
Anschrift des Autors:
Dr. Christian Herrmann
Bibliotheksschule Frankfurt a.M.
Ohmstr. 48
D-60486 Frankfurt a.M.

Elizabeth Gadd

Copyright in the Digital Library

Practical experiences

This paper examines the effect of Copyright on the digital library by drawing heavily on the experiences of Project ACORN (Access to Course Readings via Networks) in establishing their Electronic "Short-Loan" Collection at Loughborough University. Firstly I will outline the aims of Project ACORN. Secondly, I will look at the Legal Context in the UK, and see how copyright applies in an electronic environment. Then I will look at some of the implications of electronic copyright on the digital library, namely; clearing electronic copyright (the difficulties of identifying and approaching rights holders); the cost of electronic copyright in terms of fees and chasing costs; and methods of protecting electronic copyright materials. Finally I will examine some future scenarios affecting copyright in the digital age.

Copyright in der Digitalen Bibliothek

Der Artikel untersucht die Wirkung des Copyright auf die digitale Bibliothek, indem die Erfahrungen des ACORN-Projektes (Access to Course Readings via Networks) beim Einrichten ihrer "Short-Loan" der Sammlung an der Loughbor-rough University in Anspruch genommen wurden. Zuerst werde ich die Ziele des ACORN-Projektes umreißen. Danach werde ich einen Blick auf den rechtlichen Zusammenhang im Vereinigten Königreich werfen und zeigen, wie Copyright in einer elektronischen Umwelt angewandt wird. Dann werde ich einen Blick auf einige der Auswirkungen des elektronischen Copyright auf die digitale Bibliothek werfen, nämlich die Schwierigkeiten, die Rechtsinhaber zu identifizieren und an sie heranzutreten, auf die Kosten für elektronisches Copyright im Zeitalter von Gebühren und jagenden Kosten sowie auf die Methoden das Material des elektronischen Copyright zu schützen. Zum Schluß werde ich einige Zukunftsszenarien untersuchen, die Copyright im digitalen Zeitalter beeinflussen.
Copyright dans la bibliothèque digitale

L'article recherche l'effet de copyright sur la bibliothèque digitale en prenant l'expérience du projet ACORN (Access to Course Readings via Networks) en arrêtant de leurs "short-loan" de la collection de l'Université de Longborough. D'abord je esquisserai les buts du Projet ACORN. Puis je jeterai un regard sur la relation juridique dans le Royaume-Uni et je montrerai comment copyright est appliqué dans un environnement électronique. Puis je jeterai un regard sur la bibliothèque digitale avec leurs difficultés d'identifier et contacter les titulaires juridiques avec les frais pour copyright électronique dans le temps des taxes et des frais success dant et avec des méthodes pour utiliser le matériel de copyright électronique. Finalement je rechercherai quelques perspectives, qui influencer le copyright dans l'époque digitale.

Project ACORN

Project ACORN\(^1\) is an Electronic Libraries (eLib) project in the On Demand/Electronic Reserve strand funded by the Joint Information Systems Committee (JISC) here in the UK. There are three partners involved in the project. The lead partner is Loughborough University where the Pilkington Library houses the project team and is the subject of the major development work; Computing Services offer technical infrastructure, advice and assistance; and the Department of Information and Library Studies (DILS) assist with the evaluation of the service. Swets and Zeitlinger B.V., the subscription agent, are our commercial partner, and they have been exploring the role of a third party in electronic copyright clearance and digitisation. Finally, we are testing the portability of the ACORN model to Leicester University\(^2\), the third partner.

The aims of Project ACORN were to:

- develop a transferable model of the process of establishing and managing an electronic short loan collection of journal articles
- demonstrate the role of a third party agency in copyright clearance and digitisation
- link the electronic articles to the Talis Web OPAC
- develop an online demonstrator system
- monitor user reactions to the electronic texts and assess their use and usability
- assess library procedures for managing the electronic delivery of course materials
- test the portability of the model.

