JICLT
Journal of International Commercial Law and Technology
Vol. 6, Issue 4 (2011)

Regulating File Sharing: Open Regulation for an Open Internet*

Michael Filby
LLB, LLM, MPhil
School of Law
University of Leicester
mrf16@le.ac.uk

Abstract. Regulators have a choice of approaches available to them in regulating digital copyright issues that lie on a scale between restrictiveness and openness. In a world in which the regulator seems to exclusively rely on entrenching a restrictive approach, this paper questions whether the long-forgotten open approach is worth reconsidering in the digital age. The ideal of cyber socialism is examined in the context of the roots and structure of cyberspace and its state of nature, and digital distribution models operating outside of the existing law are considered. The Creative Commons licenses are evaluated for their suitability in opening the current one-note regulatory regime.

1. Introduction

In a world in which copyright regulation is becoming ever more protectionist and restrictive in nature, it is easy to forget that there is more than one approach available to be taken. The Copyright, Designs and Patents Act 1988 (CDPA) presently offers a framework enforcing a system of copyright protections that apply a number of key restrictions automatically for a generation-encompassing term ensconced in both criminal and civil sanctions – the classic and common approach of treating knowledge as an asset more than a public resource. The legislature has struggled to impose this regulatory regime upon the relatively youthful internet since its initial boom, with the infringement notification procedure and technical measures of the Digital Economy Act 2010 being the latest attempt to crowbar this form of copyright protection into the digital age. But is this regulatory approach that is traditionally used to regulate intellectual property in the physical world necessarily appropriate to intangible content in a virtual world?

This paper seeks to answer this question by defining the more open regulatory approach at the opposite end of the regulatory spectrum and exploring its applicability to cyberspace and the internet. Key differences between the two regulatory approaches are identified and compared with the distinctions that exist between the physical and virtual worlds. It is then argued that the significant overlap between the open evolution of the internet and the philosophies of open regulation supports the widening of pure copyright regulation into a more flexible licensing system that espouses the ideals of the Creative Commons, which will serve as a middle ground between the competing ideologies of these two different worlds whilst taking a co-habitational view that recognises the symbiosis between them. The Creative Commons licenses are then explained, and their primary criticisms considered. It is concluded that the internet has created an important new way of conducting business in association with the physical world and its traditional business models, but that the differences in its construction and operation necessitate a form of regulation that is less restrictive than pure copyright. It is suggested that formalisation of Creative Commons licenses as a minimum will provide a crucial regulatory middle ground between copyright and open source that will levy fewer technical impediments upon the evolution of the internet and the novel behaviours, norms and technologies that it is spawning.

* This article updates and greatly expands upon ideas originally discussed in M Filby, 'Together in electric dreams: cyber socialism, utopia and the creative commons' (2008) 1 (1-2) International Journal of Private Law 94.

2. Regulatory Approaches

In contextualising the differing methodologies that exist to regulate file sharing, four models of information policy were defined by Davies and Withers which describe four points on a regulatory spectrum ranging from the most restrictive to the most open.[1] On the extreme of the scale where the most restrictive approach resides, knowledge is treated purely as an asset. This corporation-focused approach treats intellectual property in a similar manner to physical or tangible property, and subjects IP to the same breed of restrictions and controls as if it were a piece of owned land or property. The description "American conservatism" links this approach with the stance of the US Digital Millennium Copyright Act 1998 which treats intellectual property or knowledge almost entirely as a corporate asset, with only a few fair dealing provisions to concede to public interest in the knowledge.

Moving away from American conservatism sees an approach whereby knowledge is treated as an asset in the first instance and a public resource as a secondary consideration – the "UK knowledge economy". This approach also favours the interests of the corporation, but with certain concessions made in the interests of the consumer. Describing the approach as the UK Knowledge Economy implies that this is where the authors view the law of the UK existing in that the CDPA is focussed upon restricting rights with only minor concessions to consumer interests, although its predominant use of civil remedies in non-commercial instances of infringement as opposed to a reliance upon criminal sanctions sets it apart from its US counterpart.

Moving further away still sees the next model, the "learning society", which represents an approach where these priorities are both still present but reversed in precedence in that knowledge is treated as a public resource primarily and as an asset secondarily. This approach allows the consumer more rights when it comes to dealing with and accessing intellectual property, to some extent disempowering the legal fortitude of digital rights / restrictions management (DRM) as a concession to, for example, fair use safe harbours. In describing this position as the basis of a learning society, the authors cite a number of examples of how certain European states have interpreted the requirements of the EC Copyright Directive[2] in a less strict sense than jurisdictions such as the UK, consequently affording a greater degree of openness in the use of intellectual property. However, regulation has changed in the intervening period since the commentary was submitted in 2006. For example, since Davies and Withers commended the measures taken by the French legislature via the DADVSI law[3] to impose a legal requirement to guarantee the interoperability of intellectual property subject to DRM, the law has been radically reformed to the effect that it has been brought closer to the approach of the US DMCA.

The final model on the regulatory spectrum, cyber socialism, is not presently represented by the regulative approach of any jurisdiction. It is important not to confuse the concept of applying the tenets of socialism to the digital domain with physical world socialist regimes, nor to dismiss the model simply on the basis that it differs to what physical world free markets and physical world regulations have been principally designed to accommodate. The question of whether a freer digital market would enable greater commercial success to those who choose to innovate rather than regulate is important when considering regulatory reform that protects free market principles without impeding the evolution of online business practices, so it must be considered to what extent the digital market can be unburdened without losing benefit to creators and users alike. Indeed, if it can be established that cyber socialism is not only a more viable approach as compared to the current obstructive,

[1] W Davies and K Withers, *Public Innovation: Intellectual Property in a Digital Age* (Institute for Public Policy Research, London 2006), 72 et seq.
[2] Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society [2001] OJ L167 22/06/2001, 10-19.
[3] Loi n°2006-961 du 1 août 2006 relative au droit d'auteur et aux droits voisins dans la société de l'information, 14 June 2009; see Legifrance, 'Dispositions portant transposition de la Directive 2001/29/CE du Parlement Europeen et du Conseil du 22 Mai 2001 sur l'harmonisation de certains aspects du droit d'auteur et des droits voisins dans la societe de l'information' (Legifrance 2006) <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000266350&dateTexte=> accessed March 2011.

restrictive and artificial forces being exerted upon the digital world, but perhaps even a more desirable approach, then it may serve to highlight why existing approaches are not sitting well with the users and facilitators of the internet.

3. The Ideals of Cyber Socialism

There are a number of approaches to socialism which have been (and indeed still are) taken as the basis of a political ideal which its followers believe would benefit society if its principles were applied to the manner in which society is regulated[4]. Although some differences do persist between individual socialist bodies and organisations, such as the question of whether a socialist order would require a form of moneyless utopia in which to properly exist, all share the goal of common ownership of property and equality in access to and distribution of goods[5]. But the concept of socialism also attracts a number of common criticisms. For example, a key criticism that has been explored in a seminal critique[6] points out that the distribution of goods on an egalitarian basis is unrealistic due to the problem of unequal demands leading to an exhaustion of certain wares, sometimes referred to as the economic calculation problem. It has also been opined that the forms of socialism that steer away from the controlling arms of a government or another similarly controlling entity will inevitably descend into anarchy, and that what is seen as altruistic equality in production and distribution will lead to a serious deficit in the incentive effect upon producers and creators[7].

