquire or to sell a good or service. Posner distinguishes utility as “most commonly used in economics to distinguish an uncertain cost or benefit from a certain one.”⁴² Utility does not mean simply happiness as it once did in relation to utilitarianism. Posner also points to the presumption that “business firms try to maximize profits and individuals try to maximize utility.”⁴³ Elkin-Koren and Salzberger state that “[t]he most important general premise … is that open competition within a perfect market will lead to efficiency.”⁴⁴ Posner sees efficiency as the most important social goal.⁴⁵ Trosow points to a balanced approach to help achieve the greatest positive effects, especially when technology and intellectual property collide:

Using an approach rooted in critical political economy helps correct for some serious “blind-spots” that, at least in the case of intellectual property and other information technology issues, results in the assumption that the public goods nature of information is a “problem” that needs to be “cured.” This “cure” tends to involve crafting policies that use technological measures to induce scarcity, promote rivalry in consumption, and create new exclusion and control mechanisms, all with resulting negative social effects.⁴⁶

Landes and Posner also point to the centrality of balance in the various doctrines of copyright law, such as the distinction between idea and expression and the fair use doctrine, can be understood as attempts to promote economic efficiency by balancing the effect of greater

³⁹ *Supra* note 12 at 11.

⁴⁰ *Supra* note 34 at 11.

⁴¹ John E Elliot. “Introduction to the Transaction Edition.” In Joseph A Schumpeter, *The Theory of Economic Development*. New Brunswick, NJ: Transaction Publishers, 1983 at xviii.

⁴² *Supra* note 12 at 13.

⁴³ *Ibid.*, at 24.

⁴⁴ *Supra* note 35 at 25.

⁴⁵ *Supra* note 12 at 14.

⁴⁶ *Supra* note 24 at 31.

copyright protection – in encouraging the creation of new works by reducing copying – against the effect of less protection – in encouraging the creation of new works by reducing the cost of creating them.⁴⁷

Achieving a balance between the competing interests is the goal, but Posner also points out that “virtually all market transactions have some uncompensated third-party effects.”⁴⁸ This is particularly true in much copyright litigation as third party consumers, who simply want their entertainment at the lowest price possible, are not stakeholders in litigation but are subject to the decisions. Part of the reason for this is the basic economics of the legal system itself. Going to court is expensive and therefore, networks, studios, and collection societies are the ones with the economic means to pursue legal action in the realm of intellectual property.

Posner’s theory has both normative and positive aspects that represent the balance that law in general attempts to achieve. The normative approach can “clarify a value conflict by showing how much one value – efficiency – must be sacrificed to achieve another.”⁴⁹ He goes on to point out that “much of the common law can be interpreted as aimed at maximizing the wealth of society.”⁵⁰ Normative economics is more subjective and value based as is the common law. Positive economics, according to Posner, is “the attempt to explain legal rules as they are rather than to change them to make them better.”⁵¹ Statutory law is the fact based, objective half of the law and aligns with positive economics. Common law and statutory law are meant to balance each other. Statutory, legislation-based, law takes longer to affect changes and this is to ensure that those laws reflect real changes in societal attitudes and not merely passing fads. It is not meant to be reactionary. Common law is meant to deal with the specific irregularities of the facts of particular cases and to course correct when statutory law lags too far behind. As cases move up the appeals ladder towards the Supreme Court, the issues under consideration are questions of law, not facts which are decided at the lower court. Thus, as a case moves up the appeals ladder, it gains in precedential weight and becomes closer to legislation. Decisions at the Supreme Court thus often point to changes which are necessary within the current statutory provisions. This

⁴⁷ Landes, William M. and Richard A Posner. “An Economic Analysis of Copyright Law.” *Journal of Legal Studies*. 18 (1989) 325 at 333.

⁴⁸ *Supra* note 11 at 17.

⁴⁹ *Ibid.*, at 32.

⁵⁰ *Ibid.*, at 33.

⁵¹ *Ibid.*, at 32.

balance between statutory and common law is an Anglo-American tradition, while the Continental approach places an “even greater emphasis on law as a *neutral* framework for private conduct.”⁵² Copyright sees a similar split in approaches.

