The Internet, Creativity and Copyright Incentives*

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The copyright industries savour their role as critical intermediaries in the copyright supply chain. To this end, they are continually seeking to strengthen their legal entitlements by arguing that stronger copyright incentives fuel future creative action. But the reality of creativity is different from the linear economic reward/action relationship that these industries promote. This reality has been brought into sharp focus by the seemingly limitless creativity that the Internet has unleashed. Much of this creativity occurs without reference to the incentive structure provided by copyright law and demonstrates the potential redundancy of several existing industry functions. The result has been a seemingly intractable tension between established industries and emergent modes of production and dissemination. The clearest examples of this tension are the current debates over the utility of peer-to-peer technology and the competition between proprietary and open source software development models. This tension, and the realities of creativity that underpin it are the subject of this paper. A diverse range of creative experiments facilitated by digital networked technology is considered and used as a backdrop to a general discussion on some of the areas where reforms to copyright’s existing incentive structure are most needed.

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The sound recording copyright in the hit Elvis Pressley song ‘That's All Right’ expired in Europe on 1 January 2005 after 50 years of protection. A few months earlier, a BMG reissue of the track reached number three in the UK singles chart. The loss of the economic rights associated with classic music tracks from the 1950s has focused attention on the protection afforded to sound recordings as distinct from the protection afforded to underlying musical compositions. The International Federation of the Phonographic Industry (and an accompanying troupe of well known, if ageing, musicians) has given a petition to the European Commission asking it to cure this ‘defect’ in European copyright legislation. They are demanding that the Commission should bring the term of protection for sound recordings into line with other countries, most notably the United States where copyright protection for sound recordings lasts 95 years†. Familiar arguments are made: the need to maintain a level playing field with other nations in the copyright arena, term extension as a mechanism for providing income to artists (and their heirs) who are living longer, and the need to secure future revenue streams for the record labels if they are to nurture up-and-coming talent. The same sentiment rings true throughout: the money train has reached the end of the line, it is time to build some more track‡.

This tale brings into sharp focus the debate that has engulfed copyright law in the last few years. This is a debate over the appropriate level of copyright protection in an information-rich world. And it is a debate where the ideas of stimulating diverse range creativity and guaranteeing economic returns for existing producers are vying for the ascendancy.

In the Anglo-American tradition, the limited monopoly afforded by copyright is a state sanctioned reward for artistic creativity. Without this reward, so the argument goes, authors will have no incentive to invest the time and resources needed to add to the stock of cultural resources that form a vital component of humanity. Similarly, publishers will be wary about bearing the large upfront costs associated with mass-producing the works of authors and distributing them to the public at large. Copyright incentives, therefore, are considered necessary to stimulate the creation and distribution of works. From this intuitively appealing starting point, a number of critical second order questions emerge. For instance - it is this question, which brings us back to ‘That’s All

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Right' - what is the optimum degree of protection?

A track like 'That's All Right' comprises a number of copyright works. Each of these works is protected slightly differently. In the UK, for example, song lyrics are protected as a literary work, the underlying musical composition (i.e., the notes and chords) as a musical work, and the recording of the song made by any particular artist as a sound recording. In the case of 'That's All Right', it is the last of these copyrights that expired on 1 January 2005. The literary and musical copyrights remain valid for 70 years following the death of the author of these works. In fact they will not expire in Europe until 1 January 2045. Contrary to what rights holders may think, this structure is no accident. It reflects the idea that the incentives needed to stimulate artists to write lyrics and compose music should be greater than those granted to an artist who records a version of a pre-written track. This can be thought of in terms of a karaoke machine. Performing a song with the aid of a karaoke machine is far easier than writing a song that warrants a place on the machine itself. By bifurcating entitlements copyright law implicitly recognises this principle. Furthermore, the underlying literary and musical works are unitary in nature. A song will only get written once. On the other hand, if Elvis had wished to make a later re-recording of 'That's All Right', a stand alone 50 year term of protection would attach to that recording. Another example that demonstrates how seriously copyright law thinks about incentive structures is the length of time for which photographic works receive protection. Because photography combines creative input with a mere mechanical process, the term of protection for photographs is shorter than for other works in many countries. In addition, the Berne Convention only requires signatories to protect photographs for 25 years compared to a term of life plus 50 years for most other works. The 50 year term for sound recording copyrights is neither an oversight nor a defect. It is a principled position premised on an idea that has served us for 300 years.

