THE MORAL PREFERENCE FOR DRM ORDERED MARKETS IN THE DIGITALLY NETWORKED ENVIRONMENT

John Cahir*

I. INTRODUCTION

Conventional wisdom holds that rapid innovation in digital technology and distributed communication systems experienced over the past twenty years threaten the economic interests of traditional information and entertainment producing industries. It is also commonly accepted that these threats justify a strengthening and expansion of existing copyright laws. In this paper these assumptions will be challenged, and it will be argued that, in the digitally networked environment, the time has come to think about abandoning the publicly ordered copyright regime in favour of information markets ordered exclusively around the use of digital rights management (‘DRM’) technology and contract.

Doubts as to the moral justifiability of copyright law have persisted throughout its history. In Anglo-American jurisprudence the continental basis for copyright protection – the author’s natural right to property in his work – has been largely rejected (and rightly so) for reason of its intellectual incoherence. Consequently we have been forced to rely on a mixture of pragmatic utilitarianism and rhetoric to justify the continued existence and expansion of our copyright laws. Critics, who are prepared to admit to the obvious flaws of the utilitarian case for copyright, tend nevertheless to conclude that copyright laws on balance cause no real harm and that the status quo is therefore best left unchanged.

This paper argues that copyright laws do, on their face, infringe persons’ rights by imposing burdens on the exercise of bodily liberty and tangible property rights. It is nonetheless conceded that despite the clear moral position, the reluctance to reform copyright laws is understandable. Many industries and jobs rely on them (though not to the extent commonly believed), and their negative effects have been sufficiently diffuse so as not to spark a public revolt. While such considerations provide no

* Queen Mary Intellectual Research Institute, University of London.

1 Governments the world over have duly obliged by passing expansive new copyright laws, viz the WIPO Internet Treaties 1996 [WIPO]; the Digital Millennium Copyright Act 1998 [United States]; and 2001/29/EC of the European Parliament and Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society [European Union].


5 This is probably no longer true of the online environment where the use of peer-to-peer technology to illegally share music files amounts to civil disobedience on a scale hardly imaginable by David Thoreau. The most recent (4 January 2004) survey by the Pew Internet
excuse for rights violations, they do explain why the prospect of extensive copyright reform is, as a matter of practical politics, extremely remote. Below it will be argued that DRM technology is a possible solution to the exigencies of real politick. By making privately ordered information markets more viable they can alleviate fears of a cultural and economic meltdown and thereby enable us to confront, with greater confidence than ever before, the morally dubious foundations of copyright law.

The main aim of this paper is therefore to establish the moral preference for a DRM ordered information market over one ordered by copyright law. Part II will trace the utilitarian ‘public interest serving’ structure of traditional copyright and will point out some of its obvious flaws. Part III will present the liberty based (libertarian) case against copyright law, and will argue that individual rights outtrump flawed utilitarian predictions and therefore render copyright law morally unsound. Part IV will explain how the application and use of DRM technology can be defended insofar as it does not violate the rights of others. Finally Part V will be a conclusion section.

II. COPYRIGHT AND THE PUBLIC INTEREST

A. THE PUBLIC INTEREST NARRATIVE

In Anglo-American and, to a lesser extent, continental jurisprudence the narrative of the ‘public interest’ has long animated copyright legislation and judicial decision-making. It has done so along two opposing vectors: (a) as a justification for copyright protection itself and (b) as a justification for limiting the effects of copyright protection on individual users of copyright works. The dominant historical role of the public interest narrative has, however, been along the first vector. It should be remembered that in the ‘state of nature’ prior to promulgation of copyright laws that individuals are at liberty to reproduce and communicate works that lawfully come into their possession (subject to any contractual and/or fiduciary duties to the contrary). It is generally feared that such a liberal regime will lead to an underproduction of copyright works, and that therefore it is in the public’s own interest that its communicative freedom be limited: the public, in other words, needs to be protected from itself. The economic effect of copyright law is well known: it stimulates investment in creative activities, the product of which – information and knowledge –

& American Life Project shows that 14% (18 million) of American Internet users download music via these devices: http://www.pewinternet.org/reports/pdfs/PIP_File_Swapping_Memo_0104.pdf

6 For a history of the role played by the public interest narrative in UK copyright see G. Davies, Copyright and the Public Interest (London: Sweet & Maxwell, 2002, 2nd ed), and in relation to US copyright law, see L. Patterson, Copyright in Historical Perspective (Nashville: Vanderbilt University Press, 1968). In continental Europe the narrative of author’s individual rights has tended to exercise a greater influence over copyright law development.

7 Arguably a third (less significant) emanation of the public interest narrative in copyright law is evident in the doctrine that denies copyright protection to works that are deemed not to be in the public interest: see O. Morgan, ‘Copyright, the Public Interest and Content Restrictions’ (2003) 8 Media and Arts L Rev 213.

8 For a more detailed analysis of the legitimate means for controlling creative works in the absence of copyright law, see Part III(E) below.

9 Justice Holmes reasoned that copyright ‘restrains the spontaneity of men where but for it there would be nothing of any kind to hinder their doing as they saw fit’ – White Music Publishing Co v Apollo Co (1908) 209 US 1 at 19.

10 See generally, R. Watt, Copyright and Economic Theory: Friends or Foes? (Cheltenham: Edward Elgar, 2000).
once available for dissemination is presumptively regarded as conducive to the public interest.

A review of court decisions and legislative materials shows that governments and the courts of the developed world regularly invoke the public interest narrative when called on to defend copyright protection. The US Supreme Court, in commenting on the copyright clause of the US constitution, has stated its rationale in the following terms: \(^{11}\)

> The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of author and inventors in “Science and useful Arts”.

While there is no equivalent constitutional provision in UK law, the Whitford Committee expressed the UK position in similar terms: \(^{12}\)

> It is always hard for those brought up to believe in competition as the most beneficent market force, to realise that the exclusive rights which are granted by national copyright, patent, trade mark and design laws are granted because it is in the public interest to grant them. And the greater the extent to which these rights are devalued the less the benefit to the public interest.

Finally the European Parliament and Council have linked robust and harmonised copyright protection with the fostering of an information society in Europe: \(^{13}\)

> [Whereas] a harmonised legal framework on copyright and related rights, through increased legal certainty and while providing for a high level of protection of intellectual property, will foster substantial investment in creativity and innovation, including network infrastructure, and lead in turn to growth and increased competitiveness of European industry, both in the area of content provision and information technology and more generally across a wide range of industrial and cultural sectors. This will safeguard employment and encourage new job creation.

While utilitarian considerations are not the sole animating theme of copyright jurisprudence, they have tended to dominate theoretical debates. The argument that an author’s right to control dissemination of a work is an end in itself has rarely been advanced in isolation from appeals to the public interest. Even in France where exaltation of ‘author’s rights’ is most pronounced, the historical record shows that a strong ‘instrumentalist undercurrent’ influenced the revolutionary French copyright system (the earliest continental copyright system), and continues to do so today. \(^{14}\)

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\(^{11}\) *Mazer v Stein* 347 US 201 (1954).

\(^{12}\) *Copyright and Design Law: Report of the Committee to Consider the Law on Copyright and Designs*, chaired by Mr Justice Whitford of March 1977 (Cmd 6732, paragraph 84). The Whitford Committee was established by the government to carry out a full review of UK copyright law; many of its recommendations were given effect in the Copyright, Designs and Patents Act 1988.