In defining the approaches to regulating file sharing, Davies and Withers have provided a strong contextualised definition of what they have dubbed cyber socialism – a socialist regime within the realm of cyberspace. This definition requires a deconstruction of the distinction between the users and consumers of digital information on the one hand, and the rights holders on the other. It is suggested that this deconstruction will be in favour of a world, whether virtual or otherwise, in which the public domain flourishes and creators are both willing and compelled (although specifically by what is left unidentified in the definition) to produce and share work with their fellow file sharers. This state of regulation or, indeed, deregulation most closely describes how the internet would naturally be used and would function if all information was made available for free and unfettered distribution among its users.

The characteristics of this approach to regulation can be defined as follows:

- Policy is developed around the interests of internet users;
- Intellectual property regulations are cut or abolished entirely;
- Consumers are also producers, and producers are also consumers;

[4] A Einstein, 'Why Socialism?' (1949) 1(1) Monthly Review 1 <http://www.monthlyreview.org/598einstein.php> accessed March 2011.
[5] See, for example, “the theory of the Communists may be summed up in the single sentence: Abolition of private property”; K Marx and F Engels, 'Manifesto of the Communist Party' (Marxists Internet Archive 1848) <http://www.marxists.org/archive/marx/works/1848/communist-manifesto/index.htm> accessed March 2011.
[6] G Hardin, 'The Tragedy of the Commons' (1968) 162(3859) Science 1243 <http://www.sciencemag.org/cgi/content/full/162/3859/1243> accessed March 2011.
[7] “If competition has its evils, it prevents greater evils… It is the common error of Socialists to overlook the natural indolence of mankind… Competition may not be the best conceivable stimulus, but it is at present a necessary one, and no one can foresee the time when it will not be indispensable to progress… it would be difficult to induce the general assembly of an association to submit to the trouble and inconvenience of altering their habits by adopting some new and promising invention, unless their knowledge of the existence of rival associations made them apprehend that what they would not consent to do, others would, and that they would be left behind in the race.” JS Mill, *Principles of Political Economy with some of their Applications to Social Philosophy* (7th edn Longmans, Green and Co., London 1909), Book IV, Chapter VII, p.64.

- Digital rights / restrictions management is intrinsically immoral.[8]

The definition of this regulatory approach recognises that any limitation of the sharing of any type of information would be responsible for interfering with the progress of the digital commons, and that this would be directly against the very construct of the internet itself. The ethic of such an approach can be interpreted as being fundamentally anti-capitalist in nature, and could also be viewed as being actively hostile to the capitalist philosophy of providing financial reward for the labour of others to the point of advocating and encouraging communism[9]. Nevertheless, it is prima facie apparent that the application of cyber socialism is in practice distinct enough from physical world socialism in certain key areas that will allow it to address at least some of the most prominent criticisms of the latter. For example, the problem of the distribution of property on a purely egalitarian basis inevitably leading to exhaustion of goods would be rectified by the fact that the nature of intellectual property is intangible. As copies of intellectual property can be produced and distributed at virtually no cost, it follows that an intangible good cannot be physically exhausted in terms that there will never be a point at which further copies cannot be in fact produced or created. However, not all of the criticisms of physical world socialism can be defeated quite so easily if the problem of the removal of the capitalist incentive effect for creators is considered.

To consider the issue in the context of the entertainment industries, and to borrow the terms of Karl Marx and Friedrich Engels[10], socialism can be thought to apply to the digital sphere by considering the bourgeoisie[11] to be the creators or, more accurately and realistically, the entertainment industries encompassing the distributors and publishers, in that both tend to enjoy a larger share of the profits generated by intellectual property than the creators. Similarly, the proletariat[12] can be considered to be the consumers or the users of the internet. As the characteristics of cyber socialism discussed above point out, consumers are also producers and producers are also consumers. In parallel to this, many of the facets of what has superficially been dubbed "web 2.0" in fact encompass applications where the consumer is encouraged to contribute effort for their fellow internet users by producing. As the video sharing site YouTube[13] encourages the creation and dissemination of user made films, so the rise of the "citizen journalist" phenomenon[14] is giving rise to an increase in instances where the reader becomes both writer and photo journalist. These models are in their relative infancy, and as such still tend to operate on the basis of the user producing work that results in a profit for the hosting or controlling body, i.e. the cyber bourgeoisie.

The point at which file sharing and piracy regulation currently plays a role lies around the moment that the cyber proletariat uses work that has been produced by the cyber bourgeoisie without the permission of the latter. Without this regulation, some of the cyber proletariat may argue that a state of anarchy could exist[15]. Although the notion that "property is theft" as submitted by Proudhon[16] may well appear to approve of the notion of

[8] W Davies and K Withers, *Public Innovation: Intellectual Property in a Digital Age* (Institute for Public Policy Research, London 2006), 78.
[9] P Himanen, *The Hacker Ethic* (Random House, 2002).
[10] Marx and Engels, 'Manifesto of the Communist Party' (Marxists Internet Archive 1848) <http://www.marxists.org/archive/marx/works/1848/communist-manifesto/index.htm> accessed March 2011.
[11] Defined in Marxist socialism as the social class that is in control of the common means of production; ibid Chapter I.
[12] Defined in Marxist socialism as the social class that is not in control of the common means of production, necessitating the offering of their own labour capabilities to the bourgeoisie in exchange for a wage in order to survive; ibid Chapter I.
[13] See <http://www.youtube.com/> accessed March 2011.
[14] Whereby news agencies and outlets request submissions from their readers.
[15] For example, Walker discusses the pluralist approach to accepting an "anarchy of highly differentiated units or nodes of legal authority" as opposed to "an anarchy of formally identical states" as the new state of nature that would accept the physical world without making any demands upon it; N Walker, 'Beyond Boundary Disputes and Basic Grids: Mapping the Global Disorder of Normative Orders' (2008) 6(3/4) International Journal of Constitutional Law 373, 390.
[16] P-J Proudhon, *What is Property? An Inquiry into the Principle of Right and of Government* (Cambridge University Press, Cambridge 1994).

intellectual property being reused once it has left the direct control of the rights holder, the fact remains that an anarchist view would be as impracticable as it would be contrary to all who have spent a lifetime following capitalist ideals. This could well explain why commentators focussing on the jurisprudence of intellectual property regulation more often prefer to rely upon the earlier discourse on the concept of property as submitted by Locke[17]. Locke argues that as every person owns their own labour, property rights can be accrued (both from their natural state as they would be found in a state of nature, discussed below, or from their previous owner) by mixing your own labour with it to provide added value. The notion that the addition of labour to property creates a right to its fruits has been discussed widely when considering the practical extent and imposition of intellectual property rights[18], particularly in the context of the assertion that most intellectual creation has been formed on the basis of other works. But the principle problem when it comes to applying the theory suggested by Locke to the digital arena lies in defining boundaries of what precisely defines labour expended to the extent that it will initiate a moral transfer of rights (or creation of a new set of rights) from the existing creator to the new creator.

This point can be illustrated by considering as an example the contemporary practice of file sharers in their quest to distribute and share intellectual property. The CDPA currently provides provision for intellectual property to be used without authorisation in particular circumstances without constituting an infringement. For example, the use of the work can be for the purposes of reporting[19], research and private study[20]. But can it ever be argued that digitising a work and encoding it into a format optimal for transferral over the internet adds value to the work in a Lockean sense? A film which may take up in excess of 4GB on a DVD or more than 20GB on a Blu-ray disc can be converted from its native format[21] using a far more recent and exponentially more efficient codec[22] to reduce it to around 700MB in size without any discernible loss in quality[23]. It can then be argued that, at least in a purely technical sense, through the exercise of skill and expertise required to re-encode the file, a new piece of intellectual property derived from the original work has been created and, further, it carries with it a higher degree of desirability (and thus value) to peer to peer network users due to its smaller file size and comparable quality. The problem lies in the justification that through the expenditure of this relatively minor labour upon the original file, the re-encoder would morally become the new beneficiary to the fruits of the labour according to Locke. After all, this new labour is comparatively trivial when compared to the labour required to, for example, produce a feature film. In considering this conundrum, Griffin reminds us that the UK copyright system previously allowed for the making of certain adaptations through translation and abridgement until the more restrictive principles of the Berne Convention was enshrined in the Copyright Act 1911[24]. Griffin suggests that such a merit-based system should be reintroduced to move the bias of copyright law back away from the rights holders. Applying the principles from which this system originated in a Lockean sense can not only be useful in redressing the creeping imbalance that has developed over the course of the last century, but the principles themselves (in common with those of cyber socialism) are demonstrably at a fundamental level more appropriate to the original nature of the internet and the classic philosophies that describe its state of nature.

