

COPYRIGHT PROTECTION FOR TRADITIONAL COMPILATIONS OF FACTS AND COMPUTERIZED DATABASES – IS SWEAT COPYRIGHTABLE?

This article looks at the so-called “sweat of the brow” controversy in copyright law. While the US Supreme Court has resolved this controversy by explicitly denying copyright protection to the “sweat of the brow” involved in creating a compilation of facts, it is unclear how this matter will be resolved by the English courts. This article reviews the English cases on compilations of facts, examining how far the English courts have gone in their protection of such works under copyright law. This article also examines the implications of the “sweat of the brow” controversy on the protection of compilations of facts in electronic form, *ie*, computerized databases.

I. INTRODUCTION

IT was recently reported¹ that British Telecoms are seeking an injunction against Pro CD Inc to restrain the latter from making use of CD-ROM technology to publish and distribute a CD containing the names, telephone numbers and addresses contained in British Telecoms’ white-page directories. British Telecoms are claiming that the white-page directories, as a compilation of facts, are protected by copyright. The outcome of British Telecoms’ application is, according to the report, “eagerly awaited”.

One can well imagine and appreciate the excitement caused by this piece of news. Any person familiar with copyright law will remember the decision in *Feist Publications, Inc v Rural Telephone Service Co*,² where the Supreme Court of the United States held that there was no copyright in the white pages of a telephone directory which listed alphabetically the names, addresses and telephone numbers of all telephone subscribers in northwest Kansas. In its judgment, the Supreme Court unequivocally rejected the notion that the “sweat of the brow” expended in collecting the data for such a telephone directory is protectable under copyright law. Since this landmark case in 1991, there has been much speculation about how the English courts will decide if the facts of the *Feist* case fall for determination in the United Kingdom. The forecast of the result has been varied: while

¹ [1994] 9 EIPR D-238.

² 18 USPQ 2d 1275 (SC 1991).

most writers are convinced that such a telephone directory enjoys copyright protection under English law today on the basis that English courts do protect simple lists of facts,³ it has been suggested that, in the light of the *Feist* case and other recent developments, this may no longer be the position today.⁴

This article proposes another perspective: in the writer's opinion, a review of the relevant reported English cases shows that English courts might not have gone so far as to apply the 'sweat of the brow' doctrine in protecting compilations of facts. It will be argued that a compilation of facts, like the white pages of a telephone directory, should not be protected within the copyright regime. In this respect, reference will be made to the developments taking place at the international level, in particular, the Berne

³ See the report by the British Computer Society Intellectual Property Committee on the EC Proposal For a Council Directive on the Legal Protection of Databases [1993] 9 CLSR 4 (see Appendix I); P Cerina, "The Originality Requirement in the Protection of Databases in Europe and the United States" (1993) 24 IIC 579 at 586-587; A Monotti, "Works Stored in Computer Memory: Databases and the CLRC Draft Report" (1993) 4 Journal of Law and Information Science 265 at 271-272, and "Copyright Protection of Computerised Databases" (1992) 3 AIPJ 135 at 139; TP Arden, "The Conflicting Treatment of Compilations of Facts under the US and British Copyright Laws" [1992] 2 Ent LR 43; J Morton, "Draft EC Directive on the Protection of Electronic Databases: Comfort after *Feist*" (1992) 8 Computer Law & Practice 38 at 39; S Ricketson, "The Concept of Originality in Anglo-Australian Copyright Law" (1991) 9 Copyright Reporter 1 at 12 (where the author suggested that the Anglo-Australian courts have, in theory, not gone so far as to expressly recognise the 'sweat of the brow' doctrine. However, he pointed out that the scope of protection given to many factual compilations in infringement proceedings seemed to have achieved precisely that result.); Geller, "Copyright in Factual Compilations; US Supreme Court Decides the *Feist* Case" (1991) 22 IIC 802 at 803.

