

INFORMATION OWNERSHIP, COPYRIGHT AND LICENCES

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Introduction

I have an Iraqi friend who fled Saddam Hussein's Iraq about 15 years ago. He was, and is, a very successful water engineer. He decided to write a standard textbook on water engineering. All publications in Iraq at that time, and no doubt now, had to be checked by the censor's office. He submitted his manuscript to the office. Some weeks later, he received a response. The book was fine and could be published, it told him. There was just one tiny little change they wanted. His name would remain as author, but another author's name would be added.

That added name was Saddam Hussein. My friend agreed, but decided that very day he had to leave Iraq, which he duly did a year or so later.

The concept of authorship of articles or books is something that we take for granted nowadays. We further accept that no-one should have the right to add their name to something they did not contribute to.

Yet there are threats to this concept posed by new technology and the new economics that go with it. In this talk, I want to consider such threats, and how they are being addressed. I will also discuss the changes in copyright law brought about by developments in technology and the impact of the Open Archive Initiative. So, a wide-ranging talk indeed!

Some years ago, I gave a presentation in Britain to a group of vice chancellors, deputy vice chancellors, pro vice chancellors and directors of British University computing services on the topic of copyright. After my talk, there was a series of questions from the audience to which I gave answers. After a few of these questions and answers, someone put his hand up and said "It's quite obvious, Professor Oppenheim, that you are not a lawyer". "Oh dear" I thought, "this man clearly IS a lawyer and I've made some slip in one of my earlier answers." I replied, pretending to be confident, "Oh yes, and what makes you say that?" The questioner replied, "because you give clear answers to questions."

I have to confess that my credentials are indeed a little thin. For, as that questioner rightly surmised, I am not a lawyer. I am an information scientist who happens to be interested in the law. So it is an interested layman who tries to give clear answers who is talking to you today.

Copyright

Copyright law always has been a tension between copyright owners and users. Publishers rightly want some reward for the investment they have put into creating and disseminating the materials they produce. Users want as wide access to materials as possible.

Librarians and information scientists frequently find themselves in the middle of these tensions. Up until recently, this tension was controlled because technology was controlled. There is only so much photocopying one can do in a day. Furthermore, the quality of photocopies leaves a lot to be desired. It is also expensive, either for the individual or his/her employer, to have thousands of pages photocopied. All this changed when electronic information entered the scene. As a result, the tension has increased greatly.

The dangers of unregulated copying to authors in the electronic environment are well known. Authors (and their publishers) are nervous of the electronic environment for a number of reasons:

- It is very easy, and cheap to make copies of materials in machine-readable form
- It is very easy to amend the materials to remove the name of the authors from such materials
- It is easy and cheap to disseminate the pirate copies world-wide
- It is very difficult to police such actions

There is, of course, no problem in theory legally about such actions. They are infringements of the copyright in the work, and, in some countries, also of the Moral Rights of the authors. In other words, doing such things is breaking the law. However, too often the law is ineffective in preventing such abuse. The fact that the law has been broken is hardly much consolation for the authors and publishers who can do little about it.

What are the implications of such unregulated copying? Most attention has, unsurprisingly, been focused on loss of revenue for rights owners. Each copy pirated means one less sale, which in turn means less income for the author and/or publisher. There is, however, a second issue to consider, and that is the reputation of the author.

If the materials have been amended in some way, including, of course, the author's name being deleted, then the author's reputation is diminished.

Let me move on to a discussion of some recent developments in electronic copyright law and practice. Copyright owners have responded to the digital challenge by adopting one or more of three approaches. These are not mutually exclusive; the owners are trying all three approaches. The first of these is to *lobby for a strengthening of copyright law*. The second is to develop *technical measures* to prevent copyright abuse (and have laws in place to make the bypassing of such devices without authority a civil or criminal offence). The third method is to lock users into *licences* that prevent abuse. Such

licences vary greatly in their terms and conditions. Information Managers have some resources to help them fight this confusing situation. The first is informal discussion groups, the second is the development of consortia, and the third is the publication of statements of licensing principles.