The copyright industries account for an increasing proportion of the GDP of many developed and developing nations. It comes as no surprise, therefore, that these industries have sought to leverage their positions by petitioning governments for stronger rights as a means of securing better economic returns from their investments. The current debate over sound recording copyrights is part of this general current of lobbying activity. The aim is to capture a larger proportion of the consumer surplus associated with works, and in particular, works like 'That's All Right' which retain the potential to generate revenues significantly in excess of the marginal cost of production. From the standpoint of economic efficiency, this raises few problems. Increased copyright protection shifts this surplus into the pockets of producers and away from consumers (who benefit when a work enters the public domain), but net efficiency remains the same. The issue is purely distributional. It concerns how the cake is sliced, not how big the cake is. On this basis, some have argued that tilting the balance in favour of producers is the preferred option. Doing so, they argue, will stimulate modes of distribution, which minimise transaction costs, increase the number of works created and ensure that works produced match the preferences of consumers as revealed by their willingness to pay for them.

The idea of creativity is not ignored by this analysis. Instead creativity and the promise of artistic rewards are wielded when they suit the needs of industry. Instead of focusing on the actual dynamics of creativity, this analysis fathoms a direct and linear relationship between copyright incentives and creativity. In doing so, the proposition that if some incentives are good, more must be better, does not undermine the axiomatic notion of creativity itself. However, it is at precisely this point that gaps in the rhetoric employed by copyright expansionists emerge. Creativity is subject to a myriad of competing influences. Positive copyright incentives are simply one element in a complicated matrix of factors. A failure to account for the subtle and multifarious factors that organise creative acts threatens our collective cultural output at a time when creative participation is open to all. It is this theme that is explored in this paper.

Creativity Online

Information is the currency of the Internet, which represents a paradigm shift in the way we should think about information. The effects of digital networked technology, in terms of the creation of information and its subsequent distribution and use, are only beginning to be understood. What follows is a brief survey of some of the more interesting creative enterprises that have emerged on the Internet. This is...
not an exhaustive survey. The aim is simply to paint a picture of not only what is possible, but also what is actually occurring. The examples below also share something in common. They hint that the structure and manner of recent copyright reform is misguided.

**Blogs**

Web logs (or blogs) are an emergent Internet phenomenon. Merriam-Webster's Dictionary has recently announced ‘blog’ as its word of the year for 2004, and the blog-focused search tool, Technorati, now crawls more than eight million blog sites. A blog is a regularly updated web page that includes fairly short diary-style entries containing news items, comment, associated links and third party views. They can be written by anyone and may be about anything. Blogs have proven particularly popular amongst political commentators, those involved in the IT industry and legal scholars, but blogs by individuals seeking to share their everyday experiences in all walks of life are also proliferating. In the past couple of years, the war in Iraq and the US presidential election have been relentlessly analysed and dissected by the blogging community, which is now recognised as a viable alternative, or at least a vital supplement, to traditional news publishing. A recent survey by the Pew Internet and American Life Project, for example, found that 32 million Americans read blogs in 2004. The emergence of blogs would appear to stem from our status as essentially communicative beings and offers a realisation of Tim-Berners Lee vision of the Internet as a collaborative tool for enabling creativity to flourish alongside information consumption. In doing so, they allow individuals to remove themselves from the publisher-consumer model of information dissemination and become actively involved in a dialectic conversation with their peers.

**Wikipedia**

The Wikipedia project aims to develop an evolving online encyclopedia that is freely available to anyone under a GNU Free Documentation Licence. Entries in the Wikipedia database are never finalised in the traditional publishing sense as all users (except those who have been reprimanded for previous Wiki-related misdemeanors) may update and edit entries. At the time of writing, the project has amassed over 1.3 million articles in dozens of languages, including 500,000 in English and over 200,000 in German. Although approximately half of all articles are maintained and edited by a relatively small proportion (roughly 2.5%) of users, it is worth emphasising that these authors are volunteers who are not specifically affiliated with Wikipedia and who are neither paid nor attributed for their efforts. This is the striking feature of the Wikipedia experiment. Wikipedia strives to offer a neutral point of view by presenting all sides to an issue in a fair and objective manner. It is its utility as an encyclopedia that is paramount, not the personalities, opinions and writing styles of individual contributors. This ‘self-conscious social-norms-based dedication to objective writing’ eschews author-centric copyright incentives, whilst still managing to create an increasingly comprehensive resource that is more widely used than traditional reference works such as the Encyclopedia Britannica.