Legal context

I apologise for the fact that I am only referring to British law in this presentation. I am not a lawyer, and certainly have little feel for German law, however as we are soon to be harmonised under the European Parliament and Council Directive, I hope that what I have to say will not be entirely irrelevant to our German colleagues. The legislation currently governing copyright in the UK is the Copyright Designs and Patents Act of 1988\(^4\). One can see by the date of the Act that it was passed prior to many of the recent electronic developments, and hence does not offer clarity on issues of electronic copies. However, I think it is fair to say that if an author creates a work in electronic form, it will be covered by the CDPA88 just as a work in any other fixed format would be. However, when it comes to making an electronic copy of an electronic (or other) original under the "permitted acts", or library provisions of the Act, then the situation is more unclear. Fair dealing, for example, allows the creation of a single copy of, say, one journal article from one volume, for research or private study purposes. However, strictly speaking, an electronic copy involves the creation of two or more transient copies, and therefore should not be allowable under the Act. Licences, of course, allow copying beyond the limits of the law, but no UK licence currently permits the creation of electronic copies.

There is a need therefore to approach each copyright owner directly and individually to seek permission to create a digital library of electronic works. For this reason, the phrase "electronic copyright" has almost become synonymous with "publisher relations" at the current time. As Libraries, we are moving from being purchasers to being licensees and we require new skills and new tools to adapt to this role. In developing ones own digital library, we need to learn how to identify, approach and relate to publishers, how to design agreements, deal with electronic copyright management systems, and understand security features and document formats in the electronic environment. Even when using existing digital libraries, we need to become more aware of licensing terminology – something the Dutch and German academic libraries have already recognised with the creation of the Dutch and German Licensing Principles\(^5\). In this talk however, I am focusing on the former – the copyright implications on the creation of one's own digital library.

Identifying Rights Holders

It has been ascertained that one needs to approach rights holders individually for electronic copyright permissions. The first question is therefore, "who are the rights holders?". In ACORN's experience with journal articles, the publisher is usually the best first port of call, but the copyright can belong to editors, authors, learned societies, managing directors, or combinations of these. Perhaps a more overarching question is "do publishers own electronic rights?". Many of you will heard of the recent case brought by Tasini et al against the New York Times in which the judge ruled that the Copyright can belong to editors, authors, learned societies, managing directors, or combinations of these. Perhaps a more overarching question is "do publishers own electronic rights?". Many of you will heard of the recent case brought by Tasini et al against the New York Times in which the judge ruled that the

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1 Project ACORN. URL: [http://acorn.lboro.ac.uk/](http://acorn.lboro.ac.uk/)
2 Swets & Zeitlinger B.V. URL: [http://www.swets.nl/](http://www.swets.nl/)
3 Leicester University Library. URL: [http://www.le.ac.uk/library/ll.html](http://www.le.ac.uk/library/ll.html)
5 Message to IFLA-L list on Mon, 3 Nov 1997 from Dorothy Solbrig <d_solbrig@havard.edu> Subject: Dutch/German library joint licensing principles and guidelines for negotiations with publishers.
Times. Tasini represents freelance writers who wrote for the New York Times prior to the advent of electronic copying. They assigned their rights to the New York Times, but not explicitly their electronic rights. The New York Times is now offering electronic access to the freelancers' works and earning revenue from this. Tasini et al are therefore arguing that they are owed an income from this use. There has been an initial ruling against Tasini, however, it appears that they have a fairly strong case to fight this decision. One result of this case is that some publishers are wary of licensing electronic rights where they weren't explicitly assigned. In a number of cases, ACORN has had to apply to the author in addition to the publisher for permission to use material electronically, for this reason.

