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Why Digital Copyright Matters

1.1 OVERVIEW OF THIS BOOK

Copyright is the property right the law gives authors/creators and those taking ownership from them to control the copying and other forms of exploitation of their creations or ‘works’. The traditional view is that copyright arose out of lobbying by printers to prevent the piracy of their books. So in one sense it was a response by vested economic interests to the growth of a new technology. The first UK copyright statute dates back to 1709. The current statute, the Copyright, Designs and Patents Act (CDPA), dates from 1988. A lot may have changed in 300 years but it remains the case that those who exploit their creativity (or that of others) continue to use copyright to fight a battle against piracy and the pirates become ever more sophisticated in their approach. Digitisation is yet another new technology copyright is coming to terms with. The most significant recent legislative development was the adoption in Europe of the so-called Information Society Directive[1] in May 2001 and its implementation into UK law by the Copyright and Related Rights Regulations 2003.[2]

This book argues that digitisation continues to pose fundamental challenges to copyright which have only been partially addressed by the 2003 Regulations, important though these are, although as noted case law continues to develop and the possibility of further legislation in this area arises from current UK and EU consultations and initiatives. The book’s aim is to help educate rights owners, users, and their lawyers of these challenges so that they can better protect and exploit their copyrights. Other texts tend to

1 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L 167/10 22 June 2001. This Directive is referred to throughout this book as the ‘Information Society Directive’ albeit that it applies to non-digital issues as well.

2 SI 2003/2498 (‘2003 Regulations’).

focus on all aspects of copyright, or deal only with specific digital rights or works such as software, databases and so on. This book treats digital copyright law as a subject in its own right. The basic rules of the game may be derived from the real, analogue world. Yet how those rules are applied and what businesses and their lawyers do with the proliferation of additional rules to address digitisation will determine in part the success of the digital economy. It focuses on the private rather than the public sector although in most cases the rules will be the same.[3] If this book helps creators, businesses and their lawyers through the maze of digital copyright it will have served its purpose.

The focus is on copyright and related rights such as database rights which protect digital content. The book does not deal with non-digital copyright matters such as design rights and the protection of semiconductor chip designs by topography rights.

1.1.1 This Chapter and the Book

This chapter looks at why copyright remains important, the challenges posed by digitisation and the history of legislation relevant to digital copyright. Later chapters look in more detail at the legal rules underpinning digital copyright, the constraints on how these rights can be exercised and four very important digital copyright-based industries: databases, software, e-commerce and e-publishing. The book concludes with practical advice on how to protect, manage and exploit digital copyright assets across a range of industries.

1.2 COPYRIGHT: ITS SCOPE AND RATIONALE

1.2.1 Why Have Copyright?

Most of us take copyright for granted. We may choose to ignore it when we photocopy materials, duplicate software or perform works protected by copyright. But when pressed, most lawyers and business people would at least acknowledge that the law ought to grant authors property rights in their works. Surely authors should have the right to prevent the 'theft' of their works and their creativity ought to be rewarded?

[3] But see eg Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the reuse of public sector information for specific rules dealing with the exploitation of public sector information.

1.2.2 The Case Against Copyright and Copyright Reform

Some argue that copyright ought not to exist or at least it should be severely limited in its application. The 'open source' or 'copyleft' movement discussed later in this book is one example of this. We all stand on the shoulders of giants—if all copying were outlawed how would society advance? A novel or a painting is self-evidently not the same as a piece of real property, to be subject to access and possession to the exclusion of all others. Once made available to the public surely all products of the human intellect should be available to everyone for their use, edification and enjoyment? The great US jurist and Supreme Court Justice Louis Brandeis memorably argued against the privatisation of knowledge and for an 'intellectual commons' in the landmark US case *International News Service v Associated Press*[4]: '[t]he general rule of law is, that the noblest of human productions—knowledge, truths ascertained, conceptions, and ideas—become, after voluntary communication to others, free as the air to common use'.

Concerns have been raised in certain quarters that the effect of strengthening copyright law in recent years to address the digital agenda will be to seriously and unjustifiably restrict the dissemination of speech, information, learning, and culture while not providing any decisive incentives to the creator.[5] On this analysis copyright law needs to be reassessed in light of its premises and pared back to a right of much more limited scope and duration.

Such a wholesale reassessment of copyright law is in the author's view unlikely, at least in the short to medium term. For example, the European Commission launched a consultation in 2004 on its Staff Working Paper 'On the Review of the Legal Framework in the Field of Copyright and Related Rights'.[6] The Working Paper indicated that the Commission's view was that current EU copyright legislation was generally effective and consistent, but would benefit from fine-tuning in certain areas. In 2008 the European Commission published a Green Paper on copyright,[7] but the scope of areas under consideration for review was relatively limited. In the words of the Commission:

> In its review of the Single Market[8] the Commission highlighted the need to promote free movement of knowledge and innovation as the 'Fifth freedom' in the single

[4] 248 US 215, 250 (1918).

