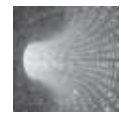

Article

new media & society
15(8) 1312–1328

DOI: 10.1177/1461444812470429
nms.sagepub.com

Copyright infringement online: The case of the Digital Economy Act judicial review in the United Kingdom

Robin Mansell
London School of Economics and Political Science, UK

W Edward Steinmueller
University of Sussex, UK

Abstract
The proportionality of the UK Digital Economy Act 2010 which aims to curtail illegal peer-to-peer file-sharing is examined in this paper in the light of changes in online norms and culture. Based on an analysis of recent studies and a critical reflection on the nature of changes in digital media production and file-sharing behaviour, we conclude that the Digital Economy Act introduces disproportionate social costs for UK Internet users, with uncertain prospects for improving creative industry revenues. The wider implications of these developments for the emerging online culture are also considered.

Keywords
Copyright, digital media, file-sharing, infringement, Internet, new media, technological innovation

Introduction

Peer-to-peer (P2P) file-sharing, the use of individual computers as both sources and destinations for file transfers often involving copyright infringement, is receiving particular attention although it is only one of an increasingly diverse range of options for sharing digital content on the Internet (Dixon, 2009). Other ways in which file-sharing is

Corresponding author:
Robin Mansell, Department of Media and Communications, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, UK.
Email: r.e.mansell@lse.ac.uk

facilitated include offshore downloading sites, exchange of memory sticks and other mass storage devices (e.g. CDs 'burnt' from other sources), sophisticated techniques such as depositing files in online 'cyber lockers' and giving the keys to the locker to others, or e-mailing files in encrypted formats or through virtual private network channels (VPNs). These are just some of the many ways in which the use of digital information and communication technology is challenging conventional assumptions about the way intellectual property rights legislation balances the interests of the creative industries in the production and sale of digital content and the interests of the public in the use of that content for a variety of purposes. The increasing availability of the Internet as a means of sharing copyright-infringing content has prompted renewed efforts by the creative industry to curtail the exchange of copyright-protected content.

Governments are responding to the creative industries' claims that declining revenues from sales of music, films and television programmes are attributable to illegal file-sharing. A principal tool in an escalating war on copyright infringement is legislation enabling copyright holders to demand that Internet Service Providers (ISPs) identify the 'offline' identities of individual file-sharers so as to make them accountable for their 'online' infringing actions or to summarily disconnect users after several complaints of infringement by copyright holders. The legislation of some countries, such as France, can require ISPs to disconnect users, while that of other countries, such as the United Kingdom (UK), requires ISPs to reveal the identities of their subscribers, exposing their customers to civil liabilities of varying and uncertain severity. Although there are differences in individual countries' legislation, the warning or 'graduated response' element of these approaches is based upon the assumption that only the most egregious and recalcitrant of copyright infringers will receive the sanction of being disconnected or exposed to civil lawsuits by copyright owners. In other words, the graduated approach is billed as an exercise in deterrence rather than of enforcement.

The aim of this paper is to examine how the creative industry companies, ISPs and governments are positioning themselves in debates about the online use of digital information. We critically assess recent developments in the light of a legislative measure in the UK which is aimed at curtailing online copyright infringement, although our analysis has broader implications for other policy initiatives that are aimed at curtailing the use of innovative technologies for copyright infringing purposes. The Digital Economy Act 2010 (DEA) was enacted by the UK Labour Government during the 'clean-up' phase when legislation is passed by Parliament in the last days of a standing government (UK Government, 2010). The DEA addressed a range of issues concerning the regulation of digital media services and set out specific provisions aimed at curtailing illegal P2P file-sharing. The Government argued that these provisions were proportionate to harm caused to UK industry (BIS et al., 2010). The Act and a provisional code prepared by the regulator, Ofcom (2010), require the ISPs accounting for some 97% of the broadband market to write to their subscribers when their Internet addresses are reported by copyright holders as being suspected of infringing copyright law. On the request of the rights holders, ISPs are required to record the 'offline' identities of subscribers whose online Internet Protocol (IP) addresses are flagged by copyright holders or their agents as being involved in the exchange of copyright-infringing files, to notify these subscribers that they have been accused of copyright infringement and, having issued three warnings, to make

available on court order their personal details, enabling the rights holders to pursue civil liability cases against them.

Two of the largest ISPs in the British market – British Telecommunications plc (BT) and TalkTalk Telecom Group PLC – were granted a judicial review of the DEA by the UK High Court of Justice on the question of whether the Act is a proportionate and legal response to online copyright infringement. The case was defended by the Secretary of State for Business, Innovation and Skills, joined by representatives of the creative industries and their expert economists. We were engaged as expert witnesses by BT to assess the issue of proportionality.[1] The High Court dismissed the challenge brought by the ISPs, ruling that it is for Parliament, not the courts, to decide the balance of interests in contestations over copyright (UK High Court of Justice, 2011). At the time of writing, the 'graduated response' provisions of the Act are to be implemented in 2014.

We begin with a brief history of the creative industries' measures to curtail online file-sharing, one of several strategies aimed at enforcing the provisions of existing copyright law. Next we examine the changing social and cultural norms that are associated with the spread of the Internet and a 'sharing' culture. We then turn to a critical assessment of the 'economic calculus' in support of the graduated response approach. This is followed by a discussion of how the Act potentially affects Internet users who are not ISP subscribers and who may or may not be engaged in infringing activity. In the penultimate section, we highlight initiatives being taken by the creative industry companies to build new markets for digital content. Finally, we suggest that the balance exemplified by the provisions of the DEA favours the creative industries and we reflect on the position of academics as expert witnesses in such cases.