Assuming we make the publisher our first port of call, the next hurdle is the fluidity of the publisher industry. In terms of journals: titles change, title publishers change, titles merge, publishers merge, publishers move, and publishers cease trading with alarming alacrity! Swets and Zeitlinger B.V. have a team of full-time staff dedicated to managing their journal title database alone. Related to the dynamic nature of the publishing industry is the diversity of the personnel who deal with copyright within publishing houses. ACORN recently received 16 questionnaire responses from publishers, and there were 15 different responses to the question "Who deals with electronic copyright permissions within your organisation?". Some of those listed include:

- Editor
- Managing Editor
- Periodicals Staff
- Journals Manager
- Publications Director
- Rights and Permissions Manager
- Executive Officer
- Director
- Assistant to Managing Director
- Managing Director

As if this weren't enough, other difficulties with identifying rights holders include the problem of discerning and locating the rights holder in an unpublished item; having to negotiate permission separately to digitise images that accompany text, and the question of what to do if a rights holder is untraceable. In the last case, we have been advised to keep a record of our diligent search for a rights holder. If our search is not fruitful, we could go ahead and digitise and then "await claim" on the copyright of an item. The problem of this is, of course, the time factor: making a truly comprehensive search for a rights holder is a very time-consuming business.

Approaching the rights holder

Once the Rights Holder has been identified, the next step is to consider methods of approaching them. Unfortunately a far more detailed approach is required for electronic copyright permissions than for paper permissions, as electronic copies are such a new unknown. Everybody knows what the outcome of the photocopying process will be— not so the electronic copying, or digitisation process. ACORN has discovered that all manner of things can affect a rights holder's response. It is therefore best to include all relevant information in as succinct a form as possible.

The first piece of Information to include is one's organisational details. Stating that you are an educational organisation can make the difference between fee or free. It is also important to give the size of the population that will have access to the digital library. This raises a question about appropriate measures of population size. ACORN were able to provide the number of students on the modules for which the materials were in high-demand, but asked if access could remain open to any registered number of Loughborough University. Most rights holders were happy with this arrangement. However, realistically, student numbers change all the time, and there is a real difficulty with measuring part-time students, or distance learners. One could consider concurrent user licensing, but as we all know, this can be prohibitive.

When listing the material for which you require permission, it is important to ensure that details are specific or you may end up paying for material that will not be used. Accuracy is also important: our publisher survey revealed that inaccurate bibliographic references are one of the biggest hindrances to publishers in granting permission, as often they need to physically leaf through their journals to check authorship before agreeing a licence. Our experience has also shown that it is worth stating whether an author is based in your institution, and whether you already have a subscription to the journal as this information can seriously affect your success rate, and what you might be charged.

Again, it may sound obvious, but the licence period for which you want to make the materials available should be clearly stated. Out of interest, ACORN's usage figures revealed that there was no usage of the articles in the four month vacation period. This should be remembered when negotiating with publishers: the academic year is effectively only eight months long.

Document security and storage are likely to be well-scrutinised elements of any permissions letter, so they need to be explained in detail. List your authentication mechanisms, document formats and type, digitisation accuracy levels, copyright compliance measures and what you intend to do with the digital documents at the end of the licence period. ACORN asked publishers if the digitised articles could be kept in an escrow arrangement whereby the articles were kept on the server at Loughborough, but were inaccessible to users until a new agreement had been reached with the publishers. This approach saves the need to destroy the digital copies that are so expensive to create.

Finally, there is the issue of payment. ACORN successfully asked for permission for no charge for the duration of the project period, with only 10% of publishers insisting on payment. We were also able to negotiate down, or away, a number of charges, showing that electronic copyright costs are negotiable for the moment at least. I would say that is was worth asking for material for no charge for educational purposes, particularly if your institution has a subscription to the journal concerned. However, other projects have worked well with

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a default fee approach, where they offered payment, but at a level set by their institution. Whichever approach is taken, it is always worth trying to negotiate up-front fees, rather than usage-based fees. Up-front fees are easier to budget as they provide a predictable cost, and are easier to administer as they are only required on an annual basis. The difficulty with usage-based fees is that an institution is unable to predict the level of usage of materials until it is too late to affect the resulting cost. Usage-based fees also tend to need to be paid quarterly, increasing the administrative burden. The JISC and the Publishers Association (PA) have recently commissioned a supporting study on charging mechanisms for digitised texts\(^8\). This recommends two charging levels: firstly a “student text-book” model for the digitisation of current, in-print materials that students would otherwise have been asked to purchase for the course. This would incur an annual fee based on the number of students on the course. Secondly, they suggest a “library subscription” model for out-of-print, or journal, materials which would incur a one-off digitisation fee. The latter certainly seems an attractive and affordable option for University Libraries.