[5] Kretschmer, 'Digital Copyright: The End of an Era' [2003] *EIPR* 333. Professor Kretschmer cites the US Supreme Court in *Eldred v Ashcroft* 537 US (2003) S Ct 01-618 and in particular the comments of Justice Breyer.

[6] SEC (2004) 995; Brussels, 19 July 2004.

[7] Commission of the European Communities, Green Paper: 'Copyright in the Knowledge Economy', Brussels, 2008 (COM (2008) 466/3).

[8] COM 2007 724 final of 20.11.2007: 'A Single Market for 21st Century Europe'.

> market. The Green Paper will now focus on how research, science and educational materials are disseminated to the public and whether knowledge is circulating freely in the internal market. The consultation document will also look at the issue of whether the current copyright framework is sufficiently robust to protect knowledge products and whether authors and publishers are sufficiently encouraged to create and disseminate electronic versions of these products.
>
> This consultation is targeted at everyone who wants to advance their knowledge and educational levels by using the Internet. Wide dissemination of knowledge contributes to more inclusive and cohesive societies, fosters equal opportunities in line with the priorities of the renewed Social Agenda.
>
> With this Green Paper, the Commission plans to have a structured debate on the long-term future of copyright policy in the knowledge intensive areas. In particular, the Green Paper is an attempt to structure the copyright debate as it relates to scientific publishing, the digital preservation of Europe's cultural heritage, orphan works [i.e. works where the copyright owner cannot be traced], consumer access to protected works [i.e. works protected by DRM] and the special needs for the disabled to participate in the information society. The Green Paper points to future challenges in the fields of scientific and scholarly publishing, search engines and special derogations for libraries, researchers and disabled people. The Green paper focuses not only on the dissemination of knowledge for research, science and education but also on the current legal framework in the area of copyright and the possibilities it can currently offer to a variety of users (social institutions, museums, search engines, disabled people, teaching establishments).[9]

On 6 December 2006 the UK Treasury under the Labour Government published the findings of the Gowers Review, a review of the UK IP system, and certain recommendations were made which, if followed up, would have made limited changes to UK copyright law.[10] Then under the current Coalition Government the Hargreaves Review of Intellectual Property and Growth reported in May 2011.[11] The government has been acting on the Hargreaves Review—the Enterprise and Regulatory Reform Act 2013[12] among other things enables the Secretary of State by regulations to introduce schemes to allow lawful use of orphan works and extended collective licensing by collecting societies under appropriate conditions, and to regulate collecting societies through codes of practice. Other actions following the Hargreaves Review include steps to establish a Digital Copyright Exchange (now called

[9] Commission Press Release, IP/08/1156 Brussels, 16 July 2008. Other recent EU consultations and relevant policy documents have included a Consultation Paper 'Creative Content in a European Digital Single Market: Challenges for the Future A Reflection Document of DG INFSO and DG MARKT' (22 October 2009) and the Commission Communication 'Copyright in the Knowledge Economy' Brussels, 19.10.2009 COM(2009) 532 final.

[10] *Gowers Review of Intellectual Property*, HM Treasury, December 2006 (www.hm-treasury.gov.uk).

[11] www.ipo.gov.uk/ipreview.

[12] 2013 c. 24.

a 'Copyright Hub') under Richard Hooper and proposals for legislative change in October 2013 to amend and expand the exceptions under UK copyright law and to introduce a new non-statutory system to help clarify copyright law by Copyright Notices issued by the Intellectual Property Office (IPO).[13]

1.2.3 Limits on Copyright

In any event, whatever the criticisms of the copyright system, copyright does not protect ideas as such. The courts have developed the so-called 'idea/expression' dichotomy to help set the boundary between what is in the 'public domain' and so common to others to freely copy and exploit, and what can be proprietary and 'privatised'.

So copyright is said to only protect the expression of ideas, not ideas themselves. Take a famous painting such as *The Bathers* by the Neo-Impressionist painter Seurat. Anyone is free to copy the idea or style behind the picture (a river scene depicted using small coloured spots of paint: pointillism). But if it were in copyright the painting itself would be protected from being copied whether by photography or some other means.

Of course this all sounds simple enough but what if someone copies a piece of software not by literally copying the code but by writing a new program which nevertheless replicates the features and functions of the existing software? As we shall see later, such examples challenge the idea/expression dichotomy. In such a case it is difficult not to argue that what has been copied are 'ideas' but nevertheless that in certain cases the law ought to protect them.

Both the common law and latterly the legislature have also recognised that not all copying and exploitation of copyright works ought to be treated as infringements of copyright. In the UK there are currently certain 'fair dealing' exceptions to copyright, such as the right to copy materials for private study and research, for criticism and review, and for news reporting, although the Gowers Review (and Hargreaves Review) have made suggestions for additional exceptions.[14] In the USA the courts have developed a broader 'fair use' defence to copyright infringement and this was enshrined in statute in the 1976 Copyright Act. As we shall see in this book these defences are being tested to the limit in the digital environment: is it fair use, for example, to copy millions of Internet images in order to operate an Internet 'visual search engine'? Or to operate an Internet music service such as MP3.com so

[13] See 'Modernising Copyright: A Modern, Robust and Flexible Framework', IPO, December 2012. These are discussed in ch 2.