There are two main approaches to copyright law: the Anglo-American approach and the Continental approach – not surprisingly, mirroring the basic differences in law generally. However, the Anglo-American approach is also known as the Economic or Utilitarian approach and as the name suggests foregrounds the importance of monetary rewards and exchanges. The other approach is generally referred to as the *Droit d'Auteur* tradition finding its roots in French history and emphasizing natural law principles and the rights of the author or creator rather than the owner.⁵³ The United States is one of the strongest Anglo-American regimes while Canada with both British and French legal histories, falls somewhere in between the strictly economic and *Droit d'Auteur* regimes. This clearly influences differences in how questions of copyright and technology are handled differently in the courts of the US and Canada. Complicating matters, however, is the very global nature of the Internet. Treaties between nations also influence the development of legislation. Economic treaties are always a reflection of negotiation and compromise and rarely encompass only one element of the economy. Countries may make compromises in Intellectual Property in order to secure other financial gains, but this subject falls outside of the considerations of this paper.

Changing technology is an important influence on changes in intellectual property law. Wu states that “new copyright law emerges from conflicts between technological incumbents and challengers.”⁵⁴ Salzberger recognizes two basic competing schools of thought. A traditional economic framework supports strong intellectual property controls while the “pro commons or public domain movement” argue “that the contemporary intellectual property rights regime in fact stifles innovation.”⁵⁵ According to Tenner, “[w]hen innovation opens a new space, there is at first a euphoria of endless horizons. Somehow, though, a new frontier is never stable. Either people lose interest and it becomes a series of literal or metaphoric ghost towns, or it is soon as

⁵² *Ibid.*, at 33 emphasis in original.

⁵³ *Supra* note 1 at 17-24.

⁵⁴ Timothy Wu. “Copyright’s Communication Policy.” *Michigan Law Review*. 103 (November 2004) 278 at 325.

⁵⁵ *Supra* note 28 at xv.

crowded as the space that people left.”⁵⁶ Tenner and Schumpeter both see change as evolutionary and cyclical. Innovations lead to crisis, which help to push new innovations. Technology is the de-stabilizing factor. The law and economics want to re-establish balance. Elliot identifies the link between innovation and economics in Schumpeter’s theory: “The strategic stimulus to economic development in Schumpeter’s analysis is innovation, defined as the commercial or industrial application of something new.”⁵⁷ Schumpeter’s theories foreground “Creative Destruction” such that new technologies destroy the old economic structures. In the stage of invention, during the circular flow, there is a state of equilibrium – the same state that Posner and others see as the balance that is desired in both economic systems and copyright but cannot be maintained.

The circular flow is disturbed by innovation. Innovation can be broken down into four kinds of changes: “(a) increases in salaries, (b) population growth, (c) changes in consumer tastes and choices, and (d) changes in how production occurs.”⁵⁸ The entertainment industry embraced the move to digital delivery for the improved quality of the product and the ease of delivery. Innovation is followed by imitation as others seek to profit from the innovation. Innovation may trigger legal activity when it challenges old parameters developed to regulate the previous technologies. However, legal activity is even more likely during the imitation stage as others seek to profit from the new markets created by the innovators. Tenner outlines a similar series of events. He sees a cycle of disasters that lead to improvement that lead to discontent:

One reason for optimism is that disaster is paradoxically creative. It legitimizes and promotes changes in rules – changes that may be resisted as long as the levels of casualties remain ‘acceptable’ prior to a disaster that leads to change. More important, disasters mobilize the kind of ingenuity that technological optimists believe exists in unlimited supply. Of course, new disasters may themselves be unintended consequences of prior solutions....Optimists and pessimists curiously agree that crisis is good for us, but for different reasons. Pessimists welcome emergency as a violent cure for profligacy. Optimists welcome it as an injection of innovative stimulus.⁵⁹

⁵⁶ Edward Tenner. *Why Things Bite Back: Technology and the Revenge of Unintended Consequences*. New York: Vintage Books, 1996 at 11.

⁵⁷ *Supra* note 34 at xix.

⁵⁸ Anabel Quan-Haase. *Technology and Society: Social Networks, Power, and Inequality*. Don Mills, ON: Oxford University Press, 2013 at 73.

⁵⁹ *Supra* note 56 at 327.

