Second Joint ICSU Press - UNESCO Expert Conference on Electronic Publishing in Science

UNESCO House, Paris,

Wednesday, 21 February 2001

New legislation on copyright and databases and its impact on society

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Introduction

What new legislation is there? Since the first ICSU/UNESCO Expert Conference on Electronic Publishing in Science, held in Paris in early 1996, legal protection for coyprightable subject matter has developed. First, at the international level, exclusive protection has been strengthened mainly by way of the two WIPO treaties of December 1996, and second, at least in Europe, protection has been extended to non-original databases as new subject matter.

What might be the impact of this legislative development on society? Some see this development as the necessary reaction to the perceived loss of control which is caused by digital and networking technology. Others, however, see it as an undue hindrance to scientific research and discussion and as a threat to the development of the information society.

The following remarks undertake:
- first, to describe the main features of the new legislation, i.e. the legislation in the field of copyright since 1996,
- second, to present some thoughts on the impact of this new legislation on society in general, and
- third, to add some comments on the effects of new legal protection on electronic publishing in science.

New Legislation on Copyright

For some participants, the following description of the new legislation on copyright since 1996 may be nothing new. But others may be not so familiar with it, so I should briefly recall those new legal instruments and describe their main legislative features.

General rules for the digital and networked environment

To begin with, on the international level, it seems rather amazing that already at the end of 1996 the international community agreed upon two international treaties in reaction to the changes brought about by digital and networking technology. As regards electronic publishing, the most relevant of these treaties is the WIPO Copyright Treaty (WCT), which is complemented by the WIPO Performances and Phonograms Treaty (WPPT). Although these treaties are not yet in force, note1 they have already largely influenced upon national legislation such as the U.S. Digital Millennium Copyright Act note 2 and the draft EU-Directive on the harmonisation of copyright in the information society. note 3 It should be noted that a similar treaty on audiovisual performances has failed in December 2000; that a treaty on broadcasters' rights is on the agenda, as well as a treaty regarding the legal protection of non-original databases. Such a treaty was already

proposed for adoption in 1996 as well, but failed to reach consensus at that time.

What are the main features of the WCT? Three features seem to be of interest here. First, the WCT clarifies that the act of making protected subject matter available online is subject to the exclusive right of the author and/or rightsholder. Second, Member States are under a duty to enact legal protection against the illegal circumvention of digital protection devices, and third, a similar duty exists henceforth regarding the removal or alteration of so-called rights management information, i.e. information which is necessary for the management of rights in an electronic environment (such as information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information). No agreement could be reached on the exact scope of the reproduction right in a digital and networked context. However, an „agreed statement" states that the reproduction right „fully applies" in the digital environment, and that the storage of a protected work in digital form in an electronic medium constitutes a reproduction within the meaning of Article 9 of the Berne Convention. Furthermore, it was agreed amongst the participants of the 1996 conference that the mere provision of physical facilities for enabling or making a communication does not in itself amount to a copyright-relevant communication within the meaning of the WCT or the Berne Convention. Moreover, it should be noted that the WCT extends the so-called three-step-test already contained in the TRIPS-Agreement note 4 to the digital and networked environment. According to this test, States are permitted to enact limitations of and exceptions to the exclusive rights granted only (1) in certain special cases, which do (2) not conflict with a normal exploitation of the work and (3) not unreasonably prejudice the legitimate interests of the author.

Of course, these treaties are the result of a world-wide harmonisation effort. Consequently, they form a legal framework rather than providing for a detailed regulation. Those details will still have to be worked out by national legislation. We might expect a fair deal of competition" in this respect. Let me just highlight three focal points of the current debate in this regard:

- it is not in dispute that offering material in digital form online to the public is an act covered by copyright, and hence requires the rightsholder's authorisation. However, it is much debated to what extent and under what conditions intermediaries should be liable for copyright infringe-ment, because they provide the facilities and services which enable users to infringe someone else's' copyright. Here, the U.S. has adopted a rather balanced notice and take-down procedure. note 5 In contrast, the EU in its electronic commerce directive has opted for a far-reaching exemption of service providers from legal liability; note 6

- another „hot" topic is the scope of the legal protection against circumventing devices. Two issues prove to be particularly tricky. First, the question is whether it should be made illegal to commit circumventing acts, or to manufacture and deal in circumventing devices. On the one hand, it seems logical to incriminate acts, but then acts mostly done in private are difficult to police, and nobody really wants to control acts of users undertaken in their private home. On the other hand, to forbid digital circumvention devices brings with it the danger of over broad protection, since a circumventing device may at times also be used for legal purposes. The second issue is to what extent digital protection devices should be protected by law against being circumvented? The WCT wisely states that such legal protection against the circum-vention of technical protection devices should only apply with regard to the restriction of „acts ... which are not authorized by the authors concerned or permitted by law". In other words, technical protection devices which fence in public domain material do not have to be protected, nor does the circumvention for uses which are permitted by law (such as fair use or private use) mandate a legal remedy against such circumvention.