[14] www.ipo.gov.uk/policy/policy-issues/policy-issues-gowers/policy-issues-gowers-flexibility.htm.

that users can listen to their CDs whenever they want to without necessarily having direct access to them? Indeed, will the very concepts of fair use and fair dealing survive in the digital economy?

1.2.4 Justifying Copyright

Copyright can be justified on several grounds. These are no mere philosophical speculations. The two major world copyright systems, the Anglo-American 'copyright' system and the continental 'authors' rights' system stand on different philosophical bases. To make sense of copyright law it is necessary to understand what these bases are and their implications for protecting digital products.

In the UK and the USA copyright is frequently justified on the basis of some or all of the following:

(a) there would be no incentive for authors to create or innovate unless in return they are granted the exclusive rights to exploit their works: innovation is good both for economic and public policy reasons and therefore we ought to have copyright;
(b) the efforts (labour) of the creative artist deserve to be rewarded in their own right, regardless of any economic benefits;
(c) the fruits of intellectual labour should be classed as property just in the same way that the products of industry or agriculture are property;
(d) it is unjust to reap where others have sown ('unjust enrichment');
(e) by reference to the Bible and the Ten Commandments ('Thou shalt not steal').

For example, in the UK database rights case, *British Horseracing Board v William Hill*,[15] the judge looked back to the express purpose behind database rights in order to determine whether there was infringement. The judge made clear that following recitals 39 and 40 of the Database Directive[16] the object behind database rights is to protect against the misappropriation of the investment made by the creator of a database in obtaining, verifying or presenting the contents of a database. The investment protected could be financial or simply the time, effort and energy spent in obtaining and collecting the database contents. This analysis was fundamental to how the judge applied database law to the facts in this case.

[15] High Court, Chancery Division 9 February 2001; J Laddie; [2001] RPC 31.
[16] Directive of the European Parliament and of the Council on the legal protection of databases 96/9/EC, OJ L 77, 27.3.96, 20.

1.2.5 Originality and Copyright

In the UK a frequent justification for copyright protection cited by the courts is the unjust enrichment argument. For example, this was referred to by the House of Lords in a leading copyright case, *Designers Guild Limited v Russell Williams (Textiles) Limited*:[17]

> [t]he law of copyright rests on a very clear principle: that anyone who by his or her own skill and labour creates an original work of whatever character shall, for a limited period, enjoy an exclusive right to copy that work. No one else may for a season reap what the copyright owner has sown ...[18]

So the law ought to protect any independent skill and effort ('originality') by an author in creating their works. This is also a variant of the so-called 'sweat of the brow' justification for copyright. The work need not be 'original' or creative in any novel sense—it simply has to have involved some, even a very modest, amount of effort to create and not be slavishly copied from something else.

In contrast, countries such as France and Germany have traditionally protected the works of authors on the basis they embody or bear the stamp of the author's personality. As a number of European Directives discussed later in this book put it, works which 'constitute the author's own intellectual creation' are entitled to copyright protection. So for certain classes of work, software, databases, photographs and so on, the standard of originality appears higher in the continental system as opposed to the UK system, although moves made by the European Commission to harmonise copyright across the EU are diminishing such differences. Indeed, since the last edition of this book it is clear that the Court of Justice of the European Union (CJEU) is in effect developing a copyright jurisprudence that will inevitably bring UK law closer to continental law here.[19]

1.2.6 Moral Rights

One lasting influence of the continental approach to treating works as sacrosanct and embodying the 'spirit' of the author/creator, has been the development of moral rights. In addition to the 'economic rights' underlying copyright which may be freely transferred ('assigned') or licensed, such as the right to copy and distribute copyright protected works, authors also have the moral right to be identified when their works are exploited and to object to derogatory treatment of their works. So the author of a photograph,

[17] [2000] 1 WLR 2416.

[18] *Per* Lord Bingham of Cornhill at 2418A.

[19] See in particular *Infopaq International A/S v Danske Dagblades Forening* (C-5/08) as applied in eg *Newspaper Licensing Agency Ltd v Meltwater Holding BV* [2010] EWHC 3099 (Ch).

regardless of whether he owns the copyright in it (ie the economic rights) may have the right to be identified when the photograph is exhibited or reproduced; he may also have the right to object should the photograph be poorly reproduced. Moral rights have also recently been extended to performers.

Unlike the economic rights, moral rights cannot be assigned and not all countries will permit them to be waived either, which is what the UK permits. Moral rights are often ignored in the digital world but as we shall see later in this book, there is no reason why they do not apply to digital works.