In the case of digital content delivery, one of the biggest unintended uses was piracy. Increased regulation of content and the Internet, however, leads to challenges to free speech as but one example. Trosow points to the “insidious exclusion, metering, and surveillance systems” that have appeared.⁶⁰

Piracy has had numerous unintended consequences that benefit content users, however. In August 2013, Jeff Bewkes, the CEO of Time Warner said, “*Game of Thrones* is the most pirated show in the world,....That's better than an Emmy.”⁶¹ Piracy in addition to new services like Netflix have spurred traditional media broadcasters like HBO, the home of *Game of Thrones*, to uncouple their delivery from traditional broadcast delivery and offer their content directly to consumers via the Internet in “over-the-top” delivery. HBO saves on paying cable companies and hopefully also reduces piracy. Consumers benefit by being able to get the shows they want when and where they want them. The cost will be more than a free pirated copy, but there is a convenience factor and many pirate sites already require payment for better downloading qualities and times. There are numerous economic and social drivers that influence consumers’ adoption of new technologies. Courts are faced with the dilemma of applying laws that may not have foreseen the technology or its consequences. The courts, which are designed to allow for the development of analogies in rendering their decisions, must try to balance the competing interests of users and owners of copyright with the interests of technology providers.

Net Neutrality – How the Move to Mobile Effects Copyright

At first glance, net neutrality may appear to have little to do with copyright. However, when ISPs and telecommunication companies can exploit content owners for access to distribution, it has a profound effect on the content that is available, hence effecting users and creators alike. A recent study found that users are turning increasingly to mobile platforms, particularly for entertainment purposes over traditional computer use. For some time, traditional television and movie consumption has been disrupted by users or consumers turning increasingly

⁶⁰ Supra note 24 at 32.

⁶¹ Sam Thielman. “Bewkes: Game of Thrones Piracy ‘Better than an Emmy.’” Adweek. August 7, 2013. <http://www.adweek.com/news/television/bewkes-game-thrones-piracy-better-emmy-151738>

to non-traditional means of obtaining content. Chord-cutters are being quickly followed by the chord-never consumer – those consumers who have never subscribed to cable.

Media and telecommunications has become ever more vertically integrated. Telecommunications companies like Verizon or Time Warner – owning Warner Brothers and internet services – and Bell, owning Sympatico internet service and CTV networks, or Rogers in Canada either have direct media ties or are increasingly moving in that direction. Verizon recently merged with AOL and Tim Armstrong, AOL's CEO, stated that “if you look forward five years, you're going to be in a space where there are going to be massive, global-scale networks.”⁶² This underscores the increasing need to have a global plan for the digital delivery of content. Looming trade deals such as the Trans-Pacific Partnership are already forging new, economically-based agreements between a select group of countries with the US pushing their own policies. These types of treaties, like the failed ACTA (Anti-Counterfeiting Trade Agreement) are in direct contrast to WIPO's (World Intellectual Property Organization) mission: “to lead the development of a balanced and effective international intellectual property (IP) system that enables innovation and creativity for the benefit of all.”⁶³ Maria Sutton states that “[t]he Trans-Pacific Partnership (TPP) threatens all users' ability to access information and participate in culture and innovation online.”⁶⁴ Access to both information and distribution channels is crucial.

In a study on the informal economy, the authors focus on the importance of fostering innovation, primarily in industry. However, “while cultural industries historically have been associated with creativity and copyright, there are many examples of ‘innovation’ in the cultural industries. Some of these innovations also occur as part of more informal activities in the creative sector.”⁶⁵ De Beer, Fu, and Wunsch-Vincent point out that “[a]mong firms that consider IPRs [Intellectual Property Rights] important, trademarks are considered the most important, on

⁶² Tim Armstrong. “Verizon to buy AOL for \$4.4B; AOL shares soar.” CNBC: Mergers and Acquisitions. May 12, 2015. <http://www.cnbc.com/2015/05/12/verizon-to-buy-aol-for-44-billion.html>

⁶³ World Intellectual Property Organization. <http://www.wipo.int/about-wipo/en/index.html>

⁶⁴ Maria Sutton. “TPP Undermines User Control and That's Disastrous For Accessibility.” EFF. July 27, 2015. <https://www.eff.org/deeplinks/2015/07/tpp-undermines-user-control-and-thats-disastrous-accessibility>

⁶⁵ Jeremy de Beer, Kun Fu, and Sacha Wunsch-Vincent. “The Informal Economy, Innovation and Intellectual Property – Concepts, Metrics and Policy Considerations.” WIPO Economics and Statistics Series, 2013. <http://ssrn.com/abstract=2329410> at 28.

average, followed by trade secrets, copyright, industrial designs and patents.”⁶⁶ Indeed, “[w]hile certain activities would qualify for copyright protection, this right seems to be rarely sought or enforced.”⁶⁷ The authors conclude that “[m]any of those in the informal economy lack knowledge of the available protections or how to secure them. They may also not be financially able to defend them. A greater access to knowledge and technology would both help to strengthen these economies.”⁶⁸ Having affordable access to the Internet both for distribution and development is important for those in the informal economy.