Having provided the rights holder with all the appropriate information, the question of agreements needs to be addressed. When granting paper copyright permissions, most publishers are happy to use a simple assignation form. Indeed, some organisations have successfully worked with publishers using such forms for electronic permissions. The eLib Reside\(^9\) project is one example. However, other institutions, and certainly the publishers themselves seem to be looking towards more complex agreements. The ACORN Project successfully worked with a “Heads of Agreement” document, which is simply an “agreement to agree”. Ninety-seven per cent of our participating publishers were happy to work with this document. Indeed the European Copyright User Platform\(^10\) (ECUP) have also designed four model Heads of Agreement documents for electronic uses of materials. These are available on their Web Site. Heads of Agreement offer publishers and libraries the opportunity to work with each other in a new and developing area, without the formality and legal status of a contract. Some projects have worked with contracts: SCOPE\(^11\) (Scottish On-Demand Publishing Enterprise) have designed their own model contract which is again available from their Web Site. The essential inclusions of any agreement should be, firstly, that the rights holder owns the rights that they are licensing; secondly, that they indemnify you against any actions arising in terms of rights ownership; thirdly, the licence period; fourthly, any security arrangements; and finally the escrow (or similar) arrangement for document storage at the end of the licence period.

Cost of electronic copyright: chasing Rights Holders

Moving on now to the cost of electronic copyright. Having identified and approached our rights holders, it is probable that they will need to be “chased” for a response. The average number of days taken for ACORN to obtain written permission from a publisher was 77 days, although this ranged from 7 days to 359! The average number of chases per publisher came to 5-6 with 77% of our 150 publishers requiring pursuit before permission was granted. This clearly represents a lot of staff time, indeed we estimated that 260 hours was spent obtaining permission from publishers for 500 articles on 49 modules for one academic year, and that £ 1,750 was spent in direct costs (fax, postage etc.) As the permission seeking process is so lengthy and complex, a good management tool is essential. As there was no comprehensive and affordable product on the market at the outset of the project, ACORN built their own Electronic Copyright Management System entitled CLEAR (Copyright Licensed Electronic Access to Readings) for this purpose. The functions of CLEAR are as follows:

- logs module, tutor and reading list information
- logs publisher contact details
- logs permission progress, chases and refusals
- logs charges (licence or royalty)
- orders ILLs
- receipts electronic copies
- stores usage statistics
- calculates payments
- generates management reports

Needless to say, the design process took a lot of staff time. Some Library Management Systems are building in the facility to manage Electronic Reserve Collections, which may assist in the future (e.g. Innovative Interfaces Inc.’s “Innopac”).

Cost of electronic copyright: permissions fees

As mentioned earlier, ACORN were quite successful in obtaining permission for no charge for the duration of the project. Sometimes these permissions were only free if the author was based at Loughborough University. Ten per cent of publishers did request payment regarding 23% of the articles we received permission for. A list of charges follows:

- Per use charges
  - 20 cents per page printed
  - 2,50 € per page printed
  - 6,00 € per page printed
  - $ 1 per article printed
  - £ 1 per article printed

- Up-front charges
  - $ 25 per page to mount the article
  - $ 50 to mount a whole article
  - £ 5,50 per page to mount the article for two years
  - 5,00 € per page with up-front charge for 10 printed copies

Admittedly this is too small a sample from which to draw any conclusions about publishers charges, however, if these figures tell us anything, they tell us that there is currently no consensus amongst publishers for electronic permission fees. Other projects and services in our experience, would tell the same story.

