## INTERNATIONAL CONFERENCE ON MULTIMEDIA FOR HUMANITIES

## Rights Management and Digital Resources: challenges and problems

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Perhaps the single greatest obstacle to the networked use of digital resources in the humanities, is uncertainty over copyright issues, and in particular a fear that the new technologies may facilitate intellectual property theft. This paper draws on the experience of the Scottish Cultural Resources Access Network (SCRAN) to review some of the issues that should be addressed in this area.

### **RIGHTS**

### Copyright

Copyright is the right of an owner to prevent others from copying their work: it is not a "right to make copies". It is intended to protect the fruits of the labour, skill and judgement of the creator. It is a collection of rights given to *authors* for a specified term to enable them to control the way their works may be exploited. Authors may assign or licence all or some of these rights to other parties. In order to qualify for copyright, works must be original (new) and fixed in some way. There is no copyright in an idea. Under the Anglo-American common law tradition, the degree of originality in the work is not qualified, and evidence of effort ("sweat of the brow") is enough to justify copyright; but "intellectual creativity" must be in evidence in Continental Europe, based on civil law.

In the UK, copyright is an *automatic right*, it does not have to be established by deposit, and the use of the © sign is not necessary. Expressions like "all rights reserved" have no validity in law.

### **Moral Right**

Moral Rights belong to authors and are independent of the economic rights of copyright. They may not be assigned. One of the more important of them is the right of integrity which protects an image or text from being modified or placed in such a context as to undermine the original intentions of its creator. Such modifications are rather easier to effect in a digital environment.

## Privacy, Confidentiality and Secrecy

Digitisation, in making unpublished material in the collections of SCRAN contributors much more publicly available than ever before, brings with it a responsibility to consider carefully matters of personal privacy, commercial confidentiality and even national security.

#### **REGULATION**

Despite being drafted quite recently, the <u>Copyright Designs and Patents Act 1988</u> is largely silent on electronic copyright issues. The more recent <u>EC Directive on the Legal Protection of Databases, 96/9/EC</u> has harmonised legislation of member states on these issues, and the 1988 Act has from 1 January 1998 been amended by the <u>Copyright and Rights in Databases Regulations 1997, SI 3032</u> to bring these changes into effect. The full text is at: <a href="http://www.hmso.gov.uk/si/si1997/1973032.htm">http://www.hmso.gov.uk/si/si1997/1973032.htm</a> and the nature of the harmonisation is that databases which through the selection and arrangement of their contents exhibit

"intellectual creativity", will have full copyright protection for 70 years, while databases which only exhibit an investment of "sweat of the brow", gain instead a new *sui generis* protection (for 15 years) against unfair extraction and reutilisation. These rights are irrespective of whether the individual *contents* of the database are original and therefore copyright in themselves.

#### **PRACTICE**

Although the regulatory framework for electronic intellectual property within the EC is more explicit than ever before, the practical position will continue to evolve and be refined by legislation elsewhere, by practice and by case law.

For news of developments on the digital copyright front, updated weekly by the Legal Advisory Board of the INFO2000 Action Line on Multimedia, see:

http://www.echo.lu/legal/en/news/

Another good source for recent thinking on these matters is Charles Oppenheim's copyright column in Ariadne:

http://www.ariadne.ac.uk/

Some pointers to good practice, based on SCRAN contributor experience, are listed below.

### Fair Dealing

The concept of fair dealing allows copying from a copyright work so long as it is

-not substantial

and

- -not damaging to the legitimate commercial interests of the owner and
- -specifically for research, private study ,criticism or review

The new database regulations now prohibit individuals from making copies from databases created since 1 January 1988 for commercial research. This prohibition does not, however, appear to apply to librarians making copies on behalf of a user under the library regulations, and this may lead to some interesting test cases in future.

### Licensing

Copying outside fair dealing provisions can only legally be performed with permission from the owner or under some form of Licence.

### The CLA

Although in the United Kingdom a Copyright Licensing Agency has been in existence for some time to licence photocopying of Literary (but not Artistic) works for educational purposes, rightsholder organisations have always been deeply suspicious of what they have termed Electrocopying (i.e. the digitisation of existing print material) and rightsholders have insisted that any licences to do this should be negotiated directly on a case by case basis. In January 1998, CLA announced that it is developing a new

digital licensing scheme:

### http://www.cla.co.uk/www/press16.htm

The licences under this arrangement will not, however, cover the licensing of material already in digital form. Nor, indeed, will they cover digitisation for use in any electronic publication such as CD-ROMs, multimedia or online services, and so SCRAN Contributors are still likely to have to negotiate with individual rightsholders for the right to digitise in-copyright material under the SCRAN Contributor Licence Agreement.