**Firefox**

Mozilla Firefox is a web browser available for free download on the Internet. Launched on 9 November 2004, it was downloaded five million times within 11 days and by January 2005 (fuelled by a two page ad in the New York Times paid for using $250,000 worth of donations from some 10,000 supporters) that figure was approaching 20 million. Firefox's main competitor in the web browser market is Microsoft's Internet Explorer. Over the course of 2004, Explorer's share of the browser market fell by over 5%. This may seem small, but it is the first time in a number of years that Explorer's share has noticeably declined. The success of Firefox — it is realistically targeting a 10% market share by the end of 2005 and has been described by Forbes magazine as ‘better than Explorer by leaps and bounds’ — is one of the key reasons for this decline. And the interesting thing is that Firefox is open source. Open source software is created in an environment that eschews the firm as a model of production in favour of a distributed, voluntary and loosely managed development system involving thousands of programmers scattered across the globe. Research into why individuals choose to contribute to such projects reveals a diverse mix of financial, socio-political and intrinsic motivations, which underpin their involvement. The open source movement continues to utilise copyright, but in an inverted form. The source code of the program is freely available, allowing individuals to fix bugs, develop functionality and informally manage the process of collating portions of code into a usable product. Instead of using copyright as a means of
restricting access, a series of licences guarantees that anyone who receives a copy of the program or its derivatives is free to use, modify and redistribute the program. This may all seem counter-intuitive given the complex nature of software products, but it undoubtedly works. Over 98,000 ongoing open source projects are listed on the open source development website, Sourceforge.

CDDB

Labour intensive creative functions may be simplified and distributed following the advent of digital networked technology. Consider, for example, the CD Database (CDDB), a resource used by many jukebox software applications to obtain CD track listing data before tracks are ‘ripped’ on to a computer. The CDDB relies on the statistical probability that the number and timings of tracks on an album are unique. By matching each album’s unique CD skeleton with the information stored in the CDDB, jukebox applications are able to download the correct track listing data. Anyone who has tried to upload their CD collection to an iPod will quickly realise the value of this function. What is interesting, however, is that the CDDB is not a centralised register created and managed by the recording industry. No such register exists. As originally conceived, the CDDB relied on volunteers to post track-listing data to a centralised location. When jukebox software applications became widely used and network enabled, the CDDB automated the process further by capturing missing track listing data that users entered for their own benefit using the software. For the CDDB to be updated all that was required was one individual anywhere in the world with the time and the inclination to provide the information. By harnessing volunteer labour at a granular level, the CDDB has succeeded in becoming a primary resource in the world of digitised music.

OhmyNews

OhmyNews is a pioneering South Korean news service that employs approximately 50 full-time staff and harnesses the creative potential of over 25,000 ‘citizen reporters’. The OhmyNews web site, established in 2000 and now generating healthy profits receives around 1 million hits each day, features 150 news items and opinion pieces written by ordinary South Korean citizens, and is widely credited with shaping the outcome of the South Korean presidential election in December 2002. Articles are selected for publication, edited and placed on the site by OhmyNews employees, but the majority of submissions received from citizen reporters (who are paid a modest sum for their efforts) end up on the site in some shape or form. A confluence of factors, most notably the significant levels of broadband penetration in South Korea and the widespread dissatisfaction with the largely conservative South Korean media, has catalysed the success of OhmyNews. What is most staggering about this experiment in journalistic enterprise is the sheer number of amateur authors involved and the manner in which they are free to help set the news agenda. As media commentator, Dan Gilmor, notes, ‘OhmyNews is transforming the 20th century’s journalism as lecture model, where organizations tell the audience what the news is and the audience either buys it or does not, into something vastly more bottom up, interactive and democratic.’ In terms of creativity, OhmyNews demonstrates how the Internet has enabled distributed creativity to be harnessed locally and managed centrally in a manner that competes with traditional news publishing organisations.