Creators and users both want certainty, and copyright law is decidedly lacking in bright line rules. Michael O’Rielly, FCC Commissioner recently pointed out the need to re-evaluate some of the FCC’s rules and policies, particularly with regard to predictive judgment. In particular, O’Rielly pointed out that “It shouldn’t come as a surprise that predictions made years ago about how technology, especially the Internet, may develop aren’t always on target.”⁶⁹ O’Reilly stresses that when the Commission makes a prediction, there should be a time limit so that the Commission is held accountable.

Technological Neutrality – The Problem of Definition and the Bleed of Analogy

Technological neutrality refers to the principle that like technologies are treated similarly by the law. In order to decide how to treat a new technology within the context of copyright, the court must engage in a task it already frequently does. The court must decide what the new technology is like; the court draws an analogy. However, even while the Internet represents the kind of technological shift that the printing press represented, the two events did not create analogous eco-systems. Carys Craig posits that “technologically neutral regulation holds the promise of sustainable laws in a time of rapid technological change.”⁷⁰ As Craig states,

⁶⁶ *Ibid.*, at 34.

⁶⁷ *Ibid.*, at 36.

⁶⁸ *Ibid.*, at 47.

⁶⁹ Michael O’Rielly. “Revamping Predictive Judgments & Interim Rules.” The FCC. July 27, 2015. <https://www.fcc.gov/blog/revamping-predictive-judgments-interim-rules>

⁷⁰ Carys J Craig. “Technological Neutrality: (Pre)Serving the Purposes of Copyright Law.” *The Copyright Pentalogy: How the Supreme Court of Canada Shook the Foundations of Canadian Copyright Law*, Edited by Michael Geist. Ottawa, ON: University of Ottawa Press, 2014 at 273.

“effective laws should be sustainable and not constantly in flux as technologies change.”⁷¹ Creating some certainty in the law through consistent regulation makes navigating the law easier for users, producers, and technology providers. Making the laws as technically specific as possible can also aid understanding. However, Craig also asserts that the courts should refrain from forcing analogies and should look to “copyright’s core concepts” when there is no “pre-Sbroader policy considerations such as fairness, incentives, and innovation” in such instances.⁷²

Craig points out that “the core concepts of copyright law are famously fluid, subjective and malleable, with the result that they are often more useful to rationalize a conclusion than they are helpful in producing one.”⁷³ Sheridan specifically focuses on fair use in the US in which “there is no *ex ante* certainty for the user. Each case is decided on its particular facts.”⁷⁴ Gregory Hagen points out that according to the 2012 Supreme Court decisions in Canada “the principle of technological neutrality is used to ensure that copyright law does not overcompensate owners of copyrights at the expense of users of copyrighted works.”⁷⁵ Users, producers, and technology innovators are continually engaging in a tug of war.

Sheridan traces the progress of that tug of war through the major cases touching on technology in the US. She points out that even beginning with the advent of the printing press, “[c]opyright industries believed their interest in maximizing the dollar value of copyrighted commodities defined the goal of the copyright system.”⁷⁶ With the move into the digital age, content producers went on the defensive and “the challenge of technology became an opportunity to eliminate the leakage from copyright protection posed by the fair use and first sale doctrines.”⁷⁷ Sheridan addresses the importance of four cases:

[*Sony Corp. of Am. v Universal City Studios, Inc.*, 464 US 417 (1984)] appeared to signal an indulgent view toward personal use copying as permissible under fair use. [*Metro-Goldwyn-Mayer Studios Inc., v Grokster, Ltd.*, 545 US 913 (2005)] pushed back the pendulum toward a stricter view of permissible fair use even for personal copying. This

⁷¹ *Ibid.*, at 274.

⁷² *Ibid.*, at 275-6.

⁷³ *Ibid.*, at 280.

⁷⁴ *Supra* note 9 at 46.

