Copyright Exceptions and Technological Protection Measures in Electronic Publications: a challenge for legislators

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Abstract

Copyright law is changing all over the world to accommodate the global online marketplace: the Digital Millennium Copyright Act and the European Union Copyright Directive (EUCD) update copyright law for the digital era. The EUCD seeks to harmonise copyright law across the EU, and apply existing principles of copyright to digital publications as well as print. Member states are in the process of incorporating it into their national laws, but the optional nature of some of the clauses, particularly the exceptions to copyright will ensure that significant differences remain between the countries of Europe.

The ease of digital copying has made publishers very wary of publishing work online, unprotected. Publications are therefore often encrypted with Technological Protection Measures (TPM), which are set by the publisher to permit or deny certain uses of the work that they consider harmful. The problem is that it is possible to set the TPM to such a level that some of the copyright exceptions normally available to users can be inaccessible in the encrypted publication. Although the EUCD forbids the denial of certain of the exceptions, it also excludes from this, publications licensed to users under a voluntary contract. The contracts, enforced by the TPM, enable the publisher to control exactly how the work can be accessed. Because different countries have differing laws on this subject, a publication can be infringing under the law of one state or country, while being perfectly acceptable in another. This tension between contract and copyright law is under discussion but unresolved worldwide.

Reputable publishers make sure the TPM they apply to prevent piracy and excessive peer-to-peer copying does not also prevent access for fair dealing, by, for example, permitting limited
copying equivalent to photocopying allowances. They want their books and journals to be attractive and useful to readers.

The challenge for legislators is to maintain the balance between the interests of rightsholders and users. Publishers need to protect their publications, and users need flexible access. Technology and the law must come together to provide the solution.

Introduction

Copyright law is in a state of flux all over the world. The internet has given publishers a world-wide audience for their online publications, and publishing into this global marketplace means taking account of the laws that operate in each separate territory. Every country has different laws, so it is simultaneously possible for a single work to infringe copyright law in one market territory but not in another.

The rapid rise of this electronic environment has rendered many existing laws inadequate, so copyright laws – as well as other related areas of legislation – are being updated all round the world. The United States was the first country to revise its laws, when the Digital Millennium Copyright Act\(^1\) (DMCA) was passed in 1998. This was followed by the Australian legislation in 2000 (the Digital Agenda Act amendments to the Copyright Act) and then the European Union Copyright Directive\(^2\) (EUCD) was enacted in 2001. This EU Directive aims to apply existing principles of copyright explicitly to electronic media and to harmonise copyright law across the European Union, as each country implements the Directive in its own national law. For example, in Germany, academics will now be able to post copyrighted material on a closed web page, intranet or extranet, such as a Virtual Learning Environment (VLE), for distribution to students, provided access is protected by a password or other security device - all this without seeking clearance. A ‘snapshot’ of European member states in May 2003 shows that Greece and Denmark were the first to implement the EUCD in January 2003, followed by Italy in April. Germany is part-way through the process, and the UK was scheduled to ratify its new law in June but it is now further delayed. Finland’s parliament rejected the proposal set before it in April, sending the legislation back to the drawing board. Elsewhere in the world, this subject is also under discussion, in countries like Canada and Australia. New media and new trading practices, enabled by electronic communications media, require new copyright laws. One result of these changes is to maintain the balance in law between the interests of publishers and of users, by applying the provisions of existing copyright law to the digital environment of music, software, films etc, as well as books. Some governments implementing the directive will try to make as little change as possible to their national laws, in order to bring digital publications into line with printed ones. The standpoint of the publishing industry to this emerging marketplace is the subject of this paper.

Definitions

A partial definition of copyright is ‘the right to make copies’. The author of a work initially owns the copyright and, in the case of a published work the author transfers some or all of his...

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\(^1\) Text of the act is available at <http://www.loc.gov/copyright/legislation/dmca.pdf>

rights under copyright to the publisher to make certain kinds of copies. The publisher then becomes a rightsholder as a result. Only the copyright holder can authorise the making of copies although usually his publisher or his agent do this on his behalf.

The law makes exceptions to this exclusive right to copy, and one category of these is known in UK law as ‘fair dealing’ or in US Federal law, as ‘fair use’. In Britain there are five circumstances where a limited but unspecified amount of copying is allowed as long as it is not the whole work, without the authorisation of the rightsholder. The circumstances which qualify as fair use in the US are slightly different and, despite constant moves towards harmonisation, the various member states of the EU all differ again, both with respect to each other, and to the United States and the rest of the world.

**Different Laws**

Many electronic publications are encrypted as a safeguard against illegal copying and piracy. American law and forthcoming European legislation make it illegal to circumvent this protection, even if there are good reasons for doing so. Unfortunately the technology makes it possible for a publisher to encrypt content so that readers cannot make use of it for fair dealing or fair use. This is currently the cause of much controversy in the United States.