[17] J Locke, *Two Treatises of Government* (Cambridge University Press, Cambridge 1988).
[18] For example, see WM Landes and RA Posner, *The Economic Structure of Intellectual Property Law* (Harvard University Press, Boston 2003).
[19] Copyright, Designs and Patents Act 1988 s.30.
[20] CDPA 1988 s.29.
[21] The native format for a film on a DVD is MPEG-2, and has remained unchanged since the DVD Video format was standardised in 1996.
[22] Such as the MPEG-4 based DivX; see <http://www.divx.com> accessed March 2011.
[23] Although a standard television definition file could be reduced from 4GB to 700MB with ease, the high definition video content and uncompressed soundtrack on a blu-ray disc can, and is, just as readily reduced down to a video file and correspondingly compressed soundtrack that can amount to as little as around 2GB without a significant loss of quality.
[24] JGH Griffin, 'An historical solution to the legal challenges posed by peer-to-peer file sharing and digital rights management technology' (2010) 15(3) Communications Law 78.

4. The State of Cyber Nature

The non-reformist concept of socialism in the physical world is intrinsically tied into the notion of revolution; that is, the proletariat wresting power from the bourgeoisie[25]. In contrast, the internet has originated from what can be described as a state of cyber nature, and has over time evolved into the artificially regulated market that it has become. Proponents of imposing regulation upon the internet tacitly support the version of this notion as submitted by Hobbes, in that their prediction that an unregulated cyberspace will lead to a hostile and anarchic wild west whereby human self-interest drives the destruction of the creative industries demonstrates strong parallels with the idea that the state of nature is aggressive and destructive towards industry and innovation[26].

The basis of this theory lies in the notion that humans are driven purely by felicity, and that moral sense is short circuited by the need for self-preservation driven by a scarcity of resources. But this is where cyberspace differs from the model of the physical world – there is no scarcity of resources, as every creative work is effectively inexhaustible due to efficient copying. Without the scarcity Hobbes describes, the prime reason for the need for the bypassing of moral sense in the quest for felicity is removed, thus restoring the moral imperative. It is recognised that human nature, when left to its own devices, will not exclusively eschew collective rationality in favour of individualistic selfishness without such a driving force: "The great majority of us accept that we should not attack other people or take their property. Of course in a state of nature a minority would steal and kill, as they do now, but there would be enough people with a moral sense to stop the rot spreading and prevent the immoral minority from bringing us to a general war."[27] If it was understood that a killing in the physical world would equate to the destruction of an online presence such as a business or an individual interest in cyberspace (as stealing or taking the property of another can certainly not be equated with copying), then it would follow that users of the internet would impose a moral code upon themselves.

It is at this point that the argument submitted by Locke that the physical world originated in a more optimistic state of nature[28] than that suggested by Hobbes becomes a compelling point of comparison to the origins of the internet: "It is a state in which men are perfectly free to order their actions, and dispose of their possessions and themselves, in any way they like, without asking anyone else's permission – all this subject only to limits set by the law of nature."[29] Locke goes on to point out that the reason that humanity evolved away from this seemingly utopian state of nature into a civilised society governed by the state was through the need for protection of property. But the reason property requires protection, according to the view of Locke, is that it is in such short supply that individuals necessarily must eventually come to rely on other individuals to meet their needs. Yet, as we have already seen, intellectual property is distinguishable from this concept of physical property in that it is effectively inexhaustible. In simple terms, there is plenty of room in cyberspace for every person that is connected. Further, the currently existing level of technology would allow the entire population of the earth to join cyberspace concurrently and there would still be plenty of room remaining (as there are effectively no boundaries to the internet).

Further to this, Locke argues that mankind leaves the state of nature at a time when they feel they are ready to formalise the social contract that will have evolved, and then enter into a regulated society: "I also affirm that all men are naturally in the state of nature, and remain so until they *consent* to make themselves members of

---

[25] See K Marx and F Engels, 'Manifesto of the Communist Party' (Marxists Internet Archive 1848) <http://www.marxists.org/archive/marx/works/1848/communist-manifesto/index.htm> accessed March 2011; & A Schaff, 'Marxist Theory on Revolution and Violence' (1973) 34(2) Journal of the History of Ideas 263.

[26] Hobbes suggested that, in the state of nature, "there is no place for Industry; because the fruit thereof is uncertain: and consequently no Culture of the Earth; no Navigation, nor use of the commodities that may be imported by Sea; no commodious Building… no Arts; no Letters; no Society; and which is worst of all, continuall feare, and danger of violent death"; T Hobbes, *Leviathan* (Oxford Paperbacks, Oxford 2008), 186.

[27] J Wolff, *Political Philosophy* (2nd edn Oxford University Press, Oxford 2006), 12.

[28] J Locke, *Two Treatises of Government* (Cambridge University Press, Cambridge 1988).

[29] Ibid Chapter 2, para.4.

some political society."[30] But to contrast this with the digital domain, regulation has arguably been levied onto the users of the internet without their permission. Indeed, some internet commentators have made it abundantly clear that leaving the state of cyber nature is the wish furthest from the minds of the common user of the internet[31]. In this respect, the intervention of state control is essentially being rejected in favour of retaining the state of cyber nature.

This means that the only argument that is left for the Lockean theorist that is in favour of moving away from this state lies in the exhaustion of the value of property, as distinct from the physical property itself. Indeed, it has already been established that intellectual property can be reproduced and distributed at a cost that is negligible to the extent of being practically free of such cost, but this does not necessarily mean that the economic and non-economic *value* of the property remains unaffected. The question of what would provide authors and creators with an incentive to create works if they were to agree to diminish the rights usually afforded to them via copyright legislation, or even if they relinquished these rights by releasing the fruits of their labour into the public domain, can be addressed with the aid of efficient digital distribution models and associated concepts such as the network effect[32], the sampling effect[33], advertising supported distribution[34] and indirectly supported distribution[35]. The internet cannot presently be described as a de facto utopia devoid of the necessity of money, but it is this fact that illustrates the importance of maintaining the relationships between the digital domain and the physical world. It is vital to recognise that despite being capable of comparison with states and other forms of political government, cyberspace is not a parallel world that runs independently of the physical world. It is instead an extension of this physical world and its associated practices where, through both design and evolution, optimal efficiency has developed in digital equivalents to physical world practices such as the distribution of information. This distinction in viewpoints is particularly important in the context that real world socialism to a large extent relies upon the state that has adopted the socialist philosophy as a political ideal to be either financially and productively independent from non-socialist states, or existing in a place where every

[30] Ibid Chapter 2, para.15.