1.2.7 Copyright and Other Intellectual Property (IP) Rights

Copyright simply protects against copying and dealing in illegal copies. If the allegedly infringing work was created without reference to the earlier work then there can be no copyright infringement: if two people write substantially similar software programs independently from each other there can be no copyright infringement. In contrast, if one of the pieces of software was patented then the other could still infringe the patent. Patents create absolute monopoly rights: copyright does not.

Copyright must also be distinguished from laws which protect against unfair competition, such as the English law tort of passing off, or laws which protect brands, such as trade mark law. For example, copying a copyright-protected logo by placing it on a website can amount to copyright infringement even if the logo is not being used as a trade mark and so there is no trade mark infringement or passing off.

These other intellectual property rights are not the subject of this book. Nevertheless rights owners need to bear them in mind where the copyright claim may be weak and where the other IP rights offer additional protection.

1.3 THE INTERNATIONAL ASPECT OF COPYRIGHT

1.3.1 Background

There is no such thing as an 'international copyright'. Copyright is a national property right. It was only in the late nineteenth century when the international piracy of books and other printed materials became a pressing problem that the major industrialised nations got together to grant authors and publishers from other countries the same rights and remedies their own authors and publishers received. This so called principle of 'national treatment' underpins the international copyright system.

The first major international convention to establish the principle of national treatment was the Berne Convention, which dates back to 1886.

It has been revised on a number of occasions but remains the leading international treaty. The USA only agreed to the Berne Convention in 1989. Before that the USA had pressed for countries to sign up to the Universal Copyright Convention (UCC) either instead of, or most frequently in addition to, Berne. The challenges of digitisation resulted in the two latest international copyright treaties: the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty, both of December 1996.

The international copyright system is notoriously complex. Readers who require a fuller treatment of this area are referred to the specialist texts in this area.[20] Nevertheless when faced with a digital copyright problem with an international dimension it is worth bearing in mind the following very rough 'rules of thumb':

(a) The law where the work is created (ie its country of origin) is likely to be relevant when determining who owns the copyright in the work or who the author is;
(b) The law where the infringing acts are taking place is likely to be relevant to the questions of the subsistence and infringement of copyright in the work; and
(c) Which courts will hear and resolve any international copyright dispute is likely to be addressed by reference to a number of international conventions dealing with jurisdiction and the enforcement of judgments including the 1968 Brussels and the 1988 Lugano Conventions on Jurisdiction and Enforcement of Judgments in Civil and Commercial Matters.

1.3.2 An Example

By way of an example consider the case of a British software developer who writes code for his employer, a UK company, in the course of his employment. His employer then exploits the code by posting it on their web-server in England as an upgrade to be downloaded by authorised users anywhere in the world. Someone else in England then downloads this code and in breach of his licence copies it and sells it with his own program in the UK.

As discussed in the next chapter, in the UK copyright can be infringed when all or a substantial part of a work protected by copyright is copied without the permission (express or implied) of the copyright owner. As the unlawful copying in this case is taking place within England the matter will

[20] For example, Goldstein, *International Copyright: Principles, Law and Practice* (Oxford, Oxford University Press 2001).

be dealt with under UK copyright law. Also it is clear the UK courts would be prepared to hear the case and give judgment, in other words 'seize jurisdiction', if the employer (as copyright owner in the UK) sued the infringer. As previously noted, the court would apply UK copyright law.

But what if the developer were Indian and the code was developed in India in the course of his employment, but still effectively first published in the UK and the English company publishing the code got an assignment of copyright from the Indian employer? Or what if the infringer were located in the USA but was distributing the pirated software in the UK via the Internet? Who would own the copyright, the developer or his employer? Which courts would have jurisdiction, the UK or US courts? Which law would they apply—US or UK?

To answer these questions it is first necessary to note again that copyright is a national right. So the general rule is that infringement will be determined by reference to the law of the country where the infringing act is taking place. Which courts will seize jurisdiction will depend on various factors as elaborated by international convention including whether the plaintiff (claimant) or defendant has a trading presence in the jurisdiction and whether the infringing act takes place within the jurisdiction.

For example, let us assume that the English company sues the US infringer in the English courts and the English courts seize jurisdiction. At the outset of the case the English company will need to show it owns the copyright being infringed: as the work was created in India the general principle is that Indian law will apply to this question. So Indian employment and copyright law will need to be considered. On the basis that the Indian employer was in fact the first owner of copyright then there would appear to be no issue here. The English company will then also need to show that a valid UK copyright subsists. This means that the work must have been first published in the UK or another country with which the UK has a relevant copyright treaty (such as the Berne Convention), or the author was a national of a country with which the UK has a relevant copyright treaty. Having overcome these two hurdles the court will then consider whether there has been infringement.