Two problems arise: first, one and the same technical device may prevent acts with regard to both protected and unprotected material. Hence, any circumventing device may be used for both legal and illegal activities. Whereas the U.S. the Digital Millennium Copyright Act is unambiguous about the fact that only the circumvention of technological measures that effectively control access to protected works is illegal, the draft EU-directive more vaguely prohibits the circumvention of technology which „in the normal course of its

operation“ is designed to prevent use acts with regard to works protected by copyright. Second, at the time of creating access to, and taking of, protected material, it is not yet clear whether the subsequent use made of such material is covered by an exception to copyright or not. Again, the EU-directive seems to be rather vague in proposing that Member States should „in the absence of voluntary measures taken by rightsholders, including agreements between rightsholders and other parties concerned, ... take appropriate measures“ to ensure that rightsholders make available to the beneficiary of an exception the means of benefitting from that exception. note7 Moreover, this duty does not extend to all exceptions which Member States may adopt under the upcoming directive. In the U.S., the DCMA prescribes that the Register of Copyrights shall examine whether users „are, or are likely to be, ... adversely affected by the prohibition ... in their ability to make non-infringing uses ... of a particular class of copyrighted works. note 8 The problem with this second issue is that technology which might differentiate in this respect is not yet available, and one may have doubts whether it ever will. Yet, the way in which this issue will be decided has far-reaching consequences regarding the organisation of the information society, as the DeCSS-case has demonstrated. Here, circumvention of a technical device has been held illegal, which has as its effect that DVD-films can only be played on licensed DVD-players, but not on Linux-machines.

- and, last but not least, there is the issue what exceptions to copyright seem appropriate in the digital networked environment? Here, one question is whether exceptions should be formulated in a general way such as the U.S. „fair use“ exception, or whether they should be limited to certain well-defined situations, such as the almost 20 exceptions provided for under the current draft of the EU-directive on copyright in the information society. Another question is how to further define the rather vague criteria of the three-step-test. When does an activity undertaken by a third party with regard to a new digital market conflict with the „normal exploitation“ of a work? A WTO panel had its first try (albeit regarding analog exploitation of copyrighted music in restaurants) which shed some light on the subject. note9 However, the issue still remains rather obscure.

Legal protection for databases

Let us now have a look at the legal protection of databases. The once prophetical proverb - was it by Marshal McLuhan, or by someone else? - according to which in the information society, everybody will turn into a database, is today a commonly accepted phenomenon. We all retrieve information from databases and we all build up databases of an ever increasing size. Hence the crucial importance of the legal protection regime of databases.

To emphasise one point: there is no disagreement regarding the fact that compilations of data or other material, in any form, which by reason of the selection or arrangement of their contents constitute intellectual creations, are, and should as such be protected by copyright. Also, the principle is accepted that this protection does not extend to the data or the material itself and is without prejudice to any copyright subsisting in the data or material contained in the compilation. note10

What is, however, much in dispute, especially in the U.S., but also in developing countries, is whether there is a need for additional protection regarding non-original databases or non-original parts of original databases against extensive or at least substantial taking without authorisation and payment. Here, Europe has taken the lead by adopting in 1996 its directive on the legal protection of databases. note11 Why does this protection raise so many concerns? In order to understand the ongoing debate, a brief overview of the protection scheme seems to be called for.

The idea is to protect the investment made for the „obtaining, verification or presentation“ of the contents of a database against the „extraction and/or re-utilization“ of the contents of a database. Of course, not all databases enjoy such protection, but only those which require „qualitatively and/or quantitatively a substantial investment“. Likewise, not any unauthorised act of extracting and or re-utilization is prohibited,

but only those acts which amount to the taking of the „whole or of a substantial part“ of the database, again measured „qualitatively and/or quantitatively“. note12 Furthermore, even when only insubstantial parts of the contents of the database are taken, „the repeated and systematic extraction and/or re-utilization“ is not allowed, if it conflicts „with a normal exploitation“ of the database in question, or which „unreasonably prejudices the legitimate interests of the maker of the database“. note13 The exclusive right lasts for 15 years, and a new 15 year term starts running whenever a substantial qualitative or quantitative change is made to the contents of a database. This expressly includes „any substantial change resulting from the accumulation of successive additions, deletions or alterations, which would result in the database being considered to be a substantial new investment“. In practice, a protected non-original database will thus remain protected as long as it is kept up-to-date with some non-minimal investment.

