

BEYOND COPYRIGHT: POSSIBLE SOLUTIONS TO AN INTERNET GOVERNANCE REGIME

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I

INTRODUCTION: COPYRIGHT HAS OUTLIVED ITS UTILITY

A long time ago, a brilliant example of man's scientific vision came to light with Charles Darwin's Theory of Natural Selection. Herbert Spencer added clarity to the implications of this theory through the term 'the survival of the fittest.'¹ Charles Darwin propounded that only those organisms will be fit to survive which can adapt to changing environments, i.e., only the most resilient will prevail. Almost a century and a half later, this theory is incredibly relevant to cyberspace also. For, what other phrase would better describe the insignificant withering away of copyright regulations for data spread over the internet?

There has been much debate over the general proposal that IP law should be re-designed to suit the climate of cyberspace.² However, in this paper, we propose that the very premise of IP law in general, and copyright in particular, as it stands on its own, is redundant for the regulation of the internet. Consequently, we propose two regulatory solutions that can complement the present copyright law regime through improved control over access to data spread over the internet, viz., the Creative Commons approach and the Tier Model for internet regulation.

The basic argument taken in favour of strong IP protection is that it supports and engenders creative activities.³ It is true that creative activities typically involve a substantial development cost,⁴

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¹ Letter from Charles Darwin, to A. R. Wallace (July 5, 1866) (on file with the Darwin Correspondence Project), available at <http://www.darwinproject.ac.uk/entry-5145>.

² Maria L. Montagnani & Maurizio Borghi, *Positive Copyright And Open Content Licences: How To Make A Marriage Work By Empowering Authors To Disseminate Their Creations*, 12 INT'L J. COMM. L. & POL'Y 244 (2008).

³ Richard A. Posner & William M. Landes, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325 (1989). Over the years, in the United States, as elsewhere, the degree of protection has steadily expanded, from the modest Copyright Act of 1790, which offered 14 years of protection with a renewal period of 14 years, to the legislation passed in 1831 (28 years), 1909 (renewal extended to 28 years), 1976 (50 years after the author's death), 1992 (automatic

and as creators alone incur these high costs, they find it necessary to recoup these costs by restricting access to their work through exclusive financial transactions relying on strong IP protection.⁵ Although there is some consensus that most creators and artists are not motivated solely by financial considerations,⁶ the fact that royalty and similar earnings are their main source of income is a relevant consideration in this regard.⁷ Hence, the argument in favour of strong IP protection is essentially utilitarian,⁸ and this is especially true for copyright laws.⁹ Thus, debates about copyright are full of subtexts; they are partly about law, partly about profit, partly about access, and partly about who produces what.¹⁰ In a more immediate sense, these debates ask what role our legal system should play in regulating creation, use, and distribution of cultural and intellectual products.¹¹

The underlying premise of current copyright protection is that there is a sole creator of a piece of art and that no one else can physically recreate this piece of art due to inherent physical limitations. These physical limitations make it cumbersome for an ordinary person to create a significant number of perfect copies. Due to the same, unauthorized copying is restricted to an acceptable minimum level using prevalent copyright law.¹² Hence, it is apparent that even if I own an original copy of a book, the only way for me to create additional copies of the book is to make photocopies of the book I own – a rather tedious process, and the photocopied book shall evidently not be of the same quality as the original book.

renewal), and 1998 (70 years). See Felix Oberholzer-Gee & Koleman Strumpf, *File-Sharing and Copyright* (Harvard Bus. Sch., Working Paper No. 9-132, 2009), available at <http://www.hbs.edu/research/pdf/09-132.pdf>.

⁴ PAUL GOLDSTEIN, *COPYRIGHT'S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 17-20 (2003).

⁵ James Bessen & Eric Maskin, *Intellectual Property on the Internet: What's Wrong with Conventional Wisdom?* (Research on Innovation, Working Paper, 2004), available at <http://www.researchoninnovation.org/iippap2.pdf>.

⁶ Paul E. Geller, *Inquiry into Justice in Copyright Law: Toward a Core Author's Right*, in *INTELLECTUAL PROPERTY AND THEORIES OF JUSTICE* (Axel Gosseries et al. eds., 2008).