1.3.3 The Internet and International Copyright

It is often argued that cyberspace has no 'real' location—it can be everywhere and nowhere. In fact as noted below, the location of the relevant equipment underlying the Internet—the routers, servers, PCs and so on immediately gives a physical presence to any infringing activity. But it may be that a person in another jurisdiction is controlling this equipment. Immediately, difficult issues are likely to arise as to which law applies and which courts have jurisdiction. An international copyright code might solve this problem but this is a long way off.[21] At the moment all we can do is endeavour to apply the existing legal rules discussed earlier to cyberspace.

1.4 THE DIGITAL CHALLENGE TO COPYRIGHT

Digital technology poses a number of challenges to copyright. The two most significant aspects are first the digitisation of copyright works (so a photograph, for example, can be scanned into an image file) and the creation of new purely digital products (such as software). Second, the growth of networks such as the Internet which allow the rapid global transmission of digital information.

A useful summary of the challenges is the six characteristics of digital technology identified by a leading US copyright lawyer Professor Pamela Samuelson,[22] to which a seventh can be added—the lack of a human author:

1. *Ease of replication*—the technology used to create and view/use a digital work can be used to make multiple 'perfect' copies of that work.
2. *Ease of transmission and multiple use*—networked computers potentially facilitate the widespread piracy of works. The ongoing development and implementation of broad bandwidth fixed and mobile networks to deliver content-rich 'multimedia' works facilitates this further.
3. *Plasticity of digital media*—users can easily modify, enhance or adapt works in digital form. This has come to the fore with the growth of Web 2.0 discussed in chapter eight.
4. *Equivalence of works in digital form*—all works look alike once in code: this means it is easy to combine digital works into new products such as 'multimedia'. This is also an aspect of *convergence*—the merger of media, technology and networks in areas such as the Internet, digital broadcasting, cable services and so on.
5. *Compactness of works in digital form*—a whole library can be stored on a few CD-ROMS or a storage device; this feature also assists in the creation of new works or assemblages of printed and graphic materials.
6. *New search and link capabilities*—Internet sites can be easily linked, for example.

[21] Sterling, *Draft International Copyright Code* (Queen Mary Intellectual Property Research Institute, University of London, 31 May 2001).

[22] Samuelson 'Digital Media and the Changing Face of Intellectual Property Law' (1990) 16 *Rutgers Computer and Technology Law Journal* 323.

7. *No human author (sometimes)*—the digital work may be computer-*generated* as opposed to being created with the *aid* of a computer; copyright law is rooted in the concept of an identifiable, personal author.

This book is about these challenges and how best to exploit the opportunities they present.

1.5 INTERNET TECHNOLOGY AND COPYRIGHT

To understand digital copyright law it is essential to look in general terms at how the Internet works.

1.5.1 How the Internet Works

To illustrate how the Internet works from a digital copyright perspective, consider what steps take place when an image is loaded onto a website—the discussion here centres on the use of a PC by the user but it equally applies to the use of a tablet, smartphone or other mobile device. When the image in question, a photograph ('Work'), is scanned into computer memory using a digital scanner the Work will be copied and if the Work is in copyright, this will amount to an infringement of copyright.[23] Once in electronic form numerous further copies of the Work can be made, for example onto floppy disk, hard disk—they would also infringe copyright under the CDPA. Also, transitory copies of the Work will be made—for example, if the work is viewed on-screen a copy of the Work will be made in computer RAM memory—both this copy but *not necessarily* the on-screen 'copy' will potentially infringe copyright.

Also, let us assume the electronic copy of the Work is loaded onto a computer server (itself an act of copying) made accessible on the worldwide web. A person browsing the relevant website would, through instructions sent by that person's computer, download a copy of the work into RAM in his PC. Again this would be an act of copying.

The Internet is best viewed as a global computer network which allows computers to talk to each other. The viewer's ('browser's') computer transmits a request to the server computer holding the website which is being browsed to forward a copy of some particular material that it is storing. This material is not passed directly to the browser's computer. It is broken into packets, each with an address, and sent across the Internet. It is then passed from one computer on the Internet to another, all of which could be said to make a copy, until all the packets are received at the browser's computer. So the Internet works by copying.

[23] s 16 CDPA.

Thus the exploitation of works in digital form is likely to involve the generation of a number of potentially infringing copies. Copying may also take place in several countries; for example, if the server in question is located in Country A and the person browsing in Country B then if the copyright laws of A and B differ this may lead to a different degree of protection between countries.

In practice, however, provided the digital copy of the work is lawfully made available for browsing then those browsing ought to benefit from an implied licence—ie the law will imply a licence from the circumstances. But query the scope of this licence—this is considered further in chapter seven. Having said that, regardless of any implied licence, in light of the recent UK Supreme Court judgment in *Public Relations Consultants Association Limited (Apppellant) v The Newspaper Licensing Agency Limited and others (Respondents)*[24] (and assuming the CJEU takes the same view as the Supreme Court when it gives its ruling on the case) then browsing the Internet will not in any event infringe copyright, as any cached or other copies made in order to do so will be lawful under section 28A CDPA (which gives effect to an exception for temporary copies under Article 5(1) of the Information Society Directive).