Creative industry strategy – a graduated response

By 2008 in the United States (US) the Recording Industry Association of America (RIAA) had filed some 30,000 legal actions against suspected P2P file-sharing copyright infringers (Kravets, 2008). Since then, the RIAA and other trade associations have been seeking cooperation with ISPs to target major alleged offenders rather than individuals who infringe copyright law, and have been publishing lists of the top illegal file-sharing websites (Murtagh, 2009; RIAA, 2010). The Digital Millennium Copyright Act (US Government, 1998) involves ISPs in copyright enforcement, but the US courts have found the language of the legislation ambiguous with respect to whether ISPs must reveal the identities of suspected infringers (Hambidge, 2007). The creative industry companies and their associations have renewed their efforts to gain ISP cooperation in tackling online 'piracy' and, by mid-2011, had reached a voluntary agreement (Strain, 2011).

The voluntary agreement with ISPs in the US follows on the heels of a vigorous campaign by the International Intellectual Property Alliance (IIPA) and the national associations to strengthen measures to ensure that copyright protection is effective on a global basis. Bob Pisano, president and interim CEO of the Motion Picture Association of America (MPAA), has said that 'we know there cannot be a one-size-fits-all approach to the problem' (Fleming, 2010), acknowledging that the specific mandates given by national policy makers to ISPs are likely to differ. These lobbying activities have been aimed at persuading governments to force ISPs to cooperate in the industry's efforts to

bring legal actions against suspected infringing P2P file-sharers. Graduated response or 'three strikes and you are out' policies requiring ISPs to become the enforcers of copyright (with court intervention) have also been supported, albeit controversially, by the European Commission and the governments of numerous other countries.[2] The DEA was introduced in parallel with negotiations leading to the Anti-Counterfeiting Trade Agreement (ACTA, 2010), which contained similar provisions with respect to file-sharing. ACTA was abandoned, but similar provisions are appearing in negotiations of bilateral and regional trade agreements. Although there are differences in the approaches, the general trend is one of enacting legislation requiring ISPs to reveal the identities of their subscribers, and enrolling courts in bringing measures against these subscribers.

Changing online cultures

The creative industry's lobbying campaign is being mounted in a context where there are clear signs of change in the perceptions of appropriate online social and cultural norms and moral behaviour, in Internet users' experience and skills, in the demand for digital products (including music, films and games), in the supply structure of the creative industries and in the levels of awareness of the risk of liability associated with infringing, file-sharing activity. This context also includes ample indications of experimentation with digital platforms where Internet users become collaborators in the production of content and in an emerging 'remix' culture where amateur creativity becomes a substantial resource for society (Benkler, 2004; Jenkins, 2006; Lessig, 2008).

Online personalised, convergent and mobile media are becoming integral to all spheres of life (Livingstone, 2009). In the wake of these changes, there is some empirical evidence of a gap between legal and user perspectives on what constitutes 'good' online behaviour and many Internet users have the impression that the use of file-sharing software is always legal (Chen et al., 2008; Pouwelse et al., 2008), despite the considerable efforts of the World Intellectual Property Organization (WIPO), industry trade associations and schools to support education campaigns. Moreover, some activities raise questions about the boundaries between artists and their audiences. For example, Internet users who participate in 'bootleg' (unauthorised recording) online communities are motivated by their loyalty and enthusiasm for the content they share and by the voluntary and altruistic ethos that characterises virtual communities (Berdou, 2011; Bruns, 2010), despite the fact that these activities infringe on artists' performance rights and copyrights (Cammaerts, 2011). We discuss the rights holders' perspectives below.

The developing 'Internet culture' is one where social norms regarding the sharing of files are unsettled. 'Sharing' norms have come into conflict with intellectual property rights enforcement such that some advocates of an open information commons see measures to enforce copyright as pulling 'the rug out from under' emerging sharing practices (Burkart, 2010: 4). Means of circumventing the flagging of a user's IP address as being involved in infringing file-sharing include avoiding sharing files with addresses identified as being related to enforcement (Banerjee et al., 2008) and using technical means to conceal the IP address (Le Blond et al., 2010). Studies of changes in the norms influencing online behaviour indicate that disruptive effects on earlier industry business models are often accompanied by the persistence of practices such that industry responses to

both technical change and social norms are always uncertain (Baym, 2010). Interventions aimed at curtailing file-sharing infringing behaviour need to be assessed in the light of social and cultural change and in an environment where the Internet is being used increasingly for downloading music, films and television programmes (Dutton et al., 2009; Lenhart et al., 2010).

In summary, the interaction between norms of 'free culture' and of markets for the sale of online products leaves little doubt that the present period involves uncertain movement between the 'paid-for' market and 'free' (at point of consumption) access to digital content. We suggest that accommodating the interests of both rights holders and file-sharers is more likely to stimulate innovation and creativity than is a costly initiative that exposes individual Internet users to large legal liabilities and potential criminalisation. The graduated response approach runs a risk of encouraging circumvention using technological innovations, whether with playful, ideological or criminal intent. It also confronts those who seek enjoyment from digital products with a heightened perception of real or imagined risk, which is inconsistent with promoting a thriving online participatory culture.

The economic calculus of balance

We focus next on methods and assumptions underpinning the 'economic calculus' employed to justify the DEA as legislation and to defend its implementation in relation to our conclusion that the DEA is a disproportionate response to the growing practice of infringing file-sharing.