⁷ *Supra* note 3.

⁸ This is essentially because weaker copyright is unambiguously desirable if it does not lessen the incentives of artists and entertainment companies to produce new works. Weaker property rights can undermine industry profitability if consumers who would have purchased a work obtain a free copy instead. The utilitarian aspect of IP rights arises because lawmakers trade off the increased incentives to create protected works and the higher prices that consumers face when books, movies, and recordings must not be copied freely. Oberholzer-Gee, *supra* note 3.

⁹ Severine Dusollier, *Open Source and Copyleft: Authorship Reconsidered?*, 26 COLUM. J. L. & ARTS 281 (2003).

¹⁰ Adrienne Goss, *Codifying a Commons: Copyright, Copyleft, and the Creative Commons Project*, 82 CHI.-KENT L. REV. 963 (2007).

¹¹ *Id.*

¹² Eric Priest, *Why Emerging Business Models and not Copyright Law are the Key to Monetising Content Online*, in *COPYRIGHT LAW, DIGITAL CONTENT, AND THE INTERNET IN THE ASIA-PACIFIC* (Brian Fitzgerald et al. eds., 2008).

Copyright law operates as a functional solution in a technologically backward environment. However, with the advent of computers and the internet, the physical limitations preventing copying of works have been largely overcome, and granting copyright protection to data over the internet has become somewhat meaningless owing to the ease with which material can be accessed and copied from any corner of the world at literally no cost to the end-user.

There were three developments, according to one author, that changed the prior functional equilibrium: the emergence of optical disc media, the personal computer and the internet.¹³ The development of optical disc media ensured that ordinary users could make near-perfect copies of digital works, including music, movies and pictures, and other copyrightable material in the form of CDs and DVDs and distribute them, even for consideration. The proliferation of the personal computer (PC) enabled innumerable unidentifiable ordinary users to access copyrighted works from their living rooms. Access apart, the PC gave rise to the culture of P-2-P sharing,¹⁴ a development that was instrumental in shutting down Napster, one of the biggest file-sharing networks ever created.¹⁵ However the most significant development of all was the emergence of the internet.¹⁶ The power of the internet lies in its basic simplicity.¹⁷ The strong pervasiveness of the internet ended the final physical limitations that ensured the efficacy of traditional copyright law in protecting artistic creations.¹⁸ Hence, the conclusion becomes clear: traditional copyright law became redundant to protect data and creations in the virtual world.

In support of this conclusion, this paper takes into account two determinant factors:

1. the nature of the internet; and
2. the problem of perspective.

¹³ *Id.*

¹⁴ BIRGITTE ANDERSEN & MARION FRENZ, THE IMPACT OF MUSIC DOWNLOADS AND P2P FILE-SHARING ON THE PURCHASE OF MUSIC: A STUDY FOR INDUSTRY CANADA (2007), available at [http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/vwapj/IndustryCanadaPaperMay4_2007_en.pdf/\\$FILE/IndustryCanadaPaperMay4_2007_en.pdf](http://www.ic.gc.ca/eic/site/ippd-dppi.nsf/vwapj/IndustryCanadaPaperMay4_2007_en.pdf/$FILE/IndustryCanadaPaperMay4_2007_en.pdf).

¹⁵ *Supra* note 12.

¹⁶ *Supra* note 12.

¹⁷ Michael Carroll, *Creative Commons as Conversational Copyright*, in INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE (Peter K. Yu ed., 2006).

¹⁸ *Supra* note 5.

II

DETERMINANT FACTORS FOR INTERNET GOVERNANCE

The Nature of the Internet

John Gilmore once famously remarked: “The Net interprets censorship as damage and routes around it.”¹⁹ Human psychology is such that anything that is prohibited is appealing. In fact, it would not be an exaggeration to contend that prohibition is most often the key to ‘negative innovation.’²⁰ This proposition is also appropriate for cyberspace. To illustrate this point, we don’t have to go too far. Most educational institutes forbid access to certain websites on moral grounds. Yet, even students with no exceptional technological capabilities take almost no time in circumventing the embargo to access the blocked websites. The nomenclature of the ‘World Wide Web’ illustrates adequately the defined scope of the medium, or, more accurately, the lack of a definite scope. The purpose of the internet was global connectivity, enabling virtual accessibility, even if the thing to be accessed were outside physical reach.²¹ The internet is a boundless cosmos encompassing several forms of creativity, where what one wants, one gets. It is thus inconceivable that a law that governs the real world can also be used for the virtual one.