In contemporary debates about the role of copyright law in society the public interest narrative along the first vector has continued to exert influence because of the perceived importance of intellectual property rights to the economic health of information-based economies. The paragraph from the European Copyright Directive quoted above indicates the extent to which strong copyright laws have become conflated with economic growth and hence the public interest. The constant mantra of governments and producer interests is that in the absence of such protection investment will shrivel up, culture will wither and jobs will be lost. It would seem that the public interest narrative along the first vector is so embedded in the consciousness of legislatures and the judiciary that its truth-value and its continuing relevance are rarely questioned in policy-making circles. Furthermore its truth-value is presumed to be impervious to developments wrought by technological change.

The public interest narrative along the second vector, i.e. as an argument for limiting the impact of copyright protection on users of copyright works, has become particularly evident in recent debates surrounding the expansion of copyright protection. Numerous authors have drawn attention to the excesses that can result from enforcement of copyright laws. In this incarnation, the existence and ultimate justification of copyright laws are taken as given whereas the interest of the public in their role as consumers/users of copyright works is posited against the private interests of copyright owners (i.e. in their role as owner-producers). Along the first vector the ‘public interest’ is the reason for introducing copyright laws, and it is generally not perceived as conflicting with any other countervailing interest. Along the second vector, it is an opposing force, which needs to be placed at the opposite end of the scales to the private interests of copyright owners.

The rise in prominence of the public interest narrative along the second vector is evident in both government pronouncements and academic writings. For instance the preamble to the WIPO Copyright Treaty expressly recognises the ‘larger public interest’ in ‘education, research and access to information’. In legal scholarship the exceptions to copyright infringement such as those contained in Part 1, Chapter III of the Copyright, Patents and Designs Act 1988 are generally regarded as upholding public interest values.

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15 The conflation of the economic performance with robust copyright laws is not of course a uniquely European phenomenon. For instance, in the US the Intellectual Property and the National Information Infrastructure: Report of the Working Group on Intellectual Property Rights chaired by Bruce Lehman (Washington: Library of Congress, 1995) at 10 states that ‘the full potential of the NII [National Information Infrastructure] will not be realised if the education, information and entertainment products protected by intellectual property laws are not protected effectively when disseminated via the NII’.

16 E.g. Recital 5 of Directive 2001/28/EC states: ‘Technological development has multiplied and diversified the vectors for creation, production and exploitation. While no new concepts for protection of intellectual property are needed, the current law on copyright and related rights should be supplemented to respond adequately to economic realities such as new forms of exploitation.’


18 The libertarian case against copyright of course holds otherwise, see Part III below.

19 WIPO Copyright Treaty as passed on 20 December 1996.

20 E.g. K. Garnet et al, Copinger Skone James on Copyright (London, Sweet & Maxwell, 1999) at 30 state that ‘There is always a concern to balance the interests of the author in
they are, are said to advance the public interest in having ready access to educational resources. The fair dealing provisions in relation to criticism and review promote freedom of expression interests. The public interest narrative along the second vector embraces therefore a number of distinct values, each of which is potentially frustrated by enforcing the exclusive rights that are conferred by copyright law.

The existence of a clash between the private interests of copyright owners and the interests of the public at large places political economy on more familiar terrain. Indeed in many respects the narrative borrows from the dialectic of the industrial economy: one has owner-individuals pursuing their self-interest on the one hand and consumer-public asserting their collective interests on the other. It seems paradoxical however that the amorphous public interest can ground (private) rights of copyright holders, while at the same time serving as the rally cry for those opposed to its more egregious effects. It suggests that there is an inherent irreconciliability between the public interest along the first and second vectors, and that as soon as the government intervenes to promote one manifestation of the public interest that it will automatically offend the other. This is hardly surprising; the 'public interest' is a term of art, one incapable of providing a solid theoretical framework in which rights and duties with respect to the use and communication of expressive works are defined. Below, I will argue for the rejection of both manifestations of the public interest narrative, and for the reformulation of the issue in terms of individual rights. When the entitlements of authors, publishers and consumers are justified by reference to their respective individual rights and powers, the public interest narrative becomes superfluous rhetoric.

B. AGAINST THE PUBLIC INTEREST

In Part III below, I will present the principled moral case against copyright protection, here I merely want to draw attention to some of the more obvious difficulties with a law, whose foundation, and ultimate justification, rests on utilitarian premises. It may seem exceptionally contrarian to proclaim oneself to be 'against the public interest'. The fish I want to fry, however, is not the general aspiration that society should conduce with the public interest (whatever that may be); rather it is the ideology, which ignores rights and individual liberty, and encourages laws to be passed provided that they are predicted on the achievement of some non-individuated socio-economic outcome.

1. Utilitarianism: A Contested Ideology

Copyright jurisprudence appears to be largely oblivious to developments in ethical theory that have taken place over the past fifty years. As described above, copyright in the final analysis rests its case on the claim that it advances the public interest in having abundant creative works available for public consumption. Copyright law is not concerned with advancing the right, but the aggregated good. Such an overtly utilitarian ideology is at odds with contemporary approaches in ethical theory that favour deontological over utilitarian reasoning.

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The principal objection to utilitarianism is, to quote John Rawls, that ‘it does not take seriously the distinction between persons’. Utilitarian theories justify rules (such as copyright law) provided that they result in a maximisation of the good (however that is defined). Generally speaking utilitarianism is not concerned with either (a) how the benefits of the resulting good are distributed, or (b) whether individual rights are violated in the process of achieving the maximal outcome. Rawls advanced his ‘justice as fairness’ principle as species of deontological theory that was sensitive to distributive outcomes.

The other leading political philosopher of the late twentieth century – Robert Nozick – while disagreeing with Rawls on most issues, also rejected classical utilitarianism. Nozick argued that moral side constraints, specifically the injunction against violating libertarian rights to bodily integrity and justly acquired property, act as absolute limitations to goal-directed actions. In other words, individuals or groups are free to pursue their own goals provided that they do not violate the rights of other people. It follows that laws should not be passed when they are predicated on achieving a goal at the expense of persons’ rights. In the remainder of this paper I will approach the issue of copyright law’s justifiability by adopting Nozick’s ethical framework. To the extent that copyright law grants entitlements (entitlements which are not themselves justified by libertarian rights theory) that necessitate the violation of persons’ rights, copyright law shall be found to lack moral legitimacy.

2. Public and Private Confusion

Another serious problem with grounding private rights in appeals to the public interest is that once granted the public interest background tends to be forgotten and beneficiaries of such rights, and those enforcing them, end up believing that they were granted exclusively for the purpose of protecting their individual interests. Jeremy Waldron has observed that ‘[i]t seems psychologically unavoidable that rights grounded in utility will be taken as ends in themselves’. This public/private confusion is a ubiquitous feature of copyright jurisprudence. Some judges think that the purpose of copyright law is to advance the non-individuated public interest, whereas others think that the purpose of copyright law is to secure the private interests of authors and publishers.

The fact that judges often treat ‘public interest’ serving rights as unadulterated private rights is perfectly understandable. In private disputes they are concerned with applying corrective justice inter partes and not with achieving some far-off public bonanza. To expect a judge to keep a watchful eye on some unspecified goal would run contrary to the internal logic of private law. For instance, a strong argument can be made that it is only in the public interest that copyright protection be

24 ibid at Chapt 1.
26 ibid at 28-35.
28 Contrast Hall VC in the early case of Hogg v Scott (1874) LR 18 Eq. 444 wherein he stated that the true principle behind copyright law is that ‘the defendant is not at liberty to use or avail himself of the labour which the plaintiff has been at for the purpose of producing his work’ (labour-based natural right theory) against the utilitarian language of the US court in Mazer v Stein (supra note 12).
conferred on works of a high aesthetic or functional quality: what public good after all is served by encouraging the production of dross? Yet common law judges strongly reject the idea that assessing the merit of a work falls within their judicial function.\textsuperscript{30} From the perspective of their proper role as judges they are undoubtedly correct; but whether such conclusions advance the public interest is a separate matter.