The major *discussion groups* of note are lis-copyseek in the UK, and liblicense in the USA. Mainly academic library and information managers who have the task of negotiating licences populate both discussion groups. Using these discussion groups, those doing licence negotiations can get help and advice from colleagues.

Anti-cartel laws mean that publishers are not allowed to jointly impose uniform terms on patrons. However, they do not stop libraries and information units creating consortia, i.e., a unified purchasing organisation. Consortia licensing deals are becoming increasingly common in the education sector.

Finally, there are *statements of licensing principles*. These are statements issued by groups of library and information managers, or their professional bodies, regarding the minimum terms they expect from licences (for example, users must be permitted to download and print out items), and terms they regard as unacceptable (for example, prices that are far higher than the equivalent print product, or contracts where the supplier reserves the right to increase prices without notice). They strongly advise librarians and information managers NOT to sign up to any deal that does not conform to these principles, but of course, anyone can sign any deal they wish. In some cases, many model Licences are available on the Web.

Let me now consider the so-called technical measures. These come under a variety of names, including ECMS (Electronic Copyright Management Systems), ERMS (Electronic Rights Management Systems) or DRM (Digital Rights Management [systems]). Whatever the generic name they go by, such systems control the usage of copyright material. They include softwares that limit what can be done with the work, for example it could limit the use of the file to view only. They can also limit the number of times the work can be retrieved, opened, duplicated or printed. They also include use of ID and passwords to gain access, or the use of credit cards to ensure there is payment for use. They often prevent someone trying to exercise their rights under an exception to copyright, such as the right to make a copy for one's own private study. Such systems put barriers, financial and/or user-unfriendly systems with hurdles to overcome before someone can access information. The track record of similar devices (copy protected software, dongles, etc.) in the software industry shows that users will boycott products of this type. There are also privacy problems raised in the records kept of who searched what.

The final issue raised by DRM is the shift away from relying on copyright law to decide what can, and cannot be done, and towards contracts between

copyright owner and user. DRM gives the copyright owner a very strong bargaining position and there are many examples of contracts that reduce the well-known exceptions to copyright that a user might have been expected to enjoy if the law alone had been applied.

The other way copyright owners have responded is by strengthening the law. The rights owners, especially from the film and music industries, and to a lesser extent from the software and publishing industries, have lobbied hard for copyright law to be made stronger.

The changes they have succeeded in bringing about vary from country to country, but one can make some generalisations.

The major changes have been to lengthen the term of copyright; to give protection to databases; to make distribution of copyright works over networks a restricted act that can only be done with the permission of the copyright owner; to make it a criminal offence to by-pass or deactivate an ECMS with the intention of copyright infringement; and to make it an offence to by-pass or de-activate copyright management information, such as a statement of who the copyright owner is, with the intention of infringing, or concealing infringement.

Such changes in the law are fine in theory, but again, unless illegal activities can be effectively policed and unless Courts are willing to impose significant punishments on those who infringe, the changes in the law are meaningless.

It is clear, therefore, that whilst copyright owners are making increasing efforts to prevent copyright abuse – the destruction of Napster by the US Record Industry is a good example of this – this is merely serving to exacerbate the tensions between the owners and users. It does not even necessarily solve the problem.

It is claimed, for example, that there is more peer-to-peer exchanging of copyright music than ever going on, despite the destruction of Napster.

So much for developments in copyright. Let me now turn to...

Who owns scholarly output?

In general, the first owner of copyright in a given work is the person who created it. I say "first owner" because the creator may choose to sell or give away his or her copyright to someone else, say a publisher, later on. There are however, exceptions. The employer will automatically own material created by an employee in the course of his or her employment. Thus, if I am

paid by an employer to write press releases, the copyright in those belong to the employer.

If am paid to write press releases, but instead write poetry, I own the copyright in that poetry - though of course my employer is entitled to sack me for wasting its time. Incidentally, it makes no difference where or when the material was created.