The internet carries various information resources and services, such as electronic mail, online chat, movies, file transfer and file sharing, online gaming, and inter-linked hypertext documents and other resources of the World Wide Web (www). The internet is a global data communications system. The internet has made possible new forms of social interaction and activities, owing to its basic features of simple usability and widespread access. Its arrival has brought to the fore a myriad of predictions, controversies, debates and mere conjectures regarding its impact on many facets of modern society. Many others see it as the creator of a new free society, a virtual democracy where information gives people the power to be their best.²² However, in the final analysis, the internet can be described as an entity that interconnects individual, autonomous computer networks in order to enable such networks to function and appear as one network.²³ Nicholas Negroponte, an

¹⁹ Philip Elmer-Dewitt et al., *First Nation in Cyberspace*, TIME INTERNATIONAL, Dec. 6, 1993, available at <http://www.time.com/time/magazine/article/0,9171,979768,00.html>.

²⁰ This term could refer to such innovation that does not benefit society, that is detrimental to the public good or to the establishment, or that effectively flouts the laws and rules that govern social behaviour and regulate a well-ordered society.

²¹ Robert Litan, *Law and Policy in the Age of the Internet* (AEI Center for Regulatory and Market Studies, Working Paper No. 01-04, 2001), available at http://reg-markets.org/admin/pdf/files/working_01_04.PDF.

²² Joseph S. Nye, Jr., *Information Technology and Democratic Governance*, in GOVERNANCE.COM: DEMOCRACY IN THE INFORMATION AGE (Elaine C. Kamarck & Joseph S. Nye, Jr. eds., 2002).

²³ MICHAEL A. GALLO & BILL HANCOCK, NETWORKING EXPLAINED 56 (2d ed. 2002).

expert in cyberspace, said about the power of the Net: “In the digital world, the bits are endlessly copy-able, infinitely malleable, and they never go out of print. Millions of people can simultaneously read any digital document- and they can also steal it.”²⁴

Unlike the traditional concept of IP that envisages a strong cultural image of creative activity as the work of a romantic individual – the artist in the garret or the inventor in the garage, the reality in relation to the internet is quite different. The simple truth is that most creative activity is not the work of single creators. Rather, it is ‘interactive’ and involves numerous contributions from different parties, who may live in any corner of the earth. Indeed, the process of innovation is often ‘sequential’, where each creator ‘improves’ on the work of the previous creator.²⁵ The traditional concept of IP equates imitation to copying and deems the same to be illegal. However, when innovation is sequential, imitation is more than copying – it adds important value and in turn results in a new work.²⁶

In addition, the internet is all-pervasive and omnipresent. The law today prohibits single acts that amount to infringement of copyright entitlements. But technology has developed so much that a single action can result in the infringement of multiple rights of the copyright holder or licensee. It will not be stretching our imagination to say that the law lags behind technology.²⁷ Something as dynamic as the internet requires something equally potent to keep abreast of its dynamism. The current copyright regime was introduced for protecting publicly available data. Today, this is not a sufficient qualification for a law to govern content available on a medium as extensive as the internet.

In addition, the connectivity objective of the internet has been, to a very large extent, defeated by the imposition of a copyright regime that favours appropriation over accessibility. In other words, a law that restricts accessibility is sought to be applied to a medium that aims to enhance accessibility. The paradox is inescapable. This position is aptly exemplified by John Gilmore’s statement – “How many of you have broken no laws this month?”²⁸

²⁴ Nicholas Negroponte & Michael Hawley, *A Bill of Writes*, WIRED MAGAZINE, (May 1995), available at <http://www.wired.com/wired/archive/3.05/negroponte.html>.

²⁵ *Supra* note 5.

²⁶ *Supra* note 5.

²⁷ Lyria B. Moses, *Recurring Dilemmas: The Law's Race to Keep Up With Technological Change*, 7 U. ILL. J.L. TECH. & POL'Y 239 (2007).

