

FROM ENTERTAINMENT TO EDUCATION:
THE SCOPE OF COPYRIGHT?

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A. INTRODUCTION

This paper considers the scope of copyright in the light of the so-called “digital (or Internet) revolution” of the last twenty years, and raises some issues about the present and future shape of the law which seem to require further investigation and reflection. In particular, it argues that much of the reform of copyright law which has occurred since the mid-1990s has been driven by the concerns of what we call the ‘entertainment industry’, the producers of recorded music, films and software games, responding to problems of apparently rampant infringement and piracy facilitated by the very digital technology in which the original products now typically appear. This sector has used these reforms to its best advantage, pursuing actual and perceived infringers through the courts where domestic legislation allows, and resorting to self-help measures to supplement and sometimes override the statutory framework where that environment is found wanting.

These legal reforms are however general in nature, and not confined in their impact to the entertainment industry, or even necessarily to digital products. Relatively little has been heard as yet about the impact the policies will have upon the interests of education and research and the sectors, private and public, which support and provide for these interests. There have, however, been signs of stress in the relationship between copyright law and higher education teaching and research in the United Kingdom. In 2002 the Copyright Tribunal ruled that the Copyright Licensing Agency’s administration of copyright in relation to the provision of course pack materials in British universities had been an unreasonable barrier to the use of such course packs in teaching.¹ A Royal Society working group report, *Keeping science open: the effects of intellectual property policy on the*

¹ *Universities UK v Copyright Licensing Agency* [2002] RPC 36; [2002] EMLR 35.

conduct of science, published in April 2003,² suggested that current developments in certain aspects of copyright can be a brake upon scientific research and the dissemination of its results.³ Copyright law has traditionally given a special place to educational and research interests, through exceptions and limitations woven into the fabric of the law since the nineteenth century. But these exceptions and limitations, which are in any event interpreted rather variably in the world's legal systems, have been under gradually increasing pressure in the reform of copyright. In the European Union (EU), notably, many have been made entirely optional for Member States under the Copyright in the Information Society (Infosoc) Directive 2001.⁴ The effects, actual or potential, of the resultant changes in the law outside the entertainment industry have been little considered or studied.

Digital producers have not relied on copyright law alone for their protection from the unauthorised use and reproduction of their products. As already noted, digital technology is a double-edged sword, in that it enables both the creation of exciting new products and their unauthorised, rapid and perfect multiple copying by others. In favour of the producers, however, is the fact that the technology allows the building into products – and also now into the hardware needed to play the products - of devices that protect against such unauthorised copying. This is not confined to the arena of Internet-based dissemination of digital products, as shown by recent experience with DVDs.⁵ These technical protection measures may indeed bar even access to the product until such contractual conditions as may be imposed by the producer are met by the would-be user. Typically these will be non-negotiable terms, created by and for the producer.

² Henceforth *Keeping Science Open*; also accessible at <http://www.royalsoc.ac.uk/policy/> (click on '2003').

³ And see also Corynne McSherry, *Who owns academic work? Battling for control of intellectual property* (Cambridge, Mass., and London: Harvard University Press, 2001); Derek Bok, *Universities in the marketplace: the commercialisation of higher education* (Princeton, N.J.: Princeton University Press, 2003); Uma Suthersanen, "Copyright in higher education", (2003) 23 *Oxford Journal of Legal Studies* 585-609.

⁴ European Parliament and Council Directive 2001/29/EC of 22 May 2001, OJ 2001, L167/10 (henceforth '*Infosoc Directive*'). See in particular art. 5 of the Directive. For the UK's implementation of all the exceptions, see the Copyright and Related Rights Regulations 2003, SI 2003/2498, regs. 8-23.

⁵ See further below, 000.

Further, since these conditions may be imposed every time there is access, they can extend in effect beyond access, to use of the underlying work. Copyright and technical protection measures are thus bolstered and extended by contract terms.⁶

While clearly these technical protection devices are of critical importance to the creation of markets using the new forms of distribution made possible by the Internet and digitisation, and have therefore themselves received specific legal protection alongside the reform of the law of copyright,⁷ further questions are raised about the effect on the established copyright exceptions and limitations, especially in sectors outside the entertainment industry. For example, can the contractual conditions imposed by the right-holder bar access and use of the kind otherwise permissible under the exception and limitation rules? In the context of education and research, should copyright owners be able also to protect their products with such digital fences as to preclude others from exercising their fair dealing rights, or to limit or exclude those rights by contract? That such questions are of importance is confirmed by the admittedly ambiguous provision in European legislation requiring Member States to ensure that the exceptions for permitted acts are made available to the public where it has lawful access to the protected work.⁸

Internet Service Provider (ISP) liability, under which copyright owners may require such providers to remove infringing material being made available through their servers, should also be noted. ISPs act as the gatekeepers to the Internet for many users. Furthermore, many works protected by copyright are made available on the servers owned by ISPs. If copyright owners can require ISPs to remove from their servers

⁶ See e.g. P B Hugenholtz, "Code as code, or the end of intellectual property as we know it", (1999) 6 *Maastricht Journal of European and Comparative Law* 308-318.

⁷ WIPO Copyright Treaty (WCT) 1996, arts. 11, 12; Infosoc Directive, arts. 6, 7.

⁸ Infosoc Directive, art. 6. For UK implementation, see Copyright and Related Rights Regulations 2003, reg. 24, adding s. 296ZE to the Copyright Designs and Patents Act 1988 (henceforth CDPA 1988).

works which infringe copyright, this would help to achieve the goal of removing works from uncontrolled general availability.

The paper thus concludes by suggesting that there are now at least three major questions of policy and fact requiring further investigation. How is policy for digital dissemination being interpreted in sectors not concerned with entertainment (e.g., education and research, and supporting industries such as libraries and archives; i.e., how are producers exercising their rights here)? What impact is that having on the digital delivery of content by publishers and other suppliers to the education/research sector? Is the policy followed in recent reforms of copyright and related areas of law suitable for digital dissemination of works in those sectors outside the entertainment industry?

B. COPYRIGHT AND THE INTERNET

The debate about the role and scope of copyright in the digital context was sparked by varying visions of what the Internet and, following it, the 'information superhighway' should be about.⁹ For government and commercial interests, it was a means of economic development. At a bare minimum, the Internet was an information, marketing and selling device capable of reaching an ever-widening number of citizens, consumers and buyers. All kinds of producers could in effect set up shop on the Internet.¹⁰ Some simply sell goods and services that were already available (but usually more expensively) through traditional outlets. Good examples are Amazon.com, the on-line bookshop, offering books, and easyJet, offering airline services; and each contracting with its customers principally by way of electronic communication across the web. But the technology which underlay the Internet – the digitisation of information and material of all kinds – also created the possibility of new types of electronic product and services that could be traded

⁹ For a good popular account of the development of the Internet see John Naughton, *A Brief History of the Future: the origins of the Internet* (London, 1999).

¹⁰ See e.g. Christina Ramberg, *Internet Marketing the Law of Exchanges and Auctions Online* (Oxford, 2003).

primarily on the Internet. Computer programs and games were the most familiar type of digital product before the Internet took off; these could now be made available on the Internet for downloading directly to computers linked to the relevant website.¹¹ Also familiar by the end of the 1980s were the digital CD-Roms which were largely replacing analogue cassettes and the still-surviving vinyl record as the primary means of disseminating recorded musical performances. The Internet opened up the possibility, soon realised by Napster and others, of a kind of global jukebox¹² from which music enthusiasts could download to a local computer at any time whatever took their fancy. From music it was but a short step to films, albeit that a full-length feature requires far more digital capacity in both the carrier and the player – a technical problem solved for the moment by the technique of compression and the development of the ‘digital versatile disk’ (the DVD) and broadband. Digitisation also enabled the rapid development of the multi-media product, combining written text with sounds and images still and moving.¹³ A well-known example is Microsoft’s Encarta encyclopaedia, typically sold as a CD; but websites may not only offer such products for download by users, but also be ones themselves.

The key point in all this was that, by contrast with the analogue world in which, although copying was easy, the copy was invariably less good than the original, the digital work would always copy perfectly. The downloader would get as good a version as the master copy on the original site – and would get it increasingly easily and quickly as the technology moved on. The Internet thus provided a tremendous new way to reach consumers of information and entertainment products in the comfort of their own homes.

¹¹ See e.g. *Sega Enterprises Inc v Maphia* 857 F Supp 679 (ND Cal, 1994).

¹² For this image see Paul Goldstein, *Copyright’s Highway: The Law and Lore of Copyright from Gutenberg to the Celestial Jukebox* (New York, 1994), especially chapter 6. See also, for a remarkably perceptive analysis, Thomas Dreier, “Copyright digitized: philosophical impacts and practical implications for information exchange in digital networks”, in: WIPO (ed): *WIPO Worldwide Symposium on the Impact of Digital Technology on Copyright and Neighbouring Rights*, (Geneva, 1993), accessible at <http://www.ip.mpg.de/Enhanced/Deutsch/Homepage.HTM>.