[31] These views are succinctly summarised in a work drafted by Barlow, a founder of the US Electronic Frontier Foundation, in response to the enactments of the US Telecommunications Acts that were seen as interfering with the state of nature that had evolved by that point in cyberspace: "Governments derive their just powers from the consent of the governed. You have neither solicited nor received ours. We did not invite you. You do not know us, nor do you know our world. Cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and grows itself through our collective actions."; JP Barlow, 'A Declaration of the Independence of Cyberspace' (Electronic Frontier Foundation 1996) <http://homes.eff.org/~barlow/Declaration-Final.html> accessed March 2011.

[32] See IPL Png, 'Copyright: A Plea for Empirical Research' (2006) 3(2) Review of Economic Research on Copyright Issues 3 & F Oberholzer-Gee and K Strumpf, 'The Effect of File Sharing on Record Sales: An Empirical Analysis' (University of North Carolina 2005) <http://www.unc.edu/~cigar/papers/FileSharing_June2005_final.pdf> accessed March 2011 for empirical evidence in support of the value of the network effect in the context of the entertainment industries, and commentary on the role of the network effect in relation to software in the Microsoft antitrust case at A Andreangelli, 'Interoperability as an "Essential Facility" in the Microsoft Case - Encouraging Competition or Stifling Innovation?' (2009) 34(4) European Law Review 584.

[33] See MD Smith and R Telang, 'Piracy or Promotion? The Impact of Boradband Internet Penetration on DVD Sales' (Social Science Research Network 2009) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=918240#> accessed March 2011 & B Danaher and others, 'Converting Pirates Without Cannibalizing Purchasers: The Impact of Digital Distribution on Physical Sales and Internet Piracy' (Social Science Research Network 2010) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1381827#> accessed March 2011 for discussion on the sampling effect acting as form of advertising for authorised copies, increasing their value as opposed to cannibalising sales.

[34] See M Pesce, 'Piracy is Good? How Battlestar Galactica Killed Broadcast TV' (2005) <http://www.mindjack.com/feature/piracy051305.html> accessed March 2011 for a suggested model of advertising supported distribution.

[35] For extensive analyses of indirectly supported distribution models such as the use of associated value-added services, subscription models as successfully used by Spotify and the novel means employed by Radiohead of offering their music on a "pay-what-you-like" basis with profitable results, see D Bounie, M Bourreau and P Waelbroeck, 'Piracy and the Demand for Films: Analysis of Piracy Behaviour in French Universities' (2006) 3(2) Review of Economic Research on Copyright Issues 15 & S James, 'The Times They Are A-Changin': Copyright Theft, Music Distribution And Keeping The Pirates At Bay' (2008) 15(5) Entertainment Law Review 106.

state is socialist. As the internet is a multinational space that runs in correspondence with the physical world, it follows that if cyber socialism is to prevail, then the former scenario must be adhered to which dictates that the physical world (which is largely not socialist) must not suffer economically.

Just as Charles Eden, the governor of the US state of North Carolina in the early 18th century, was thought to have pardoned the unlawful activities of pirate Edward Teach[36] so that he could enter into fruitful trade with him, so the entertainment industries could be seeking new avenues of profiting from the activities of contemporary pirates active on the internet. Digital distribution models that depict the relationship between the entertainment industries and consumers reveal a number of methods compatible with the values of cyber socialism in that a wide dissemination of intellectual property over the internet can demonstrate a positive effect on the physical world in several such ways. An advertising supported model relies on the embedding of advertising within the files that are shared by internet users. As suggested by Pesce[37], if this model were to be employed to the industry of broadcast television, it would follow that the more widely a television programme is disseminated, the higher the value the entrenched advertising would command, and thus so would the value of the programme increase. Such models also provide many opportunities for indirect funding, one example being the internet service providers taking advantage of their relatively new status as intermediaries for the digital world by offering subscription prices that are either directly or indirectly related to the requirements of file sharers for more bandwidth and higher download speeds. It has been established by commentators such as Png[38] that widely distributed content can be shown to lead to an increase in its physical world value due to the network effect. This was illustrated by Oberholzer-Gee and Strumpf[39] who have pointed out that the network effect in relation to music has been shown to lead to an increase in sales of concert tickets and merchandising in the physical world.

When considering digital copies of content, it is difficult to justify an argument suggesting that the value, whether economic or non-economic in nature, can be exhausted through efficient distribution. Indeed, part of the regulatory problem arguably lies in the key stake holders and legislature failing to recognise the fundamental difference between tangible products and their corresponding digital counterparts, a criticism identified by Barlow[40]. By turning their backs on or attempting to restrict the new digital models that have grown out of the demand generated by the proportion of their customers who utilise the internet and have in turn driven the evolution of revolutionary new models of consumption, the industries are failing to identify an entire portion of society as a new breed of customer ripe to be nurtured, opting instead to alienate these customers into pursuing alternate means, or indeed the traditional means they utilised regardless prior to regulation, to satisfy their demands outside of the artificial and arbitrary boundaries placed around them. It would in turn appear that this failure is being supported by the legislature, which is applying physical world norms inappropriately to the digital realm of intellectual property. This is being done without the users of the internet unanimously, or arguably even as a majority, agreeing to a social contract that will effectively establish a governance over the internet parallel to physical world regulation, and that will set the internet apart from the state of cyber nature that it has already increasingly been forced away from. If there were ever to be a cyber socialist revolution, it

[36] Also known as Blackbeard.
[37] M Pesce, 'Piracy is Good? How Battlestar Galactica Killed Broadcast TV' (2005) <http://www.mindjack.com/feature/piracy051305.html> accessed March 2011.
[38] IPL Png, 'Copyright: A Plea for Empirical Research' (2006) 3(2) Review of Economic Research on Copyright Issues 3.
[39] F Oberholzer-Gee and K Strumpf, 'The Effect of File Sharing on Record Sales: An Empirical Analysis' (University of North Carolina 2005) <http://www.unc.edu/~cigar/papers/FileSharing_June2005_final.pdf> accessed March 2011.
[40] "Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here… These laws would declare ideas to be another industrial product, no more noble than pig iron. In our world, whatever the human mind may create can be reproduced and distributed infinitely at no cost."; JP Barlow, 'A Declaration of the Independence of Cyberspace' (Electronic Frontier Foundation 1996) <http://homes.eff.org/~barlow/Declaration-Final.html> accessed March 2011.

would apparently be carried out against the cyber bourgeoisie on the basis of a perceived invasion that is both as uninvited and unwarranted as it is inappropriate[41].

5. Self Regulation

If the cyber proletariat is indeed forming its own civilisation of the mind within cyberspace and such a civilisation is based on the state of cyber nature, pro-restriction bodies such as those representing the entertainment industries would no doubt be quick to ask how such a civilisation could ever hope to govern itself without falling into anarchy[42]. By looking to both the early era of the internet and the many areas of the contemporary digital world that operate contrary to pre-existing domestic and international legislation, the answer that is yielded is through a form of self regulation. There are certainly doubts when it comes to considering how useful self regulation can be as a tool in terms of the regulation of the physical world. For example, in the arena of financial law, the legislature has attempted to adopt a number of approaches to the regulation of insider dealing. In the first instance, the application of a self regulatory approach that tasked a number of self regulatory organisations with ensuring the practice was curtailed failed to have any meaningful effect upon the practice[43]. The regime was later replaced with criminal legislation which also failed to effectively regulate the practice in all but the largest and most incompetent instances[44] before eventually being widened to its current state of encompassing civil legislative routes alongside the ill-suited criminal regulation[45].