Search Technology

Search engines function as the gatekeepers to the otherwise impenetrable mass of digital information stored in countless locations around the globe. Without these mechanisms for scooping relevant information from the sea of irrelevance, the utility of the Internet as an information resource would be severely undermined. As the textual origins of the protocols underpinning the Internet have developed to permit us to enter a richer multimedia environment, search engines have responded by developing more complex algorithms for mining digital spaces. In December 2004, for example, Google announced a partnership with several research institutions to scan and make available via Google's database 20 million books. The full text of public domain works will be available and generous access to works still under copyright will also be permitted. Amazon, meanwhile, has been fine-tuning its ‘Search inside the book’ function which debuted in 2003. The function, which allows keyword searching of the full text of some 150,000 titles via the Amazon web site, lists multiple excerpts and provides links to full page views from relevant texts. Customers are permitted to browse roughly 20% of the book’s contents. Sales of
those books are up 9% relative to non-searchable titles\textsuperscript{23}. Innovations in the search sector are not confined to textual searches. Blinkx, for example, is a video and audio search tool that allows users to search content produced by a number of television and radio broadcasters such as the BBC, CNN, NBC, and Sky\textsuperscript{24}. Searches are made by analysing an audio track generated from broadcast transmissions. The copyright issues, particularly multi-layered rights clearances, which these initiatives raise, are interesting and somewhat risky. Google, in particular, appears to have accepted that the utility of advanced search functionality outweighs the high potential costs associated with multiple infringement suits\textsuperscript{25}. However, the potency of this new technology can be seen by putting this issue to one side. Search engines are increasingly able to appropriate the aspects of works which give rise to copyright protection in the first place. In doing so they facilitate the democratisation of cultural sources by placing works on an equal footing and removing the constraints imposed by the scarcity of shelf space, the limited capacity of analogue frequencies, and the choices made by intermediaries. The results benefit artists, scientists and consumers alike.

**BitTorrent**

BitTorrent is a peer-to-peer (P2P) software application with a difference. Instead of facilitating links between two networked nodes as traditional P2P services such as Napster and, later, Kazaa and Morpheus have done, BitTorrent allows many interconnected nodes to share files amongst themselves\textsuperscript{26}. Different chunks of the same file can be distributed by multiple nodes. This is the swarm effect, the benefits of which become clear by appreciating that broadband providers do not permit uploading and downloading at equal speeds. The speed of file transfer using traditional P2P services has, up to now, been constrained by the speed restrictions placed on the uploading node which hosts the requested file. Spare download capacity is wasted. By allowing numerous uploading nodes to contribute up to the download rate threshold, large media files, such as, movies that typically weigh in at 700Mb, can be distributed far quicker than has previously been possible. An equally important facet of BitTorrent's design is that the most popular file requests are serviced by the greatest number of uploading nodes, meaning that download speeds will not slow to a trickle as demand increases. The effects and implications are enormous. After 20 million downloads, BitTorrent now accounts for more than one-third of all Internet traffic. In November 2004, the Motion Picture Association of America, hitherto safeguarded from the draining effects of P2P technology by the sheer size of its products, began suing BitTorrent index server operators. And for users, BitTorrent creates an on-demand broadcast media world with an almost infinite library of content\textsuperscript{27}. What is actually happening is that: individual users are taking care of the content distribution function themselves. By acquiring the necessary components - computer hardware, software, an ISP subscription, rendering devices and even electricity - they are, in effect, paying to distribute and package content\textsuperscript{28}. They are self-financing an activity that copyright incentives, to a large extent, are there to provide. And they are doing so in one of the most cost-effective means imaginable. BitTorrent will not, in itself, result in more content being created. If harnessed to its potential, however, it will guarantee that audience demand for content is adequately served.

**What's Happening Here?**

These initiatives can be viewed as cutting edge experiments on the frontline of creative action. They are indicative of what may be possible in a world that chooses to harness the creative potential of digital networked technology. Copyright law is the arbitrator of this choice.