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8 Bide, M., Oppenheim, C, and Ramsden, A. Charging mechanisms for digitised texts. URL: http://www.ukoln.ac.uk/services/elib/papers/parcharging/
9 Reside Project. URL: http://www.uwe.ac.uk/library/ldev/reside/
10 European Copyright User Platform. URL: http://www.kaapelii.fi/ebida/ecup
11 SCOPE Project. URL: http://www.stir.ac.uk/infoserv/scope/
Publishers responses

I thought it would be of interest to demonstrate the fruit of ACORN’s copyright permission seeking labours. ACORN contacted 147 publishers with requests to make electronic copies of 622 articles. We received permission from 102 of them (70%) to make 502 articles available (90%) in digital form. Only thirteen publishers refused us permission (8%) regarding 53 articles (9%), however, a larger proportion, thirty-two (22%), could not make a decision, or did not respond, concerning 67 articles (11%). The main reason given for refusal was that the publisher had no policy on electronic copying – or that they had a policy which disallowed such copying. This is positive, because policies can change, and indeed have been changing over the duration of the project. If faced with a refusal, ACORN would always attempt to clarify the request further, as many initial refusals have been based on a misunderstanding of the project. If that didn’t prove successful, we would in some cases involve the relevant academic. Academics’ often have good relationships with their publishers, and publishers are keen not to alienate their authors. Such meetings have facilitated two of ACORN’s agreements. If there was no change in the publishers’ position, we would not disregard them in the next phase of permissions seeking, as policies can alter fairly rapidly in this area.

As we were fairly successful in obtaining electronic copyright permissions we put together a “critical success factors” list outlining what we felt to be the reasons for positive responses from publishers. These are given below:

- Emphasis on working in partnership with publishers
- Heads of Agreement approach
- Provision of information back to publishers
- Time-limited project
- Sole focus on journal articles
- Support of intermediary

The first refers to the emphasis the project placed on working with publishers on a “partnership” level. Our Heads of Agreement approach to electronic licensing is indicative of this approach. This “agreement to agree” acknowledges that both publishers and libraries have issues to explore in this new area and allows them to do so without committing to a legally binding contract. One of the benefits offered to publishers via the Heads of Agreement was the provision of detailed management and usage information. Again, in this new and developing area, it was felt that such information was of more value to publishers than fees, and it was certainly well-received by the publishers who participated. The fact that ACORN was a time-limited project also seemed to encourage publisher participation. We promoted ACORN very much as an opportunity to explore the issues surrounding such licensing in a safe and time-limited environment. Our focus on journal articles was certainly another critical success factor. Journals are effectively “out-of-print” as soon as they are issued. University Libraries also tend to purchase journal subscriptions for research rather than undergraduate teaching purposes. Publishers were therefore less concerned about losing subscription revenue by the digitisation of individual journal articles. However, one publisher did ask us to guarantee that we would retain our subscription to their journals for the duration of the project, in return for granting us permission to digitise some individual articles. Finally, we felt publishers were happier to participate with us because of the association of Swets & Zeitlinger, the subscription agent. Swets have a good reputation within the publishing industry, and it was felt that using their logo on our letterhead may have encouraged publishers that the project represented a safe environment. Swets also directly facilitated some of our permissions through promoting ACORN on publisher visits.

Protecting electronic copyright

Having obtained permission to make articles available, it was important to look at means of protecting those rights in a digital environment. We will therefore now examine the rights that require protection under UK copyright law. The most obvious right, is the copyright in the actual text of the article. This gives the rights holder the right to restrict further copies of their intellectual property being made, amongst other rights. A second right, is the copyright in the typographical layout of the page. This gives the rights holder the right to restrict further copies of the layout of the material. Finally, there is the issue of moral rights. These give the creator the right to be acknowledged as the creator of that work (the right of paternity) and the right to object to the derogatory treatment of that work (the right of integrity). The right of paternity must be asserted by the creator, it does not exist automatically. However, it may reasonably be argued that moral rights cannot be asserted in journal articles as the law states:

“The right does not apply in relation to the publication in—
(a) a newspaper, magazine or similar periodical”

The question is, could a scholarly journal article be equated with a newspaper or magazine article. For the purposes of this paper, we will explore means of protecting such rights.

Text and typographical rights can be assigned and thus may belong to different rights holders. Moral rights cannot be assigned, although they can be inherited. Copyright in the text lasts for 70 years after the death of the creator and copyright in the typography exists for 25 years from the date of first publication.