File-sharing behaviour is a complex and large-scale social behaviour with several different types of economic effect. Most obviously, infringement may be a substitute for the purchase of media, reducing the revenue to media publishers and creators. In addition, however, file-sharing also involves the accumulation of media which would not be acquired if a payment was required, the promotional effects on the demand for both infringing and non-infringing media files of being able to 'trial' or 'experiment' with their use, and alterations in the balance between sources of revenue to media publishing and other forms by which media creators might receive revenue from their efforts.

The claims of the creative industry with respect to lost revenues due to infringement of copyright are the subject of many academic studies which, by necessity, make simplifying assumptions concerning these factors and are limited by data availability or data collection and sampling techniques. Most are based on self-reported intentions to infringe copyright law or on self-reports of actual infringements. The relatively small amount of research conducted independently of the rights holders concludes that there is no robust evidence upon which to base conclusions about the impact of measures to curtail infringing file-sharing (Hanke, 2010). Most independent studies conclude that it is very difficult to provide a definitive estimate of revenue losses (GAO, 2010; OECD, 2008; WIPO, 2009). Academic studies have focused on elements or components of the processes related to claims of revenue loss. Two basic approaches are employed in these studies. The first is based on the premise that file-sharing creates a competitive substitute for purchasing the copyrighted content; the second queries whether online sharing is impeding the rate of production of musical recording or the revenues available to artists from

their activities. Most of the available academic evidence concerns music file-sharing and focuses on P2P file-sharing methods.

Academic evidence concerning file-sharing as a substitute for legal acquisition of media

Evidence from the business, economics and sociology literatures is inconclusive regarding the behavioural relationship between file-sharing and physical or online acquisition of non-infringing content (Bhattacharjee et al., 2006; Harris and Dumas, 2009; Hietanen et al., 2008; Holsapple et al., 2008; Ingram and Hinduja, 2008; Li and Nergadze, 2009; Oberholzer-Gee and Strumpf, 2007; Plowman and Goode, 2009). The substitution approach to estimating the reduction of revenues resulting from file-sharing or their restoration as a result of efforts to foreclose file-sharing employs standard economic theory of demand substitution – when two similar goods are available in the market, a decline in the price of one will lead to an increase in the quantity demanded of the less expensive good and a 'substitution', that is, a reduction in the quantity demanded of the other. Ordinarily, this principle is followed by the phrase – *ceteris paribus* – 'other things being equal'.

However, a cacophony of simultaneous changes related to the creative industries and the Internet is underway in addition to those indicated above – for example, the decline of stores offering musical recording due to the pressure from both legal and infringing music downloading, the dramatic reduction in mass storage costs enabling libraries of music to be stored on home computer systems or online, which is destabilising the market not only for CD distribution but also for CD players, and the increasing instability of DVD rental stores and postal DVD rental services in the face of online 'streaming' competition, as well as copyright-infringing video file-sharing. Distinguishing 'signal' from 'noise' under these conditions is *not* an exercise akin to establishing the effect of a glut of strawberries on the price of raspberries.

In attempting to measure what might happen if one of a plethora of file-sharing channels were to become more burdensome, it might be presumed that the most relevant study would be of the effect on other channels. Instead, the effort to measure substitution undertaken by market research companies on behalf of their creative industry clients is directed towards asking people to speculate on what they might do if they were unable to acquire copyrighted material by online downloading. Predictably, some of them say that they would purchase some of what they had previously received without cost. From these hypothetical responses, claims are constructed about the effect of curtailing file downloading – the substitution of the 'old' method of acquiring copyright content for the 'new'.

It might be thought that economists, who are generally sceptical of hypothetical experiments, would express scepticism about such exercises. Indeed, economists generally have refused to be drawn on the effects of curtailing one channel of acquisition, confining their attention to the effect of file-sharing on sales, using the *ceteris paribus* assumption. Predictably, the effect of having channels through which copyright material can be obtained without paying for it leads to a substitution effect – less music is purchased.

Using economic logic to link industry losses with the possibility of revenue gains through suppressing file-sharing is possible only by making a series of assumptions about what individuals would do if file-sharing were not available. Economic studies of substitution measure what people do when infringing file-sharing is an option. If a file-sharing option is not available, what they actually do is a matter of conjecture rather than of measurement – the world has changed and the options available have changed with it. It does not follow that they will, in fact, behave as the economic logic suggests – they may well choose to do other things with their time and money than purchase copyrighted music which they previously freely accessed.

The consequence is that even if industry losses due to file-sharing are significant, estimates of revenue restoration from efforts to curtail P2P file-sharing are not a matter of measurement, but rather of conjecture. The 'substitution' theory has little traction when it is applied to actual behaviour because it rests on several problematic assumptions.

1. It presumes that individuals' inherent desire for consumption of music is unchanged over the period in which file-sharing has become established.
2. It presumes that the growing availability of new substitutes for copyright music (e.g. streaming music videos from sanctioned or unsanctioned outlets) is an inconsequential alternative for individuals unable to obtain copyrighted music without payment to rights holders.
3. It presumes that other methods of acquiring copyright- infringing material would not be substituted for the specific methods that are subject to enforcement.

It may be that in the era prior to P2P file-sharing, the apparent effect of infringement on industry revenue was not pronounced as a result of the use of other technologies. However, we cannot rewind history to this era; that is, we cannot create, by fiat, a world in which people who infringe suddenly become unaware of the possibility of exchanging infringing MP3 or other audio-visual files as an alternative to paying for them. Nor can we rewind history to eliminate the further proliferation of technological means to exchange files through social networks (including those formed online). Thus, estimates provided by the creative industry in support of its claims of revenue likely to be recovered as a result of legislative measures such as the DEA in the UK are simply not reliable.