If I am paid to write press releases, but choose to do so on my own home PC in the evenings, my employer still owns the copyright. All of this raises interesting questions regarding ownership of copyright by freelancers. In the UK, the freelancer owns the copyright even if paid to create something, as the freelancer is not an employee.

The development of teaching and learning materials by academics employed in Universities invariably involves the creation of new Intellectual Property Rights, or IPR.

Much of this will be copyright (in particular, there will be copyright in any new computer programs created and in new text, image, moving image and sound recorded materials incorporated into the material), but there are other forms of IPR that may well be created. Some of the material is a "database" and is potentially subject in countries in the European Union to the new "database right".

Furthermore, some of the materials may be the subject of patents. The topic of patenting of computer-controlled processes is a very controversial one, but the USA seems very willing to grant such patents. It is therefore possible that in some cases the materials may be patentable in the USA only, or indeed, that if sold in the USA, might infringe a pre-existing patent there.

Finally, in some circumstances, such as where the materials include video footage of a lecturer teaching, or of (say) a theatrical or ballet performance for illustration purposes, Performers' Rights are involved.

So why is this a problem? About five years ago, a lecturer in geology in a UK University submitted some of his research for publication to a learned journal publisher. The academic assigned - in other words gave away - copyright to the publisher. About a year after the paper had been published, the academic decided to recommend to his students that they read the article as part of their course, and approached the publisher for permission to reproduce the article for his students.

Sure, said the publisher, who I will not name but whose name happened to rhyme with Elsevier, but it will cost you £5,000 for the permission. The University in question paid up. That, in a nutshell, is why copyright poses a problem. It makes libraries pay a high price for scholarly information.

Copyright law states that whoever owns the copyright in the material (and in this case, it was the publisher because the academic had assigned his copyright to the publisher) has the right to prevent anyone from copying or adapting the material without permission. Conversely, the owner has the right to authorise or permit such copying, but can impose terms and conditions on this permission. The most common condition is, of course, the payment of a fee.

Who owns the copyright in materials produced by academics? Normally, the owner of the copyright in any work is the creator. However, in most countries, if an employee creates the work *as part of his or her employee duties*, then the owner of the copyright is the employer.

The key words here are “as part of his or her employee duties”. The duties of an academic are, unfortunately, typically couched in extremely vague terms in the contract of employment. “You shall do such duties as your Head of Department directs” or similar is a favourite, and totally ambiguous phrase.

Two questions therefore arise. What are an academic’s normal employee duties? And even if the law notionally states the copyright in the material belong to one person or another, what has been the custom and practice hitherto?

The general opinion is that copyright in lecture notes, and Computer Assessed Learning (CAL) and other e-learning materials, exam questions, and the like **certainly** belong to the University, and in textbooks certainly belongs to the academic. Copyright in research output **probably** belongs to the University. Why does research output probably belong to the University? It is arguable that academics are **required** to create research publications, and that failure to produce such articles will adversely influence their chances of promotion or even tenure within the University.

Thus, there is an arguable case that research publications **are** produced by an academic as part of his or her employee duties. Therefore, a case can be made that the University owns the copyright in such publications automatically.

There is certainly also no question that copyright in work produced by an academic during leave of absence where the purpose of the leave of absence was to publish belongs to the University.

Hitherto, most, but not all, Universities have shown no interest in exercising copyright ownership in such materials notwithstanding the fact that there is such a strong argument that they own the copyright in such material.

Most University libraries are heavy purchasers of learned journals. For the most part, these contain materials have been written by academics. The same

academics put pressure on the libraries to subscribe to their favourite periodicals.

Academics are both copyright creators and copyright users, but take a far greater interest in copyright creation niceties than in usage of materials - they assume the library will obtain the items they need, without realising they are helping to fuel the price crisis by assigning the copyright to publishers unquestioningly.