Again though, we are reminded that the rules of the physical world do not always apply to the digital world as many examples of self regulation can be seen to be operating effectively within cyberspace, in terms of users of the internet being given the power to act as a collective of enforcers. The regulations that are presently enforced online are, as they are with the practice and culture surrounding the financial world within which insider dealing resides, customs that have evolved, although here through the natural use of the internet. For example, many internet discussion forums afford particular trusted members with the power to edit and / or censor comments made by their fellow users. The most notable example of self regulated crowd sourcing is the approach taken by Wikipedia[46], which has taken this breed of regulation a step further by allowing any user of the website to edit any page listed in its online encyclopaedia. If norms or customs are not abided to, such as if a user were to vandalise a page by entering false information or tampering with content mala fides, the theory behind the approach dictates that the majority of other users will correct the misdeed themselves. There is still

[41] This notion is also represented in the Declaration of the Independence of Cyberspace, where Barlow states that "We are forming our own Social Contract. This governance will arise according to the conditions of our world, not yours. Our world is different… The global conveyance of thought no longer requires your factories to accomplish… We will create a civilization of the Mind in Cyberspace. May it be more humane and fair than the world your governments have made before."; Ibid.

[42] In a submission to the US Federal Communication Commission encouraging making the "protection of creative content online a core and guiding principle of the National Broadband Plan", the Motion Picture Association of America stated, "if it is to become national policy that the Internet serve as the center of modern society – a digital intersection of Main Street, a town square and a mega-shopping and entertainment complex all-rolled-into-one – it must be a place governed by laws, standards and rules, just like the real streets and communities inhabited all across America. Anarchy and disrespect for the rule of law online are no less pernicious to society than the flouting of our laws would be anywhere else… the promise of a free and open Internet to 'unleash creative genius' for all Americans cannot be fulfilled if the online world is subject to anarchy and chaos"; M O'Leary and F Cavaliere, 'Comments of the Motion Picture Association of America, Inc. in response to the workshop on the role of content in the broadband ecosystem' (MPAA 2009) <http://www.mpaa.org/press_releases/FCC%20Filing.pdf> accessed March 2011.

[43] M Filby, 'Part VIII Financial Services and Markets Act: Filling Insider Dealing's Regulatory Gaps' (2004) 25(12) Company Lawyer 363, 363 & 368.

[44] In the guise of the Company Securities (Insider Dealing) Act 1985, and then the Criminal Justice Act 1993 Part V, inter alia.

[45] Financial Services and Markets Act 2000.

[46] See <http://www.wikipedia.org/> accessed March 2011.

some degree of oversight, as users can register a complaint if necessary with the moderators of the website, who can then suspend the editing privileges of the subject of the complaint.

These norms are comparable with those that could arguably be imposed by the legislature should it be deemed necessary to move regulation of the internet more fully into the hands of the state. However, the practice of file sharing can already be seen to carry with it a similar kind of self regulation that would most likely conflict with the current standpoint of the legislature. File sharers who use peer to peer networks such as BitTorrent to swap files largely do so without the permission of the rights holders. In an attempt to combat this, the rights holders often respond by using tactics such as uploading dummy files[47] designed to frustrate file sharers by wasting the time and bandwidth they expend in downloading what they believe to be working unauthorised copies, and misreporting working unauthorised copies as fake on BitTorrent indexing sites. But self regulation within the file sharing world has gone some way to impeding these tactics. File sharers invariably outnumber those who desire to utilise these tactics, and so they will tend to collectively post reports that a file is fake on indexing sites which will prompt them to be "nuked"[48], and can cumulatively bury[49] false reports. There are also a number of software programmes that have been developed for free distribution that act as extra firewalls that have been optimised to block the IP addresses of all known providers of dummy files, in addition to rights holders and their representatives and anti-piracy enforcement and monitoring bodies.

This behaviour and the general culture of sharing is bolstered by the design of the BitTorrent software itself in that it has been programmed to perpetuate the uploading of files on at least an equal basis to how much data has been downloaded. This in itself is reinforced further by particular BitTorrent indexing sites restricting their services to members who agree to allow the IP address they use for file sharing to be monitored to ascertain that they are uploading at least as much data as they are downloading in exchange for superior torrent file indexing and download speeds through their trackers. Together, file sharers have effectively constructed a culture of sharing that has evolved through nothing more than the norms and behaviour associated with internet use through a non-contrived form of self regulation. In this respect, the anarchy of the internet has been successfully brought under control without the assistance of state regulators or their legislation.

6. The Creative Commons

Despite the self regulation that has evolved with the internet, many commentators still argue that a failure to apply external regulation will eventually see the online world collapse into a state of pure anarchy. For example, in his discourse on the shaping of the regulation of the internet, Lessig submits that the culture of corruption and criminal control that befell some Eastern European states after the fall of communism in the latter part of the 1980s could be described as a "modern if plodding anarchy"[50]. In likening this state of affairs to the libertarian ideology of those commentators[51] who have argued that the internet should encompass the ideals of "freedom without anarchy, control without government, consensus without power"[52], Lessig argues that there necessarily must be state control of the internet as, he submits, what has been referred to here as cyber socialism will inevitably fall into the same kind of anarchy seen in post-communist Europe.

[47] That is, files that exude the characteristics of the files they are imitating, such as dummy movie files that are the size and name a file sharer may expect genuine movie files to be, but do not run upon downloading.
[48] That is, being registered as a fake file by the host or indexing website so that other file sharers will not download the file expecting it to be genuine.
[49] When a user of a torrent indexing website comments on the authenticity or quality of a file, other users can affirm or dispute the comment. Once the comment has been disputed a number of times by a certain number of other users, the disputed comment is deleted or hidden.
[50] L Lessig, *Code Version 2.0* (2nd edn Basic Books, New York 2006), 2.
[51] P Borsook, 'How Anarchy Works' (Conde Nast 1995) <http://www.wired.com/wired/archive/3.10/ietf.html> accessed March 2011.
[52] L Lessig, *Code Version 2.0* (2nd edn Basic Books, New York 2006), 2.

Although Lessig himself admits that this view may not necessarily be correct[53], his most famous solution for how to shape the control he sees as inevitable nevertheless has its roots firmly entrenched in the ideals of open source; namely, the Creative Commons[54]. As suggested by the nomenclature, the Creative Commons encapsulates licenses that are based on the theory that intellectual property in the form of creative works should be available for use in terms comparable to physical world commons such as parks, but with the usual distinction allowed for by the internet in that it permits such commons to be shared by as many users who desire to use it without being exhaustible. In this respect, it can be considered a form of open source licensing for not only software, but other works too. The licenses can in fact be applied to any work capable of being subject to copyright protection, and can be tailored by the initial rights holder to maintain, limit or relinquish several key rights attached to the work[55]. This effectively grants rights holders the option of relying on a wide middle ground between the legal extremes of full copyright protection on the one hand, and on the other an unconditional relinquishing of many rights attached to the work that would see it practically entering the public domain.

The Creative Commons was founded in the guise of a non-profit organisation in the US in 2001, supported by the Centre for Public Domain. The founders were influential law professor Lawrence Lessig, who has published widely on the area of freeing copyright regulation and has also been involved with the Electronic Frontier Foundation; Eric Eldred, who was represented by Lessig when he legally challenged the constitutional validity of arbitrarily extending the default copyright term from life plus 50 years to life plus 70 years in the US Sonny Bono Copyright Term Extension Act 1998[56]; and Hal Abelson, a US computer science professor who has been involved with the Free Software Foundation. The principle goals of the Creative Commons are to "increase the amount of creativity (cultural, educational, and scientific content) in 'the commons', the body of work that is available to the public for free and legal sharing, use, repurposing, and remixing", and to define "the spectrum of possibilities between full copyright and the public domain"[57]. The organisation approached the task of offering a more flexible and open alternative to copyright by drafting and releasing a series of Creative Commons licenses for the public, or indeed any member of society or body corporate, to freely use and apply to their creative works.