Other copyright-related issues which arise in connection with the Internet include:

Caching

A cache is a computer (generally a server) which holds copies of information (eg, the most popular pages on the worldwide web), so that users do not have to return to the original server. In general terms cached material can be stored:

(a) at a geographically closer site; or
(b) on a more powerful computer; or
(c) on a computer with a less congested path to the user.

Typically, Internet service providers (ISPs) store ('cache') frequently-accessed web pages onto their own servers to speed up users' connection times.

A cache is also created by web browsers (such Microsoft's Internet Explorer software), which can create a cache on the hard disk of the user's computer in addition to the transient RAM copies created whilst browsing. This means that users have easier and quicker access to particular websites. Thus caching can occur both on the user's computer and at server level (so-called 'proxy caching').

Caching clearly involves copying a substantial part of a copyright work and (assuming the work is protected by copyright) would appear to require a licence from the copyright owner to avoid a claim of infringement. Although

[24] [2013] UK SC 18.

convenient for users, caching is by no means necessary and therefore it can be argued that no licence will be implied from the circumstances.

Regardless of its legal status, caching facilitates the copying of entire websites, throwing up obvious copyright issues. The cache site may not be updated as frequently as the original site. Therefore infringing information may have been removed from the original site but not the cache, rendering the website owner and/or the person operating the cache still potentially liable for any infringement actions.

Linking and Framing

Hypertext links enable a website browser to jump from one website to another, facilitating the accessing of related information. 'Hyper-link' means a connection between two items of hypertext (the HTML language used to build websites and converted into readable English by browser software). The hyper-link often appears on a page of information displayed when browsing a website as an underlined keyword, which if clicked on will take you to another document or website. Whether hyper-linking amounts to copyright infringement is considered in chapter seven. In any event, viewers are often unaware that having clicked onto a particular word or phrase (usually highlighted and underlined) they have accessed another website.

There is still debate about the extent to which the use of hypertext links requires the consent of the person whose site is being linked and/or of the copyright owner. In particular, what if such linking is:

(a) misleading (eg by 'framing' someone else's content so that it appears on-screen as your own, although in fact it is from a hypertext linked site with no connection to your site);
(b) defamatory; or
(c) facilitates copying in circumstances such that a licence permitting such copying cannot be implied from the copyright owner? For example, a search engine automatically provides a link to a site hosting infringing content.

Liability of ISPs and Others

Internet service providers (ISPs) may charge subscribers for the right to access the Internet, for the use of their bulletin boards and other services and/or for the rental of pages/space on their server on which they host content on behalf of third parties. ISPs can therefore be viewed as intermediaries in the sense they do not themselves determine what appears on the websites they host. A much debated question is whether an ISP can be held liable for copyright infringement occurring on its site and if so what (if any) knowledge of or participation in the infringement must the ISP have to be liable? This area is considered in more detail in chapters two and seven.

Various other intermediaries are involved in facilitating the transmission of content over the Internet: telecommunications operators may provide the backbone/pipe (in this case they may be said to be acting as a 'mere conduit') and may (or others may) provide the intermediate servers and proxy caches. It is clearly debatable to what extent such activities may infringe copyright.

ISPs and other intermediaries concerned that their activities may be held to infringe copyright (including the Internet Service Providers' Association in the UK) have been vociferous in lobbying to seek to ensure that copyright law does not impose liability on them unfairly. To a large extent their concerns are now dealt with by the Electronic Commerce Directive.

Transmission Right

A major issue regarding the Internet is to what extent 'transmissions' via the Internet are protected by copyright. When a person browses a website, then, as discussed above, instructions sent from the browser's computer will arrive at the computer ('server') (the physical location of the website) and will set in motion the transmission of the relevant text or image in digitised packets over the Internet. These packets are received by the browser's computer and are then converted into on-screen images.

Such 'on-demand', interactive access to copyright material is considered by some to represent a challenge to existing copyright laws. In the UK, at least, for the act of transmission itself potentially to infringe copyright the position prior to the 2003 Regulations was that the transmission would have to amount to either a broadcast (which it clearly is not) or a cable programme service. However, under the previous law it could be argued that the interactive nature of the Internet might rule out cable programme protection, although some case law suggested otherwise, as discussed in chapters two and seven.[25]

International concerns about the level of protection for online transmissions were addressed in the 1996 WIPO Copyright Treaty, the US Digital Millennium Copyright Act 1998 and in the Information Society Directive. The WIPO Treaty, for example, provides for a new right of communication to the public for authors of literary and artistic works; such persons shall:

> enjoy the exclusive right of authorising any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.[26]

This 'communication to the public right' (or as it is also called, 'transmission right') was included in the Information Society Directive[27] and implemented

[25] *Shetland Times v Wills* [1997] FSR 604; *Sony Music Entertainment (UK) Ltd v Easyinternetcafe Ltd* [2003] FSR 882.
[26] Art 8 (Right of Communication to the Public).
[27] Art 3.

into UK law by the 2003 Regulations:[28] this has given rights holders much clearer control over the use made of their works over the Internet.

