Directories to Databases: 
Bringing the Law into the Information Age

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In its drive to complete the single market for information, it is not surprising that the European Commission has proposed a Directive for the legal protection of databases (CEC Commission, 1992). A rapidly growing area of activity, databases readily cross national boundaries but their legal regulation varies widely between Member States. Those who invest large sums in compiling databases, and those seeking freedom to use them, are likely to bring pressure on their national governments to introduce new legislation. This might further increase diversity of treatment and so exacerbate the difficulties in developing the Community ideals of freedom to provide on-line database goods and services on an equal legal base within the internal market. The Commission noted also the need for a substantial increase of investment in development of databases to correct imbalances both between Member States and between the Community and the worlds largest database producers. For example, in 1989 expenditure in the Community on accessing information by electronic means amounted to about 3 billion ecus whereas that in the United States of America was about 6.7 billion ecus (Huber, 1992).

A single, stable regime of protection within the Community would go far to encourage increased investment, enhance the single market and develop competitiveness.

The Problems to be Addressed

A database may consist of material which is itself protected by copyright, for example the law reports reproduced on Lexis, public domain material outside copyright; factual information or all three. At the present time, databases comprising statistical and other numerical data arranged in alphabetical or chronological order and usually updated frequently are increasing their share in the European market over databases of full text works. There is a controversy as to whether such a compilation is sufficiently original to attract copyright protection, and indeed whether facts should be subject to the semi-monopolistic protection which is provided by copyright. The protection by copyright of my love sonnet or detective novel does not prevent you from writing another love sonnet or detective novel, or from using mine as a source. But if my alphabetical compilation, made from public sources of all registered pharmacists in the Community can have copyright protection, can you ever make such a list for yourself, even from the same public sources, without factually copying mine? And even if indirect copying is allowed, and independent research can be proved, is it economically sensible to require you to repeat exactly the same exercise? On the other hand, if I have gone to the trouble and expense of compiling my database, and of developing the market for its use, I need some protection to prevent you simply down-loading my data and selling it as yours.

It is obvious from this example that the issues to be considered must also include the level of activity with the materials which a legitimate data-user is permitted. It must be extensive enough to make
purchase of a licence worth while to the user but not so much as to render worthless the expenditure of the database maker.

Relevant areas of law

The Commission had to decide what form of legal protection to employ. Contract might have been appropriate, perhaps with a licensing and exemptions scheme similar to that applied to patent and know-how licensing. Lists of acceptable and unacceptable provisions could have been provided. This would, however, have required an enormous machinery of supervision and has the fundamental weakness that the chain between database provider and end-user may be a long one, divorced from any direct contractual relationship. Other third parties also need to know their rights and obligations in respect of databases and the information held.3

Much of the justification for protection relates to the issue of fair and unfair competition. Unfortunately, the unfair competition law of Member States is too varied and fragmentary, e.g. in Britain for the Commission to have relied solely on harmonising these general principles. However, as will be seen, the Commission has created a sui generis right based on principles of fair competition, which it proposes alongside new rules within each State's law of copyright. The major reason for using copyright is that all Member States are members of the Berne Convention and their law is, in most relevant areas, fairly similar. There is in each State a substantial body of jurisprudence which should ensure ready development of the new regime. (It is of course that variable jurisprudence which has led to some of the differences in national provision already referred to; the European Court of Justice may find itself in a harmonising role from time to time as it adjudicates whether existing case law is an appropriate base for construction of new (or existing) statutory provisions). Article 2(5) of the Berne Convention provides:

‘Collections of literary or artistic works such as encyclopaedias and anthologies which, by reason of the selection and arrangement of their contents, constitute intellectual creations shall be protected as such, without prejudice to the copyright in each of the works forming part of such collections’