6.1. The Licenses

The primary licenses are based on several key permissions and stipulations that can be customised by the licensor so that they merge into a fully formed license. Every core Creative Commons license includes an Attribution[58] term that preserves the moral right of paternity[59] through the inclusion of a requirement for future users to attribute the work to its author no matter how it is used. For example, if a creator was to publish a photograph with a basic CC BY license, users would be permitted to distribute and republish the photograph provided they gave credit to the creator. Creators may choose to apply a Non-Commercial[60] term to the license that will allow users to copy, distribute, play or perform the work provided it is done in a non-commercial context. For example, if the photograph considered above was subject to a CC BY-NC license, a user would be permitted to distribute the photograph and even post it on a personal website along with the attribution to the creator, but would not be able to publish the photograph on a commercial website or in a commercially available book without permission. These licenses allow for derivative works to be made from the original work. For

[53] Ibid 8; Indeed, the fundamental differences existing between the internet and the physical world pointed out and discussed above may be taken to suggest that this view is indeed pessimistic.
[54] See <http://creativecommons.org/> accessed March 2011.
[55] Although the Creative Commons license currently offered is version 3.0, an explanation of earlier versions of the license that share many characteristics of the current draft can be found at AM St. Laurent, *Open Source & Free Software Licensing* (O'Reilly Media, California 2004).
[56] *Eldred v Ashcroft* (2003) 537 U.S. 186 (United States Supreme Court).
[57] 'What is CC?' (Creative Commons 2010) <http://creativecommons.org/about/what-is-cc> accessed March 2011.
[58] This is abbreviated as CC BY.
[59] See Copyright, Designs and Patents Act 1988 s.77, & CDPA 1988 Ch.IV for moral rights in general.
[60] This is abbreviated as CC NC.

example, the photograph above could be used in a collage provided attribution to the original author was given (and the collage was not used for commercial purposes if the NC clause was applied).

If the creator does not wish to allow for derivative works to be made, they can utilise the No Derivate Works[61] portion of the license. This would allow, for example, a video that was subject to a CC BY-ND license to be copied, distributed, played, broadcast or posted to websites (which would only have to be in a non-commercial context if a CC BY-NC-ND license was applied) in its complete and exact form, but it would not permit a user to edit the video. If the creator does wish to allow derivatives of their work to be made, the Share Alike[62] term can be used to require such derivative works to be subject to the same licensing terms that were applicable to the original work. For example, a video subject to a CC BY-SA license could be taken by another user and edited into a new piece of work. This new video could then be used for any purpose, including commercial use, but it would automatically be subject to its own CC BY-SA license. Thus future users could still freely share the new derivative video and even make their own derivate work based upon it, but would in turn be required to maintain the original CC BY-SA license terms. The original creator may also include the Non-Commercial term, which would form a CC BY-NC-SA license.

Of the six main licenses that can be formed utilising these four terms, the Attribution (CC BY) license is the most open and unrestricted in that it allows end users to use the licensed work for any purpose, the only proviso being that credit must be given to the original author. The Attribution Share Alike (CC BY-SA) license has been likened to standard software open source licensing[63], although the CC BY-SA license, in common with all Creative Commons licenses, can be used with any kind of creative or copyrightable work. As with open source licenses, the CC BY-SA license allows for the original work to be taken, adapted and used for any purpose, including commercial purposes, with the only provisos being attribution to the original author and the application of identical licensing terms to the new work. Open source licenses, such as MPL[64], also allow for pieces of software to be modified and sold, provided that the source code is made freely available. In contrast, the Attribution Non-Commercial No Derivatives (CC BY-NC-ND) license is the most restrictive, and is referred to as the "free advertising" license[65] due to the fact that the license nevertheless frees up the work enough for it to be subject to market externalities such as the network effect, whereby any brand associated with the work, along with the name of the author, will see an increase in awareness and value due to the work being freely distributable.

The Creative Commons organisation has more recently widened the scope of its licenses on both sides of the spectrum of restrictiveness by offering two more licenses that are distinct from the six main general licenses. The six main licenses offer a "Some Rights Reserved" approach as opposed to the "All Rights Reserved" stance enshrined in copyright law. However, the No Rights Reserved, or CC0, license takes a step further away from copyright law by allowing the author to as fully as possible waive all of the rights attached to their creation. Applying this license to a work will essentially see the work entering the public domain, and will therefore allow it to be used for any purpose without even requiring the moral right of paternity to be recognised. On the other side of the scale lies the Founders' Copyright license, which essentially applies the same terms to the work as standard copyright but with a shorter term of 14 years, with the option to renew the term by another 14 years. This license is based on the original copyright clause included in the US constitution, which aimed to "promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their respective Writings and Discoveries"[66].

[61] This is abbreviated as CC ND.
[62] This is abbreviated as CC SA.
[63] For example, see the Mozilla Public License (MPL) under which the popular open source web browser Firefox is published; Mozilla, 'Mozilla Code Licensing' (Mozilla.org 2010) <http://www.mozilla.org/MPL/> accessed March 2011.
[64] Ibid.
[65] 'Licenses: Attribution Non-Commercial No Derivatives' (Creative Commons 2010) <http://creativecommons.org/about/licenses/> accessed March 2011.
[66] US Constitution, Art 1, Section 1, Clause 8.

The original term of protection, along with the clause of the constitution itself, was based on the initial term set by the originator of statutory copyright, the Statute of Anne[67], which stipulated an initial term of 14 years that was extendable by a further 14 years. This term has been extended a number of times since, most recently by the US Sonny Bono Copyright Term Extension Act 1998 which increased the term from life plus 50 years to life plus 70 years, and 120 years after creation for corporately produced works. Creative Commons founders Eldred and Lessig challenged this through the courts, arguing that extending the term was contrary to the original wording of the constitution (namely to promote the progress of science and useful arts); that most copyrighted works make the majority of their profits during their first few years of existence; that the extension of the term is disproportionate to the increased life of humans; that any extension of the term is damaging to non-profit organisations and educational establishments; and that retrospectively renewing all copyrights opens the door to perpetual copyright, which is directly contrary to the wording of the US constitution offering protection for a limited time[68]. Although these notions receive support from commentators such as Fox, Ciro and Duncan[69] who point out the irony of Disney, one of the strongest lobbyists in favour of the extension of copyright term, basing a significant proportion of their output on established and existing works in the public domain[70], the Supreme Court ruled that "Guided by text, history, and precedent, this Court cannot agree with petitioners that extending the duration of existing copyrights is categorically beyond Congress' Copyright Clause authority"[71]. In the absence of a legal victory, the philosophy suggested by Eldred and Lessig persists in the Founders' Copyright license.

6.2. Criticism

In contextualising the viewpoint of the Creative Commons licenses with the philosophies of Locke and Hegel, the latter by Landes and Posner[72], the licenses have been criticised by some commentators as acting contrary to the view frequently submitted by Lessig that intellectual works should not be treated as "creative property"[73]. However, it is arguable that this does not fully accurately describe the basis of the view espoused by Lessig. For example, in the same piece in which Lessig submits his argument that rejects the possibility of communism as applied to the digital domain successfully existing[74], rather than arguing that intellectual property should be freely shared unencumbered by property rights (which would be supporting the notion he has already rejected), Lessig submits that as opposed to conceding to what he views as a form of anarchy, users of the internet should grasp the impetus to shape the form of control that he maintains will inevitably be imposed upon authors, creators and internet users. After all, open source licensing (upon which the Creative Commons is based) cannot be accurately described as supporting an anarchistic approach, as common open source licenses, such as the Mozilla Public License[75], impose restrictions to the use of the software to which they are applied[76] to guarantee the applicability and spirit of the license.