1.6 INTERNATIONAL LEGISLATION

Legislative activity in the digital copyright area has tended to address four issues:

(a) the implementation of the World Intellectual Property Organisation (WIPO) Treaties of 1996 dealing with the challenges of copyright and digitisation generally—does existing copyright law adequately protect authors and others involved in exploiting copyright works over the Internet?;
(b) clarifying the liability of ISPs and other intermediaries;
(c) the legal protection of technical steps to prevent copying ie ensuring that there are adequate civil remedies (eg damages and/or an injunction) and possibly criminal remedies to deter those who would otherwise hack copyright protection systems, or distribute devices which facilitate illegal copying and so on; and
(d) more recently strengthening the remedies against online infringement (see section 8.3.3).

In Europe two pieces of legislation are particularly relevant:

(a) the E-Commerce Directive, dealing among other things with the liability of intermediaries; and
(b) the Information Society Directive, which implements the WIPO Treaties and deals with certain other matters including copy—protection technologies, in particular following on from the 1995 EU Copyright Green Paper.

The USA was ahead of Europe in this area with the enactment in 1998 of the Digital Millennium Copyright Act (DMCA) which deals with the implementation of the WIPO Treaties and other matters, including the liability of intermediaries.

1.6.1 Electronic Commerce Directive

Among other things this Directive clarifies that an intermediary such as an ISP would not be liable for:

(a) acting as a 'mere conduit'
(b) 'caching', or
(c) 'hosting'

[28] Regs 3 6(1).

Nor is it under a general obligation to monitor information it transmits or stores.

The UK implemented this Directive by the Electronic Commerce (EC Directive) Regulations 2002.[29] This is considered further in chapter two.

1.6.2 Information Society Directive

The main copyright issues addressed by the Information Society Directive are:

(a) Clarification of the extent to which the reproduction and distribution rights apply in the digital environment including the scope of fair use/ fair dealing exceptions.[30] The exceptions Member States may make to copyright are now constrained. A particular issue for the UK is the limitation of the fair dealing exception for research and private study to research for a *non-commercial* purpose.[31] This is a change from the previous position where commercial research fell within the exception.

(b) The reproduction right (subject to limited exceptions) is defined so that authors shall have the exclusive right to authorise or prohibit 'direct or indirect, temporary or permanent reproduction by any means and in any form in whole or in part … of their works'.[32] In particular temporary acts of reproduction integral and essential to a technological process but without economic significance of their own are expressly excepted from copyright protection (thus the activities of Internet intermediaries may not necessarily infringe copyright)[33] and indeed, as noted earlier, the Supreme Court in *Public Relations Consultants Association Limited (Appellant) v The Newspaper Licensing Agency Limited and others (Respondents)*[34] recently came to the conclusion that temporary copies made in browsing the Internet do not infringe copyright on the basis of the exception in Article 5(1) of the Information Society Directive.

(c) A new right of communication to the public (as part of an on-demand service such as the Internet) to be added to the rights of authors—reflecting the discussion above about the need for a 'transmission right' for the Internet:

> Member states shall provide authors with the exclusive right to authorise or prohibit any communication to the public of their works, by wire or wireless means, including the making available to the public of their works in such a way that members of the public may access them from a place and at a time individually chosen by them.[35]

[29] SI 2002/2013.
[30] Art 2, 5 and 6(4).
[31] s 29, CDPA.
[32] Art 2.
[33] Art 5 (1).
[34] [2013] UK SC 18.
[35] Art 3 (1).

(d) Legal protection of anti-copying and rights management systems.[36]

The UK was obliged to implement this Directive before 22 December 2002. In fact, the UK was late in doing this—the 2003 Regulations implementing the Directive came into effect on 31 October 2003. The amendments made to the CDPA by the Directive are considered in greater detail in chapter two.

1.7 THE FUTURE

Digital technology has put copyright at the cross roads. There are two conflicting ways ahead: the death of copyright or the consolidation and revision of copyright to address the digital future.

1.7.1 The Death of Copyright

Unlike a book or a painting which can be viewed or read without any need for infringing copies of it to be made, digitised works require electronic copies to be generated (whether transitory or not) in order to be accessed or used. This raises several possibilities for digital works including:

(a) The growth of file swapping/peer-to-peer services such as Napster and Gnutella together with their later incarnations (such as Grokster, StreamCast, KaZaa and Newzbin and the use by pirates of service providers such as eBay and Google/YouTube to distribute/communicate infringing material) and also DVD piracy indicate copyright cannot effectively regulate the digital environment in any event. As a result more and more digital content will be encrypted or copy-protected; breaking or hacking the copy protection or encryption to access and use the work will be made illegal or unlawful whatever the motive—to read for personal use or to distribute commercially. Also strong laws will be in force to prevent access to the Internet to those who infringe copyright along the lines of 'three strikes and you are out'. The solution to prevent serial infringers of copyright is to deny them access to the Internet by way of a warning email and then a graduated response with denial of access the ultimate sanction for non-compliance. So in France, for example, there is now the controversial HADOPI law[37] (from 2009) and in the UK from 2010 the Digital Economy Act (further discussed in chapter eight); and

36 Ch III.
37 www.hadopi.fr/ (accessed 11 May 2013).

(b) Users will also be required to enter into binding licences with rights owners in order to be permitted to access and use digital content—the use of digital material will be regulated by contract not copyright.