²⁸ John Gilmore’s homepage (co-founder, Electronic Frontier Foundation, U.S.A.), <http://www.toad.com/gnu/> (last visited July 1, 2010).

The Problem of Perspective

We need a protection regime that goes hand-in-glove with the nature of the work and the needs of the creator. Most intellectual property is created and bestowed on the creator or inventor in a uniform manner, with a clear disregard for the type or nature of the work created and the requirements of the creator. Hence, a painter and a writer get identical rights with similar attributes – a copyright. This is true for works on the internet too. This is one of the most important reasons why Creative Commons licensing developed as a concept in the first place. Most creators were not interested in gathering fame or wealth, but created art or writing because they could and they wanted to do so.²⁹ This evident lack of economic incentives was troublesome, since the rights granted to them restrained them from disseminating their work in any manner they wanted in order to protect supposed economic incentives.

When the internet evolved as a communication medium that became indispensable to regular life, governments merely extended copyright protection to the internet, thus creating ad-hoc and patched-up solutions to problems that were here to stay. In-depth knowledge of any subject is required to evolve an effective regulatory mechanism in relation thereto, and the internet is no exception to this rule. However, in an attempt to counter the recurring legal issues arising with regard to IP protection on the internet, the extension of copyright laws to the virtual world was seen as an immediate and workable solution. However, this ‘solution’ seems to have overstayed its welcome, as it is largely ineffective in doing what it was initially framed to do.

Bessen and Maskin have in fact opined that the best sort of intellectual property rights are strong enough to prevent direct copying and knock-off products, but are still weak enough to encourage the greatest amount of cross-licensing and sharing of information between competitors.³⁰ Orin Kerr proposes that the internet’s ability to generate a virtual reality creates what he calls the problem of perspective in internet regulation.³¹ According to him, many legal outcomes depend on facts, and the facts of the internet depend on which perspective we choose.³² The term he uses to describe the virtual world from the user’s point of view is the ‘internal perspective’ and that from the technician’s point of view is the ‘external perspective.’³³ For the user, the virtual world of

²⁹ *Supra* note 17.

³⁰ James Bessen & Eric Maskin, *Sequential Innovation, Patents and Imitation* (Dep’t of Econ. – Mass. Inst. of Tech., Working Paper No. 11/99, 1999), available at <http://www.researchoninnovation.org/patent.pdf>.

³¹ Orin Kerr, *The Problem of Perspective in Internet Law*, 91 GEO. L.J. 357 (2003).

³² *Id.*

³³ *Supra* note 31.

cyberspace is a legitimate construct. Hence, to the user, a computer connected to the internet provides a window to a virtual world that is roughly analogous to the physical world of real space. The external perspective adopts the viewpoint of an outsider concerned with the functioning of the network in the physical world rather than the perceptions of a user.³⁴ From this viewpoint, the internet is simply a network of computers located around the world and connected by wires and cables.³⁵

Kerr highlights the problem of perspective using the example of the *MP3.com* case.³⁶ In this case, the court adopted the external perspective while ruling in favour of the record companies that sued the defendant company for unauthorized copying and distribution of music files across the internet to its registered users. Kerr opines that if the internal perspective had been adopted, the defendant may have been let off scot-free in this case.³⁷ Essentially, the problem of perspective arises depending on who uses the work, for what purpose and in what manner.

The approach of perspectives adopted by Kerr has been an inspiration for the authors to analyse the efficacy of a copyright protection regime for the internet. Applying this line of thought, the authors opine that there may be a problem of perspectives with regard to data put up on the net. This conflict crops up pertaining to the creator's and the end-user's points of view regarding the same piece of art or work. Hence, the creator's outlook may be understood from the moral and economic rights that she has over any work created by her - including the right to earn royalties from the work, the right of attribution, right to integrity of the work etc. The creator may be taking a risk of violation of these rights by putting her work up on the net, but she takes this risk on the assumption that there is an effective regime governing the internet that protects her rights.

On the other hand, the end-user is not too bothered with the rights attached to any work available on the net. The layperson assumes that anything available on the net for free is what it seems to be - free. This is nothing but the problem of perspectives. In Kerr's analysis as in the present one, the internet is a legitimate construct that allows the end-user to freely access data without any physical or other constraints. On the other hand, what the creator wants from publishing her work on the net may not be what the end-user perceives its use to be. Hence, the work may be put up on the

³⁴ *Supra* note 31.