---

[67] Copyright Act 1709, 8 Anne c.19.
[68] *Eldred v Ashcroft* (2003) 537 U.S. 186 (United States Supreme Court).
[69] M Fox, T Ciro and N Duncan, 'Creative Commons: An Alternative, Web-Based Copyright System' (2005) 16(5) Entertainment Law Review 111, 114.
[70] For example, Snow White, Cinderella and Pinocchio are all based on existing works, as is Romeo and Juliet (adapted by Shakespeare from a poem by Arthur Brook) along with innumerable musical works that have taken melodies from older works.
[71] *Eldred v. Ashcroft* (2003) 537 U.S. 186, 206.
[72] WM Landes and RA Posner, *The Economic Structure of Intellectual Property Law* (Harvard University Press, Boston 2003).
[73] S Weinstein and C Wild, 'Lawrence Lessig's 'Bleak House': a critique of 'Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity' or 'How I Learned to Stop Worrying and Love Internet Law'' (2005) (2005) 19 (3) International Review of Law, Computers and Technology 363.
[74] L Lessig, *Code Version 2.0* (2nd edn Basic Books, New York 2006).
[75] For the full text of the current version of the license, v.1.1, see <http://www.mozilla.org/MPL/MPL-1.1.html> accessed March 2011.
76 For example, the Mozilla Public License stipulates that adaptations of software subject to the license must themselves be subject to the Mozilla Public License, and thus must be allowed to be freely distributed and further adapted on the same terms as the original software.

If this is the correct interpretation, then it can be argued that the Creative Commons actually diminishes the permission culture the commentators above liken to standard licensing as supplied by what is defined as "Big Media"[77] in return for a fee. If a work is created and a Creative Commons license is not applied, copyright legislation will automatically become applicable to rights in relation to it. Thus, any party who wishes to use or distribute the work in any way that is contrary to what is permitted by domestic legislation will be required to seek permission from the rights holder. But if a work has a Creative Commons license attached to it, the work will carry with it an enforceable unilateral contract that relinquishes certain legislative restrictions and guarantees the end user a full set of rights in order to facilitate sharing and distribution. Indeed, variations of the Creative Commons license such as the Founders' Copyright[78] illustrate how the ideology is entrenched in a combination of traditionalist values and adaptability designed to operate smoothly with the efficient distribution that has been progressively evolving over and facilitated by the internet.

Commentators such as Elkin-Koren[79] and Broussard[80] have further questioned the ability of the licenses to recognise and preserve the financial remuneration and recognition that motivate creators and authors. This has been countered by Lessig[81] who points out that copyright until relatively recently has proven successful with traditional models via a far shorter term of protection and an opt-in system whereby copyright would only be applicable if it was registered by the author. Thus, the Creative Commons licenses restore this narrower but no less valid protection left behind by the constant movement of copyright regulation towards automatic registration and longer terms. Indeed, these criticisms also fail to take into account the plethora of alternative revenue streams that are provided for through new digital distribution models and efficient distribution models that rely upon the network effect and indirect funding, inter alia. By allowing free non-commercial distribution with attribution to take place under any of the core licenses, the network effect will always be fed, increasing brand awareness, desirability and sales of associated finite products and services. This approach also allows for indirectly supported funding to be accrued through advertising and subscription-based models. For example, if a television programme containing product placement was released under a license containing a no derivate works term, such as CC BY-ND, the programme could be freely shared increasing the value of the advertising within the programme while providing legal protection against removing or otherwise interfering with the advertising.

If other criticisms that suggest that Creative Commons licenses are not as open or as compatible as comparable software licenses or even the physical commons itself[82] are answerable with the response that the regime provides a middle ground between the all rights reserved of copyright and the no rights reserved of the public domain[83], the last substantive critique left standing is the submission that the appropriate mechanism for creating an intellectual commons designed to provide an alternative to or extension of copyright is the political sphere as opposed to "legal professors setting them down on pieces of paper"[84]. This criticism suggests that regulations should only originate from the political sphere, but the Creative Commons movement has nevertheless already accrued political awareness and affirmation through its alternative route. The Creative Commons licenses have been afforded validity, recognition and enforceability under European common law[85],

[77] L Lessig, *Free Culture: How Big Media Uses Technology And The Law To Lock Down Culture And Control Creativity* (Penguin Press, New York 2004).
[78] See 'Founders' Copyright' (Creative Commons 2010) <http://creativecommons.org/projects/founderscopyright/> accessed March 2011.
[79] N Elkin-Koren, *The Future of the Public Domain - Creative Commons: A Skeptical View of a Worthy Pursuit* (Kluwer Law International, Leiden 2006).
[80] SL Broussard, 'The Copyleft Movement: Creative Commons Licensing' (2007) 26(3) Communication Research Trends 3.
[81] L Lessig, 'The Creative Commons' (2004) 65 Montana Law Review 1.
[82] See, for example, N Elkin-Koren, *The Future of the Public Domain - Creative Commons: A Skeptical View of a Worthy Pursuit* (Kluwer Law International, Leiden 2006); & D Berry and G Moss, 'On the "Creative Commons": a critique of the commons without commonality' (2005) 5 Free Software Magazine 5.
[83] L Lessig, 'The Creative Commons' 65 Montana Law Review 1.
[84] D Berry and G Moss, 'On the "Creative Commons": a critique of the commons without commonality' (2005) 5 Free Software Magazine 5.
[85] See *Adam Curry v Audax Publishing B.V.* (2006) Unreported 334492/KG 06-176 SR (District Court of Amsterdam (Summary Proceedings Court)), in which the claimant, Curry, published photographs on a website with an accompanying

and have further been adopted as the standard licenses for public sector information by the governments of Australia[86] and the US[87]. Relying on the political sphere to produce regulations is often tempered by its susceptibility to lobbying from wealthy corporations that can drown out the interests of the collective majority, and is also impeded by the lack of technical expertise inherent in government. Those who have chosen to construct and maintain the Creative Commons licenses are enthusiasts of technology and largely academically qualified in law, and therefore have the understanding of the technical and socio-legal aspects of the internet and its associated digital world to grant them the capability of recognising new models and the good that can be achieved through a more open version of copyright. If there is criticism to be made over the origins of the Creative Commons, it is to be directed not at those who have taken the impetus to suggest a robust and realistic opening of licensing, but at the legislature for failing to create such regulations itself. Simply put, the Creative Commons currently plays host to the most convincing compromise between the ideologies of pure public domain and cyber socialism, and the artificially restrictive monopoly granted by copyright legislation.

6.3. Adopting the Creative Commons

Farchy[88] suggests that the three most prominent critiques of copyright legislation lie in the fact that as copyright is at the root of access limitation, it is consequently responsible for the under-use of the pool of existing resources and works[89]; that copyright regulations favour the interests of intermediaries and the big media industries who abuse their position at the expense of the artists and creators[90]; and that ultimately any form of protection that is excessive will inevitably decrease social wellbeing[91]. If the Creative Commons licenses are to be the solution to these criticisms, they must be more fully embraced and recognised. Fitzgerald[92] points out that law reform and new business models should consider the relationships between both commercial and non-commercial interests in the online domain, and that this can be achieved through the encouragement of Creative Commons licensing. It is further suggested that that such licenses being compulsory would be a more desirable option than the continuing criminalisation of everyday internet users carried out as a substitute to offering new business models[93]. Tamura[94] suggests several alternatives, the first being the restoration of earlier copyright legislation that did not grant automatic protection so that newly created works would fall into the public domain unless the creator registers the work, or the adoption of a Creative Commons license as the default protection offered automatically to new works[95]. Less drastic alternatives are also suggested, namely limiting the scope of copyright protection only within the digital sphere, or the reduction of the copyright term so that copyright protection will be decreased unless the rights holder applies for an extension and pays a stipulated fee. Finally, Litman[96] suggests that copyright infringements should only be found to exist in instances of large scale or commercial use of a work that are conclusively shown to deprive the rights holder of measurable income that is not negligible in scale.