The most striking feature of these experiments is the volume of amateur creativity unleashed by the Internet. The term amateur here should be understood in two independent but linked senses. Firstly, amateur refers to the motivations of those involved in these creative pursuits. For these individuals, participation is a hobby, not a job. Bloggers, Wikipedia contributors, or Firefox developers, for example, usually have no expectation of immediate financial reward. Copyright incentives are not conditioning what gets written here. Secondly, amateur refers to the loose connections, which bind those working on a common project. Instead of being concentrated in firms, a distributed set of creators can work towards a common goal if the end product can be centrally managed and maintained using technology or some form of human hierarchy. The aggregation of data within the CDDB is an example of the former, the
The copyright industries have long argued that tighter controls over digitised content were needed before they would willingly make their assets available online and the celestial jukebox would become a reality. Armed with this threat, these industries have successfully argued for stronger legal entitlements, whilst at the same time suing those responsible for disrupting the status quo. These twin strategies are pursued against the backdrop of a promise to enter emergent digital markets when given enough latitude to guarantee a pre-eminent position within them. In the United States, the recording industry has brought a number of high-profile lawsuits against the operators of P2P networks, which they blame for a marked decline in revenues in the past few years. The early success against Napster, however, did little to stem the flood of copyrighted works flowing across these networks as technically sophisticated (and potentially copyright immune) successors quickly emerged. In response, the record industry launched proceedings against individual users of P2P systems. This has been a controversial strategy, but it has been replicated in many other countries and by the film industry in the USA. Throughout this period of upheaval, the content industries have invested billions of dollars in creating secure digital distribution platforms. Digital Rights Management (DRM) technology is widely endorsed as a means for technically preventing the unsanctioned distribution of music, text and films, whilst facilitating entry into new markets. Sympathetic lawmakers have readily accepted proposed changes to copyright laws which outlaw the circumvention of these 'technical measures' and the supply of devices which aid circumvention activity. This ‘paracopyright’ buttresses new modes of intellectual property onto the international copyright regime and in the process significantly alters the balance between public and private privileges.

The legal strategies adopted by the content industries are aimed at wrapping a protective blanket around the existing ways creative artifacts reach the eyes and ears of consumers. In the analogue world, the content industries were the critical intermediaries, which facilitated this process. Faced with the prospect of redundancy at the dawn of the digital era, they have been carefully treading a path between embracing the future and avoiding it. Their ultimate aim is to ensure that their stake in it is as profitable as possible. And

Painful Adjustments
they use incentive theory to argue that it could not happen any other way.

The content industries have always been entwined in the creative process. They take products of the mind, polish, sift, edit and disseminate to the masses. Typically the price for these services is a copyright assignment notice. At a time when artists can cheaply record and edit their own creations; when content filtering is performed ex post by consumers using sophisticated search technologies, not pre-publication by industry employees; or when users are prepared to finance the cost of distribution via a monthly subscription to an ISP, many of these second-order creative functions become optional. What remains is the germ of an idea or the spark of creative thought that underpins the exercise. It is this raw authorial creativity that remains critical irrespective of whether bits or atoms are dealt with. And it is this part of the copyright supply chain that warrants examination. Querying whether the owner of the rights to a hit sound recording from 1954 is adequately rewarded is simply less important.

Necessary Adjustments

Locating information

The static broadcast model of information dissemination is slowly giving way to a model characterised by interactivity. In this alternative world, individuals have appropriated the power to select and filter their exposure to content. The hyperlink is at the heart of this change. Google, one of the most potent and important Internet applications, utilises the wisdom of crowds by aggregating the distribution of hyperlinks across the web to index over eight billion pages of information. As individuals learn to navigate the Internet, their ability to see what is available, instead of simply having it described to them becomes increasingly important. Astute readers will observe that this eats away at one of the central tenets of all copyright systems: the distinction between ideas and expressions. In Kelly v Arriba Soft, for example, the US Ninth Circuit had to adjudicate on the legality of a visual search engine. These are search engines that display images in thumbnail form in response to a search request from a user. Type 'Robert Frank' into the 'Images' bar on Google to get a flavour of what is possible here. Kelly, a photographer, objected to his works being indexed in this way and brought suit against Arriba Soft alleging primary copyright infringement. The case boiled down to a 'fair use' analysis. The Ninth Circuit, paying particular attention to the informational character of the use in question and the lack of prejudice posed to the commercial exploitation of Kelly's works, found the use to be fair. The court was able to rule in this manner because the fair use doctrine is nebulous, allowing novel yet unforeseen uses to be adopted under its rubric. The same cannot be said about the European Information Society Directive. The Directive as adopted and now transposed into the laws of Member States contains, in Article 5, a closed list of bargained for exceptions which mirror the practices of existing analogue world intermediaries and institutions. If someone were to object to the indexation of their works by a visual search engine, European copyright law would probably sanction an infringement finding. The question is not simply whether a visual search engine is good thing or a bad thing, the question is whether copyright law should embrace the means by which individuals wish to interact with the information around us. From the perspective of creativity, the system demands flexibility. This is precisely what European copyright law is lacking.