¹³ See generally Irini Stamatoudi, *Copyright and Multi-Media Works: a comparative analysis* (Cambridge, 2001).

But the difficulty also facing those minded to exploit these opportunities was precisely the ease and speed of digital reproduction. How could consumers be made to pay for the material they downloaded in this way? How could pirates, those making copies for their own commercial gain without the authority of the originator, be stopped from exploiting the technology and thereby undercutting the latter's market?

The problems with which the Internet confronts copyright owners were very well illustrated by the Napster case in the USA in 2000-2001.¹⁴ The arrival of MP3 software in the late 1990s enabled the conversion of digitally recorded (or remastered) material (in particular music) into highly compressed computer files postable on and downloadable from the Internet. Napster Inc was a company which made available for downloading from the Internet its proprietary MusicShare software. This uploaded to the Napster servers a list of all MP3 files on the hard disk of the user's computer, while that person was enabled to search the servers, which contained master indices of the locations of music files on the hard disks of all users of the service. Using these indices, users might then freely download to their own computers copies of the files they wanted, directly from the hard disks of other users. These one-to-one networks were also described as 'peer-to-peer' (P2P).¹⁵ In early July 2000 there were said to be 8 million users of Napster's services in the USA, each one exchanging on average about 20 songs per month, while in the UK, the number of users had increased from 217,800 in May 2000 to 464,300 in June.¹⁶ Although Napster itself did not make any copies of the files, it was at this point that litigation at the behest of copyright owners began the process of curbing the company's activities, a process the stress and expense of which ultimately drove

¹⁴ A&M Records v. Napster 239 F. 3d 1004 (2001).

¹⁵ Larry Lessig, *The Future of Ideas: the Fate of the Commons in a Connected World* (New York, 2001), 134-137.

¹⁶ *The Times*, Interface supplement, 7 Aug 2000. Lessig, *Future of Ideas*, at 130, says: "At the time the RIAA filed suit, the number of Napster users was under two hundred thousand; after the suit hit the press, the number of users grew to fifty-seven million."

Napster into bankruptcy and closure.¹⁷ Napster's liability was founded, not upon their own infringement of copyright, but rather upon the holding that through their provision of indices they enabled, knew of, and could prevent, such infringement by others: that is, in the technical language of US copyright law, Napster was guilty of contributory and vicarious infringement, the US equivalent of the UK concept of 'authorisation of infringement', which is likewise infringement under the Copyright, Designs and Patents Act 1988.¹⁸

The legal answer to the problem of ensuring that the user paid for strictly defined rights of use was multi-faceted.¹⁹ First, make certain that the law of copyright applied to the Internet, and that material placed there enjoyed copyright, unauthorised copying of which was infringement. Second, adjust the law of copyright in so far as it seemed unable to meet the specific case of digital products and transmission: hence the public communication right first sighted in the World Intellectual Property Organisation (WIPO) Copyright Treaty of 1996,²⁰ under which the right holder has the exclusive right to authorise or prohibit any communication to the public of its work, by wire or wireless means, including making available in such a way that members of the public may access them from a place and at a time individually chosen by them. Exactly geared to the fact of one-to-one communication via the Internet (as well as one-to-many, such as broadcasting), and including not only the provision of copyable copies but also the 'streaming' of audio and visual material, the new right enables such individual

¹⁷ See below, 000, however, for Napster's resurrection in late 2003 as a licensed service for paying customers.

¹⁸ CDPA 1988, s. 16(2). See on this concept *CBS Songs Ltd v Amstrad Consumer Electronics plc* [1988] AC 1013; and compare also the contrasting approaches of the Australian and Canadian courts apparent in *Moorhouse v University of New South Wales* [1976] RPC 151 and *Law Society of Upper Canada v CCH Canadian Ltd* [2004] SCC 13. The Australian Copyright Amendment (Digital Agenda) Act 2000, amending s. 36 of the Copyright Act 1968, seeks to elaborate factors relevant to a finding of authorisation.

¹⁹ See e.g. Information Infrastructure Task Force, *Intellectual Property and the National Information Infrastructure* (1995); European Commission Green Papers, *Copyright and Related Rights in the Information Society*, COM (95) 382 final; *Follow-Up to the Green Paper on Copyright and Related Rights in the Information Society*, COM (96) 568 final; P B Hugenholtz (ed), *The Future of Copyright in a Digital Environment* (Kluwer, 1996); I Stamatoudi and P Torremans (eds), *Copyright in the New Digital Environment* (London, 2000); J Litman, *Digital Copyright* (Prometheus Books, 2001).

²⁰ WCT 1996 art. 8.

communications also to be 'chargeable events' so far as the copyright owner is concerned.²¹

As was also manifest from the 1996 Treaty, the trans-national character of the Internet entailed laws of copyright which were substantially the same everywhere. An international regime already existed and was well established. In 1886 the Berne Convention set up an international system under which member states accepted minimum standards to be achieved by their copyright legislation, and undertook to protect the works of each other's nationals on their territory. In 1994 the TRIPS agreement backed up Berne's minimum standards for copyright by requiring them to be reached by all states wishing to participate in the world trading system.²² The WIPO Copyright Treaty was implemented and extended by, for example, the Digital Millennium Copyright Act (DMCA) 1998 in the USA, the Infosoc Directive 2001 in the European Union, the Copyright Amendment (Digital Agenda) Act 2000 in Australia, and amendments to the Japanese Copyright and Unfair Competition Laws in 2000. Enforcement of these rights across the world might be difficult, but the existence and application of copyright to the Internet would send a message to consumers and pirates alike, and provide a basis, as copyright has always done, for charging those who would make and/or own copies of works under the protection of the law.

But copyright has never been a full property right or monopoly in the protected work. Neither has copyright ever been about perfect control over copies of creative works.²³ Rather, there has always been a number of limitations and exceptions which evolved, not only to give the author sufficient incentive to produce new works to satisfy

²¹ See also InfoSoc Directive, art. 3, implemented in the UK by Copyright and Related Rights Regulations 2003, reg. 6 (replacing s. 20 of the CDP 1988).

²² TRIPS stands for Agreement on Trade-Related Aspects of Intellectual Property Rights, which was part of the international agreement to establish the World Trading Organisation in 1994.

²³ L Lessig, "Intellectual Property and Code", (1996) 11 *St John's J Legal Comment* 635, at 638 ("While we protect real property to protect the owner from harm, we protect intellectual property to provide the owner sufficient incentive to produce such property. 'Sufficient incentive,' however, is something less than 'perfect control'". See also *idem*, *Future of Ideas*, 104-110, 180-217.

the public interest, but also to ensure that parts of existing creative works are available to build upon in the creation of new works by others. This need to place some limitation on copyright was recognised by the framers of the Berne Convention. Numa Droz, the Swiss president of the first Diplomatic Conference towards the Convention, held in 1884, told the delegates that “limitations on absolute protection are dictated, rightly in my opinion, by the public interest. The ever-growing need for mass instruction could never be met if there were no reservation of certain reproduction facilities, which at the same time should not degenerate into abuses.”²⁴ These considerations led to the ‘three-step test’ in the Berne Convention, which provides that limitations or exceptions to exclusive rights must:

- (1) be confined to certain special cases;
- (2) not conflict with the normal exploitation of a work; and
- (3) not unreasonably prejudice the legitimate interests of the right holder.

The Anglo-American and Continental systems differ, however, regarding the way in which these exceptions or limitations operate, with the former taking them to be rather a limit on the grant of property whilst, by contrast, the latter perceive them rather as an exception to the property right granted.²⁵ Equally there are differences in approach with the way in which they operate in domestic law, with the US and (to a lesser extent) the UK favouring broad fair use or fair dealing provisions,²⁶ but the Continental systems focussing rather on specific, narrow categories.²⁷

The policies at domestic level underpinning these provisions are often far from clear. In a number of cases an exemption might simply be the result of political bargaining rather than principled development. Indeed, the long list of optional

²⁴ Berne Convention Centenary 1986, (Geneva, 1986), 105.

²⁵ See generally Gillian Davies, *Copyright and the Public Interest*, 2nd edn (London, 2002).

²⁶ See US Copyright Act 1976, § 107; and (pre-Infosoc Directive implementation) CDPA 1988 ss. 28-31 (see also ss. 32-76 for other ‘acts permitted in relation to copyright works’).

²⁷ French Intellectual Property Code Art. L122-5; German Copyright Act arts. 45-63; Netherlands Copyright Act 1912, arts. 12-25 (all references to pre-Infosoc Directive versions of these statutes).

limitations to be found in the Infosoc Directive,²⁸ together with the protracted process of drafting that instrument, suggests that many are included (or excluded) for pragmatic political reasons rather than on a principled basis. On matters of principle, the ‘three-step test’ to be found in the Berne Convention (and now repeated in the latest Treaties²⁹) is often called upon to justify or to refuse a specific measure. But the three-step test appears more suited to Continental copyright systems, with their closed categories, than it does to either the UK or the USA ones, with their more open-ended and thus less legally certain notions of fair dealing and fair use. Notably, a proposal to add a more open-ended fair dealing type of provision to the Infosoc Directive failed, thanks to Continental opposition.³⁰

However, the question must arise as to the extent to which even the closed category of exceptions in the Infosoc Directive is actually suited to the digital era. When the Berne Convention was finalised, Numa Droz’s clear concern was with relation to education of the masses,³¹ at a time when only imperfect copies of works could be made – and that rarely. Now, perfect copies can be made quickly almost whenever the consumer wants them; but the potential to prevent or control the making of those copies is also greatly increased. It can be argued that copyright exceptions and limitations were created because they related to areas of activity in which the creation of an efficient market in which producers and users could bargain about prices for access to and use of works seemed impossible, or at least far too costly;³² but if that was so, has the Internet solved the market’s failure by providing an environment in which transaction costs are

²⁸ Art. 5.