Why does the academic assign copyright to the publisher for research work he or she has undertaken? Because the publisher insists on this as a condition of publication. The academic feels that he or she has no choice because he or she has two different, but important needs that only the publisher can supply, and so feels obliged to agree to the publisher's terms. The first is to gain **priority** - this requires rapid publication and widespread *dissemination*. The second is to gain academic respectability by having the research added to the **archive of knowledge**. This does not require speed, but does require appearance in a peer group reviewed vehicle recognised as having prestige.

Hitherto, the scholarly journal has provided both requirements, but at a price. That price is that the academic has been asked to assign copyright to the publisher.

Stevan Harnad, Professor of Cognitive Science at Southampton University and a well-known commentator on the scholarly publishing scene, calls this the "Faustian bargain". The academic assigns copyright; the publisher in return provides eyeballs to read the article.

With the advent of electronic journals, the academic has a genuine choice; he or she can gain the priority using an electronic medium, whilst still obtaining the archival success by publication in a printed journal - but only *so long as he or she does not assign copyright*.

I have presented an argument that the copyright in research materials in law belongs to the employer, not the academic. However, custom and practice has been to leave this matter in the hands of the academic. My argument is that financial pressures will sooner or later, make a University challenge the custom and practice. I envisage this will be contentious.

At present, if a well-known prestigious author refuses to assign his or her copyright to a publisher, and instead, say, grants the publisher a licence for print publication, few publishers will argue. This is because the publisher needs the academic more than the academic needs the publisher.

If, on the other hand, an academic just starting out on his or her career tried this, the publisher would tell that individual it's take it or leave it. That's

because the academic in this case needs the publisher more than the publisher needs the academic.

If the University owns the copyright, it will have more muscle than the individual academic and is therefore more likely to get the publisher to agree to a licence rather than assignment.

It's not just staff that are affected. Students are not employees of the HEI, so copyright in anything they create - dissertations, software and so on - belongs to them, not the University. There was a recent case at Glasgow School of Art. It reproduced on postcards images created by a former student as part of her coursework.

That ex-student had since become a noted artist, and the School was attempting to make money by selling the postcards. The ex-student sued for infringement, and won.

Many Universities have developed clear policies regarding credit and reward in patented inventions developed by their academic staff. There is now increasing pressure that a similar clear approach should now be taken in regard to copyright and related rights in scholarly output of other kinds. There are two reasons for this development. The first is that Universities are recognising that in an age where distance learning courses and electronic learning materials are becoming important for both developing the reputation of the University and for earning money.

The second is that Universities are becoming concerned about the increasing cost to their libraries to subscribe to key research journals, yet those very journals contain articles contributed for nothing by academics around the world, including their own staff.

So they see the idea of ownership of the copyright in the output of scholarly research as a potential way to save money on expensive journals.

This is because if the University owns the copyright, it and not the academic would decide which journals to submit the articles to – and the chosen journal would be a cheaper one, such as one published by a learned society.

However, there are great dangers and problems with Universities taking a more aggressive approach towards who owns the output of academics who are employed by them. There are dangers to the concept of academic freedom if academics are not able to choose what they produce and where they disseminate it. There are also Human Resource Management problems with changing long-established custom and practice. There is a risk that an aggressive approach will inhibit academics from exploring speculative research or teaching ideas, or experimenting with novel methods of dissemination or collaboration.

There is a trend towards the idea that, irrespective of custom and practice in the past, Universities should lay explicit claim to the ownership of everything produced by academics that is relevant to teaching and to research.

The trend is stronger in some countries than in others; it very much depends on the legal system in the country, and what custom and practice has been hitherto.

There is another factor to take into account. Particularly in the area of the development of e-learning materials, the materials are likely to have been developed by a team of academics, research assistants, technicians and programmers, rather than by just one person. In these cases, it is difficult indeed to identify one person as the creator. As a result, arguably, every contributor should be considered to be a creator, which makes things very complicated, or no-one should be considered the creator and the e-learning materials are simply owned by the University.