Using Information

According to James Boyle, 'the romantic vision of authorship plays down the importance of external sources by emphasising the unique genius of the author and the originality of the work'. By internalising creativity and casting the lone author as the figurehead around whom incentives must flow, copyright is able to carve the market for works of the mind into discrete assignable packets. As Boyle observes, however, this is not the nature of creativity. Works are not forged alone. The ability to access, study, manipulate and deconstruct other works is a critical part of the creative process. Copyright law doctrines including the idea/expression dichotomy, the limited duration of copyright protection, fair use or fair dealing, and the permissible taking of non-substantial parts of works have traditionally been the means by which this creative reality has been recognised and accounted for. This, observes Jessica Litman, is the nature of the public domain, and it permits us to continue to exalt originality without actually acknowledging that our claims to take originality seriously are mostly pretence. It furnishes a crucial device to an otherwise unworkable system.
by reserving the raw material of authorship to the commons. Lawmakers have chosen to strengthen digital copyright protections. They have done so by arming content owners with alternative rights structures - such as the protection granted to DRM technologies - that can be used to bypass the safety valves operating within the body of copyright law itself. When this is done without simultaneously catering for the emerging needs of the creative swarm, the reality of creativity described by Litman is ignored.

Consider, for example, Article 6 of the Information Society Directive. This provision outlaws the circumvention of DRM technologies used by rights holders to limit access and use (or copying) of works. The provision is not linked to copyright infringement, and it is effective even if circumvention is intended to facilitate actions permissible under the exceptions to the basic rights of reproduction, distribution and communication to the public contained in the Directive. Article 6.4 attempts to ameliorate the harshness of this provision as it applies to use controls by encouraging rights holders to develop methods by which a lawful user of a work may benefit from specific exceptions that are considered particularly valuable. This is an attempt to uphold the public's side of the copyright bargain. Rights holders may, however, ignore this provision where works are ‘made available to the public on agreed contractual terms in such a way that members of the public may access (the work) from a place and at a time individually chosen by them’. There is confusion as to how far this provision extends. Does it only apply to specific services such as video-on-demand or is it wider, extending to online services in general? The issue will need to be resolved by the courts. This, however, is not the point. The beneficiary protection principle only applies to use controls. The structure of the provision contemplates a clear delineation between DRM technologies which protect against unauthorised access to works and those which limit the uses which can subsequently be made of the work once access has been obtained. Yet right holders are under no obligation to segment their technical restrictions in a similar manner. There is a danger that users who agree contractual terms to obtain access to DRM-protected works may at the same time sign away the use protections they are afforded under Article 6.4.

Calculating the negative consequences of provisions designed to shore up DRM protections is a tricky task. It is, after all, hard to measure what has not been created. What is clear, however, is that the roll-out of DRM will have pernicious effects on the ability of the new breed of amateur creators to make use of the 'raw material of authorship'. In fact, it is possible to go further and speculate that the technological partitioning of the market for information goods exhibits anticommons tendencies. Anticommons theory suggests that the cumulative effects of having multiple owners of a resource can lead to no one having an effective right to use the resource. The Internet is fundamentally an information resource. The effects of paracopyright mean that users are deprived the full benefit of that resource in terms of both its application layer protocols and content layer materials. The consequence is that the transaction costs associated with creatively engaging existing sources increase. When this happens, certain creative activities will be stifled and others may never be undertaken.

**Distributing Information**

Historically, copying was hard to do. Historically people needed to be encouraged to generate copies. And historically the copy has served as the point of value. Consider, however, what the value of a copy of a work residing on a hard drive is when that copy is never read, watched or listened too? And consider whether there is value when that copy has been created at zero-cost? What about a copy of a song that is listened to once and then discarded? There is a value here, but that value is small. In the opinion of this author, copying as a metric for measuring value is now meaningless in many circumstances. And in a world that functions through zero-cost copying, a law that affixes at the point of copying should be viewed as a bad law. To an extent this has been recognised by lawmakers. The Information Society Directive, for example, excuses ‘transient and incidental’ copies in a given set of circumstances. This, however, still represents an attempt to map a concept from the old world onto the new. Copyright law needs another metric.