²⁹ TRIPS 1994, art. 13; WCT 1996, art. 10.

³⁰ Report on the Proposal for a European Parliament and Council Directive on the harmonisation of certain aspects of copyright and related rights in the Information Society, Committee on Legal Affairs and Citizens’ Rights, European Parliament Report No: A4-0026/99.

³¹ See the quotation above, at note 24.

³² The classic statement of this argument is Wendy J Gordon, “Fair use as market failure: a structural and economic analysis of the *Betamax* case and its predecessors”, (1982) 82 *Columbia Law Review* 1600. For Gordon’s more recent development of her analysis, see “Excuse and justification in the law of fair use: commodification and market perspectives”, in Neil Netanel and Niva Elkin-Koren (eds), *The Commodification of Information: Social, Political, and Cultural Ramifications* (The Hague, 2002).

hugely reduced by the automation of the contracting process between supplier and consumer?³³

The approach to copyright exceptions and limitations found in the WIPO Copyright Treaty and subsequent instruments has been increasingly restrictive. The Treaty itself talked of ‘confining’ exceptions,³⁴ and the Infosoc Directive did not insist upon a harmonised approach, largely allowing Member States to choose which ones they would recognise. Following on is the question as to whether the exceptions to be found in the Infosoc Directive – deriving at least in part from the three-step test – are what is needed, either to protect later authors, or to stimulate creativity and provide a reward for investment? How are these measures in the Directive being interpreted and implemented in domestic law? What effect is that then having, not only on the education sector, but on all aspects of society where works are used for the advancement of knowledge, whether by authors, by educators or by researchers? How far, for example, does the Infosoc Directive’s prevention of ‘commercial’ research in relation to protected material inhibit other researchers building upon that material for the public good?³⁵

C. THE RELEVANCE OF DATABASE PROTECTION

A further legal development of significance for the legal protection of online digital products was the implementation in a number of systems around the world in the 1990s of special regimes for the protection of databases. Databases have long been accorded protection under the Berne Convention,³⁶ but that protection is limited to the selection

³³ See Michael Meurer, “Price discrimination, personal use and piracy: copyright protection of digital works”, (1997) 45 *Buffalo Law Review* 845-898; Tom W Bell, “Fair use vs. fared use: the impact of automated rights management on copyright’s fair use doctrine”, (1998) 76 *North Carolina Law Review* 557-619. See further on the economic analysis of ‘fair use’, W M Landes and R Posner, *The Economic Structure of Intellectual Property Law* (Cambridge, Mass., and London, 2003), 115-123.

³⁴ Art. 10(2).

³⁵ See Infosoc Directive, art. 5(3)(a) (CDPA, s. 29 as amended by Copyright and Related Rights Regulations 2003, reg. 9); and see further Royal Society, *Keeping Science Open*, paras. 3.23, 4.19-4.22, 5.5-5.9, 5.21.

³⁶ Berne Convention art. 2(5). See also TRIPS art. 10(2).

and arrangement of their contents, and does not reach the contents themselves. Following a failure to agree a more detailed standard for protection of databases at WIPO,³⁷ the EU in 1996 enacted a specific instrument, the Database Directive,³⁸ protecting the structure of the database by way of copyright as under the Berne Convention, but also according a separate sui generis right against extraction and re-utilisation of the contents, even for databases falling short of the levels of creativity in selection and arrangement needed to achieve copyright protection. The basic criterion for this latter protection is the right-holder's 'substantial investment' in creating the database.

However, the impact of protecting databases in this way is still far from clear.³⁹ Protection generally goes far beyond what might be expected under copyright, in that in effect pure information is often the subject of the right. Further, the Directive drew the exceptions and limitations to both copyright and the sui generis right in databases narrowly and made them optional for Member States, so that for example, as with the later Infosoc Directive, only 'scientific' research for 'non-commercial purposes' was permitted.⁴⁰ The effect on the development of research has yet to be measured, although, with proprietary rights extended in this way, the impact must be more than negligible. The Royal Society's 2003 report on Keeping Science Open argued forcefully that the strong protection of databases against unauthorised extraction and reutilisation causes such difficulties for researchers as to outweigh the need to ensure some return to those who invest in the creation of such databases.⁴¹

³⁷ WIPO Diplomatic Conference held in Geneva December 2006. For information on the questions raised by delegates see Information Meeting on Intellectual Property in Databases Geneva 17 to 19, 1997 Paper (available at the WIPO website, <http://www.wipo.int/>); and for developments subsequently, see <http://www.wipo.int/copyright/en/activities/databases.htm>.

³⁸ Directive 96/9/EC of 11 March on the Legal Protection of Databases; 1996 OJ L77/20.

³⁹ A convenient way of keeping up to date with case law on the Database Directive around the European Union is the Database Right File maintained by the Institute for Information Law Amsterdam and accessible at <http://www.ivir.nl/files/database/>.

⁴⁰ Arts. 6(2)(b), 9(b).

⁴¹ See *Keeping Science Open*, chapter 5.

D. TECHNOLOGICAL PROTECTION MEASURES: DIGITAL RIGHTS MANAGEMENT

A pragmatic answer to the problems of protecting digital works and ensuring that consumers paid for their access and use was provided by the technology itself: the product could be locked behind technological barriers (or ‘walls’ or ‘fences’) – encryption, so-called ‘water-marking’, passwords and so on – requiring authorisation and payment through electronic means before they could be opened up or set aside. The New York case of *Universal Studios Inc v Corley*⁴² provides an explanation of one such barrier device, the ‘content scramble system’ (CSS) protecting DVDs:

CSS is an encryption scheme that employs an algorithm configured by a set of ‘keys’ to encrypt a DVD’s contents. The algorithm is a type of mathematical formula for transforming the contents of the movie file into gibberish; the ‘keys’ are in actuality strings of 0’s and 1’s that serve as values for the mathematical formula. Decryption in the case of CSS requires a set of ‘player keys’ contained in compliant DVD players, as well as an understanding of the CSS encryption algorithm. Without the player keys and the algorithm, a DVD player cannot access the contents of a DVD. With the player keys and the algorithm, a DVD player can display the movie on a television or a computer screen, but does not give a viewer the ability to use the copy function of the computer to copy the movie or to manipulate the digital content of the DVD.⁴³

But the difficulty with technological protection of this kind was its susceptibility to technological circumvention, and the incentive for such circumvention to which protection systems would give rise. The Corley case itself arose, as will be explained more fully

⁴² *Universal City Studios Inc. v. Corley*, 273 F. 3d 429 (2d Cir 2001).

⁴³ *Ibid* at 436-7.

below,⁴⁴ from the dissemination across the Internet of the means by which the CSS barrier might be crossed and DVDs reproduced without payment to those who owned the relevant rights. Thus it was crucial for digital producers to obtain the protection of the law against, not only acts that sought to circumvent the technological defences of digital products, but also the providers of further technology which enabled such circumvention to take place.

This protection began to emerge internationally in the WIPO Copyright Treaty 1996.⁴⁵ The anti-circumvention provisions now largely in place around the world⁴⁶ form an extra level of protection for creative works, over and above that derived from copyright law.⁴⁷ This conclusion stems from the fact that there may be no need to reproduce a work (i.e. infringe the exclusive right of the copyright owner) before anti-circumvention liability can attach. This might, in turn, lead to a question as to the proper place of these anti-circumvention provisions in copyright policy. The issue becomes all the more acute if there can be no question of a user engaging in fair dealing or exercising any one of the other 'limitations/exceptions' to be found in the law of copyright unless access can be gained to that work.⁴⁸ The issue then becomes the exercise of the balancing features within the law of copyright that copyright policy has historically

⁴⁴ See below, 000.

⁴⁵ Arts. 11 and 12.

⁴⁶ For the European Union see Infosoc Directive, arts 6 and 7, implemented in the UK by Copyright and Related Rights Regulations 2003, regs. 24, 25; for the USA, Copyright Act 1976 chap. 12 (added by DMCA); and for Australia, Copyright Amendment (Digital Agenda) Act 2000, adding ss. 116A-116D to the Copyright Act 1968.