Many countries have clear laws on Moral Rights that state that the author's name must be associated with his or her work. However, not all countries have such laws. In countries with weak laws on Moral Rights, one could foresee Universities choosing not to credit particular academics for their help in creating e-learning materials, say. This may seem unlikely to many of you, but this is a serious proposition in the United Kingdom.

The Open Archive Initiative

Although not directly relevant to copyright, this well-known initiative does have some copyright implications. The OAI develops and promotes interoperability solutions that aim to facilitate the efficient dissemination of electronic content.

It is usually associated with e-print archives. Stevan Harnad has argued for many years that the solution to many of the difficulties associated with scholarly publishing today can be resolved by means of self-archiving by scholars of their research results on Web sites, probably maintained by the employing University. These e-print archives would be OAI compliant, to ensure ease of searching. An argument against this approach has been that publishers will not be willing to publish in peer-review journals results that have already been published on the Web as an e-print. This view has however been challenged by the so-called Harnad-Oppenheim strategy. This works as follows: an author posts an early draft of an article on a University's Web site, for all to read. At the same time the article is submitted to a traditional peer-reviewed journal, whether print or electronic.

The referees comment on the article and certain changes are made. The publisher asks the author to sign a statement that this material has not been published before, and the author is able to sign such a declaration - the Web version is slightly different from the final version because of those changes imposed by the referees. So two versions are available.

The Web version, uncorrected, and the journal publisher's version, corrected. Readers can choose which one they wish to use, and at what cost.

Conclusions

Let me sum up what I have been telling you today. One of the challenges of the new technologies is to change, or even cast doubt on, the role of digital authorship. Digital authorship by academics is under threat from two different directions. The first is from pirates, who threaten both the income and the reputation of academics. The second is from the wish of Universities to be more pro-active in owning copyright, both as a potential money-earner from e-learning materials and to save costs of expensive journals. Combine this with the fact that increasingly materials will be created by teams rather than by individuals, and you can see that the role of the academic author in this new environment will become diminished, and in some circumstances, their names may not appear at all on the products they have been associated with. It is my contention that the long-standing relationships between academics and their employing Universities are being affected by the new technologies.

So, the new technologies will have significant impact on the concept of ownership of scholarly information. It will also have an impact on your relationship with publishers. Copyright always has been, and always will be, a balance between the interests of the copyright owners, and the interests of information users.

The new technology, and in particular the ease with which one can now copy, has made that tension far more acute. The publishers, even whilst showing considerable flexibility in developing licences and new electronic products, are supportive of the moves by the media and software companies to strengthen copyright laws.

Users' needs are simple. They want electronic information, delivered to the desktop wherever they are, and even if they are on the move. They want user-friendly search software, and a single portal to do all their searches from. They want to put in a single ID and password to access anything and everything. They want current awareness and retrospective retrieval that gives them exactly what they want and no false drops. They want a choice of titles, abstracts or full text, according to need. They want to be able to hyperlink from one item to another by clicking once on a reference button. They don't care who supplies the information to them, or from where, and they want seamless links between internal information and external information. They want to be able to annotate or amend the materials they get, and they want the right to forward it to as many people as they so wish. They are happy enough for the library to set all of this up for them, but they don't want to have to go through the library or into the library to get access. And, of course, they want all of this at no cost to themselves or to their employers. This scenario is, of course, precisely what the publishers are trying to stop.

Libraries, are, of course, caught in the middle of this war, and no group is more in the front line than those libraries with extensive electronic offerings. Librarians have always felt themselves in a difficult position regarding copyright. On the one hand, they wish to serve their patrons as best they can. On the other hand, they find themselves in the front line in representing rights holders' interests against the wishes of their patrons. Despite the mutual distrust between librarians and publishers, librarians care about copyright and wish that it were respected.

So, to sum up in one sentence: the digital library will not come about unless these legal issues are addressed. We still have a long way to go!

Let me finish off with a final thought. **Copyright compliance is less to do with the law than it is to do with management of risk.** Library managers must decide on the basis of probabilities, i.e., that the action is legal or illegal; and that the action is likely or not to result in a complaint by a rights owner.