3. The Public Choice Conundrum

Another endemic problem with an approach that demands legislative action for the promotion of murky public goals is that it opens the door to ‘public choice’ abuses.\textsuperscript{31} Public choice theory, as developed by James Buchanan, Gordon Tullock and others, holds that individual legislators and bureaucrats operate as self-interested utility maximisers in a similar way to private operators. While they are supposed to work in the public interest, putting into practice the policies of government as efficiently and effectively as possible, public choice theorists see public officials as being influenced to a greater or lesser extent by patronage and concern for their own political, financial and reputational gains. Regulatory capture is therefore an inevitable feature of governmentally regulated economic and social spaces.

The historical literature on copyright legislation indicates that the practice of making copyright law is particularly prone to regulatory capture. In the United States, for instance, it would appear that for most of history copyright laws were in fact written by content industries and vested interest groups such as libraries.\textsuperscript{32} In the European context one commentator has said that the recent Information Society Directive involved ‘unprecedented lobbying’, ‘bloodshed’ and the ‘hounding of EC and governmental officials’.\textsuperscript{33} Public choice theory may be thought to be an unduly pessimistic ideology; it nevertheless alerts us to the folly of thinking that the ‘public interest’ has any really chance of achieving success through the political process. It is most likely that a copyright law crafted by legislators will come to reflect the interests of beneficiary industries and organised lobby groups. The public interest will therefore only be advanced to the extent that it coincides with their interests and will be damaged to the extent that it does not.

III. COPYRIGHT’S COLLISION WITH LIBERTY

A. ON LIBERTY

Libertarianism is the branch of moral philosophy which holds that individuals fully own themselves and have moral powers to acquire property rights in external things under certain conditions.\textsuperscript{34} These rights of self-ownership and property set the limits of permissible non-consensual force, and in particular, define the extent to which state action in social and economic affairs is justified. State action, i.e. non-consensual force, is permissible only to the extent necessary to prevent the violation of persons’ rights and to impose rectification for when such violation occurs. Nozick summed up libertarianism’s spirit in the following terms: ‘Individuals have rights, and

\textsuperscript{30} Per Peterson J in University of London Press v University Tutorial Press [1916] 2 Ch 601.
\textsuperscript{32} J. Litman, Digital Copyright (New York: Prometheus Books, 2001).
there are things no person or group may do to them (without violating their rights). Here I will demonstrate that libertarianism and natural rights theory do not support property rights in abstract objects, such as those works protected by copyright law.

Libertarianism is in general opposed to non-consensual distributions of private property, but supportive of voluntary giving. It is fair therefore to describe it as a ‘pro-individual’ and an ‘anti-government’ doctrine. Libertarianism supports free markets neither because they are economically efficient nor because they can be said to reward the meritorious, but instead because they are a form of economic organisation that does not conflict with the enjoyment of natural rights. The fact that a libertarian society may be conducive to the public interest is to be welcomed, but is not in itself the justification for recognising and protecting individual rights.

In this section I will not provide any more detailed treatment of the underlying ethical basis of libertarianism, a matter which has been adequately dealt with elsewhere. My principal aim is to assess the extent to which bodily and tangible property rights are violated by copyright laws. If that much is established, I believe that the argument in favour of copyright law is, from a moral perspective, undermined. Copyright laws in their current form, as will be shown, have no moral beg on which to hang themselves, therefore their justifiability evaporates once they are shown to conflict with the enjoyment of natural rights. Likewise, the goal of increasing the amount of informational works available for public consumption cannot be justified if the means employed offend other persons’ rights.

B. EXISTING LIBERTARIAN PERSPECTIVES ON COPYRIGHT LAW

Early writers in the libertarian tradition were divided over the issue of copyright law’s moral justifiability. Nineteenth century American constitutional scholar, Lysander Spooner, believed that men have a natural right to property (arising either from occupation or labour) and that this right may extend to all forms of ‘wealth’. He reasoned that ideas and expressive works are properly categorised as wealth, and hence that they too are susceptible to individual appropriation. The law that vindicates property rights in such immaterial objects, i.e. intellectual property law, is therefore justified. In a somewhat apocalyptic outburst, Ayn Rand writes that ‘patents and copyrights are the legal implementation of the base of all property rights: a man’s right to the product of his mind’ and that ‘once they are destroyed, the destruction of all other property rights will follow automatically, as a brief postscript’. She failed to reconcile this statement with the fact that tangible property rights existed for millennia prior to the adoption of patent and copyright laws around the time of the industrial revolution. In his brief comments on intellectual property, Nozick is uncharacteristically coy. He concludes that the issue of the justifiability of patents and copyrights is one of those subjects upon which libertarians may have legitimate

35 Nozick, supra note 25 at ix.
36 A variant of libertarianism – left libertarianism – does permit some elements of redistribution on the grounds that unappropriated natural resources belong to everyone in common, and that appropriations thereof give rise to a compensatory duty, e.g. M. Otsuka, ‘Self Ownership and Equality, A Lockean Reconciliation’ (1998) 27 Philosophy and Public Affairs 65.
37 See Nozick, supra note 25 at Chapts 3 to 6.
differences and therefore leaves the matter unresolved.\textsuperscript{41} It is clear however, that a
vein of libertarian scholarships lends support to full-blooded legal protection of
intellectual property rights, including copyright.

The opposite line of scholarship can be traced to the Jacksonian political theorist,
William Leggett, through Frederick Hayek and most recently to Tom Palmer. Leggett,
who was writing during the time when the issue of extending copyright protection to
foreign authors was taking place in the United States, opposed copyright protection
for two reasons.\textsuperscript{42} First, he argued that copyright stifles the free spread of ideas and
is therefore imimical to the public interest. Secondly, and more importantly for present
purposes, he argued that to claim ‘property’ rights in incorporeal objects necessarily
means condoning infringements of other persons’ natural rights, a position that he
viewed as incompatible with liberty. Furthermore he argued that this was a peculiarity
of incorporeal property rights, as no such infringement of individual rights occurs
when one recognises and enforces a natural right to corporeal property. Hayek’s
sceptical views on intellectual property are worth spelling out:\textsuperscript{43}

\textit{The slow selection of trial and error of a system of rules delimiting individual
ranges of control over different resources has created a curious position. Those very intellectuals who are generally inclined to question those forms of
material property which are indispensable for the efficient organisation of the
material means of production have become the most enthusiastic supporters
of certain immaterial property rights invented only relatively recently, having to
do, for example, with literary productions and technological inventions (i.e.
copyrights and patents).

The difference between these and other kinds of property rights is this: while
ownership of material goods guides the use of scarce means to their most
important uses, in the case of immaterial goods such as literary productions
and technological inventions the ability to produce them is also limited, yet
once they have come into existence, they can be indefinitely multiplied and
can be made scarce only by law in order to create an inducement to produce
such ideas. Yet it is not obvious that such forced scarcity is the most effective
way to stimulate the human creative process.}

Hayek doubted the validity of intellectual property rights firstly on the basis that they
are not products of an evolutionary social process.\textsuperscript{44} Second, he classified them as
examples of ‘forced scarcity’ (rather than \textit{bona fide} property rights) and questioned
whether they were an effective means of achieving their alleged goal of stimulating
the human creative process.