If the work is then published worldwide, differences in the law between countries start to cause problems. The publisher may encrypt the e-publication to suit the country in which he is publishing – say, in the UK – but once that publication is available in a foreign country, readers find they cannot make “fair use” of the publication, as permitted by their own national laws. In practice, for many UK e-publishers, the largest part of their market is the USA so, in the absence of explicit European laws, their priority is to make sure their products adhere to US legislation.

Among the countries of Europe, however, the aim is harmonisation of copyright laws, but it looks as though significant differences will remain for the foreseeable future. These differences stem from two main causes:

- The EUCD includes a list of 21 ‘exceptions and limitations’ to the exclusive rights of the copyright owner, which sums up all the exceptions granted to users by all the copyright laws of the different member states. Each country’s exceptions reflect its own cultural traditions and business practices. Article 5 of the EUCD gives each member state the option to include any or all of the 21 elements in their national version of the legislation.

- Another cause of the different emphases in implementation of the Directive is the contrasting structures of the rightsholder lobbies, which have subtly differing priorities that may affect the final outcome of copyright practice in each country. According to EBLIDA (the independent umbrella organisation for national library and information institutions in Europe), in Germany and Britain it is publisher organisations fighting for the interests of the rightsholders, in Scandinavia the collecting societies have the loudest voice, and in Denmark the music lobby is strongest. It will be interesting to follow how these differences affect the resulting laws.

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3 <http://www.eblida.org>
One area not addressed by the EUCD is the question of jurisdiction. If there is a dispute in cyberspace between parties based in different countries, which of the litigants’ national laws should apply: that of the perpetrator or the victim? The rightsholder or the infringer? The end-user or the publisher? A principle for this has not yet been established as different cases around the world have resulted in different outcomes.

**TPM and Fair Dealing**

The ease of making perfect copies with ‘cut and paste’ editing and CD rewriting has tipped the balance of power away from publishers, making piracy much easier. The recent turbulence in the music industry is an example of this. Publishers now have the technology to respond to the threat of piracy by installing technical protection measures (TPM): software copy-protection in their electronic publications. The fear is that these measures can be used to eliminate any kind of copying, thus swinging the balance too far in the other direction. Some e-books are harder to reproduce than an illuminated manuscript before the days of the photocopier. However, certain kinds of copying are allowed by law, and certain sectors of the population rely on that copying. TPMs are therefore blunt instruments if, by preventing piracy and peer-to-peer copying, they are also preventing legitimate fair use copying.

The trouble is that TPM technology is still very new. It took many years for industry wide codes of good practice to be developed by rightsholder organisations in collaboration with libraries and archives resulting in recommended acceptable amounts of photocopying under fair dealing. We are still at the pioneer stage in the digital world. While publishers are afraid of losing their intellectual property (their publishing assets), users can’t believe their luck with technology that means they can make their own copy of any song, television show or computer software program they have borrowed from a friend. As a result publishers are acting with caution. Meanwhile, e-publications are not making enough money to enable research and development to evolve improved TPMs sufficiently quickly. There is neither the money, nor the skills in most publishing houses to develop more refined security systems.

The law may state that users are allowed fair dealing exceptions to the exclusive right to copy – 21 under the EUCD, as mentioned earlier – but the EUCD also directs that TPMs can only provide access equivalent to fair dealing, as decided by the publisher, rather than allowing readers the freedom of fair use in any way they choose. In the digital environment, to enable such freedom would simply open the door to piracy.

However, there is nothing to stop a “beneficiary of an exception” such as a student, copytyping whatever he or she wants to quote, just as they used to have to do with printed books.

**TPM and Contracts**

Another feature of general copyright law is that it is not refined enough for publishers to feel safe, so publishers rely on contracts or licences to over-ride the ambiguities of the law. Some licences are shrink wrapped or online click-user licences aimed at the individual user. These latter types are non-negotiable. Before accessing an online publication, the reader is given the terms of access on screen. These terms specify aspects such as: whether the content can be read only on screen or printed out; whether the content is tied to one machine, or can be accessed on any number of terminals; and lists of other things the reader can and can’t do.
with the content. The user is required to click an ‘I agree’ button before opening the file and the TPM software then enforces the terms of this online contract. The subsequent transaction is thus governed by the terms of this contract (if a click through agreement is considered to be valid), rather than by those of general copyright law. While Article 6.4 of the EUCD requires the TPM to allow certain fair dealing access, it also explicitly excludes from the scope of the Directive, publications which are the subject of voluntary contractual agreements. This means the fair dealing exceptions provided in copyright law can be denied, by requiring the user to agree to the terms of a contract instead. The terms of the end-user contracts and the TPMs enforcing them can be applied, in perpetuity, to any content published in this way, including for example an ‘out-of-copyright’ book or journal.