⁷⁵ Gregory R Hagen. “Technological Neutrality in Canadian Copyright Law.” In *The Copyright Pentology: How the Supreme Court of Canada Shook the Foundations of Canadian Copyright*. Michael Geist, ed. U of Ottawa Press, 2013 <http://www.press.uottawa.ca/sites/default/files/9780776620848.pdf> at 309-10.

⁷⁶ *Supra* note 9 at 83.

⁷⁷ *Ibid.*

perceived setback by *Sony* and possible uncertainty of *Grokster* for the industry was remedied by the passage of the DMCA in 1998. For the software industry, [*MAI Sys. Corp. v Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993)] and [*ProCD, Inc. v Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996)] represented clear victories. *ProCD* held that license restrictions on use were enforceable. *MAI* held that the purposes of the Copyright Act.⁷⁸

Sheridan points out that case law and the DMCA all seem to be moving increasingly to unbalance the relationship between users, producers, and technology providers. Technological Protection Measures were another way to lock in producers/owners' rights at the expense of users' rights. Hagen identifies several problems:

while, absent Parliamentary intent to the contrary, disseminators must be treated equally by copyright, Parliament *has* intervened to create a prohibition against circumventing TPMs, which can be used to treat disseminators unequally. These provisions permit copyright owners to define digital access rights as they please, privileging themselves as disseminators over rival disseminators.⁷⁹

Is current jurisprudence in either the US or Canada helping to re-stabilize the balance?

A Tale of Two Cases

Both cases are important for what they illustrate about how the highest courts in the United States and Canada are handling technology, especially cutting edge technology, and copyright. It is important also to note that both cases pit copyright owners against technology owners or users and that in neither instance are users involved in the actual court case. The cases also represent different points in Schumpeter's model. Both cases illustrate how imitation plays a part in how the courts determine what the technology at play is imitating and how it is mimicking prior technologies.

In *ESA*, the Supreme Court was reinforcing the concept of technological neutrality in the digital environment. Their decision favored consumers and users by not requiring them to pay more for the same content which was being delivered by a different technological method. Given the focus on maintaining the status quo, *ESA* seems to fit into Schumpeter's circular flow mode.

The court in *ESA* succinctly sums up the case and their views:

⁷⁸ *Ibid.*, at 81.

⁷⁹ *Supra* note 75 at 326-7.

In the video game publishing industry, the royalties for the reproduction of any musical works which are incorporated into the game are currently negotiated before the games are packaged for public sale. Once these rights have been negotiated, the owner of the copyright in the musical work has no further rights when the game is sold. The question in this appeal is whether the rights are nonetheless revived when the work is sold over the Internet instead of in a store. In our view, it makes little sense to distinguish between the two methods of selling the same work.⁸⁰

The case began as an appeal by the Entertainment and Software Association and Entertainment Software Association of Canada of the Copyright Board. The Supreme Court's decision, stated that the Board's decision "violates the principle of technological neutrality, which requires that the *Act* apply equally notwithstanding the technological diversity of different forms of media."⁸¹ The SCC stresses that "[t]he traditional balance between authors and users should be preserved in the digital environment."⁸² The focus is on maintaining that status quo. The technology, in this case does not challenge traditional Copyright assignments in terms of reproduction. The delivery of the musical works via the Internet also did not trigger any other rights such as a communication to the public or the public performance right.

In the dissent in *ESA*, Justice Rothstein makes the distinction between media neutrality and technological neutrality, relying on the decision in *Robertson v Thomson Corp.*, 2006 SCC 43, [2006] 2 S.C.R. 363:

Media neutrality means that the *Copyright Act* should continue to apply in different media, including more technologically advanced ones. But it does not mean that once a work is converted into electronic data anything can then be done with it.... Media neutrality is not a license to override the rights of authors – it exists to protect the rights of authors and others as technology evolves.⁸³

Hagen, however, states that "[t]he message of *ESA* is that one cannot conclude that a new medium of dissemination, such as Internet delivery, is a form of communication unless that characterization treats incumbent forms of delivery... equally under copyright law."⁸⁴ It is important to remember that this was a five-four split of the Court, so it is important to note the varying attitudes and interpretations. However, in the end, "the ruling is stated in broad terms

⁸⁰ *ESA* at para 1.

⁸¹ *Ibid.*, at para 2.

⁸² *Ibid.*, at para 8.

⁸³ *ESA* at para 121 quoting JJ LeBel and Fish at para 49.

⁸⁴ *Supra* note 76.

and may be viewed as a guideline for many other fact situations.”⁸⁵ In contrast, in *Aereo*, Justice Breyer stipulated that the decision was to be very narrowly construed.