³⁵ See *Reno v. Am. Civil Liberties Union*, 521 U.S. 844, 849 (1997) (describing the internet as 'an international network of interconnected computers').

³⁶ *UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d 349, 350 (S.D.N.Y. 2000) (*Per* Rakoff, J.).

³⁷ *Supra* note 31.

net for a particular purpose by the creator but may be used by the end-user for another function not envisaged by the creator. The predicament is that the creator cannot recoup her expenses by imposing restrictions on access to her work, because of the large variety of alternative means available to the end-user today to access the work online. Consequently, the creator dissuades the end-user from trying to access her work freely. Clearly then, there is a constraint on the very purpose for which the internet is being used by the creator as well as the end-user.

The problem of perspective is relevant because the adoption of the correct regulatory mechanism depends on the perspective chosen.³⁸ This argument is expanded further in the section dealing with Creative Commons Licensing and the Tier Model.

III

POSSIBLE SOLUTIONS

It is clear that a tailor-made regime of regulation is required to govern something as dynamic as the internet, and that copyright is certainly not suited to this end. As one author said, without a legal monopoly, not enough information will be produced but with the legal monopoly, too little of the information will be used.³⁹ Hence, the authors propose two solutions to the governance of the internet, which modify the current regulatory regime to suit the nature of the internet.

Creative Commons Licensing

“Creative Commons aspires to cultivate a commons in which people can feel free to reuse not only ideas, but also words, images, and music without asking permission- because permission has already been granted to everyone.”⁴⁰ Modern copyright law presumes that one size fits all. A Creative Commons (CC) license is a form of copyright license that can be linked to the World Wide Web. The purpose of CC licenses is to replace the default ‘all rights reserved’ approach with a more modest ‘some rights reserved’ approach that permits a variety of uses, subject to one or more limitations that the copyright owner has placed on the work.⁴¹ A CC license bridges the gap between the concept of copyright that reserves all rights and the public domain where no copyright

³⁸ *Supra* note 36.

³⁹ ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 135 (1988), *quoted in*, Paul Goldstein, *Comments on a Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2573, 2574 (1994).

⁴⁰ Legal Concepts - CC Wiki, http://wiki.creativecommons.org/Legal_Concepts (last visited July 1, 2010).

⁴¹ See Creative Commons, <http://www.creativecommons.org> (last visited July 1, 2010); *see also supra* note 10; *see also supra* note 17.

restrictions apply.⁴² From the user's perspective, the presence of a CC license raises and answers the question, 'How can I use this?', as opposed to the question that is attributable to a copyright, 'Can I use this at all?'

Thus, the primary licensing terms that CC provides are:

- Attribution: rights to copy, distribute, display, perform and remix a copyrighted work as long as due credit is given.
- Non-Commercial: rights to copy, distribute, display, perform and remix a copyrighted work for non-commercial purposes only.
- Share Alike: rights to create remixes and derivative works under the identical license that the original work was published under.
- No Derivative Works: rights to copy, distribute, display and perform restricted to only verbatim copies of the original work.⁴³

Creative Commons attempts to create a private solution to the problems of overprotection by building 'a layer of reasonable copyright' on top of existing law.⁴⁴ However it is important to note that while CC licenses create resources that are commonly accessible, these resources are not collectively owned. With a 'collective property', as opposed to intellectual property, the community as a whole determines how the resources are to be used. These determinations are made on the basis of the social interest existing in the property through mechanisms of collective decision-making. Creative Commons provides each rights-owner a chance to associate to a group that has a certain view of how copyright and property rights should be. It is easy to obtain the exclusivity of copyright, but sharing the work in a controlled way is a harder task.

Creative Commons has, together with an international community of volunteers,⁴⁵ created a set of open content copyright licenses and a web interface that enables rights owners to choose from a list of copyright licenses. First versions of the licenses were released in December 2002 and in nine years CC licenses have reached their third versions. After a licensor has chosen a license with the web interface, they can attach the selected license to the work as a hyperlink. After the license is

⁴² Joshua But, *New Copyright Licences Allow More Sharing On Web ... Legally*, S. CHINA MORNING POST, Oct. 26, 2008.