In each case technology, contract or stringent anti-piracy laws will effectively prevent users from benefiting from the fair use/fair dealing exceptions to copyright infringement. Copyright will become redundant. Taken to an extreme, digital content could effectively be locked up and no longer be available for legitimate private study or research, criticism or review, etc. Digital information will become privatised. Chapter seven looks in detail at this area.[38]

1.7.2 A New Future for Copyright

Legislators are becoming increasingly aware of the need to preserve the public domain or, as it is often called these days, an 'intellectual commons'. Also is copyright 'fit for purpose'? The Information Society Directive empowers member states to take action to ensure access to copyright-protected works for limited 'public good'-type purposes regardless of technological or contractual restrictions on their use. However, the language in the Directive enabling this is vague and difficult to construe. Much depends on its implementation in the various EU states.

Initiatives such as the Information Society Directive indicate that copyright's power and flexibility as an intellectual property right is not yet dead.

Some argue for a much more simplified copyright system aimed at the digital environment with one key copyright—the right to control the dissemination or exploitation of copyright works. This would replace the existing 'bundle of rights' approach to copyright (ie today copyright covers many rights such as the right to control copying, adaptation, broadcasting, transmission, etc). Such a single right should be technologically neutral whatever digitisation and other new technologies bring. There would also probably be a breakdown between the current classification of copyright works as films, sound recordings, artistic works, etc to one all-encompassing class of 'multimedia' work.[39]

Others see an International Copyright Code as the solution to the harmonisation and effective enforcement of copyright in the digital world.[40]

[38] See eg Lucchi, 'Access to Network Services and Protection of Constitutional Rights: Recognizing the Essential Role of Internet Access for the Freedom of Expression' (2011) 19 3, *Cardozo Journal of International and Comparative Law (JICL)*. Available at SSRN: http://ssrn.com/abstract=175624.

[39] Perlmutter, 'Convergence and the Future of Copyright' (2001) *EIPR* 111.

[40] Sterling, *Draft International Copyright Code.*

Digitisation may also lead the way to new collective ways of administering rights. 'Micro payments' and other Internet technologies could play a part in enabling proper remuneration for rights holders. For example, in the UK a digital copyright hub is being established to assist in rights clearance.

Finally, some people want to keep the copyright system in place but construct licensing models to allow the collaborative and open exploitation of digital works. The best known examples of this are the 'open source' or 'copyleft' movement and 'Creative Commons', discussed in chapter nine.

1.7.3 Concluding Thoughts

It is unclear where copyright will end up: an irrelevance in a world of technological and legal locks and keys, or a simplified and rejuvenated intellectual property right. Much will depend on how the courts and legislators balance fair use and free speech arguments against contractual, legal and technological measures restricting access to content. But for the moment at least, news of copyright's demise remains greatly exaggerated. Certainly since the first edition of this book in 2002 when these comments were first made, copyright far from being an irrelevance has taken centre stage with ongoing legislative reform to seek to make it fit for purpose in light of technological change.

Nevertheless, rights owners should take account of the pressures digital copyright protection is facing. In practice digital copyright law *and* a combination of technical and/or contractual steps will need to be applied or at least considered when protecting digital content.

This book endeavours to state the law current in the UK as at 31 December 2012 but where possible, account has been taken of more recent decisions up until April 2013 (and in certain cases up to June 2013). This book does not purport to advise or provide guidance on US law although where helpful US cases are referred to, but these are not necessarily up to date references.

SUMMARY

(a) Digital copyright law involves the application of existing 'analogue' copyright rules to the digital environment and new digital rules.
(b) The primary purpose of digital copyright law is to protect the investment and/or the skill and effort of the creator of the copyright work.
(c) Gaps in the existing copyright rules are being plugged in a piecemeal fashion to deal with digitisation.

(d) The bulk of European legislation dealing with digital copyright is now in place following the adoption of the Information Society Directive.

(e) The UK implemented the Information Society Directive on 31 October 2003.

(f) Unfinished legislative business includes better ways of dealing with international copyright disputes and the ongoing modernisation of copyright law in the UK (see 1.2.2).

(g) The jury is still out whether digital copyright has a long-term future or whether technical locks and keys and/or contract law will displace copyright from protecting digital content.

(h) Content owners will want to use a mixture of digital copyright, technical measures and/or licences (ie contract law) to protect their content.