File-sharing and creative production

Because of the simultaneous effects that cloud the examination of substitution effects, an alternative is to examine the apparent effect of all factors acting together on the production or supply of creative output. This approach is less satisfactory in that it leaves open the question of how much revenue 'might have' been lost or how much better-off copyright owners 'would have been' if file-sharing were not widespread. Nonetheless, it offers some insight regarding the extent of the harmful effects that file-sharing might be having on the creative industries.

Academic studies pursuing this approach are fewer in number. Handke (2012) has shown that, for Germany, while the revenues of the industry declined in the period during

which online file-sharing has become prevalent, this has not influenced the number of recordings published.[3] In addition to music publishing, music industry revenues include receipts from live performances and related merchandise (mementos and apparel related to artists and their creations). Mortimer et al. (2012), employing the same framing assumption of comparing the before and after effect of file-sharing, like Handke, find that revenue declines from music publishing. However, live performance revenues increase for the less well-known artists while the better-known artists' live performance revenues remain constant and they experience declining revenues in the 'after' period. This is consistent with anecdotal observations, both of well- and less well-known artists, that recordings are less directly remunerative than concert receipts and that comprehensive recording contracts, including support for live performance staging and revenues, are on the increase.

The 'distribution effect' by which better-known artists might be losing out to less well- known artists raises questions about the quality of musical offerings. Waldfogel (2011) takes up this issue by creating quality indices to compare the before and after periods based on critics' reviews, airplay and sales data. He finds no evidence of a decline in the period following large- scale file-sharing and that the airplay and sales quality index increases during this 'after' period. He also provides evidence of a distribution effect in which smaller 'independent' labels are advancing while the larger publishers are losing share, which he speculates is an effect of the declining costs of both production and distribution of musical recording.

Like the substitution analysis, the supply effect leads to the conclusion that file-sharing has reduced music industry revenue. The studies considered also suggest, however, that there are additional offsetting effects in broadening the availability of music through live performances of less well-known artists and smaller record labels. The apparent absence of a decline in measures of quality of musical recording suggests that, while the effect of file-sharing might be most unwelcome for the best-known artists and larger recording companies, the impact on broad social and cultural welfare may be more ambiguous, leading us to a more general assessment of the social welfare issues arising from file-sharing. These findings also indicate that industry claims that the effects of file-sharing will lead to a dramatic reduction in the capability to invest in new talent or to create high-quality products are not yet visible.

Welfare analysis and interests

The impact assessments of the DEA prepared by the UK Government prior to the passage of the legislation barely acknowledged that many Internet users engaged in file-sharing would be unwilling or unable to pay for the music they have acquired through infringing file-sharing. Instead, it was argued that their welfare, because of their infringement, should *not* be considered in the balancing of interests. The Government took this position despite acknowledging that 'US evidence indicates that were this cost [the welfare loss of those unable or unwilling to pay] to be monetised it could outweigh the monetised benefits' (BIS et al., 2010: 55). However, people who are unable to pay for digital content also suffer a welfare loss from the unavailability of the infringing content

and we conclude that their interests should be considered in the economic analysis of the costs and benefits of this legislation.

The lost value that former infringers incur when they are induced to stop infringing is in fact a cost that should be considered in assessing the proportionality of the DEA legislation that targets individuals.[4] It may be claimed that because legislatures are democratically accountable, legislators undertake a complete assessment of social welfare in setting the terms of intellectual property protection, that is, they weigh the costs incurred by copyright restriction against the incentive benefits of such restrictions that encourage development and publication of new material. If this line of reasoning is accepted, then the social welfare (value) gained by those who participate in copyright infringement should not be counted because it is contrary to legislative intent. In this view, a 'diversion' of social welfare from producers (and their customers) to infringers occurs as the result of infringement; that is, it is not legitimate to 'count' the value realised by infringers since it is the intent of the legislature that this should go to producers directly and their customers indirectly through the incentive effect it creates over time.

There are two problems with this argument. One is that those who infringe are believed to have a desire to acquire music which they satisfy either by infringing or purchasing. If infringing is not an option, then they are presumed to purchase a share of what they acquired from infringing. As we have already noted, there are reasons to be dubious about the behavioural assumptions that link an inability to infringe with claims regarding a conversion to revenue through purchasing. The second problem concerns the assumption that legislatures make concerning the incentive effects of copyright protection. It is presumed by some economists that copyright is a limited restriction on re-publication to ensure that those undertaking the initial publication are able to recover their costs and to generate revenues that enable them to expand their offerings. However, it is not reasonable to believe that legislatures are able to ascertain for the purposes of calculating benefits and costs of legislative initiatives all of the ways in which this desirable incentive may be diluted – for example, through the resale of CDs or vinyl recordings (with or without the retention of a copy), the broadcast of music and its retention through online recording, or even more sophisticated methods, for example, the monitoring of online 'radio' (streaming) broadcasts in search of desired material (with or without the retention of a copy of same). To suggest, therefore, that the parameters of copyright protection are a *direct weighing* of incentive effects against the social welfare costs of exclusion is to attribute godlike powers to legislatures.