#### The SCRAN Licences

The SCRAN project has developed a licensing model based on a pair of "bookend" licensing agreements.

Contributor Licence In essence the Contributor retains all commercialisation rights in the new digitised object, but grants to SCRAN a perpetual, non-exclusive right to use the digital object for any non-profit educational purpose, world-wide. SCRAN undertakes to pass back to the contributor an agreed payment for any commercial use of the digital object. Finally, if SCRAN were to be taken over by any commercial third party, all the educational rights would "snap back" to the original contributor.

*User Licence* SCRAN grants the user a non-transferable, non-exclusive right to use of the digital objects by the employees and students of the user institution and any member of the public visiting the institution for educational purposes.

# **Electronic Document Delivery**

SCRAN is interested in Electronic Document Delivery systems in the longer term, as part of its vision of end-users achieving seamless access to both images of cultural objects and documentation about them. Rightsholder organisations have been particularly suspicious of electronic document delivery systems, many of which rely both on electrocopying and on an interpretation of fair dealing to which rightsholders have already been antagonistic.

There have been a range of demonstrator projects for electronic document delivery, most of which have required directly negotiated licenses between the rightsholder and the delivery service.

One project which has been moving this argument forward is EDDIS

### http://www.ariadne.ac.uk/issue14/eddis/intro.html

The EDDIS experience has been that for copy documents supplied under the fair dealing arrangements, direct desktop delivery to the end user is not acceptable to copyright owners. The original EDDIS vision of a one-stop, help yourself, seamless process for end users has been much compromised by this because to stay within fair dealing, the supplying library must not retain scanned documents in digital form for future use, and at the requesting institution, incoming documents must be intercepted, printed and deleted from the system, and the hard copy forwarded to the end user by conventional means.

#### **Extraction**

*Criticism and Review* so long as they are acknowledged, extracts of works made for the purposes of criticism or review are not a breach of copyright.

Factual Compilations Facts (including names and contact details) are not in themselves copyrightable,

and under the European "intellectual creativity" tradition, there has been nothing to stop others extracting such facts and re-utilising them in other compilations.

In <u>Magill</u>, for example, the EC won its case that radio and TV programme details could not be copyright, thus leading to a proliferation of listings publications. Even in the States (in <u>Feist</u>), it was ruled that there was no copyright in a telephone directory. This appeared to kill off the "sweat of the brow" tradition in the US, but that may be re-instated by the <u>Collections of Information Antipiracy Act, H.R. 2652</u>, which is currently being debated in the House of Representatives. In any case, the new database regulations are intended to rectify the situation in Europe.

Although it needs to be tested by case law, the situation in Europe under the new regulations appears to be:

- -Original selection and arrangement of contents (e.g. <u>Chemical Abstracts</u>): 70 years copyright against any extraction.
- -Unoriginal selection and arrangement of contents but evidence of heavy investment (e.g. <u>Books in Print</u>): 15 years database right against substantial extraction and re-utilisation.
- -Unoriginal and little evidence of heavy investment (e.g. TV listings): no protection.

*Press Cuttings* Until recently, it would appear that conventional paper-based press-cuttings services have been operating outside copyright law, since these practices do not fall within fair dealing. These may now be licensed under the Newspaper Licensing Agency scheme. In the electronic arena, <u>Textline</u> were sued for mounting online the full text of articles from the Financial Times, in competition with FT's own services. They settled out of court.

Hyperlinking In another out-of-court settlement where a precedent had been hoped for, the <u>Shetland News</u> internet service has agreed in future to acknowledge any <u>Shetland Times</u> stories which it links to from its own website, rather than (as <u>Shetland Times</u> had claimed) passing them off as its own.

Framing A precedent does seem to have been set in the <u>Totalnews</u> case, where they were prohibited from embedding material from <u>CNN</u> and the <u>Washington Post</u> within frames on their website alongside paid advertising.

Abstraction The situation is a little less clear regarding the creation of electronic surrogates for original copyright material: much hinges on the extent to which such a surrogate can form a complete substitute for the original work.