Several scholars have suggested that, in the online world, the idea of paying for individual copies should be jettisoned in favour of a model that permits free copying of certain types of work in exchange for a levy on the goods and services used to affect such
copying or via a flat rate monthly fee included as part of our monthly ISP subscriptions. These models all share the idea of using time as an alternative metric to ‘the copy’. There is no constraint on the number of copies that can be made; yet the tendency is to remain bound by the number of copies that can be made use of. Where the value of collective use is known (by looking at the amount of money that can be devoted to the entertainment industry, say), then if this money can be raised and allocated fairly, then moves to restrict copying are unnecessary. In fact, under this alternative model, copying should be encouraged as a means of exposing us to a diverse range of cultural sources. If copying is encouraged, P2P networks as a tool for distributing information are welcome and attempts to extinguish the operation of these networks are misguided. In effect, distributional efficiencies are harnessed without upsetting creative incentives. These ideas are taking hold amongst copyright scholars, and have already received book length treatment by some. The challenge lies in the detail, in particular, the means by which funds are gathered and the manner in which they are distributed to creators. This is a task for lawmakers. Unfortunately, lawmakers remain fixated on the notion of rogue copies whistling throughout the networked space.

Conclusion
In an influential essay written in 1997, James Boyle lamented the lack of cohesion and organisation amongst those who fear the tide of copyright expansionism. This, he noted, is understandable given the diffuse and intangible nature of the benefits, which derive from the public domain. Boyle’s central insight was his call for a ‘politics of intellectual property’ in the online world, an organising principle through which IPR regimes could be made accountable to public privileges, not simply private interests. Without this politics - which he likened to the emergence of the environmental movement in the 1960s - Boyle feared that the structural tendency to over protect information assets would continue unabated.

In the intervening years, this rousing call to arms has seen an increasingly powerful response. A range of social movements focusing on creativity, the rights of the public, and the needs of artists have emerged. Examples include the Creative Commons in artistic communities, the proliferation of the open access publishing model for scientific research, and the continued success of open source modes of production in the software industry. These movements exist because the Internet has catalyzed creativity and the organisation of creative endeavours. They exist because artists and scientists realise that copyright law should serve them. And above all they exist to provide balance to a regime that has become increasingly lopsided.

This paper has sought to sketch the contours of the emergence of creative empowerment. It has done so against the backdrop of a debate over sound recording copyright that is made to appear far more important than it actually is. And it has sought to elucidate several aspects of copyright where changes to the law would benefit creators and users alike. Lawmakers in the US and Europe have a responsibility towards all stakeholders in the copyright supply chain. Yet up to this point they have lavished attention on strengthening the incentives for outdated modes of production and dissemination. There are at last signs that change is in the air. Lawmakers in other countries should strive to avoid the same mistakes.

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27 http://bittorrent.com/
28 Clive Thompson, The BitTorrent Effect, Wired, January 2005
30 Compare Ad&M Records v Napster, Inc, 239 F.3d 1004 (9th Cir. 2001) with MGM Studios, Inc v Grokster Ltd, 380 F.3d 1154 (9th Cir. 2004). On 10 December 2004 the US Supreme Court agreed to hear the content industry's appeal against the Ninth Circuit's Grokster decision. Judgment is expected in summer 2005
32 See, e.g., WIPO Copyright Treaty 1996, Article 11
33 280 F.3d 934 (9th Cir. 2002)
34 http://images.google.co.uk/images?q=Robert+Frank&hl=en
37 Simon Stokes Digital Copyright: Law and Practice (Butterworths: London 2002), §7.62-§7.84
40 Information Society Directive, Article 6.4, subparagraph 4
42 Hardin's oft-quoted 'tragedy of the commons' theory posits that resources held in common will be prone to over utilisation and under replenishment. See Garrett Hardin 'The Tragedy of the Commons' 162 Science (1968) 1243. Dan Hunter has tweaked this metaphor as it applies to online resources by suggesting that multiple rights of exclusion may lead to an inverse 'tragedy of the digital anticommons'. See Dan Hunter, Cyberspace as place and the tragedy of the digital anticommons, 91 California Law Review, 2003, 439
43 Jessica Litman, Digital Copyright (New York: Prometheus Books, 2001), 177
44 Information Society Directive, Article 5.1