States are agreed that databases can come within this definition but they vary on the extent of the requirements. Because the Convention provision was not drafted directly with databases in mind, some of the particular issues raised by this fairly new form of intellectual property are not covered either in the Convention itself or in enabling national legislation.4 Even basic matters like the identity of the author, who is the owner, whether up-dating creates a new database each time (and so a new period of protection) are not easily resolved. More questions arise from the technical capabilities of the media used for storage and the possible demands of the new markets being created. The prohibition against copying in English law applies to the work or a substantial part. Case law tells us we must test substantiality by quality not quantity. A legitimate database user may wish to extract and copy parts of the database. What is a substantial part of a compilation which may consist of many hundreds of equally important (or unimportant) entries? Should transfer of the contents from one computer to another constitute copying? If by automated means a user takes the contents of the database and puts them into different order, under different headings, is that a breach of the database owner’s rights or has the user created a new database? The various issues will be raised and the position in English law will be explained and followed by the new proposals.

Copyright in a database: English law

English law makes no direct provision about copyright in databases. The Copyright, Design and
*Patents Act* 1988 makes clear that a computer program may be protected as a 'literary work' but a database is not a program. The most appropriate part of the definition of 'literary work' (S3 (1)(b)) is 'a table or compilation'. (S3 (1)(a)) This continues the law as it had developed before the 1988 Act so it is relevant to consider the earlier case law on 'compilations'. If the database consists entirely of items in which the database maker already has copyright as individual literary works (such as a database of original precedents or standard letters), it may be that no issues relating to copyright in the database as such will arise. Any infringement by copying the database will necessarily infringe copyright in the contents. Problems arise when the copyrights in the contents of the database are held by others (but the database maker is authorised to include the works in his database) and, more importantly, when the contents of the database are not as such protected by copyright. Does the database itself attract copyright?

English law applies copyright to original works of authorship of various kinds. It has long been recognised that 'original' does not relate to literary merit or novelty but simply that the work emanates from the author's mental processes and is not copied from another. In the case of a compilation consisting of excerpts and abridgements of other works with explanatory notes it was held that entitlement to copyright depends on whether

'labour, skill and capital [has been] expended sufficiently to impart to the product some quality or character which the raw material did not possess and which differentiates the product from the raw material'

Merely to select items for the compilation may not be sufficient to give copyright if the skill and labour required are slight - but if the borrowed materials are 'combined in a different manner from what was in use before' then others will have no right to use those same materials 'with his improvements superadded, whether they consist in plan, arrangement or illustration or combinations; for these are strictly his own'

The originality may consist in the arrangement of commonplace items, such as the types of list under which names of football teams would be placed in pools coupons. While this may require considerable skill in forecasting likely results, some cases seem to have required no more than labour and expense to obtain copyright protection for a compilation. Three cases in the 1860s concerned directories of businesses, the defendant in the first case being plaintiff in the others. The courts assumed copyright protection for a trade directory without any discussion of originality or skill, but they were careful to limit the restrictions placed on the competitors' use of the material. In terms of delineating unfair competition the cases were probably necessary at the time, but it was perhaps unfortunate that the law of copyright was thereby blurred. Bradshaw's Railway Guide provided another decision readily explicable on competition grounds, but less clear on the requirements of originality for copyright. The plaintiff had for many years published a monthly compilation of timetables of the various railway companies together with an alphabetical list of the stations with annotations, making a useful index for travellers seeking convenient itineraries using several railways. In *Blacklock v Pearson* the defendant publisher was penalised for copying the alphabetical list of stations (for use in a magazine competition). He did not copy the timetables or the annotations which turned the alphabetical list into an index. The defendant had undoubtedly made use of the plaintiff's labour in gathering the names together, but there is little originality in an alphabetical list. The information was all available in public materials, but not in a readily available form. Indeed a few years earlier the House of Lords had doubted whether copyright could be claimed for a smaller local compilation of railway timetables, though their Lordships had found that a small section giving information about excursions using a variety of sources and arranged in a convenient form was entitled to protection. Perhaps Bradshaw's comprehensiveness in a complex area (and its undoubted usefulness) indicated a level of skill in compilation which the courts found it unnecessary to explain. It may be that familiarity with British Rail timetables (and the simplicity of recording the
activities of a single rail system) has led some commentators and judges to overlook that element of skill and originality which went into the original Bradshaw and distinguished it from the compilation in *Leslie v Young*. Some recent cases have suggested that English law requires no more than effort in collecting the different parts of the compilation. Whifford J in *Express Newspapers v Liverpool Daily Post and Echo* speaks of the need for 'skill and labour or possibly may be only labour'.