National court cases have given this protection a rather broad meaning, in covering, e.g. in Germany, phone directories, concert program listings, newspaper-like online advertising, and in one case also a collection of some 250 links.

http://europa.eu.int/eur-lex/en/lif/dat/1996/en_396L0009.html

Impact of New Copyright Legislation on Society

What will be the impact of this new legislation on society?

Predictions like this are rather risky. This is so, because we always tend to overestimate short-term effects, and to under-estimate fundamental long-term changes. Moreover, the system is so complex, and the possible impact may be so diverse that, today, three remarks will have to suffice.

Effects of broad exclusive rights

My first remark concerns the extension of the exclusive right.

It is true that a literal reading of the existing legislative text subjects those electronic repro-duction acts to copyright which occur in the course of using the protected work in question in the digital format. Hence the impression arises that certain uses of protected material - such as reading a book - which used to be free in the analog world are no longer free in the digital context. This is all the more true in the light of the prevailing economic property rights theory which focuses on protecting the investment made for the production of the material against unauthorized misappropriation. Some see this as upsetting the fundamental balance struck by the legislature between conflicting proprietary and access interests. In particular, it has been argued that if browsing protected material is subject to copyright, then the user could not verify the contents of the material and decide whether or not he or she needs it, before making the decision to purchase the book.

However, the same is true when printed books are ordered via the internet from an online seller such as amazon.com, or when books are sealed in plastic. Also, any restriction regarding access seems to be the result of technical mechanisms rather than of legal rights. As such, in my view extensive copyright protection does not seem to be troublesome, as long as maximum distri-bution of the content is what is aimed at. Especially, extended copyright protection does not prevent authors from posting their material for free on the net, as it does not hinder any open source strategy.

But we undoubtedly have a problem in situations where rightsholders make use of their exclusive rights in order to block markets for strategic reasons, which they themselves do not - or maybe not yet - serve. In addition, together with extended legal protection, the technical access control mechanisms just mentioned subject sources to payment which so far could be consulted for free. Well, „for free“ at least as far as the

individual user is concerned; but then, of course, someone - usually a publicly funded library - has paid for the acquisition of the books. Furthermore, self-publishing may enter into conflict with the publishers exclusive marketing strategy of the contents delivered by the authors.

This highlights another point which may at first sight seem somewhat surprising: there is a clear link between the scope of copyright protection and the issues of financing and contracting. I will get back to this in a moment.

Importance of copyright exceptions and limitations

But before this, with my second remark, let me draw your attention to the fact that instead of focussing on the exclusive right, it is in my opinion far more important to focus on the exact scope of the limitations and exceptions to the exclusive prerogatives, which copyright grants to rightsholders. The reason for this is that limitations provide for the fine-tuning of the delicate balance between proprietary and non-proprietary interests. This includes interests of competitors, of second sources, of those who offer value-added services on the basis of pre-existing protected material, and, last but not least, of users.

As has already been mentioned, the framework is set by the so-called „three-step-test“ as prescribed to national legislatures by the international conventions (TRIPS, WCT). Exceptions and limitations must be confined to special cases, they may not interfere with the normal exploitation of the protected work, and they may not otherwise prejudice the legitimate interests of the rightsholders. However, the problem is, how shall these purposely vague notions be interpreted? In particular, what has to be regarded as „normal“ exploitation in an electronic environment? To simply say that any exploitation possible with regard to protected material in print and electronic form constitutes the „normal“ exploitation would mean that by definition no digital exploitation could be privileged. That cannot be the answer. note14 Rather, what this criterion means is that the exclusive rights granted by national law need not contain a legal guarantee to totally control the exploitation of a given work. So far so good, but the problem remains how to treat mere exploitation expectancies, especially those which are just about to open up because of the advent of new technology. In my opinion, one should distinguish between those exploitation activities already undertaken by the rightsholders or which the rightsholder is likely to undertake in the near future, and those which are only theoretically within his reach due to the extended possibilities of exercising the exclusive rights. note15

In practice, however, there is a certain tendency to interpret copyright limitations rather narrowly. This is particularly true for countries with a droit d'auteur background. This tends to severely limit the possibilities of re-using published material, and of providing value-added services in the digital and networked environment. Just take the example of Germany: according to the courts, to send analog copies of individual articles upon a request made by the user is covered by the so-called private use exception. note16 However, coupling this service with a research and information retrieval service, is not. note17 This is all the more true, if the user obtains a digital data set. Hence, a service which consists in digitizing someone else's analog archive of copyright protected material was held to be in violation of copyright (note18) as were electronic press-clipping services. note19 In other words: under existing German copyright law, all these activities are reserved to the original rightsholders, irrespective of whether those rightsholders are willing or able to offer such a service. I have my doubts whether this can be the ultimate solution. Of course, it is possible to read some of these decisions as inviting the legislator to change the law in an appropriate way.