⁴⁷ For other litigations on technological protection measures, see *Kabushiki Kaisha Sony Computer Entertainment v Stevens* [2003 FCAFC 157 and *Sony Computer Entertainment v Owen* [2002] EWHC 45 (Jacob J, Ch D), both concerned with encryption and circumvention devices. See also in Germany District Court of Stuttgart, decision of 10 February 1989, CR 1989, 685-688 ['Hardlock']; District Court of Munich, decision of 3 November 1994, CR 1995, 663-665 ['UNPROTECT']; District Court of Frankfurt am Main, decision of 13 June 1995, NJW 1996, 264-265 ['Pirate Card']. For an in-depth discussion on the removal or circumvention of anti-copying devices under German law before the implementation of the Infosoc Directive, see Peter Wand, *Technische Schutzmaßnahmen und Urheberrecht (Technical Protection Measures and Copyright Law)* (Munich, 2001).

⁴⁸ See Institute for Information Law Amsterdam, *Contracts and Copyright Exemptions* (Amsterdam, 1997); L M C R Guibault, *Copyright Exemptions and Contracts: an analysis of the contractual overrideability of of limitations on copyright* (The Hague, 2002).

insisted upon to meet the interests of the author, the publisher by whom the work is made available to the wider public, and the user.

E. INTERNET SERVICE PROVIDER LIABILITY

A number of laws have been drafted providing for ISP liability with the interests of copyright owners in mind.⁴⁹ Generally these laws state that ISPs will not be liable for any infringing content they host (which could be film, software or music files placed there without authorisation), if they remove that content once informed it is there. If they do not, then they will themselves become liable for infringing copyright. Liability is based broadly on the concept of authorisation of infringement (UK standard), or on vicarious and contributory copyright infringement (US standard). In practice what happens is that the copyright owner 'polices' the Internet, and if infringing content is discovered on the servers belonging to an ISP, sends a notice to that ISP requiring removal of the infringing content. This 'notice and take-down procedure' enables the entertainment industry to eliminate infringing content at what might be considered the 'choke' point on the Internet.

Further questions arise over the provision of links on a website taking a surfer from one homepage to another. Could an ISP which hosts a page for a third party containing links to infringing material itself be liable for infringement of copyright? It was on the basis that its facilities enabled users to find infringing material that Napster as an ISP found itself unable to take shelter in the 'safe harbour' provided by the ISP immunity provisions of the US legislation.⁵⁰ If it were possible to remove, not only

⁴⁹ See in the USA the Online Copyright Infringement Liability Limitation Act, part of the DMCA (Copyright Act 1976 § § 201-203); in the EU, the European Parliament and Council Directive on E-Commerce 2000/31/EC, OJ 2000, L178/1, arts 12-15; and in Australia the Copyright Amendment (Digital Agenda) Act 2000, adding ss. 36, 39B and 112E to the Copyright Act 1968 (now under review: see http://www.phillipsfox.com/whats_on/Australia/DigitalAgenda/Liability.pdf). Germany had earlier enacted the Teleservices Act 1997, restricting ISP liability significantly.

⁵⁰ *A & M Records v Napster* 239 F. 3d 1004 (2001).

allegedly infringing material, but also any links on sites which took the surfer to other allegedly infringing material, then the copyright owner would have a powerful weapon to use in a quest to have such material removed from the Internet. This is all the more so if the ISP – a relatively easy target – could be held liable for infringement if such links were not removed. The attempts to obtain definitive answers to the question of liability have led to a number of conflicting cases.⁵¹ Some jurisdictions have enacted specific legislation to provide immunity for the ISP so long as certain procedures are followed,⁵² but that in itself does not necessarily mean that the ISP would be liable if the links were not removed. And if, as appears from a number of cases in Europe, individuals can be liable for deep-linking to web sites on the basis of the sui generis right protecting against unauthorised extraction and re-utilisation,⁵³ does a similar liability attach to the ISP?⁵⁴

F. WHAT IS HAPPENING NOW?

In this part of the paper we examine what has been happening in relation to digital dissemination and copyright by reference to news stories, litigation and legislative enactments, mostly emanating from the USA, where the majority of the changes to domestic legislation required in terms of international obligations were first implemented, so making it, to some extent, the testing bed for these new laws and their effects on

⁵¹ USA: *Playboy Enterprises v Webworld Inc* 968 F Supp 1171 (ND Tex, 1997); Germany: see 'ISP responsible for pirated music', http://www.out-law.com/php/page.php?page_id=is_responsiblefor957137869&area=news. 18 April, 2000; Netherlands: *Church of Scientology v Providers and Karin Spink*, 8 September 2003, LJN-nummer A15638, Zaaker 99/1040, <http://www.linksandlaw.com/news-update10.htm>.

⁵² US Copyright Act § 512(d); German Teleservices Act 1997, s. 5; Australian Copyright Amendment (Digital Agenda) Act 2000, adding ss. 36, 39B and 112E to the Copyright Act 1968.

⁵³ *Société Cadremploi v Société Keljob*, Paris High Court, 5 Sept 2001; District Court of Hamburg, judgment of 12 July 2000, CR 2000, 776-778; District Court of Cologne, judgment of 28 Feb 2001; District Court of Hamburg, judgment of 22 Feb 2001, GRUR 2001, 831-832; NVM/De Telegraaf HR, 22 March 2002, IER 2002/3, 154-180; District Court of The Hague, 14 Jan 2000, Mediaforum 2000, 64; District Court of Rotterdam, 22 Aug 2000, Mediaforum 2000, 344.

⁵⁴ The Higher Regional Court of Cologne has ruled that an operator of a search engine for online newspaper articles which supplies the user with a list of all press reports and, via a 'deep link', leads him directly to the full text version of the document (i.e. without passing through the respective press firm's homepage), neither violates copyright nor engages in anti-competitive behaviour (decision of 27 October 2000, GRUR-RR 2001, 97).

commercial and consumer practices. It is clear that currently the principal concerns are still those of what we call the entertainment industries, in particular, the producers of recorded music, films, and software. These are particularly represented in the USA by, respectively, the Recording Industry Association of America (RIAA),⁵⁵ the Motion Picture Association of America (MPAA),⁵⁶ and the Business Software Alliance (BSA).⁵⁷ But their European counterparts, at least in the sound recording industry, are beginning to become both vocal and active as well.

(1) Copyright enforcement

The music recording industry continues to be deeply concerned by the continued proliferation of Napster-like P2P file-sharing on the Internet (now, thanks to the software of providers such as KaZaA, Gnutella and others, allowing computer users to copy files directly, or 'down-load', from the hard drive of another computer user without the need, as in Napster, to go through a centrally held index). In January 2004 the International Federation of the Phonographic Industry (IFPI) published figures showing that the number of people offering 'infringing files' ('up-loaders') had risen in 2003, from 5 million to 6.2 million, although the total number of files available had fallen from 1.1 billion in April 2003 to 900 million by the end of the year.⁵⁸ The recorded music industry estimated that file-swapping, along with illegal copying of CDs, was reducing its revenues by at least \$4 billion per annum. A 35% decline over three years was claimed, from \$40 billion in 2000 to \$26 billion in 2002.⁵⁹

Scepticism about these figures is no doubt warranted: how exactly are they obtained, and what factors other than file-swapping and piratical copying, such as the

⁵⁵ See <http://www.riaa.com/>.

⁵⁶ See <http://www.mpaa.org/>.

⁵⁷ See <http://www.bsa.org/>.

⁵⁸ The IFPI On Line Music Report is available at <http://www.ifpi.org/site-content/library/online-music-report-2004.pdf>.

⁵⁹ See The Times, 24 Jan 2004 ('Songs on Internet free with Coke').

ailing state of the world economy since 2000, also have a bearing on the sales of pre-recorded music, films and software? Further, the recorded music industry tends to argue that every copy made through the medium of file-sharing is a lost sale. That begs the question whether the person who made the copy, or bought the piratical product, would actually pay to acquire a legitimate copy. This must be a matter of some doubt, given a widespread and firmly established popular perception, long preceding the existence of 'free' services, that legitimate recorded music is over-priced.⁶⁰ In its report of January 2004 referred to earlier, IFPI summarised a survey in the USA, Canada, Germany, Japan and Australia as showing that "on average 27% of respondents ... stated that their spending on CDs and similar music purchases had decreased since they began downloading illegally distributed music, compared with 15% who said that their spending had increased".⁶¹ IFPI stated that these figures countered the 'misconception' that sales were promoted by availability on the Internet, and showed unauthorised file-swapping hurting rather than increasing sales. The organisation did not, however, draw what on the face of it is another obvious conclusion: that for 58% of those surveyed the availability of free copies on the Internet made no difference one way or another to their purchasing of recorded music. Their argument seemed to be further countered by an econometric study by Felix Oberholzer (Harvard Business School) and Koleman Strumpf (University of North Carolina at Chapel Hill), published in March 2004, which concluded that 'downloads have an effect on sales [of recorded music] which is statistically indistinguishable from zero, despite rather precise estimates. Moreover, these estimates are of moderate economic significance and are inconsistent with claims that file sharing is the primary reason for the recent decline in music sales.'⁶²

⁶⁰ See e.g. The Price of Compact Discs, Fifth Report of the National Heritage Committee, 1992-93, HC 609; Monopolies and Mergers Commission, The Supply of Recorded Music (Cm 2599: June 1994).