Tom Palmer’s article on the moral justifiability of patents and copyrights is the most
thorough analysis of copyright’s ethical foundations from the libertarian perspective.\textsuperscript{45}

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\textsuperscript{41} Nozick, \textit{supra} note 25 at 141. Later on he suggests that, assuming patents are permitted,
that there duration should be limited to approximately how long it would have taken, in the
absence of knowledge of the patented invention, for independent discovery of the same
invention (p.182).
\textsuperscript{42} W. Leggett (L. White (ed.)), \textit{Democratick Editorials: Essays in Jacksonian Political
Economy} (Indianapolis: Liberty Press, 1984)
\textsuperscript{44} Evolutionary epistemology was an important theme throughout Hayek’s work, see F.
\textsuperscript{45} Palmer, \textit{supra} note 38. See also, T. Palmer, ‘Intellectual Property: A Non-Posnerian Law
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Having surveyed both libertarian traditions, he comes firmly down on the side of the view that copyright law lacks moral legitimacy. Central to Palmer’s argument is an analysis of the ontology of abstract objects, such as literary works, which copyright law purports to protect. He points out that the objectivity of these entities, i.e. their existence as something external to human subjects, is of a fundamentally different character to the objectivity of material entities, like land and machinery. The latter’s objectivity does not require human perception as a contingent and contributory variable, whereas the former’s does. This is an important point. Once fixated in a material form (e.g. paper, or a computer hard drive) a creative work ceases to depend on their author’s mind for a continued existence, but after publication the audience’s experience of the work manifestly contributes to its objectivity. When listening to music, the listener’s aural and mental interpretation constitutes the composition’s objectivity. In contrast, a material entity such as a car requires no active mental operation or audience appreciation in order to have a fixed objectivity. The audience’s role in objectifying abstract entities means that if anyone is entitled to personal rights in a creative work it should be the audience, for they, and not the author, are necessary for its continued existence! Palmer concludes that because scarcity is a condition precedent for instantiating a private property regime that property rights in abstract entities, which are non-rival by nature, are without any legitimate moral grounding. Intellectual property rights are parasitic on bodily and material property rights, the obligations that they impose on third parties arise solely because a government has imposed them and they are therefore ‘exogenous to the internal logic of private law’. The fact that two groups of moral theorists, who agree on most other matters, can reach diametrically opposed conclusions on the issue of copyright law’s moral legitimacy, highlights the complexity of the moral questions raised by copyright law. Libertarians agree that utilitarian considerations are not a sufficient ground for legitimating private property rights in either material or abstract objects. Their divergence in approach arises because a labour-based natural rights argument lends superficial justification for a ‘property right’ in creative abstract objects. To claim that man has the right to own the fruits of his intellectual effort is intuitively appealing, and can understandably lead one to conclude that laws which purport to vindicate that right (copyright and patent law) are morally justified. The principle moral objection to this conclusion advanced by Palmer and others is that in order to vindicate such a right one necessarily infringes other person’s natural rights. However, the one crucial matter that their riposte fails to confront is the author’s claim to a natural right of some sort derived from labour in his work. If he has a legitimate property right the fact that it clashes with other persons’ natural right, is not a reason to deny his right outright, but a reason to find a just means of balancing conflicting legitimate claims.


46 Palmer, supra note 38 at 843-849.

47 Ibid at 848.

48 Ibid at 861. Most property theorists agree that scarcity is a pre-condition for establishing a system of private property, e.g. J. Waldron, The Right to Private Property (Oxford: Clarendon Press, 1988) at 31-32. Palmer has simply confronted the moral consequences of this premise


51 W. Gordon, An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement (1989) 41 Stanford L. Rev. 1343 at 1423 argues that all property rights compromise individual liberty and that copyright is no different in this respect. While this conclusion is correct it does not lead to the implication that copyright law is morally
Arguably copyright law achieves that goal, and if it does the libertarian critique is neutralised.

The source of all this confusion is the absence in existing literature of a clear understanding of the concept of property as applied to abstract objects. When property theorists state that mixing one’s labour with an unowned resource generates a natural right to property in the resulting product, they rarely explain what they mean by the word-locution ‘property’. In respect of material objects, defined as they are by clear spatial and physical qualities, this may not present too many difficulties: these same characteristics frame the content of property rights and correlative duties. Abstract objects have no such anchor points, so a moral intuition that one has a property right to them simply begs the question: what form is the property right to take? Copyright law certainly grants rights in abstract objects, but how can we know that these are the types of right that a labour-mixing act generates? To answer these questions we must identify the underlying interests that property rights serve in natural rights theory. Only then is it possible to sketch the contours of a legitimate property right (if there is any) in abstract objects.

C. PROPERTY IN MATERIAL AND ABSTRACT OBJECTS

Legal philosophers of the analytical school have developed a sophisticated conception of property over the past hundred years. Wesley Hohfeld famously dispelled the laymen’s belief that property involves some relationship between man and things in his canonical *Fundamental Legal Conceptions as Applied in Judicial Reasoning*, by showing how all legal relations can be viewed in terms of rights (broadly speaking) and correlative duties. A crucial feature of property rights is that they concern rights *in rem* as opposed to rights *in personam*. A right *in rem* is literally translated as a right in a thing; and it is said to bind the world at large. A right *in personam* is, in contrast, a personal right that binds only a specified person or group of persons. Hohfeld argued that with *in rem* property rights what is really involved is a multitude of *in personam* rights and duties. In other words when a person is recognised as owning an object the correct understanding of the legal relationships involved is that every non-owner owes the owner a duty that correlates with the property right, i.e. property consists of ‘multital’ rights and duties.

The second major contribution to the rights analysis of property was Tony Honoré’s essay, ‘Ownership’.* Honoré began with the proposition that ownership is generally recognised in law as the greatest possible interest in a thing which a mature legal system recognises. He then listed what he thought to be the necessary incidents of ownership – the right to possess, the right to use, the right to manage, the right to the income of the thing, the right to the capital, the right to security, the rights or incidents of transmissibility and absence of term, the prohibition of harmful use, liability to equivalent. As regards legitimate tangible and bodily rights; we permit restrictions on their fullest exercise only where there is a potential conflict with some other person’s legitimate tangible and bodily property rights. These limitations represent nothing more than a compromise between two equally legitimate set of entitlements. For copyright to enter the moral calculus it must be established a priori that it too is morally justified. If it is not there is no space for it at the ‘rights’ bargaining table.

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execution, and the incident of residuarity. Where a sufficient number of these incidents are present the term ‘owner’ may be rightfully invoked. The significance of Honoré’s approach is that it represents an attempt to define ownership (and by implication, property) from the perspective of what the owner may exclusively claim for himself in respect of an object. The focus is on the scope of the owner’s permitted activity, rather than the duty that is imposed on non-owners. While Hohfeld and Honoré approach property and ownership from different perspectives, the combination of their approaches was generally assumed in legal literature to be the authoritative statement on the property concept.