In *Aereo*, the Supreme Court had a much more difficult time grappling with the technological issues. In the end, their decision really highlighted the law’s inability to effectively deal with the technological questions. The *Aereo* technology is the kind that “revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.”⁸⁶ The decision benefitted the content owners at the expense of technology innovators and consumers who were denied the availability of a less expensive system. However, the technological challenges did have the positive outcome of making more choice available for consumers through new OTT services being offered by both HBO and CBS. Like *ESA*, this was also a split decision, but in this case, the split was 6-3.

Aereo was founded in February 2012, and began offering its services in New York, New York. It later expanded to offer services in Boston, Atlanta, Baltimore, Cincinnati, Dallas, Denver, Detroit, Houston, and Miami. Because it was offering antennae services via the Internet, the signal was not available outside of normal antennae range. For approximately \$8.99 per month, users could record or watch live broadcast television shows through the Internet and thus on multiple devices, such as smart phones, tablets, computers, or televisions. In essence, the service worked like an antennae, DVR, and Slingbox⁸⁷ all in one. Users chose which shows they wished to watch from a provided list of those available. Programs had to be chosen before they aired – either to be watched “live” or to be recorded for later viewing. Users could choose to record at any time during the “live” viewing or before the show aired, but once that viewing was finished, if they had not selected record, they could not save the show for later viewing.

A “live” stream of a show was actually a dedicated saved copy for that single user. Once the user selected the show, *Aereo* then recorded the live broadcast for that user. The show streamed from the saved copy, approximately 5-10 seconds after the live broadcast had been transmitted. If the viewer chose to record, the saved copy remained stored, in the same way that any remote DVR functions. Each user received his or her stream via a dedicated antennae which

⁸⁵ *Supra* note 7 at 136.

⁸⁶ *Supra* note 31, Elliott quoting Schumpeter.

⁸⁷ A Slingbox allows the user to stream content to any Internet enabled device from their DVR. In most instances, a sling box must be bought separately from the DVR.

streamed only to him or her. Aereo has warehouses of antennae banks which contain thousands of small antennae. Each bank is made up of a number of boards each of which contains approximately 80 dime-sized individual antennae. While a user did not have a dedicated antennae at all times, any content streamed only to them via a single antennae any time he or she used the service. The only disputed fact regarding Aereo's system was whether or not the antennae actually operated independently. The District Court ruled that based on expert testimony, the antennae did operate independently as Aereo asserted.⁸⁸

In the oral arguments, the Justices were particularly interested in determining what Aereo was "like," with finding the best analogy. It is interesting that the case does not consider the part of the service that allowed consumers to tape programs as that would have made the decision more complicated as that service clearly mirrors a DVR function which has already been analogized to a VCR and that issue was definitively decided with *Sony*. Of particular concern in considering the streaming function was the relationship to cloud computing. Justice Stotomayor asked "what does the Court do to avoid a definition or an acceptance of a definition that might make those people liable?"⁸⁹

Much like *ESA*, *Aereo* is decided on the copyright questions of the public performance right. Unlike, *ESA*, the decision in *Aereo* does not provide as satisfactory an answer in regards to the technology question. Breyer J. writes,

We must decide whether respondent Aereo, Inc., infringes this exclusive right by selling its subscribers a technologically complex service that allows them to watch television programs over the Internet at about the same time as the programs are broadcast over the air. We conclude that it does.⁹⁰

The Court concluded that Aereo was not simply an equipment provider but acted more analogously like a cable company, and thus, without paying retransmission fees, was infringing. Even during the oral arguments, the Justices were told that Aereo likely did not meet the requirements of a cable company and would therefore be denied a cable retransmission license. Upon losing the Supreme Court case, Aereo did apply for the license with the FCC and was

⁸⁸ See District court decision: *American Broadcasting Companies, Inc. v. Aereo, Inc.*, 874 F.Supp.2d 373, 2012; Circuit Court decision: *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 2013. See any of the SDNY, 2nd Circuit, or Aereo decisions for a fuller and more detailed accounting of the facts.

⁸⁹ *American Broadcasting Companies Inc., et al v Aereo, Inc., FKA Bamboom Labs, Inc.* No. 13-461, April 22, 2014 at 8, II 19-21.