So, how can we adequately protect these three different forms of rights? I will illustrate ACORN’s approach. Firstly, to protect the rights holder’s right to copy the text of the document, we saw the need to restrict access to the document. To do this we instituted both IP address and Username and Password authentication mechanisms. Copying facilities were also restricted by disabling cut, copy and paste functions, and the downloading of the articles to disk. Any legitimate copying in the form of printing was monitored both by comprehensive usage logging, and watermarking each printed page with the Username, date and time printed. This meant that if any subsequent illegal copies were made from the print-out, they could theoretically be traced back to the infringer. Secondly, in order to protect the typographical copyright in the document, ACORN retained the original

layout of the page by using PDF file format which kept the original page numbering system. Thirdly, in order to protect an author’s right of paternity, a watermarked copyright script giving the authors name and full bibliographic reference was visible on every page both on screen and printed out. To protect the right of integrity, the articles were always made available in full, and a high degree of accuracy was demanded from the OCR Ring process. In summary, the document security features ACORN felt it necessary to institute for the protection of their electronic copyrighted materials were:

- IP address authentication
- Username and password authentication
- Copyright script on every page
- Disabled cut, copy and paste functions
- Watermark on all print-outs
- Comprehensive usage tracking

Future scenarios

Looking to future of the protection of electronic copyright, I think it is fair to say that security features could be relaxed if publishers were agreeable to two developments: firstly IP address-only authentication, and secondly, up-front (rather than usage-based) charging mechanisms. IP address authentication would obviate the need for centrally administered Username and password lists which many Universities do not have. Some publishers are moving to such a system for their own electronic journal services. However, Athens 3, the national authentication mechanism for JISC-funded services could offer an alternative solution. It should be possible to use this system for local services such as an ACORN-type system. In terms of charging, if publishers were happy with up-front licence fees, there would be no need for such comprehensive usage tracking for usage-based fees. The tracking of printing is particularly difficult because of the variety of printers across campuses. For ACORN it has meant that students with networked personal computers in their study bedrooms could not print to their personal printers. This was because the mapping of hundreds of individual printers for logging purposes would have been too large an undertaking.

The future of electronic copyright clearance shows signs of development. The eLib funding Phase 3B asked for calls to tender for what they termed a “National Resource Bank” of digital materials for use by Higher Education Libraries. It is hoped that the successful bid will offer a copyright clearance and digitisation service for previously undigitised materials. The UK’s Copyright Licensing Agency also recently issued a press release announcing their hope to move into the licensing of electronic copyright. This may also offer HE Libraries a simpler solution to electronic copyright permission seeking. Other work by the JISC and the Publishers Association in this area has produced a draft model licence for electronic materials, as well as offering two charging mechanisms discussed earlier. Finally, the Authors Licensing and Collecting Society are promoting the retention of copyright for electronic use by the author, and intend to set up a licensing system for them. From the Library’s point of view, this will be acceptable if authors do actually re-licence their electronic rights to the ALCS, and the ALCS offer a workable clearance solution. It would not be so beneficial if authors decide to retain the rights for themselves, as Libraries may find themselves having to chase individual authors for permissions, rather than their representing publisher. However, in ACORN’s experience, having approached an author, they are more likely to agree to the digitisation of their work for dissemination purposes.

In summary, the implications of electronic copyright for the digital library are currently restrictive. Pursuing permissions is a labour intensive and complex activity, and because of this, costly. There is currently no consensus on either fees or charging mechanisms. Protecting the rights once gained is the easier of the two activities, and should become easier as publishers fears are allayed, and their demands relax. The work of the JISC in this area is improving communications between libraries and rights-holders so the future of electronic copyright offers some promise.

Anschrift der Autorin:

Elizabeth Gadd
Information and Library Studies
Loughborough University
Leicestershire LE 11 3TU
England

13 eLib Circular 2/97, URL: http://www.ukoln.ac.uk/services/elib/info-projects/circular2-97.html
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