⁴ Thorne, "The Infringement of Database Compilations: A Case for Reform?" [1991] 9 EIPR 331 at 332 (suggesting that the English approach might be due for reform, given that in recent cases such as *Interlego AG v Tyco Industries Inc* [1988] 3 All ER 949, English judges appeared to be taking a stricter view of copyright protection); VH Bouganim, "Conference Report: the EC Database Directive" (1992) 8 Computer Law & Practice 81 at 82 (where Professor Gerald Dworkin, a leading copyright expert in the UK, has been reported to have "observed that the generous approach of the UK courts in granting copyright protection may be due to be re-examined in the light of the *Magill* case and the United States Supreme Court decision of the *Feist* case."). The *Magill* case [1991] 4 CMLR 669, 745 was a spin-off from a decision of the Irish High Court in *Radio Telefis Eireann & Ors v Magill TV Guide Ltd* [1990] ILRM 534 which held that, just as in the UK, there was copyright in TV programmes listings under Irish law. The defendant *Magill* then complained to the European Commission, arguing that the refusal of the TV companies to licence the reproduction of their advance weekly programmes in which they claimed copyright, was anti-competitive behaviour and therefore contrary to Article 86 of the Treaty of Rome. The European Commission, and on appeal, the Court of First Instance, agreed with *Magill*. It was apparent from the latter's judgment that it found it regrettable that such "banal" listings as TV programme listings should enjoy copyright under the national law. This decision of the Court of First Instance was recently affirmed by the Court of Justice of the European Communities: see *The Times*, 17 April 1995.

Convention for the Protection of Literary and Artistic Works and the GATT Trade-Related Aspects of Intellectual Property Rights Agreement. Finally, this article examines briefly the implications of such a proposition for computerized databases, as well as the alternative form of protection for compilations of facts stored electronically, *ie*, computerized databases presently under consideration by the European Commission.

II. COPYRIGHT PROTECTION FOR COMPILATIONS OF FACTS

1. *Originality: skill, judgment and labour*

A compilation of facts is a type of work protectable within the Anglo-American copyright regime if it satisfies the statutory requirement of ‘originality’.⁵ There are no statutory definition or guidelines as to what ‘originality’ means, but it is a well-established principle that an ‘original’ compilation is one in which its compiler had expended sufficient skill, judgment and labour in creating it.⁶ What is also clear is that the amount of such skill, judgment and labour need not result in a ‘novel’ or ‘ingenious’ compilation;⁷ in fact, the threshold of originality is very ‘low’.⁸ In each

⁵ In the UK, copyright subsists in an “*original* literary work”: s 1(1)(a) of the UK Copyright Designs and Patents Act 1988. The term “literary work” is defined to include “a table or compilation”: s 3(1)(a). Similar provisions existed in the two copyright legislation immediately preceding the Copyright Designs and Patent Act 1988, *ie*, the Copyright Act 1911 and the Copyright Act 1956. In the US, the originality requirement is set out in ss 102-103 of the 1976 Copyright Act: copyright protection subsists in a ‘compilation’ if it qualifies as an “*original* work of authorship”.

⁶ See the oft-cited passage from the Privy Council’s opinion in *Macmillan & Co Ltd v K & J Cooper* (1923) 93 LJPC 113 at 121: “To secure copyright for this [compilation] it is necessary that the labour, skill and capital expended should be sufficient to impart to the [compilation] some quality or character which the raw material did not possess, differentiating the [compilation] from the raw material.” In the US, Justice Story said in *Emerson v Davis* 8 F Cas 615, at 619 (No 4436) (C C D Mass 1845): “He, in short, who by his own skill, judgment and labour, writes a new work, and does not merely copy that of another, is entitled to copyright therein”.

⁷ *Macmillan & Co Ltd v K & J Cooper*, *ibid*, at 119. See also the report of the House of Representatives (H R Rep No 1476 at 51) on the phrase “original works of authorship” in the US Copyright Act 1976: “This standard [of originality] does not include requirements of novelty, ingenuity or aesthetic merit...”

⁸ Copinger & Skone James, *Copyright* (13th ed, 1991), at 60. The ‘low’ threshold requires only that the skill, judgment and labour expended be “more than negligible” (*Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 All ER 465 at 476, *per* Lord Hodson), or more than “merely trivial” [*Alfred Bell & Co v Catalda Fine Arts Inc* 191 F 2d 99 at 103 (2d Cir 1951)] or involving “some minimal degree of creativity” (M Nimmer & D Nimmer, *Copyright* (Vol 1, 1990), at para 2.01[a][b], cited with approval by the Supreme Court in the *Feist* case, who added that such level of creativity is “extremely low” *supra*, note 2, at 1278. See also *infra*, note 13 and the accompanying main text).

case, the sufficiency or otherwise of the skill, judgment and labour expended is a question of fact, and therefore disagreements on this question are inevitable.⁹