⁹⁰ *Aereo* at 1.

subsequently denied. These events lead to the eventual bankruptcy of *Aereo*. The end result can only be a chilling effect on innovation and new technologies. The Court, somewhat unusually, clearly stated parameters surrounding other technologies:

We cannot now answer more precisely how the Transmit Clause or other provisions of the Copyright Act will apply to technologies not before us. We agree with the Solicitor General that “[q]uestions involving cloud computing,[remote storage] DVRs, and other novel issues not before the Court, as to which ‘Congress has not plainly marked [the] course,’ should await a case in which they are squarely presented.”⁹¹

This statement, however, creates enough uncertainty, for other technologies to be wary of potentially costly or even ruinous court cases which may or may not go in their favor.

Sheridan posits that the two main opposing forces in copyright are creation and distribution. The move from physical to digital distribution allowed content owners to literally lock down the content with the advent of the Digital Millennium Copyright Act. Sheridan stresses that “[c]opyright commentary has failed to notice the central importance of access to works – *all* works – as a necessary pre-condition to the creation of new works.”⁹² *Aereo* would indicate that even innovation in distribution that favors making content available more widely is unwelcome to the content monopolies. As Sheridan states, “favoring the interests associated with the distribution function, to the point of choking off access to works of knowledge will adversely affect the creation of works of knowledge.”⁹³ As an addendum to Sheridan’s statement, it is important to add ‘entrenched’ distributors, who in the media industry are also usually the content owners. It is important to note that Sheridan is writing primarily about access to educational materials, yet her theories apply in a similar way to the media industries – arguably the industry with the economic clout to be driving this bus anyway. Sheridan posits that “less access means less learning, which may lead to less growth in society as a whole.”⁹⁴ Cultural production through the media industries is also important for society as a whole. In media terms, content owners rely on having an audience and it is important to cultivate that audience. Increasingly, media industries rely on having a knowledgeable fanbase. While this is serving the content owners economic interests rather than copyright’s underlying commitment to knowledge advancement, it is a real incentive for content producers. Perhaps more in line with the

⁹¹ *Ibid.*, at 17.

⁹² *Supra* at note 9 at 45. Emphasis in original.

⁹³ *Ibid.*, at 97.

⁹⁴ *Ibid.*, at 100.

knowledge function, the ease of digital distribution has also increased the number of content creators, who will look for at least some certainty in the legalities of their efforts.

Conclusion

Both net neutrality and technological neutrality can help to foster better distribution of content that will in turn foster increased creation and dissemination of knowledge. Is anyone seeming to balance technology innovation in digital distribution while keeping both users and owners reasonably happy? Netflix seems to be a leader for several reasons. Their basic model began as an innovative DVD rental system. Owners and users alike were able to easily assess copyright within a system based on a tangible object. Netflix entered into standard licensing agreements with content providers as their service went digital. Users could easily see the benefit to the small cost for large amounts of content. Many creators, especially of documentaries, suddenly had a cost effective means of distribution. Netflix also moved into the creative sphere themselves, once again innovating based on their users' preference for binge watching, creating a release window unlike anything else in the television or film industry. Also, unlike the film and television industry, Netflix does not rely on the standard Nielsen ratings or advertising. In fact, statistics on usage is closely guarded. So much so that Netflix stymied the recent CRTC public consultation, *Let's Talk TV* by refusing to divulge this information. When Netflix refused to move on the issue, the CRTC was forced to throw up its hands and ended by striking all of the Netflix testimony from the official record. This divide between regulators and innovative content producer/distributors underscores the current lack of clarity about copyright in the digital environment. Sheridan states that "the copyright paradigm of the print era will not address access to knowledge in the digital era."⁹⁵ Sheridan does not dismiss the very real threat of piracy, but it is clear that new models do exist that can provide economically viable alternatives.

Current models are not working when courts must surgically carve out decisions such as in *Aereo*. Regulators and courts can both help to foster creativity and economic growth by providing a level playing field for users, producers, and technology providers through net neutrality and technological neutrality. Craig concludes that the power of technological neutrality

⁹⁵ *Ibid.*, at 106.

“flows from a substantive commitment to the notion that copyright law should apply with equivalent *purpose and effect* across the technological landscape.”⁹⁶ At present, it would appear that this commitment is stronger in Canada than in the US, and it is vitally important to recognize the global nature of the digital environment going forward to craft regulations and policies that foster both economics and creation.

⁹⁶ *Supra* note 70 at 299.