There is an additional issue regarding whether, as a matter of policy, the welfare gains created by infringement should be considered in balancing the interests of the creative industry and Internet users. In the UK, the Government argued that no account should be taken of any benefit to these users because the law must be respected. The deterrence of theft is in the long-term interest of society even if it might be claimed that, in the short term, the transfer of value from 'victim' to 'thief' might increase the welfare of the latter. However, these are statements of principle better applied to commodities where the 'theft' leaves the 'victim' bereft of what is 'stolen' rather than diluting the sales opportunity for further copies of the original, as is the case with digital content. Instead, it is appropriate to consider the value that might be lost in relation to the extent of value that might be recovered through further expenditures on enforcement of copyright infringement. This

was not done in the UK Government's assessment of the costs and benefits of the DEA provisions.

Casting the net too widely

Legislation that targets individual file-sharers makes every Internet subscriber liable for possible misuse of his or her Internet connection for copyright infringement. This has substantial implications for the way the Internet online culture is likely to develop in the future because of the varied methods by which the Internet is accessed. It suggests the need for an analysis of the scope of the application of the DEA which, as we show in this section, is substantially greater than the Government acknowledged in its impact assessment of the DEA. In the UK, almost all those who access the Internet do so at least some of the time at home (95% in 2009). A single person in the household may, through engaging in copyright-infringing behaviour, affect others in the household. Based on Office for National Statistics data on household composition in the UK, we estimate that as many as 15 million uninvolved individuals could be at risk if there is an infringer in the household, a number larger than the total number of ISP subscribers.

Furthermore, the home is not the only place of Internet access. Each point of access is likely to involve an ISP subscription and a subscriber who is concerned about possible misuse of this connection, resulting in threats and possible sanctions. This could lead to responses such as denying access, requiring users to assume liability, or to the purchase of insurance to protect against misuse. Some of these responses will raise the costs of Internet use; others are likely to erode trust. In the Oxford Internet Institute (OII) sample for its 2009 survey of Internet use, some 41% of users reported accessing the Internet at work. In the UK, 29.3 million people were employed full- or part-time workers in 2008. Thus, a reasonable estimate of the number of people using the Internet at work is 12 million. Places of employment may record Internet use by employees, but the DEA makes them liable for the possible misuse of every Internet connection at all times. This liability is likely to have a chilling effect on the freedom and ease with which people make use of the Internet in the workplace.

People also use the Internet in other places where the subscriber to the Internet will now face liability associated with the misuse of a computer. For example, according to the OII, 35% of Internet users report accessing the Internet from someone else's home. This means that more than 10 million people are, at least occasionally, using the Internet from someone else's home. In these homes, the Internet account holder rarely will be in a position to assure that visitors to the household, for example, teenage children, uphold 'house rules'. In other words, some of these 10 million users may represent a liability for the person allowing someone else's use of his or her Internet connection. This too is likely to have a chilling effect on the willingness of people to allow friends or guests to use their Internet connections.

The net is cast even further because the implications of this legislation are likely to be felt by public institutions such as schools, libraries, museums, hospitals and universities. For example, the OII found that 16% of those aged 14 and over use the Internet at school or university (over 7 million people) and 14% (over 6 million people) access the Internet from libraries. These are large numbers of users who previously have enjoyed access,

often without the need to prove their identity, as well as the risks that a friend or other person can gain access in their name and misuse their access privileges. All of these sites as well as others such as Internet cafés (with over 3 million people accessing the Internet) are now threatened with possible misuse of the access they provide as a public service or as the basis for their business or mission. In each of these environments, access to the Internet is now more tightly regulated, results in costs in assuring compliance and involves Internet users being subject to suspicion and a test of trust.

The scale of those affected by this legislation who are not online copyright infringers is potentially very large. The Government claimed that the Act is aimed at balancing legitimate uses of the Internet and freedom of expression against the costs of implementing technical sanctions against Internet users, assuming authorisation by the courts (UK Government, 2010). However, if citizens become confused about the legality of their use of the Internet or the likelihood of punishment for this use, resulting in a reduction of their experimentation in using Internet services, this would defeat the Government's aim of encouraging innovative and inclusive online participation. Measures aimed at curtailing P2P file-sharing mean that citizens will perceive that their online behaviour is being monitored and the resulting loss of privacy is likely to result in a decline in perceptions of the trustworthiness of the Internet. Surveillance and monitoring involving interference with privacy and democratic principles may lead Internet users to find alternative ways of obtaining digital content, regardless of whether it is legal or illegal.

Contradictory industry responses

The interests of the creative industry are not completely aligned with the efforts to achieve stronger copyright enforcement. People are incorporating recorded music and other digital content into their lives with the possibility of portability and of anytime, anywhere consumption. Although these changes began with the advent of the Sony Walkman and other portable cassette players, the digital phase is creating further benefits for consumers and producers and sellers of MP3 and other portable music and media players. It is not possible to return to the pre-Napster era when online sharing of copyright material (and hence infringement of copyright) accelerated and began to play a role in displacing the sale of CD recordings, opening the market for digital music and media players such as the iPod and MP3 players.

In exploiting the business opportunities made available by portable music, music publishers have licensed distributors of legitimate copies of their products such as iTunes and a variety of services that offer online access to music. Legal digital services seem to appeal to some mature users but illegal digital services continue to appeal to bootleggers, aficionados and singles-buying youths. Companies are developing 'paid-for' services which offer greater reliability, reduced security problems, extra features such as celebrity play lists, exclusive tracks, album art, gift certificates, allowances and streaming audio, leading to changes in the attractiveness of legal services. In the wake of all this activity in the market, Van Eijk et al. (2010: 53) conclude that 'introducing new protective measures does not seem the right way to go'.