Similarly in *Football League v Littlewoods Pools* LipJohn J had said 'a great deal of painstaking hard work...was all that was required in Blacklock'. The Directory cases have been directly followed in the recent case of *WaterlowDirectories v Reed Information Services* [1992] FSR 409, again without any direct discussion of whether, or why, the plaintiff's directory has copyright but simply discussing how far a competitor may use the publication in making his own collection. Aldous J said

>'clearly there can be no infringement without reproduction and it may be correct that a person can use the information in a directory to compile another directory provided reproduction does not take place'. (p415)

The defendant, seeking to enlarge his directory, had copied names and addresses for the plaintiff's publications onto a word processor and computer. From this, he sent out letters requesting the recipients to complete details which would then be used in the new directory. Section 17(2) of the *Copyright, Designs and Patents Act* 1988 makes clear that copying includes storage in a computer. An interlocutory injunction was granted.

The 1988 Act clearly brings transient or incidental copying into the ambit of protection. It does not follow that a more stringent interpretation of copying should be applied to a looser definition of copyright work. The Act requires the work to be 'original' and most cases have indicated the need for some level of skill when copyright is sought for a compilation of material that is commonly available or in the public domain. The English courts have not emphasised that 'mere facts' cannot acquire copyright as have the courts in the United States of America but have sought to ensure reasonable availability of such material by limiting the restricted act of copying and concentrating on the unfair competition elements in the practices of business rivals. If we are not to stultify the use of information in an age of easy and much used forms of temporary copying we would do well to limit full copyright protection to that which can be said to be original by the use of imagination or some other mental skill, and does not therefore prevent others from making use of available information. An additional question likely to arise more in databases than in earlier compilations is whether the database maker is entitled to take extracts, synopses, tables or contents and other small parts of copyright work without seeking the licence of the copyright owner. Infringement of copyright required copying of a 'substantial part' of the work in question (CDPA s.16 (3)(a)). Case law has clarified that 'substantial' must be judged by quality rather than quantity, but the decision in a particular case is necessarily subjective and uncertain. Section 60 of the *Copyright Designs and Patents Act* 1988 specifically allows abstracts of scientific and technical articles to be copied for the public (for example in abstracting and alerting services provided by a learned society) if there is no licensing scheme available. The Act does not otherwise directly address this issue.

**Copyright in a database: the European Community Proposal**

The draft Directive applies only to collections made by electronic, electro-magnetic or electrooptical means or analogous process. It concentrates on the issue of copyright protection for the database itself. The contents may or may not have protection under national law. For the purposes of the Directive, protection is given for a database only if it is original

>'in the sense that it is a collection of works or materials which by reason of their selection or their arrangement constitutes the author's own intellectual creation' (Art. 2)
The preamble makes clear that an original database may consist of any type of work or material including sounds, images, numbers, facts or other data. Thus it does not follow the American line of keeping facts in the public domain, but it goes further than at least some English cases in requiring intellectual creativity rather than just labour and expense in the definition of originality. It may be that a straight alphabetical list of a whole class however arduous to collect it forms no such intellectual creation; arranged under different heading it may do so.

The draft Directive faces the issue of abstracts. By Article 4(i) a database maker is authorised to include bibliographical material or brief abstracts, quotations or summaries 'which do not substitute for the original works themselves' without consent of the owners of copyright in those materials. This is wider in scope than s.60 of the 1988 Act both in going well beyond scientific and technical abstracts and in excluding the right to claim a licence fee. In this respect the draft Directive will affect the rights of copyright owners in the materials under national law.