CC BY-NC-SA license, but which the defendant then published without permission in a commercial magazine without attaching the same terms. The court held that the license was valid. The enforceability of open source licenses was also recently recognised under US law in *Jacobsen v. Katzer* (2008) 535 F.3d 1373 (Fed Circuit (US)).

[86] A Fitzgerald and K Pappalardo, 'Australia: Public Sector - Freedom of Information' (2009) 15(7) Computer and Telecommunications Law Review 203.

[87] F Benenson, 'Creative Commons - The Story So Far' (2009) 188 Copyright World 12.

[88] J Farchy, 'Are free licenses suitable for cultural works?' (2009) 31(5) European Intellectual Property Review 255.

[89] RA Eissenberg and MA Heller, 'Can patents deter innovation? The anti-commons in biomedical research' (1998) 280 Science 698.

[90] R Bettig, *Copyright culture: the political economy of intellectual property* (Westview Press, Colorado 1996).

[91] B Depoorter and F Parisi, 'Fair use and copyright protection: a price theory explanation' (2002) 21 International Review of Law and Economics 453.

[92] B Fitzgerald, 'Copyright 2010: The Future of Copyright' (2008) 30(2) European Intellectual Property Review 43.

[93] Ibid 47-48.

[94] Y Tamura, 'Rethinking copyright institution for the digital age' (2009) 1 WIPO Journal 63.

[95] Ibid 73.

[96] J Litman, *Digital Copyright: Protecting Intellectual Property on the Internet* (Prometheus Books, New York 2009).

These ideas do not come without their pitfalls. For example, while lowering the level of copyright protection unless a work is registered by the rights holder with a responsible governmental body in exchange for a fee would offer some incentive against needlessly extending protection for works that are no longer financially viable, there is a risk that such a system would favour the larger corporations in that these bodies tend to have the disposable income to plough into such endeavours regardless of utility. Any reduction of copyright protection across the board is also likely to be met with phenomenal resistance from the very same corporations that have so far successfully persuaded the legislature to enforce the precise opposite, and thus remains an unrealistic prospect. However, the notion of reducing copyright protection purely for the digital sphere is compelling in that it recognises the fundamental differences between the physical world and digital world markets, and the application of a Creative Commons license by default would ensure that basic protections are always guaranteed without impeding efficient digital distribution models. Similarly, where full copyright protection does still exist, only recognising as an infringement any such activity that is shown to be commercial in nature or shown to de facto affect the economic opportunities of the rights holder has the advantage of baring similarity to the existing terms of the CDPA that distinguish civil infringements from criminal offences[97]. It would be particularly useful to stipulate the definition of affecting economic opportunities more precisely than has been done with the test of prejudicial affect in the CDPA[98] so that the somewhat long-lost spirit of the test could be restored. Indeed, a clarification of the burden and standard of proof so that rights holders are required to demonstrate that loss or financial harm has in fact been suffered because of an infringement would surely be preferable than the blind acceptance of the wealth of unverifiable "research" with hidden methodologies and data sets currently offered by the industries that purports to make such claims.

Taking into account the fact that any reduction in copyright term or protection is unlikely in the near future, the least radical way forward would be to grant Creative Commons licenses some form of statutory recognition alongside the existing copyright framework. The fact that current copyright protection is essentially an automatically applied super-license in tandem with the fact that Creative Commons licenses have already been recognised under common law mean that such a change will make little difference in terms of the legal validity of the CC licenses. However, by affording them a statutory basis, the public awareness of the licenses and their terms can be increased, which could encourage more creators to choose to utilise them. Criticisms that the multiple forms of license are too complex[99] could be addressed by promoting awareness of the terms – the truth that all CC licenses allow free non-commercial distribution is a simple message, and the few remaining terms only become relevant when a user wishes to make a more advanced use of a work. Although this approach is not as desirable as that that would combine statutory recognition of CC licenses with a relaxation of existing copyright protection in the digital domain, it is unfortunately the only option that is, in the contemporary legal and political climate, even remotely realistic.

7. Conclusion

Although use of the internet is becoming increasingly widespread[100], there remains a significant gulf between the varieties of skill levels possessed and the behaviour exhibited by internet users. Indeed, to a large extent the ideology of online freedom and the operation of new distribution and revenue models rely on this disparity. It may appear at first glance that the ideals of cyber socialism and the open internet seek to equalise access to the

[97] See, for example, CDPA 1988 s.107(1) which provides that what would otherwise be the civil infringement of making or dealing with infringing articles becomes a criminal offence if done in the course of a business or is done "otherwise than in the course of a business to such an extent as to affect prejudicially the owner of the copyright".
[98] Ibid.
[99] For example, Tamura points out that "even when many creators consider the current copyright protection to be too strong and pervasive, and thus want to use the Creative Commons license scheme, some of them may not fully understand all the terms and conditions of such licenses or can feel troublesome to learn how to utilise particular marks"; see Y Tamura, 'Rethinking copyright institution for the digital age' (2009) 1 WIPO Journal 63, 73.
[100] ONS, 'National Statistics Omnibus Survey' (Office of National Statistics 2009) <http://www.statistics.gov.uk/cci/nugget.asp?ID=8> accessed March 2011.

internet so that every person enjoys the same technical knowledge and de facto access, but this would in fact have significant ramifications for many of the alternative avenues of funding suggested in the efficient distribution models discussed in this paper that have ostensibly been fashioned around a co-habitation of the capitalist physical world alongside the freer realm of cyberspace. Provided there is and as long as there will be two distinct categories of person in the physical world, namely those who are able to access the internet and those who cannot or do not, and as long as there lie further sub categories among the former category of user that will together pursue their goal of behaving as if a state of cyber socialism exists regardless of the status of the law, the likelihood will remain that this group will go on sharing files via the internet while, in the physical world, creators will continue to be provided with sufficient incentive to continue creating through their ability to accrue either value for their work or an indirect economic benefit from their labour through alternative and indirect revenue models.

In practical terms, it would be unrealistic to expect the legislatures of the world to adopt a regulatory approach that expressly encourages a state of pure cyber socialism to exist in cyberspace within the foreseeable future, whether through fear of the unknown, a fundamental misunderstanding of the differences between the virtual and the physical world, or simply because they believe rather too much of what the entertainment industries tell them without supporting evidence. The risk is greatening that, with the advent of the Digital Economy Act 2010, domestic law is moving increasingly towards the DMCA-style of American conservatism. Yet the very basis of the internet indicates that this is the wrong direction. If regulators were to at least embrace the minimalist stance offered by the learning society by widening the focus of copyright to encompass the flexible approach of the Creative Commons, then the original spirit of the Statute of Anne as being "An Act for the Encouragement of Learning"[101] could be maintained. To best uphold this spirit, the legislature should recall the traditional focus of the regulation in this area which concentrated upon the bargain between the author (or creator) and the consumer (or the user), as opposed to overemphasising the sole interests of intermediaries such as distributors and publishers. The relaxing of copyright laws to enable freer sharing of information for non-commercial purposes would refocus the regulation upon the interests of both creators and consumers, and would also allow the internet and cyberspace to continue to grow and evolve unimpeded by the shackles of the past.

[101] Copyright Act 1709, 8 Anne c.19.