Thus descriptive cataloguing and indexing are much less likely to infringe copyright than is the creation of abstracts; and indicative abstracts are less likely to infringe copyright than informative abstracts. But unless an abstract consisted of extracts from the work with no added intellectual input, it is unlikely that copyright will be deemed to have been infringed.

The Acid Test Electronic copyright is, and is likely to remain, a grey area. In deciding what practices to adopt, the test SCRAN ought probably to apply, is not "is this legal?", but "does this harm any one?". If an action does not harm the financial interests of another institution or individual, it is probably safe to take it.

## **RIGHTS MANAGEMENT**

The final part of this paper considers the ways in which SCRAN Contributors may identify, and with

SCRAN's assistance protect and exploit, the rights they have in their collections.

### **Terms of Availability**

It is first important to recognise that a Contributor might not own rights in all the material it has collected. In some cases, this may inhibit the extent to which that material may be digitised: but in every case, digitisation ought to involve a consideration of the terms on which such material may be made available through SCRAN.

Published Material As has been discussed above, rightsholders in conventional published material are currently extremely reluctant to allow that material to be digitised more than fleetingly (as part of a fax or photocopying process), and generally opposed to licensing the storage of such material in digital form. Some publishers are breaking ranks however, and parallel or even electronic publishing is becoming more common. Furthermore, a considerable proportion of the more interesting published holdings in the collections of SCRAN contributors are already out of copyright.

*In-House Productions* Generally speaking, any work, whether literary, graphical or photographic, undertaken by an institution's staff as part of their normal duties, remains the property of that institution. In any research oriented organisation however, the rights in some work, as part of the academic "gift economy", may already have been assigned, for example to journal publishers. The rights to the digitised version of these will need to be explored, if they are to be included in SCRAN.

Commissioned Work When an institution has commissioned work, for example photography, it will normally have taken care to secure all reproduction rights in that work. Unfortunately the rights position in works commissioned before digitisation was generally thought of, does need to be considered, and in some cases re-negotiation may be necessary.

Other Project Work Similarly, clarity needs to be established in the rights position regarding SCRAN Contributor material currently being digitised in non-SCRAN projects, and material needed for SCRAN projects, from organisations unwilling to subscribe to the standard SCRAN contributor licence.

Gifts and Bequests Contributor's collections may contain many gifts and bequests, some of which may have particular conditions attached to them (e.g. "not for commercial use") which may affect the terms of availability of their digitised versions.

*Loans* The terms under which loans and deposits of material have been made to SCRAN Contributors may in some cases be even more restrictive than those for gifts and beguests.

Commercial Photography There is in some Contributors' Picture Libraries a considerable body of work from independent professional photographers for which they act as an agent. While these photographers are likely to welcome this new sales channel, appropriate terms of availability must be established for them as well.

### Metadata

A major advantage of digitisation, is that Terms of Availability and other Rights Metadata can be incorporated within the digital object itself. That is, the object can be encoded to include an authoritative description of itself, including its unique registration number (e.g. Digital Object Identifier, DOI), its technical format, its rights owner, and its terms of availability. Under the new World Intellectual Property Organisation (WIPO) amendments to the Berne Convention, the removal of such rights management information will be illegal. However, it will be some years before this provision is incorporated into UK Law.

### **Paradigm Shift: Access with Protection**

In the pre-digital world, it is a truism that the more secure an object, the less accessible it is. A manuscript, map or glass plate negative in a vault may be extremely safe both from unauthorised copying and from wear, tear and accidental damage, but the value of the information it contains cannot be realised.

A driving principle behind the SCRAN project, has been that creating a comprehensive digital record of the collections will increase opportunities for resource discovery without greatly compromising the conservation objectives of SCRAN's contributors.

Indeed, it is likely that during the course of this project, technology will have matured to the extent that it will be possible to create acceptable digital surrogates for many resources, which can be accessed and exploited repeatedly with no harm to the original artefact. Furthermore, the rights management capabilities of the delivery system for these surrogates will be such as to protect the intellectual property they contain more comprehensively than can be achieved in pre-digital systems. Thus digitisation paradoxically is likely to increase both usage and protection at the same time.

### **Levels of Access**

It is strongly recommended that, wherever possible, images should be digitised at the highest resolution currently economical. In present day terms, this would equate to PPCD Base 16 or equivalent TIFF. At this resolution, a 35mm slide image would occupy 18Mb, and would display as 2048 pixels by 3072, or 16 computer screens full of data. For conservation purposes materials should be handled as infrequently as possible, and it is worth the marginal additional cost to use this one-off digitisation to create a high-resolution master image for archival purposes.