Authorship and Duration of Copyright: English Law

In English law the author of a literary work is the person who creates the work (CDPA s9(1)) or, in the case of a computer-generated work, the person who undertakes the arrangements necessary for creation of the work.\(^{17}\) This formula is not entirely clear but in many cases potential ambiguity will not matter because a computer-generated work has a fixed life of 50 years rather than the life of the author plus 50 years which is the normal rule for a literary work. If an employee makes a work in the course of his employment, although he is the author, the first owner of the copyright is the employer. Thus for many computer-generated works it will not matter which of a number of employees can be said to have made the necessary arrangements, or even if the company itself may have done so. The duration is fixed and the company is first owner of the copyright. The position is different for the majority of works where an individual author\(^ {18}\) is necessary to fix the duration of copyright, even though his employer may be the first owner of the copyright. It has been pointed out by Phillips and Firth (1990: 282) that difficulties may arise in determining the ownership of a database. In Waterlow Publishers v Rose, an unreported Court of Appeal decision, the note in Current Law states\(^ {19}\)

> 'Where a compilation of material has no identifiable author the person named as its first publisher will be presumed to own the copyright in it'

It is not apparent why this should necessarily be so unless all the candidates for authorship were employees of the publisher. There is no rule in copyright that the commissioner of a literary work owns the copyright; this would happen only if it was assigned in writing by the author under contractual agreement. If the compilation has an entitlement to copyright beyond that attaching to the contents it is because of the skill (or labour) of the maker in making a new work. It should not be impossible to ascertain who exercised that skill. If a work is genuinely anonymous its copyright has the shorter duration of 50 years from publication;\(^ {20}\) there does not seem to be any good reason for failing to analyse the contribution of the people involved and ascertaining who was the author.\(^ {21}\) Ownership would then follow. The Waterlow case appears to be wrong in principle and potentially damaging.

Authorship and Duration: the European Community Proposal

The draft Directive follows the better view of English law. It provides as a basic rule that

> 'the author of a database shall be the natural person or group of natural persons who created the data base' (Art.3)
and allows joint exercise of rights by joint authors. As with current English law, the draft Directive proposes that the employer will have exclusive right to exercise all economic rights in the database where the author made it in the course of his employment. (Art.3 (4))

Some national legislations designate a legal person as right holder of copyright in a database and recognise a legal person as creator of a collective work. The draft Directive allows for these persons to be within the definition of author. If English law wished to solve problems of authorship in this way the necessary statutory change would have to make provision for duration. At present English law never uses the life of a company to measure copyright duration. The draft Directive provides that duration will be that provided in national law for literary works though with a caveat for future harmonisation (Art.9 (1)).

**Updating and new editions: English law**

There is an additional problem related to duration and to the definition of an 'original work' which may be particularly applicable to electronic databases which may be readily updated and the value of which may lie largely in their holding the very latest information. Does each amendment create a new work and a new copyright period? English case law has dealt mainly with the more ponderous updating of printed works. Lord Kinloch in *Black V Murray* ((1870) 9 M 341) was clear that a new edition of a book was not necessarily a new work.

'It will not create copyright in a new edition of work, in which the copyright has expired, merely to make a few emendations of the text or to add a few unimportant notes. To create a copyright by alterations of the text these must be extensive and substantial, practically making a new book. With regard to notes, in like manner, they must exhibit an addition to the work which is not superficial or colourable but imparts to the book a true and real value over and above that belonging to the text'

Of course a new preface or much altered chapter may obtain a new and separate copyright. Similarly in the *Interlego* case the Privy Council clearly recognised and rejected the attempt by the original copyright owner to

>'obtain effectively a perpetual monopoly - an undesirable practice' ... 'by redrawing, however skilfully, virtually the same component with "minimal visual alterations"'

On the other hand, Bradshaws Guide was more like the modern database in that new editions appeared frequently with some, though not necessarily many, alterations. Joyce J had no doubt that each edition had a new copyright term.

>'A book which consists of a specification of conditions at the present moment of a constantly changing subject matter is a new work even though some of the particulars given may not have altered from what they were, and were stated to be, at some prior date, perhaps years before.'

The 1988 Act makes no provision to reconcile or clarify these conflicting approaches.