This ‘bundle of rights’ conception of property has been gradually retreated from over the past twenty years. The main charge made against it is that it, to quote Thomas Grey, ‘fragments property into a set of discontinuous usages’. When taken to its logical conclusion the Hohfeld/Honoré approach disintegrates the property concept into a collection of isolated legal relations. Property becomes a disconnected and confused abstraction. The most unsatisfactory side effect of the approach is that the connection between property rights and the object of those rights is severed. Hohfeld may have intended to dispel the misconception that property rights are anything more than a normative construct, however, in so doing he set in train a logic that removed altogether the factual element of the institution (the underlying thing).

The most noteworthy recent attempt at re-formulating a unified legal conception of property comes from James Penner. Penner has outlined a refreshingly simple formulation of the property concept as: ‘the right to property is a right to exclude others from things which is grounded by the interest we have in the use of things’. Most importantly he moves away from the multital view of rights and instead argues that the correlative of the exclusion right is a single ‘duty in rem’ that all others have not to interfere with the property of others. Penner’s ‘exclusion thesis’ has the advantage of simplicity and represents a significant improvement on the Hohfeld/Honoré bundle of rights approach. It offers an escape from the artificiality of imagining a myriad of legal rights and duties and from the hopeless task of listing the uses to which an owner may possibly make of property. The exclusion thesis agrees with Hohfeld that legal relationships are what constitute property rights, but reaffirms the natural view that the object of those relations (a thing) is what really determines the content of property rights. Penner has in effect recast the property concept to mean the duties that non-owners owe through things to others.

For present purposes two aspects of Penner’s approach to the property concept deserve attention. First we can reduce the institution of private property to the following two legal propositions: (a) the owner has a right to exclude others from the

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57 Ibid at 71. This is in fact an abridged version of Penner’s property definition. The full definition that also takes into account his ‘separability thesis’ states that property is, ‘the right to determine the use or disposition of a separable thing (i.e. a thing whose contingent association with any particular person is essentially impersonal and so imports nothing of normative consequence), in so far as that can be achieved or aided by others excluding themselves from it, and includes the right to abandon it, to share it, to license it to others (either exclusively or not), and to give it to others in its entirety’ (p.152).
object owned; and (b) non-owners are under a duty not to interfere with the owner’s enjoyment of that object. Secondly, we determine the extent of the right of exclusion and duty of non-interference by identifying the underlying interests that property rights serve. This second aspect of Penner’s approach incorporates the ‘interest theory’ of rights. The interest theory of rights states that a person is the bearer of a right when a duty is imposed in order to serve or protect his/her interests.\(^{59}\) An interest is some basic value that concerns the nature of an individual’s wellbeing. In other words, underlying all rights is some interest, which law and morality deem in need of protection.

With these principles in mind, we can begin to tackle the question: what sort of ‘property right’ (if any) does the act of creative labour generate in abstract objects? We need to first identify the interests that property rights in natural rights theory serve. Once that has been achieved we can begin to describe the nature and extent of the right of exclusion and duty of non-interference necessary to vindicate that interest. It should be noted that there is a direct connection between the interest underlying the property right, and the moral theory from which one justifies that right. We are only concerned with identifying the rights that labour-mixing may generate, believing that the utilitarian justification for copyright law is insufficient in itself; thus utilitarian considerations, like providing authors with incentives for future production, do not influence our conception of the underlying interest. Three possible interest theories present themselves: (a) a value theory of property rights; (b) an absolute control theory of property rights; and (c) a conflict theory of property rights.

### 1. Property and Value

One possible approach is to say that the purpose of recognising property rights in abstract objects is to ensure that the owner will be able to capture the ‘value’ of the object, or in economic language to internalise positive externalities that flow from the object once it is circulating in the marketplace.\(^{60}\) In this formulation the interest that property rights serve is the interest in reaping from what one sows.

A moment’s reflection reveals that this approach is anathema to a natural rights theory of property. What after all generates an object’s value? If the Ricardo-Marx labour theory of value had survived the nineteenth century we might perhaps afford it a second thought. The idea that labour has some objective quantifiable measure has, however, long been discredited by neo-liberal economics.\(^{61}\) Value is a socially created phenomenon, and in a market economy it depends on such factors as the activity (or nonactivity) of other producers, consumer demand and overall market liquidity.\(^{62}\) If, for example, I own a barrel of oil its value will be determined by inter alia

\(^{59}\) See J. Raz, ‘Legal Rights’ (1984) 4 Oxford J of Legal Studies 1. The opposing approach is the ‘choice theory’ as proposed by H.L.A Hart, Essays on Bentham (Oxford: Clarendon Press, 1982), at 174 –193, which argues that one only has a right when one has a choice in respect of the way in which a duty may be performed. The interest theory is nowadays the preferred approach in analytical jurisprudence.


\(^{61}\) The labour theory of value holds that the price of a good is proportional to the amount of labour that was necessary to produce it. The reason why it is wrong is (in brief): (a) it treats the cost of production as a constant, whereas in reality the cost of producing something is variable, being a function of the quantity produced; and (b) it assigns no role for consumer demand of a good in determining price and hence value. See generally, D. Friedman, Price Theory: An Intermediate Text (Ohio: Southwestern Publishing, 1990).

\(^{62}\) Hettinger, supra note 3 at 38.
the production quotas set by OPEC ministers, the geo-political stability of the Middle East, world economic growth and climatic conditions. Clearly none of these factors bear any relation to my labour act of extracting oil from the ground. If OPEC ministers decide to increase oil production and thereby reduce the market value of my barrel of oil, the idea that I ought to be able to sue them for the loss in value suffered is risible. There is no coherent ethical basis for drawing a direct connection between the nature and extent of property rights and the potential market value of the object to which they relate. The recognition of secure property rights may certainly facilitate entry into the market place, but that is not their primary purpose under natural rights theory. Far more important to the operation of a free market is a person’s power to make binding agreements and bargain transfers: matters that fall within a different field of ethical theory from property rights (see subsection E below).

Attempts to define property rights by reference to potential market value are even more problematic in the context of abstract objects. The non-rival nature of abstract objects means that the extent and effectiveness of property rights is one the principal determinants of their market value. If the term of copyright protection were to be reduced to five years from publication, the market value of many copyright works would plummet. Indeed, if copyright protection were to be abolished altogether, the market value of expressive works would arguably be zero. Because extent and effectiveness of property rights largely determine the market value of abstract objects, the argument that property rights should be framed to protect market value is wholly circular. Logically, the relationship between property rights and value must be as follows: (a) property rights are framed by reference to objective ethical criteria, which are blind to any potential market valuation of the object; (b) property rights so framed then become one of the constitutive elements of the object’s economic value. A value theory of property rights must therefore be rejected.

2. Property and Absolute Control

An alternative approach is to say that the interest that property rights in natural rights theory serve is the legitimate owner’s interest in maintaining exclusive absolute control over all uses of an object. Under this approach one identifies the object which is the product of one’s labour and one frames property rights so as to ensure that the owner may control all conceivable uses that bear a causal relationship to it. Superficially this approach appears faithful to a natural rights theory of property, even if in extremis: it guarantees that the owner and no one else has sole and despotic dominion over his justly acquired property. While this approach has some appeal, it too is flawed beyond the point of redemption.