The “sweat of the brow” controversy relates, however, to a question of law: when deciding if the amount of skill, judgment and labour expended in making a compilation is sufficient to merit copyright protection, what types of skill, judgment and labour are relevant? Different types of skill, judgment and labour can be expended in creating a compilation of facts. Basically, they can be organised into two categories. In the first category are the skill, judgment and labour involved in the many ‘preparatory’ acts leading up to the making of the compilation. For example, a compiler of a directory of restaurants may have to expend skill, judgment and labour, at the ‘preparatory’ stage, of selecting which restaurants to list in the directory, and what information to include in the directory; other than the names, addresses and telephone numbers of the restaurants, should the directory also contain data such as the type of cuisine served by the restaurants or their sitting capacity? He may also have to expend skill, judgment and labour (otherwise known as the “sweat of the brow”) in collecting the data needed, and perhaps to verify the data. In many cases, the greatest work involved in creating a compilation is at this stage of collecting and verifying the data. The second category concerns the skill, judgment and labour involved in the actual coordination and presentation of the facts in the compilation. Thus, the compiler of the directory of restaurants would have to decide on how the collected data is to be arranged (eg, by categories) so that they may be effectively used by readers. What, of these various types of skill, judgment and labour, is the court entitled to take into account when determining if the compilation is ‘original’?

As will be discussed in detail below, the need to make a distinction between these various types of skill, judgment and labour arises out of the argument that since copyright protects not ideas or facts, but their expression, the skill, judgment and labour relevant for copyright purposes,

⁹ Eg, in *GA Cramp & Sons Ltd v Frank Smythson Ltd* [1944] AC 329, where the originality of a collection of tables comprised in a diary was in issue, there was a wide divergence of opinions among the judges who heard the case. The trial judge found that this selection of tables (ie, tables for weights and measures, postal rates and percentages etc), which was commonly found in diaries, did not involve “any real exercise of knowledge, labour, judgment or skill” (at 334), and accordingly held that the claim for copyright failed. The majority of the Court of Appeal (Luxmoore LJ dissenting) reversed the holding, although Mackinnon LJ thought that this was a case “near the line” (at 334). In the House of Lords, the unanimous finding of the Law Lords did not seem to entertain any doubt that the amount of skill, judgment or labour involved in the selection process was “very minimum” (at 338) and “of the smallest” (at 340), and therefore not entitled to protection.

and in particular for determining the originality issue, must relate only to the expression of the ideas or facts. If this idea/expression or fact/expression dichotomy is applied rigorously, the problem of protecting compilations of facts under copyright law becomes apparent: the “sweat of the brow” expended in the ‘preparatory’ stage of collecting and verifying the facts may have a closer connection with the ‘discovery’ of facts, rather than their ‘expression’.

2. *Feist: No ‘sweat’*

In the United States, the Supreme Court in the *Feist* case, has answered the question of what type of skill, judgment and labour is relevant thus:

[I]n determining whether a fact-based work is an original work of authorship, [the courts] should focus on the manner in which the collected facts have been selected, coordinated, and arranged. This is a straight-forward application of the originality requirement. Facts are never original, so the compilation author can claim originality, if at all, only in the way the facts are presented. To that extent, the statute dictates that the principal focus should be on whether the selection, coordination, and arrangement are sufficiently original to merit protection.¹⁰

A detailed analysis of this decision is not within the ambit of this article.¹¹ What the writer wishes to do here is to highlight the rationale underlying the American court’s refusal to take into account the “sweat of the brow” expended in collecting data when assessing the originality of the compilation, and then to determine if the rationale is recognised in English copyright law and will be applied by the English courts.

The basis of the Supreme Court’s decision is apparent from the extract of the judgment just quoted: copyright protects not facts, but the expression of the facts. In the United States, the fact/expression or idea/expression dichotomy has statutory force in section 102(b) of the US Copyright Act 1976:

¹⁰ *Supra*, note 2, at 1283.

¹¹ For more detailed analysis of the *Feist* case, see, *eg*, M Schwarz, “Copyright in Compilations of Facts: *Feist Publications, Inc v Rural Telephone Service Co, Inc*” [1991] 5 EIPR 178; PH Miller, “Life after *Feist*: Facts, the First Amendment, and the Copyright Status of Automated Databases” (1991) 60 Fordham LR 507; G Wei, “Problems in Applying the Form of Expression and Idea Principle in Copyright Law”, a paper presented at the Workshop of the Singapore Conferences on International Business Law VII on 30 August 1994.