⁶¹ IFPI Online Music Report 2004, p. 11.

⁶² Felix Oberholzer and Koleman Strumpf, "The effect of file sharing on record sales: an empirical analysis", accessible at http://www.unc.edu/~cigar/papers/FileSharing_March2004.pdf. The quotation is

The importance of the numbers produced by the recorded music industry is what they show to be the industry's perception of market conditions and the responses which it feels necessary to make thereto.⁶³ Litigation aimed at stopping file-swapping as copyright infringement, which had its first great success with Napster, continues to be a major strategy of the music industry, as both a method of deterrence and a way of raising public awareness of the copyright issues involved in use of P2P networks. Against other unlicensed providers of P2P networks, however, the tactic has had variable success. Thus, in the *Grokster* case, decided in April 2003, the Court for the Central District of California held that since, unlike Napster, the supplier lacked any central control over how users deployed the P2P systems in question, there could be no liability for vicarious or contributory infringement of copyright.⁶⁴ Similarly, the Hoge Raad in the Netherlands held in December 2003 that the developers of the KaZaA Media Desktop file-sharing software, which, with 17 million registered users, had become the most popular means of swapping music following the demise of Napster,⁶⁵ could not be held responsible for how others made use of the facility they had created.⁶⁶ In March 2004 the Federal Court of Canada held that neither down- nor up-loading music files constituted an infringement of copyright.⁶⁷ But in the *Aimster* case,⁶⁸ a preliminary injunction was granted by the US

from the abstract of the article. For IFPI's response, arguing that the study is skewed by its use of data from the last quarter of 2002, see <http://www.ifpi.org/site-content/press/20040330n.html>.

⁶³ There can be no doubt that times are hard for the recording industry, with sales declining, staff being reduced, and expenditure cuts pursued: *The Times*, 1 April 2004, ('EMI cuts 1,500 jobs after CD sales slump').

⁶⁴ *MGM Studios Inc v Grokster Ltd*, 259 F. Supp 2d 1029, 66 USPQ 2d 1579, CD Cal, 25 Apr, 2003. Arguments in an appeal were heard in the Court of Appeals for the Ninth Circuit on 3 Feb 2004 (see http://www.eff.org/IP/P2P/MGM_v_Grokster/20040203_eff_pr.php).

⁶⁵ KaZaA was also the most popular search term in 2003 on the Yahoo search engine, besting inter alia Harry Potter, Britney Spears and Eminem: see BBC News Online, 30 Dec 2003 (<http://news.bbc.co.uk/1/hi/technology/3356397.stm>).

⁶⁶ Hoge Raad 19 Dec 2003, *Buma-Stemra/KaZaA*, C02/186HR (accessible at <http://www.rechtspraak.nl/uitspraak/frameset.asp?ljn=AN7253>). See also BBC News Online, 19 Dec 2003, <http://news.bbc.co.uk/1/hi/technology/3335063.stm>. Actions for copyright infringement in relation to KaZaA are also being brought in the USA and Australia (see *ibid*, 6 Feb 2004, <http://news.bbc.co.uk/1/hi/entertainment/music/3465251.stm>; *ibid*, 10 Feb 2004, <http://news.bbc.co.uk/1/hi/entertainment/music/3475043.stm>).

⁶⁷ *BMG Canada Inc and others v John Doe, Jane Doe and all those persons who are infringing copyright in the plaintiffs' sound recordings* 2004 FC 488 (Von Finckenstein J). Note also the decision of the Copyright Board of Canada in December 2003 to freeze at existing levels private copying levies on audio cassettes, CD-Rs,

Court of Appeals for the Seventh Circuit to stop a subscription service (available for \$4.95 per month), the members of which could swap music files only when both parties to the transaction were online and connected in a chat-room enabled by an instant messaging service. In effect the members communicated with each other by emails to which music files were attached. Circuit Judge Richard Posner held that the service provider was liable for contributory infringement even although it did not know what files were being transferred through its systems; wilful blindness to the use of the system for copyright infringement was equivalent to knowledge, and the mere possibility of non-infringing uses of the system was not enough to preclude contributory infringement. Further, the only example of file sharing in an online tutorial on the use of the system was the swapping of copyright music.⁶⁹

In June 2003, however, the RIAA switched attention from the suppliers of the downloading software and announced that it proposed to bring copyright infringement actions against individual computer users uploading large numbers of music files to be

CD-RWs and MiniDiscs, to impose for the first time a levy on non-removable memory permanently embedded in digital audio recorders (such as MP3 players), and not to impose such levies in respect of blank DVDs, removable memory cards and removable micro hard drives, finding no clear evidence that these recording media are ordinarily used by individuals for the purpose of copying music. See <http://www.cb-cda.gc.ca/news/c20032004nr-e.html>, and for the full text of the decision, <http://www.cb-cda.gc.ca/decisions/c12122003-b.pdf>.

⁶⁸ In re *Aimster* copyright litigation, 334 F. 3d 643, 67 USPQ 2d 1233 (2003).

⁶⁹ The Australian Copyright Council also reports a case in Sydney as follows (<http://www.copyright.org.au/>):

“Three university students were sentenced in Sydney on 19 November 2003 in the first criminal prosecution for internet music piracy in Australia. According to a report in the Sydney Morning Herald, Charles Ng and Peter Tran created and operated a digital music website called “MPW3/WMA Land”. The site allowed users to download more than 1800 songs from 390 albums free of charge, without permission of the copyright owners. A third student, Tommy Le, also provided compilation albums for the site. The three defendants tried to avoid detection of the site by structuring it through various internet servers both in Australia and overseas. MPW3/WMA Land site proved very popular with internet users and attracted more than 7 million hits. All three defendants pleaded guilty to numerous counts of copyright infringement from the site. Mr Ng and Mr Tran were sentenced to 18 months gaol because of the seriousness of the offences and the need to deter others from committing similar acts. However, their sentences were suspended for 3 years on a \$1000 good behaviour bond because of their age and because they had not profited from the site. Mr Ng was given 200 hours of community service. Mr Tran, who was unable to complete community service due to a medical condition, was given a fine of \$5000 and a three year good behaviour bond. Mr Le, who had a lesser role in the operation of the site was given 200 hours of community service.”

available on unauthorised P2P networks.⁷⁰ The tactic may have been induced in part by the difficulties being experienced in stopping service providers' activities, but was also clearly aimed at the deterrence of users, and at giving licensed online providers the breathing space needed to establish themselves in the market place.⁷¹ In September 261 such actions were launched in the USA.⁷² Nearly 2,000 further suits have since been initiated,⁷³ although the RIAA's campaign suffered a setback in December 2003 when the US Court of Appeals for the District of Columbia held that the DMCA could not be used to compel Verizon, an ISP, to disclose to plaintiffs from the music industry the names and addresses of subscribers who were using their service for file-swapping purposes.⁷⁴ Suits are now being filed using instead the so-called 'John Doe' process against defendants whose names are unknown; they are identified only by their numerical computer address (the Internet Protocol address), and the plaintiffs can then subpoena the further information necessary to identify the defendants by name.⁷⁵ According to the IFPI report, the RIAA had also sent since April 2003 approximately 18 million instant message warnings of copyright infringement to P2P users in the USA, and record industry groups in a number of other countries (not including the UK) had sent nearly 2 million similar messages to users since August 2003.⁷⁶

In January 2004 British Phonographic Industry (BPI), the trade association of the music recording industry in the UK, indicated that it was increasingly prepared to take legal action against users of unlicensed downloading services (perhaps making use of the new public communication right conferred upon copyright owners by the UK's implementation of the Infosoc Directive on 31 October 2003). But if legitimate file

⁷⁰ See RIAA press release of 25 June 2003: <http://www.riaa.com/news/newsletter/062503.asp>.

⁷¹ IFPI Report, p. 16.

⁷² <http://www.riaa.com/news/newsletter/090803.asp>.

⁷³ See further RIAA press releases: <http://www.riaa.com/news/newsletter/120303.asp>, <http://www.riaa.com/news/newsletter/012104.asp>, <http://www.riaa.com/news/newsletter/021704.asp>, <http://www.riaa.com/news/newsletter/032304.asp>.

⁷⁴ 351 F. 3d 1229; 69 USPQ 2d 1075 (2003).

⁷⁵ See RIAA press release, <http://www.riaa.com/news/newsletter/012104.asp>.