First, we know that in respect of material objects, such as land, moveables and even our own bodies that this approach is not in fact followed in any mature legal system that respects private property rights. If I organise a horse race on my land, my property rights do not extend so far as to permit me to exclude my neighbours viewing the event, or reporting on it, from the vantage point of their land or a public viewing area. Similarly, the act of electronically communicating information about

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64 Support for this proposition comes from the well know Australian case of Victoria Park Racing and Recreation Ground Co v Taylor (1937) 58 CLR 479, where it was held that the plaintiff had no proprietary rights in a spectacle (horse race) that occurred on its land.
professional basketball games as they are in progress does not offend any property right of the playing field owner or game organiser. A consistent control theory of property rights would, however, deem such uses of one’s property as falling within the ambit of the owner’s protectable interests: sporting spectacles and information relating thereto are certainly causally connected to the owner’s property.

Secondly, we know that intellectual property law also grants far from absolute control over the beneficial uses of abstract objects. The exclusive rights granted by copyright law mainly prohibit communicative acts that the recipient of a protected work may make. Copyright law does not grant exclusive rights to experience a work: I may read a friend’s copy of a copyrighted book without infringing any property right of the author or publisher; I am also free to recall in my mind a favourite poem or song. Neither does copyright law grant the copyright owner exclusive control over the functional uses of information: making a chocolate cake from a copyrighted recipe does not infringe any property right.

The fact that positive law does not meet the demands of an absolute control theory is not, of course, determinative of the issue. It may be that existing laws fall short of the highest moral standards and should be reformed accordingly. It is submitted, however, that the de jure limitations to property rights in material and abstract objects referred to above hint at an underlying rational limitation on the extent of property rights. Control is important, but there is a point at which controlling uses of an object by means of in rem norms falls outside of the remit of legitimate property rights.

3. Property and Conflict

The conflict theory of property rights being advanced in this paper can be summarised as follows: under natural rights theory the interest that grounds property rights and their correlative duties is the interest in controlling all potentially conflicting uses of a thing. It follows that property rights are not justified to the extent that they protect non-conflicting uses of an object. It is called a ‘conflict theory’ because the act of mixing labour with an object only legitimates the recognition and enforcement of property rights in respect of potentially conflicting uses of that object. A ‘conflicting use’ is taken here to mean any use of a material or abstract object, whose use by another person reduces the owner’s own consumption opportunities. For instance, the act of entering onto someone else’s land without permission can be said to be a conflicting use because the trespasser’s presence reduces the amount of space available for occupation by the owner himself. On the other hand the act of admiring daffodils growing in a neighbour’s garden is a use of your neighbour’s land that in no way depletes his own flower gazing opportunities.

The moral reasons for excluding non-conflicting uses from the ambit of property rights require some teasing out. At its base, natural rights theory is concerned with justifying a de minimus protection of autonomous zones of space and material wealth from interference by other persons or the state. Central to the idea of interference,

Common law did not recognise such a right appurtenant to the racecourse owner, therefore there was no legal basis for claiming a monopoly over the spectacle.

65 So held by the United States Federal Court of Appeals: National Basketball Association v Motorola Inc (1997) 105 F.3d 841.

66 A number of decided cases support this proposition. In Foley (Brigid) Limited v Ellott [1982] RPC 433 it was held that the making of a knitted garment by following a set of textual and numeric instructions did not infringe the copyright in those instructions. See also the Australian case, Cuisenaire v Reed [1963] VR 719.
and hence protection therefrom, is the scarce condition. Assuming that mankind is competitive by nature it is inevitable that multiple individuals will separately seek to avail of the beneficial uses of resources that exist in the world. Where beneficial uses are susceptible to overcrowding conflict between individuals will eventually occur unless some strategy for co-ordinating individual actions is established. Rules governing access to and the use of scarce resources are therefore a necessary pre-requisite for the existence of a peaceful and productive society.\(^{67}\) Natural rights theory overcomes the co-ordination problem by identifying morally significant acts (e.g. mixing labour) which are capable of placing an individual in a position of priority over all others with respect to the question of who is entitled to have primary decision-making power over the conflicting uses of an object.

The paramount condition precedent for natural rights theory is therefore the scarce condition. Only where conflicting uses are possible, can a labour-mixing (or any other) act have morally significant consequences for others. With respect to non-conflicting uses of resources, no co-ordination problem exists and therefore no action of an individual, however meritorious, can justify the imposition of \textit{in rem} norms. It should be remembered that natural rights theory and libertarianism are theories about limiting the permissible grounds of non-consensual force. It is with some reluctance therefore that property rights are themselves recognised as meriting state protection; for the promulgation of duties \textit{in rem} for their protection necessarily implies the non-consensual use of state power.\(^{68}\) A consistent libertarian theory is reluctant to extend \textit{in rem} protections, and will certainly refrain from so doing where the basic material preconditions for their instantiation are absent.

D. \textbf{COPYRIGHT'S MORAL JUSTIFIABILITY}

Having identified the interest underlying property rights in natural rights theory as the interest in controlling all potentially conflicting uses of a thing, the task of framing justified property rights in abstract objects can begin. Once an abstract object is fixated all potential uses of it are non-conflicting: no one can dispute this fact. It follows therefore that laws which purport to impose \textit{in rem} obligations on persons with respect to any particular uses of these objects are of dubious moral standing. The inherent non-rivalry of abstract objects can lead to no other conclusion. This outcome may seem particularly harsh on creative labourers. It must be remembered, however, that the principal concern of deontological theories is to determine what is \textit{right} and not who, or what activity, is deserving of reward. In any event, the conclusion reached in this section holds only that the imposition of \textit{in rem} duties regarding the use of abstract objects is without moral justification, it does not deny that authors and publishers may use alternative legitimate means for manufacturing scarcity.

From the libertarian perspective copyright law would appear to be in trouble. The entire edifice of copyright law is predicated on imposing non-consensual duties on members of the public to refrain from engaging in communicative acts that entail the use of their own bodies and their tangible property. Economic rights such as the exclusive rights of reproduction and communication to the public prevent owners of tangible property from exercising their right to use their photocopiars, computers and audio-visual equipment. Public performance rights prevent singers and actors from

\(^{67}\) It is of course true that rules over the use of resources need not necessarily take the form of private property rights. In communist societies, for instance, the means of production are held by the state and all decisions regarding the use of such resources are taken by state officials.

\(^{68}\) M. Cohen, ‘Property and Sovereignty’ (1927) 13 Cornell LQ 8.
using their voice boxes and moving their bodies dramatically in public. In isolation these violations might be regarded as minor, but in aggregate cannot be ignored.

E. **LEGITIMATE CONTROL OF ABSTRACT OBJECTS**

The moral landscape for copyright laws would appear to be very bleak. Creative workers and industries should not despair. The principal reason why the creative sector is presently so reliant on copyright laws for its economic wellbeing is because it has not fully realised alternative legitimate opportunities for exercising control over abstract objects. Most economic analyses assume that without copyright law, authors and publishers have no means of enforcing exclusion, and therefore no chance of extracting economic rents.\(^{69}\) To the extent that their economic models rely on these assumptions they are wrong. The common law of contract and property, together with self-help protection mechanisms, offer numerous opportunities for creative industries to engineer scarcity without violating persons’ rights.\(^{70}\) This paper does not claim that these exclusionary practices will deliver the same economic dividends to authors and publishers as copyright law; it merely points to their existence as plausible alternatives. So that we can understand these alternatives, it is worth spelling out the legitimate rights and powers that authors/publishers have at each stage of the creative process.\(^{71}\)

First, all human inspired abstract objects originate as unexpressed ideas or thoughts in the self-conscious mind of the author. At this very early stage, the physical structure of the author’s body and his right of bodily integrity grant him effective and absolute control over the idea. Because the idea has not acquired any objectivity distinct from the human subject, it would be incorrect to speak of a property right in it.\(^{72}\) Nevertheless the author’s right of bodily integrity means that he can exclude all others from gaining access to the unexpressed abstract object. The absence of copyright protection at this stage therefore does not diminish the creator’s ability to exercise exclusionary control over his ideas.