The use of illegal downloading sites is reported to be growing despite the availability of 'free' sites such as Spotify, where copyright licensing arrangements permit making

music available online (or offline using the Spotify player, which verifies the user's rights to access the music files downloaded). Spotify is one example of the creative industry developing new business models and taking steps to make content available legally for consumers in ways that substitute for copyright-infringing file-sharing. These new business models suggest their recognition that Internet users will continue to engage in practices that violate existing copyright law. It is possible to speculate that, in the absence of copyright-infringing file-sharing, greater investment would be made in these services. However, their variety and the scale of their operation indicates that the industry is willing to license music, despite the relatively straightforward means of retaining copies and potentially distributing them to others, that is, infringing on copyrights. These are some of the innovative ways in which rights holders are adapting to a changing online marketplace, even as they seek measures to protect their traditional business models.

Conclusion

Uploading and downloading of digital content are regarded both as piracy or stealing *and* as content-sharing. The former was the perspective consistently taken by the UK Government in the context of the DEA, despite its insistence that it is seeking to balance the interests of rights holders and Internet users. Reports prior to the introduction of the DEA suggested the need for a flexible approach to intellectual property rights (BIS and DCMS, 2009; HM Treasury, 2006). Nevertheless, the Government claimed that the DEA was necessary to allow 'investors to obtain *fully appropriate* returns on their investment' (BIS et al., 2010: 54, emphasis added). It has consistently favoured the creative industry's definition of what is 'fully appropriate'.

We concluded in our capacity as expert witnesses that the question of balancing interests should be considered in the context of innovative developments in the use of the Internet. In the light of uncertainty about the direction of change in social norms and behaviour, legislation that seeks to suppress file-sharing, whether P2P or by other means, by bringing legal actions against individual infringers is likely to disrupt or alter the course of Internet development in ways that cannot be assumed to be benign. An economic calculus offering a reasonable balancing of interests would take into account the structure of the ISP industry and provide a full welfare analysis with consideration given to the welfare gains and losses to *all* stakeholders, as well as taking into account the welfare implications of the wide 'casting of the net' for privacy and trust. There is little doubt that rights holders have lost revenue as the result of P2P file-sharing, but the evidence is insufficient to estimate the amount of these losses and the balance between losses and gains from industry innovations appears to be fluctuating over time. The provisions of the DEA are disproportionate because of uncertainties regarding the benefits that might be produced for the creative industries and the negative implications for Internet users.

This conclusion is in marked contrast to the logic of the argument that, because industry revenue losses have occurred through online infringing behaviour, something must be done. Implementation of the DEA means that ISP subscribers will find themselves liable to claims of infringement. The hopes that this form of 'deterrence' will

target only those guilty of infringement and have no effect on others, or that the result will be a very substantial increase in the revenues of the rights holder industry, are just that: hopes. The legislation is a costly, large and risky experiment and hence we concluded that it is disproportionate. The Act does not achieve an appropriate balancing of the interests of intellectual property rights holders and others with an interest in a thriving participatory online world.

The Government took the view that the only way forward is to change hearts and minds so that Internet users regard copyright infringement as being unacceptable. Under the DEA the assumption is that a system of mass notifications will 'educate consumers about copyright and bring about a change in consumer behaviour' (BIS, 2010: 36). The promotion of legal means of acquiring content, combined with greater public recognition of improvements in legal services, as well as new methods of compensating content creators, is more likely to shape the development of the creative industries in the interests of all than is legislation that targets Internet users. In its ruling, the court accepted our argument about the ambiguity of the results of empirical studies of Internet user intentions and behaviours and that users may take steps to avoid legal liability, resulting in a chilling effect on the development of the Internet. It did not accept that such an effect would exceed the benefits of enhanced copyright protection and left it to Parliament to decide the appropriate weighing of the interests of the creative industries and Internet users: 'Parliament, when considering measures such as the contested provisions, which could be expected to enhance copyright protection, is entitled to proceed on the basis that existing copyright law does strike a fair balance between the interests referred to' (UK High Court of Justice, 2011: para 249).

It also observed that until the DEA is implemented, it is not possible to know with certainty what risks are associated with this legislation. The court insisted that *ex post* evidence of the impact of legislation is the only evidentiary basis for a legitimate case against the present legislation. This places academics in the position of retrospective analysts of history rather than as commentators, based on a variety of methodologies, on present and future developments which are likely to impinge on the way Internet users enjoy their online experience, learn to experiment with digital content and build a participatory online culture.

This raises an issue for scholarship and for the role of academics who participate in deliberations when they reach the courts. Independently of the legal challenge to the DEA, the Government commissioned a review of intellectual property protection and the creative industries' contributions to economic growth, which concluded that greater emphasis should be given to the interests of non-rights holders (Hargreaves, 2011). Nevertheless, the Government's response is to implement the graduated response strategy until such time as there is empirical evidence that it is not working. The conclusion, at least in this case, is that we cannot rely on the court to rebalance the outcomes of existing copyright legislation to favour citizens' interests at least as much as those of the creative industries. The challenge of achieving a better balance remains a matter for political lobbying, and more likely, for the creative tactics of Internet users as they appropriate each new generation of digital technology to access online digital content, whether legally or not.

Acknowledgements

An earlier version was presented at the IAMCR Conference, Istanbul, July 2011. We are grateful for comments, including those of the referees.

Funding

Some of the research reported was funded by British Telecommunications plc under contract to provide independent witness evidence. This research was also supported by the London School of Economics and Political Science and the University of Sussex as part of the authors normal research responsibilities.