⁷⁶ IFPI Report, p. 14.

swapping services supported by the music industry were successful in causing illicit song-swapping levels to fall, legal action might not be necessary.⁷⁷ In March, however, BPI went further and announced that it was following in the footsteps of the RIAA, and using the Internet to send warning messages about copyright to allegedly infringing file-swappers, claiming that they numbered 7.4 million in the UK.⁷⁸ This was followed by an announcement from IFPI that 247 copyright infringement actions had been launched with the relevant national recording industry associations against up-loading file-sharers in Denmark, Germany, Italy and Canada.⁷⁹

Another important development in 2003 strongly supported and promoted by the music recording industry was the launch of a number of licensed music download websites. The IFPI report stated in January 2004 that the total number of subscribers to such sites had reached half a million, although consumer awareness was still low. Companies from outside the music industry were also establishing music download sites. The most prominent was Apple's iTunes site,⁸⁰ from which, beginning in April 2003, licensed music could be downloaded at a cost of 99 cents per track. iTunes is closely associated with Apple's portable digital player device, the iPod, which according to Apple sold over 730,000 units in the last quarter of 2003. The software, which can now operate on both Apple and PC machines, was available only in the USA in 2003, but was expected to be made internationally available in 2004. Apple has also licensed Hewlett

⁷⁷ BBC Online News, 15 Jan 2004, <http://news.bbc.co.uk/1/hi/entertainment/music/3395161.stm>. At the same time BPI also settled an action against CD Wow!, a company that imported CDs from low-price countries in the Far East and sold them at discounted prices in the UK; the settlement was on the basis that henceforth CD-Wow! would purchase only from within the European Union CDs for resale in the UK, such parallel importing being lawful within the Union but not in relation to goods from elsewhere (The Times, 22 Jan 2004, ('CD importer settles legal fight with music firms'). In February BPI settled a similar action against Play.com, a retailer of CDs and DVDs operating as CD-Wow! had done before the settlement (see the BPI press release of 22 Feb 2004, available at <http://www.bpi.co.uk/>).

⁷⁸ See the BPI press release of 25 March 2004, available at <http://www.bpi.co.uk/>; also BBC News Online, 25 March 2004, <http://news.bbc.co.uk/1/hi/entertainment/music/3567417.stm>.

⁷⁹ See the IFPI press release of 30 March 2004, available at <http://www.ifpi.org/site-content/press/20040330.html>.

⁸⁰ <http://www.apple.com/itunes/>.

Packard's bundling of the iTunes software into its PCs, and had sold over 50 million tracks by the end of March 2004.⁸¹

Napster returned to Internet life in October 2003, but this time as a paying service.⁸² It too plans an extension to Europe in 2004, which it claims is being delayed by the reluctance of European licensing groups to agree terms and conditions.⁸³ In December 2003 Wal-Mart, the US retail chain which also owns Asda in the UK, announced that it was considering entry into the downloading market, selling its files at 88 cents each and thus undercutting most other sites in the market.⁸⁴ Early in 2004, Coca-Cola launched a download site accessible in the United Kingdom. MyCokeMusic.com offers more than 250,000 tracks at prices ranging from 80p to 99p for singles, and £6.40 for albums. The site is being promoted with free downloads available by use of codes which can be found on one in ten of Coke cans and bottles and then entered at MyCokeMusic.com for a single track.⁸⁵ In March 2004 Microsoft announced that it would launch an online music store the following autumn, although there was no indication whether this would be a sales or subscription service.⁸⁶

The issue which dogs the licensing of file-swapping websites is the restricted amount of material which the recorded music industry appears to be willing to allow into circulation, by contrast with the "world of almost limitless access to content"⁸⁷ created originally by the likes of Napster. There have accordingly been arguments for the reintroduction of a system of compulsory licensing akin to the 'mechanical reproduction right' known in UK law between the 1911 and 1988 Copyright Acts, under which once

⁸¹ For the foregoing, see IFPI Report, p. 4. See also BBC News Online, 20 Oct 2003 (<http://news.bbc.co.uk/1/hi/technology/3207984.stm>), 16 March 2004 (<http://news.bbc.co.uk/1/hi/technology/3514178.stm>), and 18 March 2004 (<http://news.bbc.co.uk/1/hi/technology/3523634.stm>).

⁸² <http://www.napster.com/>.

⁸³ Note also the RealRhapsody service available at <http://www.real.com/rhapsody/index.html>.

⁸⁴ BBC News Online, 19 Dec 2003 (<http://news.bbc.co.uk/1/hi/entertainment/music/3333551.stm>).

⁸⁵ The Times, 24 Jan 2004 ('Songs on Internet free with Coke').

⁸⁶ BBC News Online, 24 March 2004 (<http://news.bbc.co.uk/1/hi/entertainment/music/3564755.stm>).

⁸⁷ Lessig, *Future of Ideas*, 131.

the copyright holder had granted permission to make a recording of a musical work, third parties were also free to make such recordings subject to payment of a statutorily fixed licence fee.⁸⁸ Such proposals are rejected by the recorded music industry on pretty much the grounds which explained their repeal in the 1988 Act, namely that they involve too great a constraint upon market freedom and competition; but if copyright is used to prevent the coming to market of products for which there is a reasonable public demand, then there may indeed be grounds in competition law for intervention of some kind.⁸⁹ Compulsory licensing would sit rather easily with automated contracting; it might also be thought of as compulsory blanket licensing of the repertoire of the recording companies, akin to that which collecting societies already grant voluntarily to broadcasters. In the book publishing world, the reproduction of out-of-print works by way of 'print-on-demand' or POD services provides an interesting business model which other sectors might profitably think of following.⁹⁰

(2) Anti-circumvention devices

Two particularly high-profile cases illustrate the zeal with which the industry has pursued the infringers of anti-circumvention protection. The first concerned the film industry and the encryption program CSS, and started in Norway in early 2000, when a student, Jon Johanssen, wrote the DeCSS decryption program designed to overcome the

⁸⁸ Ibid, 254-5. Sir Arnold Plant, one of the first economists to consider the economics of intellectual property, favoured the extension of the mechanical reproduction right into areas other than the recording of music: see his "The economic aspect of copyright in books", (1934) 1 *Economica* 167-195 at 194-5; idem, *The New Commerce in Ideas and Intellectual Property*, Stamp Memorial Lecture, University of London (London, 1953), 15-18.

⁸⁹ See e.g. *Radio Telefis Eireann v Commission*, Case C-241/91, [1995] ECR I-743; cf *Tierce Ladbroke v Commission*, Case T-504/93, [1997] ECR II-923.

⁹⁰ See Oxford University Press Print on Demand service, accessible at <http://www.oup.co.uk/pod/>; note also Oxford Scholarship Online (<http://www.oxfordscholarship.com/oso/public/index.html>), which keeps available a number of OUP scholarly books; and Oxford Reference Online, <http://www.oxfordreference.com/pub/views/home.html>), which is based upon the Oxford Companions series.

encryption controls (CSS) on DVDs.⁹¹ Eric Corley, a US citizen, gave details of the DeCSS on his website, 2600.com. The MPAA sued Corley, using the anti-circumvention provisions in the DMCA, and was successful.⁹² The Court rejected the argument that the purpose of the DeCSS program was to allow purchasers of the DVDs to play them on computers running the Linux operating system, and was therefore an instance of fair use. “Fair use,” it remarked, “has never been held to be a guarantee of access to copyrighted material in order to copy it by the fair user’s preferred technique or in the format of the original.”⁹³

A second case, also concerning the anti-circumvention provisions of the DMCA, occurred where a Russian programmer, Dmitry Sklyarov, was arrested on arrival in the USA to present a paper at a conference. His alleged crime was that he had written a program that could decrypt the technical controls surrounding Adobe’s e-book reader. This machine allowed one to download e-books from the Internet, but only subject to terms and conditions. The encryption program incorporated in the reader only allowed a user to ‘use’ the e-book in the ways dictated by the technology, as supplemented by the contract terms. Although Sklyarov was allowed to return to Russia, the company for which he worked was charged with the same offence, but was ultimately found not guilty.⁹⁴

The technological protection systems developed by the entertainment industries are most effective if the hardware used to access and copy the works also forms part of the measures. For instance, an encryption code in the work that prohibits access is more effective if the work has to be run through a chip embedded in a computer which decrypts the work, rather than simply relying on the code itself. It is for this reason that

⁹¹ Johanssen himself was subjected to a criminal prosecution in Norway as a result of his activities. He was cleared of any offence both at trial and after a prosecutor’s appeal.

⁹² *Universal City Studios, Inc v Corley* 273 F. 3d 429 (2d Cir 2001).

⁹³ *Ibid*, at 459.

⁹⁴ For documents relating to this case, together with comment, see http://www.eff.org/IP/DMCA/US_v_Elcomsoft.

sectors of the copyright industry have sought to negotiate with the electronics industry to ensure the inclusion of such mechanisms in hardware. Some headway has already been made in persuading parts of the electronic industry to agree to the inclusion of copy protection mechanisms in its hardware, in particular where the devices will be used to listen to music.

The US film industry, as represented by the MPAA, identified two particular mechanisms for the protection of its interests. The first is to have an invisible digital file attached to all digital television broadcasts. This flag would then dictate under what conditions the broadcast could be recorded or retransmitted by the home viewer. Digital televisions and video recorders would need to be built to recognise the flag, and act in accordance with the instructions.⁹⁵ This goes some way to explain why the film industry responded with court action to the appearance on the marketplace in 2001 of a digital video recorder (DVR) manufactured by Sonicblue, which allowed television watchers to record television shows while skipping commercial breaks, and to send the programmes thus recorded to others across the Internet, using high speed connections. In an initial controversial ruling, that was very quickly overturned, Sonicblue was required to record the activities of its users.⁹⁶ The Electronic Frontier Foundation, a pressure group promoting 'cyber-freedom',⁹⁷ then supported a further lawsuit against the plaintiffs in the Sonicblue case, on behalf of five consumers who owned other DVRs with similar facilities, asking the court to declare such activities legal.⁹⁸ The two actions were consolidated, but the whole case was ultimately dismissed in January 2004, Sonicblue having filed for bankruptcy and sold its assets to Digital Networks North America Inc, a

⁹⁵ For ongoing developments, see <http://www.mpa.org/Press/>, 'Broadcast Flag'.