⁴³ *Id.*

⁴⁴ LAWRENCE LESSIG, *FREE CULTURE* 264-65 (2004), available at <http://www.free-culture.cc/freeculture.pdf>.

⁴⁵ Creative Commons International, <http://creativecommons.org/international> (last visited July 1, 2010).

successfully attached, the website where the work is available will have a logo stating: 'CC licensed. Some rights reserved.'

In technical terms, CC is perhaps the first popular licensing project to answer the concerns of the European Copyright Directive which calls for rights holders to "identify better the work"⁴⁶ and "encourage the use of markings"⁴⁷ to "provide information about the terms and conditions of use of the work."⁴⁸ In particular, the set of CC licenses can be used to mark the copyright status of a work in order to enable users to quickly ascertain whether a desired use is permitted, and if so, on what conditions.⁴⁹

A wide range of creators from around the world have already contributed to and drawn from this Commons. For example, CC licences have been localised and adapted to copyright laws in Hong Kong, making it the 50th jurisdiction in the world where they have become legally applicable. About 140 million objects around the world have so far been licensed under the system.⁵⁰ The surprisingly rapid growth of this system demonstrates the importance of marking information on the internet in a way that signals use relevance as well as topical relevance.⁵¹

CC is refreshingly innovative because it clearly accommodates the variable and vast nature of the internet as well as taking care of the problem of perspectives. CC in itself is a 'sequential innovation' over copyright law in the sense that it improves the working of copyright as applied to the internet. Copyright owners are denied a simple system to allow use of their work under the existing copyright regime. The permissions process can be cumbersome, if not prohibitive, and so, private actors have attempted to create and use modularized contracts so as to pre-authorize the use of their works.⁵² CC simplifies this permits process by attaching pre-created licenses to the work, thus defining the scope within which the work can be used. Thus, not only is CC an improvement over copyright, but it also propagates sequential innovation by allowing 'next-in-line' creators to use original works to create new ones or even to facilitate improvement thereon.

⁴⁶ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society (E.U. Copyright Directive), 2001 O.J. (L 167) 10.

⁴⁷ *Id.*

⁴⁸ *Supra* note 46.

⁴⁹ Aarthi S. Anand, *Readymade Licences as Obstacles to Blogging*, HINDU, Jan. 20, 2009; *see also supra* note 17.

⁵⁰ *Supra* note 42.

⁵¹ *Supra* note 17.

⁵² *Supra* note 10.

CC has been evolved to adjust the needs of the end-users with those of the creators, thereby addressing the problem of perspective. It takes into account the fact that different creators have different intentions with respect to the creative content of their work, and that this intention is not corrupted by unauthorized use of the creation by any end-user. Using the CC license, not only is the creator empowered to exercise the moral and economic rights that she wishes to own with respect to the work, but there is also a flexible, legally-accepted framework created within which any end-user can use the work. Since the law cannot be individually tailored to suit the needs of every creator, a CC approach fashions a flexible legal structure that gives enough freedom to every creator to allow what she wishes others to do with the work, without having to tolerate its use in any manner not desired by her.

The Tier Model: A Business Solution

Another feasible solution that the authors propose for enhanced internet regulation within the scope of the issues raised by this paper is the Tier Model. Inspired roughly from Yochai Benkler's Theory of Layers,⁵³ this model proposes that no regime of regulation whatsoever should be imposed directly on the internet, and consequently, on its users. Instead, the law should seek to regulate the internet by regulating the models used to conduct business over the internet. This makes the need for a copyright regime redundant, focusing instead on the very nature of the internet as a medium of interconnectivity, accessibility and advertising.

The ad-based model, deployed by internet giants like Google to earn revenue, can be used to depict how the Tier Model may work. The Tier Model is based on the premise that the internet is a free market wherein every player aims to earn the maximum profits possible. It is assumed that websites on the internet are put up for a particular purpose, which has a profit or other personal motive behind it. Hence, persons advertise the works of a particular creator and host that work in order to increase the number of visitors to that website – also called 'eyeballs.'⁵⁴ An increase in the number of eyeballs increases the chances of visitors to the site using the services provided by the website and augments revenues.