What this situation means is that end-user contracts are being used to replace copyright law. The technological measures are overriding the exceptions granted to users in law, and, so have the potential to distort the balance that the law tries to achieve. This is a conflict that is so far, unresolved in European law, and could be the subject of forthcoming legislation in US law. Although the Australian government has received recommendations to make this type of contract unenforceable, they have not so far made any legislative changes. They see the real solution being international agreement on the matter. However, as copyright exceptions vary from country to country, it will be hard for a publisher’s TPM to stay within the law of every country.

**TPM and the Law**

However, publishers acting with integrity strive to use the technology to uphold copyright law.
The publishing group Taylor & Francis, for example, prides itself on going beyond the legal minimum by facilitating fair dealing for users in the following way:

- Giving the user up to 45 minutes to browse a publication before making a purchase;

- Allowing the user to print or download a range from one page to one chapter up to a limit of 5 per cent of the book – the same extent allowed by UK photocopying licences from the Copyright Licensing Agency for printed books – on payment of a small fee.

The price Taylor & Francis sets for printing or saving ranges from 5p to 10p a page, designed to equate with the cost of photocopying similar print content in a library. By this means the fee goes to the publisher and the author, rather than the photocopier owner.

Another option publishers can take is to leave the work unencrypted, and rely instead on password protection to prevent unauthorised use. They trust their institution and corporate

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4 The Uniform Computer Information Transactions Act (UCITA) [http://www.ucitaonline.com](http://www.ucitaonline.com)

It should be noted that only two States have passed UCITA, and it appears not to have general support.

5 International academic publisher with online bookshop:

<http://www.ebookstore.tandf.co.uk>

6 The UK collective licensing organisation for photocopying and scanning by organisations

<http://www.cla.co.uk>
clients to control access by their members and staff, and then in turn trust the users to behave lawfully when accessing the content. The Institute of Physics\(^7\) is one of many who control their publications in this way, without TPM.

As with any encryption, TPM acts as a deterrent but is not foolproof, so determined hackers and pirates can break into protected sites if they have the skills. However, the larger the scale of piracy activity, the more effective the law is as a tool for stopping it, especially as most countries are party to the Berne Convention, and their governments uphold international copyright agreements. In May this year Singapore signed a Free Trade Agreement with the United States, which includes a provision to outlaw the circumvention of TMPs, a provision of American law, but not previously of Singaporean.

The current emphasis of trade practice therefore is on what publishers allow users to do with online content. In the case of a printed book, copyright law and the physical nature of the product determine what readers can’t do: the physical nature of the product is a deterrent to copying; and individual readers only tend to have one copy of the book, preventing mass peer-to-peer lending. Electronic products have no such in-built deterrents, which makes online publishers feel very exposed to piracy. If an electronic product is put online with no TPM security in place, it is like a bookshop with no staff: readers can walk in and help themselves to as many copies as they like. The publisher, having put so much time and expense into the production of the publication will not make enough money from sales to finance other new titles; and the author gets no royalty payment from illicit copies.

Technology gives publishers the means to control not only the distribution of copies but also the extent of readers’ access to its content, in accordance with what they have paid.

**TPM and Sales**

Some civil liberties campaigners portray publishers as rich and greedy dragons, determined to guard access to their treasures and ensure readers can do as little as possible with the content they have acquired. However, the truth is that publishers are in business to: (a) make content available (i.e. publish); and (b) maximise sales and therefore profit. The more flexible publishers can be regarding access to content, the more likely they are to achieve these aims. In order to maximise sales, they must ensure their books are as useful as possible to their customers. Increasing circulation on a limited basis also increases sales in the long term. Publishers need to attract customers, as well as authors, in this competitive world marketplace, so they must be seen to be following best practice.

Campaigners say this should not be something the publisher has to allow, but rather a legal right that should be there naturally for the reader, but unfortunately the technology does not work like that. TMPs either do nothing, or whatever the publisher chooses to make them do. Publishers have always determined what the reader buys: for example, how many pages, at what price, and which illustrations. Now online publishers are starting to give readers a similar choice: download a chapter – or even just a page for only 5p!

\(^7\) See the terms of subscription at <http://www.iop.org/EJ/help/-topic=ejform/librarians/-page=instreg>
Conclusion

One ongoing challenge for legislators is to maintain the balance between the needs of rightsholders and of users. Outlawing the circumvention of copy protection goes some way to redress the balance that has been tilted by peer-to-peer copying and piracy. However the challenge for publishers is to keep that copy protection to a level that remains light enough to enable people to make ‘fair use’ of the publication while being strong enough to prevent theft and piracy.

The other current challenge legislators have to negotiate is the passing of national copyright laws for our 21st-century age of digital media that do not conflict with those of other countries while maintaining support for the rich diversity of culture around the world.

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