⁹⁶ For the order in *Paramount Pictures Corp v Replay TV and Sonicblue*, dated 26 April 2002, see http://www.eff.org/IP/Video/Paramount_v_ReplayTV/20020426_order.pdf. For its reversal, dated 31 May 2002, see

http://www.eff.org/IP/Video/Paramount_v_ReplayTV/20020531_replay_discovery_reversal.pdf.

⁹⁷ See further its website, <http://www.eff.org/>. As illustrated by the previous note, the site contains an extensive archive of relevant court decisions, and also of legislation and other developments in the field of cyberlaw.

⁹⁸ *Newmark v Turner Broadcasting Network* 226 F. Supp 2d 1215, CD Cal, 15 Aug, 2002.

company which then agreed in a settlement with the film industry plaintiffs to manufacture and sell the DVR in question without the commercial-skipping and transmission features.⁹⁹

The second goal of the film industry has been to control the proliferation of P2P systems, as there is evidence that the phenomenon now takes in films as well as music and computer programmes and games.¹⁰⁰ The MPAA would like systems to support the inclusion of watermarking technology in all consumer products, but need the assistance of the electronics industry to ensure that appropriate technology is included in consumer products. Agreement between the two sectors has proved difficult to attain.¹⁰¹ Perhaps in response to failure to reach accord with all sectors of the electronics industry, some 'content' owners are considering producing their own electronic products for the dissemination of content, such as set-top boxes that will not include commercial-skipping features and include copy-protection technologies.¹⁰² Such a strategy is already evident in the software games console market, where a number of players compete. The most popular products are Microsoft's Xbox, Sony's Playstation and Nintendo's GameCube. These companies now aim to develop those devices on which computer games are currently played into a network of consoles through which all kinds of entertainment content (films, music and games) can be distributed.¹⁰³ This helps to explain Microsoft's determination to pursue those who have created the means by which a modified version of the Xbox can play music and swap videos over the Internet.¹⁰⁴ It also clearly illustrates a move by the content owners towards vertical integration of content and platforms.

⁹⁹ Paramount Pictures Corp v Replay TV 298 F. Supp 2d 921, CD Cal, 9 Jan, 2004.

¹⁰⁰ See <http://www.mpa.org/anti-piracy/>, 'Internet Piracy', for the MPAA perception.

¹⁰¹ See 'Tech firms fight copy protection laws', <http://news.com.com/2100-1023-981882.html>.

¹⁰² For developments see Ruel.Net Set-Top Page, <http://ruel.net/top.box/news.htm>.

¹⁰³ The Economist, 22 June 2002 Console Wars.

¹⁰⁴ <http://news.com.com/2100-1040-935092.html>.

Perhaps the most far-reaching proposal to date to force manufacturers of electronic products to include copy protection measures in hardware was the Consumer Broadband and Digital Television Promotion Bill in the US Congress in 2001-2002. This would have required the embedding of copyright-protection mechanisms in PCs, handheld computers, CD players, and anything else that could play, record, or otherwise manipulate digital information. Perhaps unsurprisingly, the Bill encountered a good deal of opposition both from the electronics industry and from consumers, and eventually failed to become law. In January 2003 the recorded music industry (but not the film industry) reached agreement with the electronic manufacturers not to seek the inclusion of copy protection technology in hardware but rather to embark upon a joint campaign to educate consumers on the value of copyright.¹⁰⁵ Almost simultaneously technology companies including Microsoft, Apple and Intel formed the Alliance for Digital Progress, an organisation to resist compulsory copy protection in their products.¹⁰⁶ The film industry continues however to be active in its pursuit of devices that will break the copy protection systems of DVDs. In February and March 2004, MGM, Paramount Pictures and Twentieth Century Fox succeeded in persuading California and New York courts to apply the anti-circumvention provisions of the DMCA and grant a preliminary injunction against 321 Studios manufacturing and distributing software enabling consumers to copy DVDs.¹⁰⁷

(3) Contracts

One effect of technological protection is to compel the would-be user to contract with the right-holder to gain access and pay for her use. The extent to which contract

¹⁰⁵ BBC News Online, 15 Jan 2003 (<http://news.bbc.co.uk/1/hi/entertainment/music/2656833.stm>).

¹⁰⁶ Ibid, 24 Jan 2003 (<http://news.bbc.co.uk/1/hi/technology/2690565.stm>). See further the Alliance website, <http://alliancefordigitalprogress.org/>.

¹⁰⁷ See *321 Studios v MGM Studios Inc*, 2004 WL 415250, ND Cal, Illston J, 19 Feb 2004; *Paramount Pictures Corp v 321 Studios*, 2004 WL 402756, SDNY, Owen J, 3 March 2004.

conditions imposed in this way may depart from copyright limitations and exceptions remains controversial. In 2002 the Australian Copyright Law Review Committee produced a report examining the issue for Australian law, and comparing the approach taken in the EU and USA.¹⁰⁸ The Commission recommended that the Australian Copyright Act be amended to provide that an agreement excluding or modifying sections in the Act limiting copyright should be of no effect.¹⁰⁹ It remains to be seen whether these recommendations will be acted upon. Nonetheless it is noteworthy that what appears to be the first official report in this area has concluded that legislative measures should be taken to preserve what the Review Committee saw as the copyright balance. Another Australian report published at much the same time argues, however, that prohibitions on contracting around the limits of copyright protection are generally undesirable. The view that such restrictions are needed overestimates the ability of the law to establish optimal rules for the protection of copyright material, at the expense of the considerable advantages to be derived from private market-based arrangements. It also overestimates the extent to which copyright owners, operating in a competitive market, are capable of unilaterally imposing terms on end users. Insofar as private agreements may result in less than optimal outcomes, they should be dealt with under established principles of contract law, competition law, or consumer protection law. The attention of policy-makers should therefore focus on examining whether existing principles of contract law, competition law and consumer protection law are able to deal adequately with mass market agreements for the distribution of copyright material, rather than on imposing rigid prohibitions on freedom to contract. On

¹⁰⁸ Australian Copyright Law Review Committee Report, *Copyright and Contract* (Commonwealth of Australia, October 2002), accessible at <http://www.law.gov.au/www/clrHome.nsf/0/F880D70E3300D17BCA256B3700139147?OpenDocument>.

¹⁰⁹ *Ibid.*, ch. 7. This recommendation was supported by the Australian Copyright Council in a response published in July 2003: <http://www.copyright.org.au/PDF/Submissions/X0303.pdf>.

the other hand, there may be an argument for imposing some restrictions on freedom of contract to the extent that copyright policy is directed at promoting objectives other than economic objectives. If that is the case, it is important that non-economic objectives be clearly specified and that any prohibitions be narrowly focused on achieving such objectives.¹¹⁰

How all this might sit with compulsory and/or blanket licensing linked with the automated contracting possible on the Internet¹¹¹ remains to be explored.

(4) Internet service provider liability

As a result of the active policy pursued by the representatives of the entertainment industry, and because ISPs face potential liability if infringing material remains on their servers, much offending material is being removed from websites at the behest of the entertainment industries. For instance, the BSA has deployed special programs to scan the Internet for unauthorised software being traded on P2P networks, Internet Relay Chat channels, and Web and FTP sites,¹¹² and the MPAA has also used a software program to identify web sites containing films placed there without authorisation.¹¹³

The BSA has said that, having located allegedly infringing material, it issued nearly 1,800 takedown requests in Europe in 2000, achieving 96% compliance.¹¹⁴ Perhaps this may be linked to another BSA statement in 2003, claiming that in Western Europe software piracy (defined as the unlicensed installation of business application software) was down in 2002 by 17 percentage points since 1994, a calculation based upon the gap between,

¹¹⁰ David Lindsay, *The Law and Economics of Copyright, Contract and Mass Market Licences* (Centre for Copyright Studies Ltd, Australia, May 2002, accessible at http://www.copyright.com.au/reports%20&%20papers/IssuesPaper_Lindsay.pdf), at 8. The Centre is funded by Copyright Agency Ltd, a collecting society representing authors and publishers.

¹¹¹ See above, 000.