Archival For cost and security reasons, it is recommended that this large digital object should be stored offline, probably on Compact Disc.

Commercial Once the archival digital image is available, a digital copy should be the delivery mechanism of choice for Picture Library and other licensed usage. A full-size copy TIFF will be acceptable for most hard-copy uses. For electronic use, the file size can be cut down as appropriate (to provide the digital equivalent of a 5x4 transparency when the licensee only wants the image for a CD-ROM, is to open an unnecessary loophole in the licensing process).

Until confidence has been built in the security of delivery over the Internet, the delivery medium is likely to be either point-to-point ISDN, or physical media (CD, JAZ, DAT etc) delivered by courier (the so-called "SneakerNet"!)

Networked Surrogate A copy of each archived digital image should be made for online storage and delivery at "screen resolution". This might currently be set at 512 by 768 pixels and 256 colours, but could be upgraded (by re-copying from the Archive Master) in line with user installed equipment and bandwidth - the aim is to keep to the minimum both download speeds and the possibilities for piracy.

Images at this resolution would be made available for licensed use only. Visitors to Contributor sites (and licensed remote clients) could view them as confirmation of their choice of which image to buy, or download them for use as lo-res paste-ups for discussion with their own clients.

Of course, the major use for these images will be educational, and the SCRAN Contributor Licence specifies that the Contributor grants SCRAN a non-exclusive, but perpetual, licence to make this material available for unlimited, non-profit, educational use. The SCRAN approach is becoming more widely understood. For example, in the Ross Report Funding Information and Communications Technology in

## the Heritage Sector

#### http://www.arts.gla.ac.uk:80/HATII/HLFICT/

recommendation 38, states: "The HLF should make certain that any digital resources created with its funds are freely available for educational purposes."

Thumbnail A copy of each archived digital image is being made for online storage and delivery at "Thumbnail" size (say 256 colours and 150 pixels in its largest dimension). Thumbnails have little economic value, but act as very useful Metadata to the full size images, as well as making the website more attractive to the browser. It is a matter of policy at most cultural institutions that electronic access to their collections documentation or catalogue material should be available free of charge, and thumbnails can be seen to be within this category. Thumbnails are thus being made available to unlicensed users, without any of the formalities of Authentication and Authorisation.

#### **Authentication and Authorisation**

If some material is only available to licensed users, it is important to have in place facilities for Authentication (the user is who they say they are) and Authorisation (the user is licensed to use the requested service). It would be possible for SCRAN to do this, using a combination of User Id and Password, and possibly IP Address.

However, the bureaucratic costs, to service provider, licensing institution, and end user, of supporting a multiplicity of such safeguards, has led to a move to delegate all Authentication and Authorisation to a "trusted third party" called ATHENS

### http://niss.ac.uk/athens/

ATHENS only supports users in the UK Higher Education community at present, but extensions to support the entire educational community are under consideration. There is also an international study underway in this area, involving the JISC and the Coalition for Networked Information (CNI), and looking at other areas of authentication (such as Kerberos and Digital Certificates) which are outside the current scope of ATHENS.

## **Encryption**

Demonstrable systems are available that can deliver high value information (such as high definition images) in an encrypted form, that can only be decoded by using a separately available key. It is recommended that such a facility will not be required by SCRAN until such time as the archival images are loaded onto the online service.

### Watermarking and Fingerprinting

Although screen resolution images do not have the value of archival masters, they can nevertheless be easily copied into CD-ROMs and Websites, and SCRAN is actively considering a means of marking such images in some way. Images can be discretely but visibly marked, but this can lead to a Catch-22 situation. If the mark is placed where it interferes least with the information content of the image, it is easy to crop off. If not, it lessens the value of the image being delivered.

It is therefore planned that a mark encoding technique will be adopted that is invisible to the naked eye. Encoding techniques are now available that create marks that can be decoded even after the image has been printed out and rescanned. Using such techniques it is expected that two kinds of marking should

be encoded into the image.

The *Watermark* will identify the original rightsholder, and that the image has been licensed through SCRAN.

The *Fingerprint* will identify the date the image was delivered, who it was delivered to, and under what licence terms (educational, commercial, time-limited etc).

Watermarking and fingerprinting could together provide, embedded in each image, an indelible audit trail to assist in the prosecution of any person infringing the intellectual property rights of SCRAN or its Contributors.