Similarly, with its fixed catalogue of possible exceptions, the draft EU-directive on copyright in the information society may lack the flexibility necessary for the future development of the information society. Therefore, it will be of prime importance to carefully monitor and influence the process of implementing copyright exceptions into the national laws of the EU Member States.

Databases

Remark number three concerns the sui-generis protection of databases. Especially in the U.S., a large part of the scientific community has spoken up against it, fearing that it would severely affect the production, dissemination and use of scientific information. Mainly because of this, so far, attempts to enact similar protection both in the U.S. and by way of an international Treaty under the auspices of WIPO have failed.

In essence, the new right is one against misappropriation. In practice, however, the difference to an exclusive right is not too great. The main problem with the sui-generis right then is that by protecting investment made in order to make a database, the law likewise tends to open up the possibility of monopolizing the information contained in it. Of course, this openly contradicts the premises of the very rationale for protection. note20 In addition, the exception contained in the EU-directive (note 21) for teaching or scientific research is likely to be too narrow, since it only concerns the extraction for „purposes of illustration," but not for other research activities as well.

However, it is my view that an appropriate interpretation of the flexible notions of „substantial" investment and „substantial" taking - the two decisive factors for the exact scope of the sui-generis right - can indeed prevent the sui-generis-protection to be overbroad. Of course, in order to achieve this, we will have to have a much better understanding of the economics of the information market. In this respect, economic theory and empirical information will certainly be of great help.

Legal Protection and Electronic Publishing in Science

One quick word regarding the effects which the new copyright legislation has on electronic publishing in science in particular.

Again, two points retain our attention: first, the author-publisher relationship (the author as provider of scientific content), and second, the publisher-library-user relationship (the author as user of scientific content).

As far as the author-publisher-relationsship is concerned, the main issue seems to be whether or not a publisher will agree to pre-print and/or at least simultaneous posting of an article on the author's website. However, it seems that this is a problem only in fields where scientific publications follow the economic model not of scholarly, but of trade publications. In some countries, including my own, this is the case, e.g., in the field of law. But it seems that publishers who have fully embraced their new role in the digital and networked environment, do not see pre-print publication or posting on institutional or private websites as a threat to the exploitation of their own markets, and hence would not object.

As far as the publisher-library-user relationship is concerned, authors often voice their concern that new legislation might tend to block access to otherwise free material, or to make access more costly than it used to be in the analog environment. In my opinion, these concerns are certainly justified. However, it should be kept in mind that a digital product is a product which in many respects is of a better quality than the analog book in printed form. Moreover, it has in the last years become widely accepted that providing access to, and using material in digital format touches upon the exclusive rights of publishers, and therefore requires licensing. The question at issue is then what principles of licensing can the parties involved agree upon as fair and reasonable. Without going into detail, it should be emphasised that in the last five years quite a number of licensing consortia agreements between publishers and libraries have been concluded, and „good" practices of licensing have developed. This includes the modalities of limiting access to closed user groups as well as new business-models of financing. Of course, not all issues may already be solved satisfactorily, but

the issues which remain open are under constant scrutiny such as the one undertaken by the EU-funded TECUP-project. note 22 The latest Memorandum of Understanding of the TECUP-Strategy advisory group lists as outstanding issues electronic interlibrary document supply, cross searching and cross linking, rights management systems, permanent access to digital material, and, finally, long-term archiving. note 23

Concluding Remarks

Any conclusions?

We have certainly witnessed a remarkable legislative activity within the last four, five years. And we will continue to witness - and hopefully influence - legislative activities in this field in the years to come.

We will have to ensure that the exclusive right is broad enough in order to protect authors and rightsholders against misappropriation of their protected material. However, we will also have to prevent abuses of these broad exclusive rights, abuses which might consist in blocking access to markets or market segments which the rightsholder does not serve himself.