In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept or principle or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

The only expression conceivable in a compilation of facts – where the compiler lets the facts speak for themselves – is the manner in which the compiler has selected and arranged the facts. The Supreme Court found support for this view in the definition of ‘compilation’ in section 101 of the 1976 Act:

A ‘compilation’ is a work formed by the collection and assembling of preexisting materials or of data *that* are selected, coordinated, or arranged *in such a way that* the resulting work as a whole constitutes an original work of authorship. [Emphasis added by the Court]

To include the act of collecting the facts as part of the expression in a factual compilation,¹² so as to protect the “sweat of the brow” involved in this process, would mean that a subsequent compiler would not be able to take bits of information from the compilation, but would have to go to the same common sources of the information himself. This, the Supreme Court concluded, would eschew the most fundamental axiom of copyright law enshrined in section 102(b).

Applying the fact/expression dichotomy in the context of factual compilations, the only elements protectable in such compilations are the selection and arrangement of the facts, and only if these elements are original. Therefore, the skill, judgment and labour expended in making the compilation which the court can rightly take into account in assessing the originality of a factual compilation is restricted to that expended in the selection and arrangement of the facts; any “sweat of the brow” expended in the process of collecting the facts, since it does not go towards creating the expression of the compilation, must be exorcised.

On this basis, the Supreme Court made a finding of fact that the skill, judgment and labour involved in selecting and arranging the data in the white-page telephone directory for northwest Kansas did not cross the low

¹² It has been suggested that, other than the arrangement of the facts, the act of collecting the facts is protectable expression: RC Denicola, “Copyright in Collections of Facts: A Theory for the Protection of Nonfiction Literary Works” (1981) 81 *Columbia LR* 516 at 531 (“...the process of culling and assembling facts, which results in the collection, [is distinguished] from the discovery of the facts themselves, and thereby secures a spot for the collection outside the category of discoveries, which are expressly excluded from copyright protection.”)

threshold of originality which requires there to be at least “some minimal degree of creativity”:¹³ the selection of the “most basic information” for inclusion in the white pages – the name, town and telephone number of each subscriber – was a selection of a sort but it could not be “more obvious”,¹⁴ while the arrangement of the subscribers in an alphabetical order was “so commonplace” that it was “practically inevitable”.¹⁵

The other point to note from the Supreme Court’s judgment is that the application of the fact/expression dichotomy to compilations of facts makes it inevitable that the copyright therein is ‘thin’.¹⁶ This means that there is no copyright infringement unless the expression of the compilation, *ie*, the selection and/or arrangement of the facts, has been taken by the defendant; the facts or information contained in the compilation may be freely copied.

3. Review of English cases

The term ‘compilation’ is not defined in the UK Copyright Acts. It is merely identified as a type of “literary work”¹⁷ that can enjoy copyright protection. The protectable elements in a compilation under English copyright law are therefore not clearly set out as has been done in section 101 in the US Copyright Act 1976. However, the fact/expression or idea/expression dichotomy is recognised in English copyright law. In fact, this principle is considered “trite law” today in the United Kingdom.¹⁸ Whether it has always been so is, however, questionable.

(a) Before and in the nineteenth century

It is said¹⁹ that the origins of the fact/expression dichotomy in the United Kingdom appeared in the dissenting judgment of Yates J given in the 1769

¹³ *Supra*, note 8.

¹⁴ *Supra*, note 2, at 1284.

¹⁵ *Supra*, note 2, at 1285.

¹⁶ *Supra*, note 2, at 1279. To see how the American courts, since the *Feist* case, have been coping with the ‘thin’ nature of copyright protection in factual compilations, see, *eg*, *Kregos v Associated Press* 937 F 2d 700 (2d Cir 1991) and *Bellsouth Advertising & Publishing Corp v Donnelley Information Publishing Inc* 999 F 2d 1436 (11th Cir 1993) (*en banc*) [Note that an earlier opinion by a panel of the Court of Appeals, 933 F 2d 952 (11th Cir 1991), was vacated and a rehearing *en banc* granted].

¹⁷ *Supra*, note 5.

¹⁸ *LB (Plastics) Ltd v Swish Products Ltd* [1979] FSR 145 at 160 (*per* Lord Hailsham of St Marylebone LC). Note, however, that there is a caveat to this assertion: see *infra*, note 78 and the accompanying main text.