⁵³ Professor Yochai Benkler's Theory of Layers provides an effective approach to a multi-level analysis of access regulation. Professor Benkler's theory addresses not only the content layer of digital communication, but also the code layer and the actual physical infrastructure. YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* (2006).

⁵⁴ *Supra* note 12.

The Tier Model proposes that what should be controlled is not the content posted, but the way or the means through which the content or work of the creator is posted, and the way in which it is advertised. In effect, the Tier Model proposes that the content of advertisements that declare the existence of that particular work on that website is to be regulated. By doing so, i.e., by telling the intermediary⁵⁵ that she can't advertise the content of the work in a way that violates the creator's permit to use the work (on the assumption that the work is CC licensed), the law protects the creator's rights, and warns the end-user of the limits to which the work can be used. This, of course, is just one example of how business models can be regulated in order to protect data over the internet.

Another example of the application of this model is the way Jstor works. Jstor is an online digital library that caches a number of journals on subjects of philosophical and sociological interest. It is subscription-based and allows users to access content originally published in journals which hold the copyright. Consequently, what is regulated is the way users are allowed to access the content and not the content itself. So, instead of letting users download for free, Jstor only allows the user to purchase and then download the content online.⁵⁶ This reduces the risk of users interfering with the content and also allows them to access content, albeit in a limited manner. In this example, the Tier Model is used to restrict the manner in which the websites allow access to content. This is a way to indirectly restrict access without touching the copyright on the content.

If there exists a law or bye-law that restricts proprietors of websites and service providers from providing or displaying content in a particular manner, say by restricting downloads as in the case of Jstor, what the law is doing in effect is regulating the model on which the operation of the site depends, instead of creating an IP over the content itself. This in turn clears the haze surrounding the problem of perspective, as in this case, the only perspective being applied is that of the proprietor. Any kind of use of the creator's material by the proprietor that is illegal or not in conformity with the law will result in liability. However, in this case, the internet is still a legitimate construct where knowledge and content is free. The qualification remains that such access is not unlimited but restricted by virtue of the kind of services provided by the proprietor of the website. Hence, the user may continue to legally access and use the content but only in one possible manner - the restricted way, as defined under the law. Such a law would be workable

⁵⁵ The service provider who posts or allows the author to post his creation on the net.

⁵⁶ See JSTOR: The Archives, <http://www.jstor.org/page/info/about/archives/index.jsp> (last visited July 1, 2010); see also Frequently Asked Questions, <http://www.jstor.org/page/info/help/faq.jsp> (last visited July 1, 2010).

because in this case, access to the content, and consequently its authorized use, depends solely on the medium in which content is published. Other factors like the nature of the content, i.e., whether it is a literary or artistic or cinematographic work, or the question of whether the content *per se* is protected, do not come into play. Hence, this law would be medium-specific, wherein what is regulated is the medium of publication of the content, rather than the content itself.

The other perspective we are concerned with is that of the creator. Clearly, the problem of copyright violations occurs because the user's perspective doesn't match that of the creator. CC licensing may solve this problem in part by making the creator's perspective clear to the user by virtue of the nature of license attached to the work. The Tier Model may be useful in removing the problem of perspectives because it adopts a perception of the internet which is neutral. The perspective adopted is that of the proprietor, the person who facilitates the interaction between the user and the creator through the internet medium.⁵⁷ The role of the proprietor of the site in the virtual world is similar to the role of the publisher of a book in the real world. The proprietor of the website has an economic interest in putting the creator's content up on his site.⁵⁸ This incentive may be in form of the number of the eyeballs he receives, the number of downloads from his site, etc. Hence, the rationale behind adopting the proprietor's perspective is that he has the best interests of the creator as well as the user in mind – the former, because he becomes responsible to the creator for ensuring that the material is not abused because it is put up on the internet, the latter because he must still try and make the work as widely accessible as possible.