Notes

1. This paper draws on Mansell and Steinmueller (2010). The analysis is based on documentary evidence, a review of the scholarly literature and interpretations as a result of our participation in the case. A comprehensive search of trade literature from mid-2010 to early 2011 was undertaken with E Van Couvering.
2. See European Commission (2009: Art 1.3), 'Internet Freedom' Provision of the Telecom Reform Package.
3. At least until 2006, the last year aggregate published data on new titles was available. Handke (2012) also considers two possible confounding effects. 1. The proportion of classical recording titles, less likely to be downloaded by older listeners, does not dramatically increase as might be expected. 2. Although the share of international titles does increase, the number of domestic titles in the best-seller lists does as well, providing mixed evidence regarding the economic effect of file-sharing on the German domestic music publishers in the context of overall revenue decline.
4. The formal economic argument is that file-sharing involves a producer surplus transfer from the media industries to those file-sharers who would otherwise legitimately acquire what they are receiving. In more strident terms, this is the 'gain from theft' that deprives the 'victim', in this case the music publisher and artists, of welfare they would otherwise have had. However, from a social welfare perspective, no net change has occurred (producer surplus becomes consumer surplus). On the other hand, for those individuals who would not otherwise have paid for some or all of the music they obtain by file-sharing, their welfare is diminished if file-sharing becomes unavailable *with no compensating increase in the welfare of the music publishers or artists.* Economists refer to this effect as 'deadweight loss', a loss that occurs that will not be recoverable with alternative arrangements. For further discussion see Rob and Waldfogel (2006).
5. The estimates in this section are based on Dutton et al. (2009) and ONS (2009).

References

ACTA (2010) Anti-counterfeiting trade agreement: negotiating parties. Available at: http://www.mofa.go.jp/policy/economy/i_property/pdfs/acta1105_en.pdf (accessed 16 November 2012).

Banerjee A, Faloutsos M and Bhuyan L (2008) The P2P war: someone is monitoring your activities. *Computer Networks* 52(6): 1272–1280.

Baym NK (2010) *Personal Connection in the Digital Age*. Cambridge: Polity Press.

Benkler Y (2004) Sharing nicely: on shareable goods and the emergence of sharing as modality of economic production. *Yale Law Journal* 114: 273–358.

Berdou E (2011) *Organization in Open Source Communities: At the Crossroads of the Gift and Market Economies*. New York: Routledge.

Bhattacharjee SRD, Gopal RD, Lertwachara K, et al. (2006) Impact of legal threats on online music sharing activity: an analysis of music industry legal actions. *Journal of Law & Economics* 69: 91–114.

BIS (2010) *Online Infringement of Copyright (initial obligations) Cost-Sharing: Consultation Document*. London: Department for Business Innovation and Skills.

BIS and DCMS (2009) *Digital Britain: final report*. June. London: Department for Business Innovation and Skills and Department for Culture Media and Sport.

BIS, IPO and DCMS (2010) *Digital Economy Act 2010: impact assessments*. 3rd ed. March. London: Department for Business Innovation and Skills, Intellectual Property Office, Department for Culture Media and Sport.

Bruns A (2010) Distributed creativity: filesharing and produsage. In: Sonvilla-Weiss S (ed.) *Mashup Cultures*. Vienna: Springer, pp. 24–37.

Burkart P (2010) *Music and Cyberliberties*. Middletown, CT: Wesleyan University Press.

Cammaerts B (2011) The hegemonic copyright regime vs the sharing copyright users of music? *Media Culture & Society* 33(3): 491–502.

Chen U-C, Shang R-A and Lin A-K (2008) The intention to download music files in a P2P environment: consumption value, fashion, and ethical decision perspectives. *Electronic Commerce Research and Applications* 7(4): 411–422.

Dixon AN (2009) Liability of users and third parties for copyright infringements on the Internet: overview of international developments. In: Strowel A (ed.) *Peer-to-Peer File Sharing and Secondary Liability in Copyright Law*. Cheltenham: Edward Elgar Publishers, pp. 12–42.

Dutton WH, Helsper EJ and Gerber MM (2009) *The Internet in Britain 2009*. Oxford: Oxford Internet Institute.

European Commission (2009) *Directive 2009/136/EC of the European Parliament and of the Council of 25 November 2009*. L337/11. Available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0011:0036:En:PDF (accessed 16 November 2012).

Fleming M (2010) MPAA urges Japan on pic pirate issue. *Deadline Hollywood*, 21 October. Available at: http://www.deadline.com/2010/10/mpaa-urges-japan-on-pic-pirate-issue/ (accessed 20 December 2012).

Government Accountability Office (GAO) (2010) *Intellectual Property: Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods*. Washington, DC: Government Accountability Office.

Hambidge T (2007) Containing online copyright infringement: use of the Digital Millennium Copyright Act's foreign site provision to block US access to infringing foreign websites. *Vanderbilt Law Review* 60: 905–937.

Handke C (2010) *The economics of copyright and digitisation: a report on the literature and the need for further research*. Report for the Strategic Advisory Board for Intellectual Property Policy. Rotterdam: Erasmus University.

Handke C (2012) Digital copying and the supply of sound recordings. *Information Economics and Policy* 24(1): 15–29.

Hargreaves I (2011) *Digital Opportunity: A Review of Intellectual Property and Growth*. London. Available at: www.ipo.gov.uk/ipreview-finalreport.pdf (accessed 16 November 2012).