At the second stage ideas become expressed in a material form. A writer expresses his ideas in material form by assembling linguistic symbols on paper or computer disc. A musician expresses his ideas in material form by recording the musical sounds on cassette/disc. An artist expresses his ideas in material form by patterning lines and colours on canvas. A filmmaker expresses his ideas (or the ideas of the film scriptwriter) in material form by organising actors and props and recording their performance on celluloid. By recording the idea in a material form, the creative individual abandons his natural exclusive control over the abstract object. There are, however, legitimate means by which he can continue to exercise effective control over the object. It is reasonable to assume that the author will be the proprietor of the material substratum on which the work is first recorded. His property right in the material substratum can provide him with a legitimate legal means for preventing others gaining access to the abstract

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\(^{70}\) The potential of alternative exclusionary practices has been investigated by *inter alia* Breyer, *supra* note 5, and Gordon, *supra* note 53 at 1394-1405.

\(^{71}\) Boukaert, *supra* note 49 at 801-806

\(^{72}\) Penner, *supra* note 56 at Chapt 5.
object. If such protection is not on its own sufficient, the author can avail of additional self-help measures like placing the material substratum in a safe, or encrypting a computer file. All in all, there are many legitimate exclusionary practices open to the author who wishes to keep his abstract object secret. Again the absence of copyright protection does not present any insurmountable problems for the exclusionary-minded creator.

At the third and final stage the abstract object is communicated to some other person. The act of communicating has the effect of making the abstract object available to another person without lessening the creator’s own enjoyment of it: this is the beauty of abstract objects. In most cases, however, authors and publishers (understandably) perform communicative acts with a view to profiting from their work. At present they rely on copyright law to impose in rem duties on all potential recipients of their work so as to prevent such persons from engaging in further communicative acts. We have found this to be an illegitimate means for controlling abstract object. Such a finding does not however mean that authors and publishers are prohibited from exercising their power to contract as a means for regulating recipients’ access to and use of abstract objects.

The fact that the author/publisher initially has exclusive possession of the material substratum on which the abstract object is recorded means that he is in a powerful bargaining position. He can, for example, grant access to a work on condition that the recipient does not himself engage in further communicative acts. The recipient who engages in a communicative act will be in breach of this contract and therefore be liable to pay the author/publisher damages. So, the author/publisher can, by means of his contractual power, engineer scarcity in abstract objects even after they have been communicated. It may be, as commercial practices develop over time, that the in personam rights of these contracts will come to resemble the in rem rights conferred by copyright law. No one can know at this stage. The crucial difference between a market in information goods that is organised on the basis of a multitude of in personam obligations as against one that is organised on the basis of state crafted in rem obligations, is that the former consists of legitimately consented to duties limiting non-conflicting uses, whereas the latter does not.

From a moral perspective no significant problems are raised when an individual generates scarcity through contractual practices. Every major branch of moral philosophy accepts that the voluntary creation of rights and obligations by contract is an expression of liberty and presumptively just. Contract, and not property, rules are in fact the standard tool for achieving artificial scarcity in business life. The employer who, as a condition of employment, requires that his employee not work for a competitor, makes labour scarce by means of a contract. A confidentiality agreement between a company and a worker that relates to a company’s know how or inventive processes is also an established means for making knowledge scarce. It is conceded that in practice contract may not deliver the same level of protection to authors/publishers as copyright law now does. In the Internet environment, DRM technology confers significant additional power on publishers to achieve exclusion. The fact that a contractually/technologically ordered market for information goods is unlikely to mimic the publicly ordered copyright market is not in itself a reason to be fearful. Economic theory teaches us that, in most circumstances, markets function

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73 E.g. in Oxford v Moss [1979] Crim L Rep 119 it was held that the misappropriation of an examination paper could lead to a charge of stealing the sheets of paper, but not the information contained thereon.

74 P. Atiyah, **Promises, Morals and Law** (Oxford: Oxford University Press, 1983)
more effectively when government interference is kept to a minimum. The excessively regulated copyright markets of today’s economy may well become more dynamic and creative if freed of public control.

Finally, intellectual consistency demands that we confront the ‘friendlier’ side of copyright law’s nature, namely the exceptions and limitations to infringement that are conferred by statute. Does rejecting the legitimacy of copyright law’s in rem norms mean that we should also reject provisions such as these that are alleged to serve the public interest qua consumer? The simple answer is yes. It should be first pointed out that as the law currently stands there are few bars to the contractual overriding of these privileges.75 Use of a contractual provision or technological protection measure to prevent a user exercising a limitation or exception will therefore make scant difference whether or not copyright laws remain in force. Nevertheless if copyright laws were to be abolished and replaced by contractually ordered information markets there would be no legitimate reason for regulating contractual practices with an equivalent set of limiting provisions.76 The legitimacy of these interest group privileges derives exclusively from the fact that governments have taken it upon themselves to intervene in information markets through copyright legislation for the purpose of stimulating creative activity. The limitations and exceptions are measures designed to ameliorate some of the negative side effects of this intervention. Logically the side-stepping of copyright law and replacement by contractually/technologically ordered information markets undercuts any claim to have the effects of government intervention alleviated: the government no longer has any active role in ordering rights with respect to abstract objects. Under such circumstances, we would rely on market forces to achieve a reasonable balance between producer and consumer interests.77

IV. THE PROMISE OF DIGITAL RIGHTS MANAGEMENT TECHNOLOGY

A. THE SIGNIFICANCE OF DRM FOR INTERNET INFORMATION MARKETS

Focus now turns to the specific issue of the use of DRM technologies to order information markets in the digitally networked environment, and the extent to which it offers an exit strategy from copyright ordered markets. The use of self-help measures to achieve exclusion in information markets is by no means a novel phenomenon - book publishers employ techniques to hinder the photocopying of printed material and film distributors apply encryption technology that restricts consumer uses of DVDs. These exclusionary practices have tended, however, to play no more than a supporting role to copyright law’s lead: they regulate fringe consumer uses rather than monopoly-destroying communicative acts. The threat of copyright infringement, and state intervention to seize unauthorised reproductions, remain the principal methods for achieving exclusion in pre-Internet mass media. The reason why DRM technology is of such potential significance in the Internet environment is because it,

75 See L. Guibault, Copyright Limitations and Contracts: An Analysis of the Contractual Overridability of Limitations on Copyright (The Hague, Kluwer Law International, 2002), reviewing the position under Dutch, French, German and US law. In relation to computer programmes and databases, the relevant European directives do negate the legal effectiveness of contractual overrides.


in combination with contractual licensing, promises to become the dominant means for achieving exclusion with respect to consumer uses of information goods. If this happens the factual assumption – that the absence of in rem norms will lead to market failure - upon which the utilitarian case for copyright law is founded will dissolve. We will then be in a position to make an orderly transition from the morally dubious copyright regime to one found on private ordering.  

In the early days of the Internet the popular view was that copyright law would not survive the onslaught of digital technology allied with a distributed communication system. Following the promulgation of the WIPO Internet Treaties, the US Digital Millennium Copyright Act and the European Information Society Directive, the opposite consensus emerged: copyright law would not only survive, it would have more pervasive effects than ever before. Instead of an ‘information wants to be free’ utopia the sceptre of a pay-per-use society was predicted, where once free information landscapes became ravaged by commercial interests. While both visions possess an element of truth, neither can be said to accurately represent the reality of the Internet’s communicative environment.