Moreover, we will have to carefully discuss limitations and exceptions to the broad exclusive rights, in order to create enough leeway for value-added services by third parties.

Finally, the effort by all parties concerned to develop good licensing practices will have to be continued.

All this requires a better understanding of the markets in the field of electronic publishing of scientific material, by way of refining or economic models and adapting financing structures in the field of electronic publishing in science.

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Footnotes

1 As of February 1, 2001, 22 States have ratified the WCT, and 20 the WPPT. Both treaties require 30 instruments of ratification or accession.
2 Pub.L.No.105-304.
3 Common Position, OJ EC No. C 344 of 1 December 2000, p. 1. - See also the European Parliament legislative resolution on the Council common position for adopting a European Parliament and Council directive on the harmonisation of certain aspects of copyright and related rights in the Information Society (9512/1/2000 - C5-0520/2000 - 1997/0359(COD)) of 14 February 2001.
4 Art. 13, Agreement on Trade-Related Intellectual Property Rights, which is an Annex to the WTO-Treaty.
5 Sec. 202 of the Digital Millennium Copyright Act.
6 Arts. 12 et seq. of the Directive 2000/31/EC of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce), OJ

EC No. L 178 of 17. July 2000, p. 1.
7 Art. 6 of the Common Position of the EU-Directive on Copyright in the information society, op. cit.
8 § 1201 (C) of the U.S. Copyright Act, Title 17 U.S.C.
9 Doc. WT/DS160/R of 15 June 2000.
10 See Art. 4 WCT.
11 Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, OJ EU No. L 77, of 27 March 1996, p.20.
12 Art. 7 (1) of the EU database directive, op.cit.
13 Art. 7 (5) of the EU database directive, op.cit.
14 The Report of the WTO Dispute Panel, Doc. WT/DS160/R of 15 June 2000 arrives at the same conclusion: “If "normal" exploitation were equated with full use of all exclusive rights conferred by copyrights, the exception clause of Article 13 would be left devoid of meaning. Therefore, "normal" exploitation clearly means something less than full use of an exclusive right.”
15 See also the finding of the Panel Report WT/DS160/R: ”... in our view, not every use of a work, which in principle is covered by the scope of exclusive rights and involves commercial gain, necessarily conflicts with a normal exploitation of that work. ... We believe that an exception or limitation to an exclusive right in domestic legislation rises to the level of a conflict with a normal exploitation of the work (i.e., the copyright or rather the whole bundle of exclusive rights conferred by the ownership of the copyright), if uses, that in principle are covered by that right but exempted under the exception or limitation, enter into economic competition with the ways that right holders normally extract economic value from that right to the work (i.e., the copyright) and thereby deprive them of significant or tangible commercial gains.” (emphasis added).
16 Federal Supreme Court, judgement of 25 February 1999 (I ZR 118/96) - CR 1999, 614 - Kopienversand auf Bestellung.
17 Federal Supreme Court, Judgement of 16 January 1997 - I ZR 9/95, GRUR 1997, 459 - CB-Infobank I, and of 16 January 1997 (I ZR 38/96), GRUR 1997, 464 - CB-Infobank II.- In the opinion of the Court, copying which went beyond the commissioned making of single copies of particular articles goes beyond the limits of the copyright exception, because it allows for a use intensity which is far greater than the one which gave rise to the limitation of the author‘s exclusive right. - The electronic storage of abstracts, however, was not at issue in this case.
18 Federal Supreme Court, judgement of 10 December 1998 (I ZR 100/96), CR 1999, 213 - Elektronische Pressearchive. - The Court saw the danger that the exploitation reserved to authors of their works might be significantly impaired if such services fell within the archiving exception.
19 Court of appeals of Cologne, judgement of 30 December 1999 (6 U 151/99), CR 2000, 352 - Elektronischer Pressespiegel, and Court of appeals of Hamburg, judgement of 6 April 2000 (3 U 211/99), CR 2000, 658 - Elektronische Pressespiegel und Urheberrecht.
20 See recital 46 of the EU-directive on databases, op. cit: „Whereas the existence of a right to prevent the un--authorized extraction and/or re-utilization of the whole or a substantial part of works, data or mate-rials from a database should not give rise to the creation of a new right in the works, data or materials themselves“.
21 Op. cit, Art. 9 (b).
22 Testbed Implementation for the Electronic User Platform; for further detail see the TECUP website at http://www.sub.uni-goettingen.de/gdz/tecup/.
23 For a draft version of this Memorandum see http://www.sub.uni-goettingen.de/gdz/tecup/TDreport.pdf, p. 50 et seq.