Harris L and Dumas A (2009) Online consumer misbehaviour: an application of neutralization theory. *Marketing Theory* 9(4): 379–402.

Hietanen H, Nuttunen A and Kokkinen H (2008) Criminal friends of entertainment: analysing results from recent Peer-to-Peer surveys. *Scripted* 5(1): 32–49.

HM Treasury (2006) *Gowers Review of Intellectual Property*. London: Her Majesty's Stationery Office.

Holsapple C, Iyengar D, Jin H, et al. (2008) Parameters for software piracy research. *Information Society* 24(4): 199–218.

Ingram J and Hinduja S (2008) Neutralizing music piracy: an empirical examination. *Journal of Deviant Behavior* 29(4): 334–366.

Jenkins H (2006) *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

Kravets D (2008) File sharing law suits at a crossroads, after 5 years of RIAA litigation. *Wired*. Available at: www.wired.com/threatlevel/2008/09/proving-file-sh/ (accessed 16 November 2012).

Le Blond S, Legout A and Lefessant F (2010) Spying the world from your laptop. In: *Presented at 3rd USENIX workshop on large-scale exploits and emergent threats*, San Jose, CA, 27 April.

Lenhart A, Purcell K, Smith A, et al. (2010) *Social Media & Mobile Internet Use among Teens and Young Adults*. Washington, DC: Pew Internet & American Life Project.

Lessig L (2008) *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. London: Bloomsbury.

Li X and Nergadze N (2009) Deterrence effect of four legal and extralegal factors on online copyright infringement. *Journal of Computer-Mediated Communication* 14(2): 307–327.

Livingstone S (2009) *Children and the Internet*. Cambridge: Polity Press.

Mansell R and Steinmueller WE (2010) *British Telecommunications plc ("BT") and TalkTalk Telecom Group Limited v Secretary of State for Business, Innovation and Skills ("BIS") In the matter of an intended claim*. Report for BT Legal. 1 July. London: LSE Enterprise. Available at: http://eprints.lse.ac.uk/36152/1/British_Telecommunications_plc_(author_version).pdf (accessed 16 November 2012).

Mortimer JH, Nosko C and Sorensen A (2012) Supply responses to digital distribution: recorded music and live performances. *Information Economics and Policy* 24(2): 3–14.

Murtagh M (2009) The FCC, the DMCA, and why takedown notices are not enough. *Hastings Law Journal* 61(1): 233–273.

Oberholzer-Gee F and Strumpf K (2007) The effect of file sharing on record sales: an empirical analysis. *Journal of Political Economy* 115(1): 1–42.

Organisation for Economic Cooperation and Development (OECD) (2008) *The Economic Impact of Counterfeiting and Piracy*. Paris: Organisation for Economic Cooperation and Development.

Office of Communication (Ofcom) (2010) *Online infringement of copyright and the Digital Economy Act 2010: draft initial obligations code*. 28 May. London: Office of Communication.

ONS (2009) *Social Trends (No. 39)*. London: Office for National Statistics.

Plowman S and Goode S (2009) Factors affecting the intention to download music: quality perceptions and downloading intensity. *Journal of Computer Information Systems* 49(4): 84–97.

Pouwelse JA, Garbacki P, Epema D, et al. (2008) Pirates and Samaritans: a decade of measurements on peer production and their implications for net neutrality and copyright. *Telecommunications Policy* 32(11): 701–712.

RIAA (2010) RIAA joins Congressional caucus in unveiling first-ever list of notorious illegal sites. *Recording Industry Association of America Newsletter*, 19 May.

Rob R and Waldfogel J (2006) Piracy on the high C's: music downloading, sales displacement, and social welfare in a sample of college students. *Journal of Law & Economics* 49(1): 29–62.

Strain A (2011) *International recording industry welcomes US ISP agreement to curb copyright theft*. 7 July. London: IFPI.

UK Government (2010) *Digital Economy Act 2010 (c.24)*. London: The Stationery Office Ltd.

UK High Court of Justice (2011) *British Telecommunications plc, TalkTalk Telecom Group PLC vs. Secretary of State for Business, Innovation and Skills, and Interested Parties and Interveners, Case No. CO/7354/2010 [2011]EWHC 1021 (Admin)*.

US Government (1998) *Digital Millennium Copyright Act*. Washington, DC: US Government Printing Office.

Van Eijk N, Poort J and Rutten P (2010) Legal, economic and cultural aspects of file sharing. *Communications & Strategies* 77(1): 35–54.

Waldfogel J (2011) *Copyright protection, technological change, and the quality of new products: evidence from recorded music since Napster*. NBER Working paper 17503. Available at: www.nber.org/papers/w17503 (accessed 16 November 2012).

World Intellectual Property Organization (WIPO) (2009) *Enforcing intellectual property rights: an economic perspective*. Report for WIPO Advisory Committee on Enforcement. 2–4 November. Geneva: World Intellectual Property Organisation.

Author biographies

Robin Mansell is professor of new media and the internet in the Department of Media and Communications, London School of Economics and Political Science. She is past president of IAMCR, former head of department and author of many articles on the social, political and economic implications of innovations in digital technologies. Her most recent book is *Imagining the Internet: Communication, Innovation and Governance*, Oxford University Press, 2012.

W Edward Steinmueller is professor of information and communication technology policy at SPRU - Science and Technology Policy Research, University of Sussex. His research focuses on the economics of technical change and innovation, science and technology policy and the relationships between information and knowledge. His recent publications include studies of the social organisation of open source software and the history of engineering knowledge.