It is undoubtedly true today, as it was in the early 1990’s, that copyright law is an ineffective means for achieving exclusion on a global communications network across which all recipients of information also have the capacity to publish. In order to enforce in rem norms across such a network copyright owners must be prepared to take legal action against all individuals who transmit copyrighted information without authorisation (potentially every Internet user). For obvious practical and economic reasons, copyright owners cannot hope to exercise such an option; at most they can take sample suits as a means of deterring mass infringement. The alternative tactic - pursuing intermediaries - was initially successful, but has since proved ineffectual. Copyright law is about enforcing exclusion and generating scarcity through threat of legal action. In the pre-Internet mass media where economic, physical and regulatory barriers severely limited the number of potential publishers, it proved to be an effective exclusionary tool. It cannot, however, expect

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78 While a number of commentators have acknowledged that the factual assumption on which copyright laws are justified may be on the point of disappearing, the standard response has been to call for even more government regulation of information markets in order that the publicly ordered copyright model may be transposed to the online environment, see J. Cohen, ‘Some Reflections on Copyright Management Systems and Laws Designed to Protect Them’ (1997) 12 Berkeley Tech. L. J. 161. A notable exception is Tom Bell who has recommended an opt out strategy for content owners who wish to avail of common law rights and powers instead of copyright law: T. Bell, ‘Escape From Copyright: Market Success vs. Statutory Failure in the Protection of Expressive Works’ (2001) 69 U. Cin. L. Rev. 741.

79 The best known advocate of this view was J. Barlow, ‘The Economy of Ideas: Why Everything You Know About Intellectual Property is Wrong’ (Wired, March 1994).

80 E.g. L. Lessig, The Future of Ideas (New York: Random House, 2002);


82 Of course that has been the recent tactic of the Recording Industry Association of America, e.g. on 21st January 2004 it announced that it had taken 532 individual actions against file sharers – RIAA press release at: http://www.riaa.com/news/newsletter/012104.asp. There are, however at least 18 million Americans engaging in file sharing activities (supra note 6)

83 The famous Napster case - A & M Records Inc v. Napster Inc 114 F.Supp.2d 896 (N.D. California 2000) - resulted in a victory of the record industry. However in the more recent Grokster case - MGM v Grokster 259 F.Supp.2d 1029 (C.D. California, 2003) - the record industry failed in its infringement action against second generation file sharing service Grokster on the basis that its parent company had no way of controlling the activities of the individuals using its software.
to achieve similar results in the digitally networked environment. In this respect the early cyber-evangelists’ predictions have proven to be true.

The conclusion that copyright law is an ineffective exclusionary tool does not, however, lead to the conclusion that information wants to be free. On the contrary, copyright’s failure has led content industries to look for alternative exclusionary tools, in particular electronic self-help measures. At this (still) relatively early stage of development it seems likely that DRM technologies will facilitate a range of exclusionary practices. Both access (e.g. password-protected websites) and copy control mechanisms (e.g. copy management systems) that deploy sophisticated encryption software potentially allow for more flexible and effective means of exclusion than heretofore permitted by copyright law. Despite uncertainty as to the viability of digital information markets engendered by the popularity of file-sharing services, it seems reasonably clear that DRM technology together with contractual licensing, and not copyright law, are the only plausible means for engineering scarcity in the digitally networked environment. If copyright law is a response to market failure, we can say that encryption technology is a response to statutory failure.

B. THE MORAL PREFERENCE FOR DRM TECHNOLOGY OVER COPYRIGHT LAW

The principal reason for welcoming the use of DRM technology and contractual measures to engineer scarcity in abstract objects is that they do not necessitate non-consensual interference with bodily and tangible property rights. In this respect they are preferable to copyright law as a means of achieving exclusion. When a creator applies a DRM technology to his expressive content for the purpose of regulating consumer access and use no such infringement of rights occurs. How can it be that achieving the same result by a different means does not meet with similar moral objections?

Where an individual applies a DRM technology to a creative work he exercises a natural power with respect to how he may use and dispose of his legitimately acquired tangible property (computer hardware) and software tools. The key difference between this exclusionary practice and copyright law, is that with the former the exclusion is achieved by an individual exercising a liberty consequent upon his own rights, whereas with the latter exclusion is achieved by the state limiting persons’ exercise of their rights and powers. Furthermore the application of DRM technology to regulate access does not infringe any other persons’ rights, for the simple reason that the public at large has no free standing right to gain access to a creative work. The temperamental poet who destroys the only copy of his masterful epic does not infringe the rights of others to gain access to that work, nor does the diarist infringe public rights of access by locking his journal in a safe. The idea of a public right of access to abstract objects clearly lacks any coherent ethical foundation. It follows that the application of self-help measures to regulate consumer access and use involves no encroachment upon other person’s natural rights. The creation of in personam duties via shrink-wrap licences is also defensible for the reason that such obligations are voluntarily assumed and arise from the natural power that all individuals possess to form binding agreements.

85 E.g. price disrimination
86 Bell, supra note 81.
V. CONCLUSIONS

In spite of the immeasurably improved moral situation the prospect that DRM technology will usurp publicly ordered copyright markets in the digitally networked environment has provoked a generally negative reaction in the academic community.\(^{87}\) To some extent these criticisms focus on the excessive measures put in place to guard against anti-circumvention,\(^{88}\) however most reflect a fear that information will be ‘locked up’ and public spaces will disappear if content industries acquire the power to determine for themselves the nature and extent of user access to expressive works. With such fears in mind, commentators fetishise copyright law, by claiming that, despite much evidence to the contrary, it represents the ideal of democratic governance.\(^{89}\) Instead of welcoming the possibility of exiting copyright markets gracefully, they call for government interference with technological protection measures so that ‘ancient’ user privileges of the pre-Internet mass media may be given similar effect in the digitally networked environment.\(^{90}\)

Fears that public spaces will disappear and that information will be locked up are for the most part irrational. First, it is plain to anyone who uses the Internet that it abounds with freely donated information: the Internet has facilitated an explosion of voluntary non-proprietary information production. It may even be the case that open information environments will come to dominate in the Internet environment.\(^{91}\) Secondly, the idea that content industries will wantonly ‘lock up’ information that they produce betrays a fundamental misconception about the dynamics of market exchanges. A commercially minded information producer will seek to offer generous consumer access to entertainment and educational products, provided that his ability to extract monopoly rents is not unduly jeopardised: it is in his interest to attract many paying customers and not to shun them. If there are concerns about a ‘digital divide’, i.e. that the existence of income differentials limits lower-income access to information resources, copyright law is plainly not the vehicle in which to have them resolved.

In conclusion, the Internet appears to have irreversibly disrupted the copyright paradigm. Traditional copyright law is no longer capable of achieving its exclusionary objective, so creative and information sectors have been forced to look for alternative exclusionary practices. DRM technology and shrink-wrap licences are legitimate and plausible candidates. It seems likely that they, and not copyright law, will increasingly determine the nature and extent of consumer access to, and use of, commercial information resources in the online environment. We should welcome these developments as they offer a painless exit strategy from copyright dependency. Over time as the efficacy of these exclusionary practices becomes apparent, it is to be hoped that the copyright dependency will become less acute.

\(^{88}\) E.g. Samuelson, supra note 17.