It is also clear that this model works best when the work is CC licensed, i.e., the creator has previously permitted the work to be used in an ascertained manner. Usually, no creator who wishes to propagate her work will prevent advertising to her own detriment. But using this model, she can also impose restrictions on the way the advertisement depicts the work to the end-user. In addition, this model acts as a good check against the defense usually taken by intermediaries that they were unaware of the infringement taking place. This was a concern that came up with the suit filed against Napster by major record labels in the US, when the file-sharing giant was shut down on grounds of copyright violation. Yet, this suit encouraged a 'tsunami' of open P-2-P file sharing

⁵⁷ On the emergence of new intermediaries in the digital world, see Michael W. Carroll, *Creative Commons and the New Intermediaries*, 4 MICH. ST. L. REV. 45 (2006).

⁵⁸ For the functions intermediaries play in the commercial dissemination and exploitation of creative works, see *supra* note 2.

that was unencumbered by DRMs.⁵⁹ This development led many record labels to sue individual end-users who were found to have downloaded music from the internet illegally.⁶⁰

IV

CONCLUSION

Knowledge is a public good in that it cannot and should not be the personal domain of any one creator. The internet is an ideal forum for the dissemination of knowledge due to its all-pervasiveness. Alternative internet governance mechanisms should be explored that can fulfill this objective and still serve as viable regulatory models. Any solution proposed should ensure that knowledge dissemination is not restricted while also considering IP infringement as a real threat to creativity – the solution should bridge these two considerations.

It is quite evident that internet governance is not a simple matter. The internet, in particular, is a highly interactive environment with sequential innovation. Attempts to impose additional intellectual property protection or to expand existing protection might be detrimental because they fail to consider the value of creative imitation.

The internet has created new problems for copyright owners, who see their works distributed and copied throughout this immeasurable network. Piracy and copying of protected works have always existed, but never on the scale that the internet so simply facilitates. Many solutions have been offered, but to regulate any distinctive institution, activity or phenomenon, the law needs to take into account the nature of the subject, its complexities, its weaknesses, possible loopholes, etc. Therefore, in the absence of the aforementioned considerations, copyright law, on its own, is evidently unsuitable for governing a dynamic forum like the internet, primarily due to its inflexibility and redundant assumptions.

However, it should be remembered that in the absence of an elaborate, full-fledged legal and regulatory regime to protect content over the internet, copyright cannot be abolished. For instance, even the solution proposed in this paper, i.e., CC licensing, is based on copyright. Although Lessig argues that these licenses are ‘bullet-proof’,⁶¹ to date, they have not been tested even in the U.S.

⁵⁹ *Supra* note 12.

⁶⁰ *Supra* note 12.

⁶¹ *Supra* note 44.

courts, and Creative Commons itself gives no such guarantees.⁶² As long as enforceability is unclear, some prohibitive uncertainty remains.⁶³

To illustrate this point further, Goss provides an example to illustrate the existing ambiguities in relation to CC licensing where an educational website displays an article but requires a membership password to access it. Would this amount to commercial use? Moreover, if the same website uses advertisements to support its publishing costs albeit without a membership system, then is that 'primarily intended for' or 'directed towards' commercial use? It is thus evident that without clear interpretations of its licensing terms, CC licensing still has a long way to go in proving itself as a pragmatic replacement to copyright.

Moreover, it has further been debated as to whether, instead of extending the public domain, CC licenses have introduced prior permission for work which may have no commercial value.⁶⁴ On the premise that CC is the most commonly used 'prêt-à-porter' (or readymade) and easily embeddable licence regime, Aarthi Anand argues that many blogs and other non-commercial forums would not be copyrighted if creators had to pay for the cost of drafting a legal notice. In other words, in the absence of CC licensing, creators would have been willing to incur legal expenses only for work they intended to commercially exploit, with all non-commercial work remaining free from copyright. Thus, the real test of CC licensing's contribution to the public domain should not be the popularity of the CC licence but a future creator's ability to draw on commercial work hitherto prevented by copyright.⁶⁵

Accordingly, the above solutions proposed by the authors can be used as viable complementary mechanisms to the existing legal regime as the said solutions merely control the dissemination of works, and do not protect works as such. Hence, these solutions may be effective in stopping or reducing unauthorised access of protected works on the internet.

⁶² *Supra* note 10.

⁶³ *Supra* note 10.

⁶⁴ *Supra* note 49.

⁶⁵ *Supra* note 49.