**Updating and new editions: The European Community Proposal**

The draft Directive expressly provides (Art.9 (2)) that

>'Insubstantial changes to the contents of a database shall not extend the original period of copyright protection'
'Insubstantial Change' is defined to mean

additions, deletions or alterations to the selection or arrangement of the contents of a database which are necessary for the database to continue to function in the way it was intended by its maker to function.' (Art.1 (4))

This curious exclusive definition ('means' not 'includes') may lead one to speculate on the possibility of making unnecessary changes or additional categories of items, and so extending the period. It is however salutary to remember the genuine need for originality in the creation of a copyright protectable database within the Directive. The careless muddle of the English directory cases will not be allowed to infiltrate the copyright-protected database under the draft Directive. However, we will see below that the Directive also gives lesser protection for lesser databases and this issue will again become relevant.

What the legitimate user may do with a database under the European Community Proposal

Distinction must always be made between the database and its contents. The draft Directive is not concerned about rights in the contents that is a matter for national law. Thus, apart from the brief extracts provision noted above, the incorporation of any works or material into a database is subject to any copyright rights and obligations relating to those works or materials under national law. In English law there is substantial uncertainty as to how far a user can make use of the contents of a compilation (particularly in the form of a directory) in making his own, possibly competing, product. Waterlow Directories v Reed Information Services ([1992] FSR 409) left open the question of liability if the defendant had copied individual names and addresses onto envelopes rather than storing them, albeit temporarily in his computer.

By Article 5 the author's exclusive rights in respect of the selection or arrangement of contents of the database and the electronic materials necessary for its operation are set out. He alone may authorise reproduction translation, alteration etc. of the database in whole or in part, and its distribution and rental to the public. These provisions are similar to English law. The first legitimate sale in the Community will exhaust the rights of distribution but not of rental. Article 6 allows the lawful user of a database to do any of the things in Article 5 which are necessary for the use of the database as agreed contractually. Obviously, a licensee must have an implied right if necessary to reproduce, if only temporarily, the database or parts of it, since otherwise he could not use it.

National law makes exceptions to copyright protection for educational purposes; these must also be applied to materials held in a database provided it is 'compatible with fair practice' (Article 7(1)). The 1988 Act makes broad provision for licensing of work used for educational purposes. The licences will no doubt be extended to works in databases. If national law allows other exceptions in respect of the contents, these must also be applied to the database lest the Directive should inadvertently diminish the rights of users in national law. Article 8 of the draft Directive goes further, where a database which is made publicly available contains materials or works which cannot be obtained elsewhere, or where a database is made publicly available by a public body with a duty to collect or disclose information. Provision must be made for compulsory licences to allow extraction and re-utilisation for commercial or other purposes of the whole or a substantial part of the works (Art.8 (1),(2)) in the database. This is not surprisingly subject to rules of privacy, data protection or national security. Insubstantial parts of the materials may be extracted without licence provided that acknowledgement is made of the source if the extraction is for commercial purposes. English law since the 1988 Act is well equipped to oversee the fairness of licences and to provide the necessary arbitration (CDPA ss116-52).
Databases without copyright: Protection against unfair copying

Many of the most useful and commercially viable databases will not qualify for full copyright protection under the proposed Directive. For example a database of facts and figures arranged alphabetically or numerically is unlikely to be considered to have so original a selection or arrangement as to be describable as the author's 'own intellectual creation'. Nevertheless the cost of setting up such useful sources of information and the readiness with which they may be copied demands some protection against unfair competition. The draft Directive provides this sui generis form of protection for all databases, so it is cumulative with copyright protection of the database itself for the 'original' ones. The new protection is a right to prevent unauthorised extraction or re-utilization of the contents of the database, in whole or substantial parts, for commercial purposes and applies from creation of the database and for ten years from the database being made available to the public. Unauthorised extraction from an in-house database could thus be prevented indefinitely but commercial ones are given only a short protection. This is where the question of what is a new database becomes important. Article 9.(4) provides that insubstantial changes to the contents shall not extend the period of protection. The comments made above must still apply.