¹¹² <http://www.newsbytes.com/news/02/176800.html>

¹¹³ <http://www.washingtonpost.com/wp-dyn/articles/A5144-2002Jun18.html>

¹¹⁴ <http://global.bsa.org/security/resources/2001-03-26.107.doc>.

on the one hand, demand for personal computers multiplied by an estimated number of applications per computer, and, on the other, sales of licensed software.¹¹⁵

Some ISPs are concerned with protecting their customers, on occasion going to the lengths of requiring those who serve the notice to prove conclusively that the content in question infringes copyright. The Verizon case, in which it was held that an ISP was not obliged to disclose the names and addresses of infringing users to pursuing rights-holders, provides a different example of this. However, courts seem willing to require the ISP to accede to the takedown request, perhaps sometimes based on evidence that might be insufficient to prove infringement.¹¹⁶

G. CONCLUSIONS

From the above discussion it becomes apparent that to date the entertainment industry has been most active in developing, using and enforcing the means at their disposal to control digital content. The targets have been the integrity of technical protection systems, the development of channels to secure content from digitisation through to the end user, and removing allegedly infringing content from the Internet where found.

This raises the critical question about how those other parts of the copyright sector whose activities might more generally be considered to contribute to education, research and the advancement of knowledge (such as publishing), might react to the digital dissemination of their works. Further, how will the chosen strategy impact on the provision of services by libraries and archives whose activities support this sector? Will the publishing and other industries be as active in content protection as the entertainment industry has been, even where their products are to support research and education? Or will other benefits be perceived to flow from a more relaxed regime of

¹¹⁵ See the Eighth Annual BSA Global Software Piracy Study (June 2003), accessible at http://global.bsa.org/globalstudy/2003_GSPS.pdf.

¹¹⁶ <http://www.siliconvalley.com/mld/siliconvalley/news/editorial/3487654.htm>

protection? It would appear that there is nothing to stop publishers from following the paths opened up by the entertainment industry. The activities pursued in the entertainment sector do appear to be within the letter of the law. However, this has been supplemented by initiatives taken by the entertainment industry that go beyond even domestic legislation, whether through contractual terms, or more commonly, by writing the terms of dissemination into the code through which the content is delivered. To date, there is no suggestion that this is unlawful in terms of copyright law. However, their combined implementation raises the question whether the public interest goals historically pursued through the development of copyright policy might have been overtaken by the desire to ensure that the Internet, as a means of communication, is as friendly to the interests of copyright owners as possible.

The framework is now in place within which the entertainment industry can fight its own battles. It is tempting to say, let them carry on. This is not to belittle the problems faced by that sector. Works protected by copyright serve very varied needs. Entertainment products are generally made to be consumed over a limited period. Other creative works serve to enrich and enhance knowledge, and thus form the platform from which advances are made for the benefits for the whole of society. The rampant piracy and individual acts of infringement dogging the entertainment sector is unlikely to trouble the research and education sector to the same extent. A recent survey carried out by the European Commission and Eurostat, considering the diversity of the cultural habits of Europeans, confirmed that both television and cinema were important to all Europeans, but fewer read books on a regular basis. The majority of those who do, read mainly for entertainment purposes.¹¹⁷ The entertainment industry has huge resources at its disposal, and has lobbied long and hard at international, EU and national level to shape policy decisions to meet its own ends. It also has the resources to use those laws

¹¹⁷ http://europa.eu.int/rapid/start/cgi/guesten.ksh?p_action.gettxt=gt&doc=IP/02/667|0|RAPID&lg=EN&display=.

in pursuit of its goals. But the power to shape dissemination and the market for entertainment products is now at least to some extent being offset by the entry into the game of new players at least as strong, such as Coke, Walmart and Microsoft, and the countervailing interests of the technology industries whose products are the means by which those of the entertainment industry reach consumers.

Much more problematic now is the question as to how those same laws will impact on the building blocks of knowledge for the education and research sectors. This part of the copyright industry is far less cohesive in terms of being a lobby group, and equally, it has far fewer resources at hand to use to lobby for specific outcomes. One good example of this in the European sphere has been the debate over the exceptions and limitations which were, or were not, to be included in the Infosoc Directive. The aim of the entertainment industry was to have categories, if any, as narrow as possible. By contrast, those arguing on behalf of the education, library and research sectors would have preferred to see permissions as broadly framed as possible, whilst respecting the interests of authors. The debate is further complicated through the adherence to the Berne three-step test, resulting in at times odd alliances between those representing author's rights and entrepreneurial rightholders such as publishers.

There can be no doubt that the traditional raw materials of education and research are being caught up in the digital revolution. Educational establishments themselves are increasingly interested in e-learning, the provision of courses and programmes over the Internet. In our own discipline of law, where there is a complex interaction between academic and practitioner forms of research, on-line versions of academic and professional journals are now commonly provided by their publishers, either in their own right or through licensed databases, and whether or not they are also

published in hard copy.¹¹⁸ Primary sources in law, such as legislation and judicial decisions, are also made available by way of commercial databases accessible through the Internet, often with texts and journal articles.¹¹⁹ Alongside these initiatives can be found the publicly available material from government, parliamentary and court websites, which may however lack the editorial ‘added value’ provided by the commercial sites.¹²⁰ Other sites such as BAILII attempt to pull this ‘free’ material together for users.¹²¹ Academics concerned by the ever-rising number and subscription costs of their journals also try to create their own websites, databases and self-archiving facilities, from which their output may be freely (‘openly’) accessed.¹²² Law is far from the only discipline affected by such developments. Open access with regard to scientific publications is being investigated by the House of Commons Science and Technology Committee.¹²³ Social and family historians in Scotland may now access the primary sources of wills and testaments from 1500-1901 via the Scottish Archives Network (SCAN);¹²⁴ archaeologists and cultural scholars may study materials in Scottish museums and galleries through the Scottish Cultural Resource Access Network (SCRAN);¹²⁵ and film and media scholars can draw online upon the resources of Scottish Screen.¹²⁶

Three questions thus arise, as stated at the outset of this paper:

¹¹⁸ See e.g. Oxford Journals Online (Law) (<http://www3.oup.co.uk/jnls/fields/law/default.html>); Blackwell Publishing Online (http://www.blackwellpublishing.com/cservices/journal_online.asp?site=1); For examples of purely online journals see the Web Journal of Current Legal Issues (<http://webjcli.ncl.ac.uk/>), the Journal of Information Law and Technology (<http://elj.warwick.ac.uk/Jilt/>), and SCRIPT-ed (<http://www.script-ed.org>).

¹¹⁹ For example, Sweet & Maxwell’s Westlaw service (<http://www.westlaw.co.uk/>); Butterworths Lexis Nexis Online services (see <http://www.butterworths.co.uk/about/index.htm>).

¹²⁰ E.g. UK legislation (<http://www.hmso.gov.uk/acts.htm>), Scotland legislation (<http://www.scotland-legislation.hmso.gov.uk/legislation/scotland/about.htm>), the Scottish Courts website (<http://www.scotcourts.gov.uk/>) and the English Court Service website (http://www.courtservice.gov.uk/judgments/judg_home.htm).

¹²¹ British and Irish Legal Information Institute (<http://www.bailii.org/>).

¹²² On ‘open access’ see John MacColl, “The open access movement in scholarly publishing”, (2002) 8 E-L@w Review 5. See article and letter on the SHERPA (Securing a Hybrid Environment for Research Preservation and Access) project (<http://www.sherpa.org>) in Times Higher Education Supplement, 16 and 30 Jan 2004.

¹²³ http://www.parliament.uk/parliamentary_committees/science_and_technology_committee/scitech111203a.cfm. Evidence was taken on 1 and 8 March 2004.

¹²⁴ <http://www.scan.org.uk/>.

¹²⁵ <http://www.scran.ac.uk/>.

¹²⁶ <http://www.scottishscreen.com/>.

1. how is policy for digital dissemination being interpreted in sectors not concerned with entertainment, (e.g., education and research, and supporting industries such as libraries and archives); i.e., how are producers exercising their rights here?;
2. what impact is that having on the digital delivery of content?
3. is the copyright policy that has been followed in recent reforms suitable for digital dissemination of works in those sectors outside the entertainment industry?

These most pressing questions need to be answered at a European level sooner rather than later. The Infosoc Directive falls due for review in 2005. That Directive contains a number of critical provisions regarding anti-circumvention measures, as well as complicated procedures designed to enable a user of a work protected by copyright exercise a number of the limitations/exceptions to be found in that instrument. These limitations/exceptions in turn are merely permissive, so disparities in implementation in Member States may have important consequences. For instance, if one state were to permit the use of a work for non-commercial research, but another did not, would the content provider simply bar access to that work through code and/or contract in the state where that limitation/exception had not been enacted? Or will the content owner go to the difficulty and expense of writing code that will conform to the domestic legislation of each Member State?

To this end, it is suggested that empirical research is essential to find out what is happening in the research, education, library and archival sectors in Europe with the implementation of the Infosoc Directive with particular focus on (1) the implementation of the optional copyright exceptions and limitations in the Member States of the EU, and the perceived impact of the choices made upon the education and research sectors; (2) the use and impact of digital and other technologically based protective devices with regard to the education and research sectors, including the contractual provisions

deployed alongside the use of such devices; and (3) the interaction between copyright exceptions and limitations, protective devices and associated contracts, and government regulation of the area. Only through such grounded empirical research will we be able to go beyond the rhetoric that has characterised so much of the discussion of legal development in this area, and begin to understand the true impact of the digital revolution on the research and education sectors and their attendant regulatory framework.