The right to prevent unfair extraction of contents applies subject to the licensing and fair use of materials in unique and public body databases provided in article 8. The right clearly applies to non-copyright materials, thus allowing a database owner to prevent anyone using otherwise available materials via his database. The right is expressed not to apply to the contents of a database if they are already protected by copyright (Art.2 (2)). Parliament will have to spell out how the fairness of extraction for commercial use can be assessed and procedure, presumably by way of injunction, for enforcing the right.

Conclusion

There is a clear need to create some common form of protection in order to stimulate the market in information within the Community. The number of unsolved issues in English law indicates how the law must move to keep in touch with commercial and technological realities. The provision of intellectual property rights always sits rather uneasily with the philosophy of the European Community. The proposals wisely make use of copyright law which, based in the Berne Convention, has already produced a large measure of harmonisation and should be a ready vehicle for reciprocal provisions in states outside the Community. A trade war in databases would be in no-one's interest. However, copyright law has the potential to stultify competition if protection is given too readily. The emphasis in the draft Directive on fair use and remuneration rather than on measures to prevent use by others is significant and to be expected. There is, though, not much logic in an unfair competition provision for ten years only in an area where regular small updates will be needed to keep the database marketable. This provision may make licence fees extremely high in those first few years. it has been suggested by Hughes and Weightman (1992: 147) that a better provision might have been indefinite protection in return for registration, rather like trade mark protection. Compulsory licences could be coupled with this so that the database provider would have a regular income (while he found it worthwhile to continue registration) but public use of the material was not unduly restricted. Many of the still unresolved issues like what use can be made of the database would disappear within a system of licensing. The proposed Directive will probably take out of full copyright protection some databases which English law hitherto has protected. If this requires the English courts to consider more carefully what it is that makes a database original, the Directive will benefit not only Community trade but also the English law of copyright.

Notes

http://www.bileta.ac.uk/93papers/pearce.html

2. Within the limits of fair dealing in English law, c.f. of Dr.Johnson 'We devour half a library to make one new book'.

3. The new provisions are expressed to be without prejudice to (inter alia) contractual and unfair competition law applicable to the database or its contents (Art. 12).

4. Huber (1992) asserts that database production did not gain significance in Europe until the mid 1980s. The Copyright Designs and Patents Act 1988 (CD PA) expressly includes a table or compilation and a computer program in its definition of a literary work (s.3(1)) and includes electronic storage in the definition of copying (s 17(2)).

5. These were the Part I works under the Copyright Act 1956. Protection is also given to other works such as, sound recordings (PartII works in the 1956 Act). The 1988 Act gives equal status to both groups.


10. Ladbroke (Football) v Wililam Hill [1964] 1 ALL ER 465 H.L.

11. Kelly v Morris (1865) LR1 Eq.697; Morris v Ashbee (1866) LR7 Eq34.

12. [1915] 2Ch 376 But only £50 damages were awarded effectively a cheap licence. The judge noted that it did not compete with the plaintiff.

13. Leslie v J Young and Sons [1894] AC 335.

14. [1985] FSR 309, This was obiter as he held the 'Millionaires Club' competition grid required much skill.


17. This position was not covered in the law before the 1988 Act. A computer-aided work would be covered by the usual rule.

18. Or two or more joint authors CDPA 5 10 (1).


20. CDPA 5 9 (2) Very unlikely to apply in this case.
21. The Waterlow list came from those compiled by the professional associations. Presumably an employee of the associations or of the publisher decided on the appropriate format. Lack of clarity on the basis for copyright protection here creates the difficulty.

22. This does not seem in principle to be a significant factor. New editions made by authors of course do not affect the period but after his death it is significant whether the copyright has expired or not.

23. Interlego AG V Tyco Industries Inc. [1989] AC 217 Lord Oliver, This case concerned an artistic work.


25. Groves (1992: 226) suggests the right cannot apply to the contents as this would impose compulsory Licences on copyright works. Yet the wording of the article is clear.

26. CDPA 55 116 - 152. Article 8 (3)

27. Hence the judicial creativity of the doctrine of exhaustion of rights.

28. Like the compulsory licensing of programme listings by the Broadcasting Act 1990s 175.

**References**


McFarlane (1989). *Practical Introduction to Copyright* 2nd ed.