¹⁹ RY Libott, “Round the Prickly Pear: The Idea-Expression Fallacy in a Mass Communications World” 16 Copyright Law Symposium (ASCAP) 30 at 33-34.

case of *Miller v Taylor*,²⁰ in which the King's Bench first examined the inter-relation between common law rights and the protection granted under the first copyright act, the Statute of Anne 1709.²¹ The learned judge said:

Ideas are free. But while the author confines them to his study, they are birds in a cage, which none but he can have the right to let fly; for, till he thinks proper to emancipate them, they are under his dominion.²² [Emphasis added]

On this basis, Yates J argued that once an author published his work, thereby putting his ideas into the public domain, he no longer had any right to prevent others from copying his work except under the Statute of Anne. His conclusion – that common law copyright in a work was extinguished upon publication – was adopted by the majority of the House of Lords in *Donaldson v Becket*.²³

From this notion that ideas are in the public domain grew the idea/expression dichotomy. However, while the seed was planted as early as in the eighteenth century, it did not seem to have taken root in English soil until the late nineteenth century when there started a proliferation of cases in which the dichotomy was expressly endorsed.²⁴ Interestingly enough, in one such case *Hollinrake v Truswell*,²⁵ Lindley LJ cited in support of the principle, not English cases, but *Baker v Seldon*,²⁶ the American case in which the idea/expression theme was first articulated by the Supreme

²⁰ 4 Burr 2303 (98 ER 201).

²¹ 8 Anne c 19. The Statute of Anne came into force on 10 April 1710. Before this statute, there were earlier English statutes controlling printing: the Star Chamber Decrees of 1586 and 1637, the Ordinances of 1643 and 1647 for the Regulating of Printing, and the Licensing Act of 1662. These statutes, however, were fundamentally censorship laws. Hence, the Statute of Anne 1709, being the first statute to recognise the author's rights in his work, has been hailed as the first copyright statute. For the evolution of English copyright law, see A Birrell, *Seven Lectures on the Law and History of Copyright in Books* (1899), and LR Patterson, *Copyright in Historical Perspective* (1968).

²² *Supra*, note 20, at 2378-2379.

²³ 4 Burr 2408 (98 ER 257).

²⁴ *Kenrick & Co v Lawrence & Co* (1890) 25 QBD 99 at 103; *Walter v Steinkopff* [1892] 3 Ch 489 at 495; *Hollinrake v Truswell* [1894] 3 Ch 420 at 427; *Chilton v Progress Printing and Publishing Company* [1895] 2 Ch 29 at 32; *University of London Press Ltd v University Tutorial Press Ltd* [1916] 2 Ch 601 at 608; *McCrum v Eisner* (1917) 87 LJ Ch 99 at 102; *Donoghue v Allied Newspapers Ltd* [1938] Ch 106 at 109; *Football League Ltd v Littlewoods Pools Ltd* [1959] 1 Ch 637 at 651; *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 All ER 465 at 477; *LB (Plastics) Ltd v Swish Products Ltd*, *supra*, note 18; *Ravenscroft v Herbert* [1980] RPC 193 at 203; *John Richardson Computers Limited v Flanders & Another* [1993] FSR 497 at 523.

²⁵ *Ibid.*

²⁶ 101 US 99 (1879).

Court and on which section 102(b) is based.²⁷ This seems to indicate that the naissance²⁸ of this principle took place in England, as it did in the United States, only in the 1890's.

It is also worth noting that Yates J seemed unperturbed by the corollary of his 'bird' analogy, namely, that an author has rights in the ideas in his work before publication. The nature of such rights was clarified by the Law Lords in *Donaldson v Becket*²⁹ who found that an author of any book or literary manuscript had at common law "the sole right of first printing and publishing the same for sale", and might bring an action against any person who printed, published, and sold the same without his consent.³⁰ To distinguish this right in an unpublished work from the author's rights in a published work under the Statute of Anne, the former was sometimes called "common-law copyright" while the latter was called "statutory copyright".³¹

The notion that "common-law copyright" protected ideas in an unpublished work could have arisen from the close relationship which the "common-law copyright" had with a right to prohibit publication under the law of confidence. For example, in *Prince Albert v Strange*,³² it was held that the rights of Queen Victoria and the Prince Consort in etchings made by them for their own use and not for publication, were founded on "the common law right of property"³³ in unpublished works, whose existence had been affirmed in cases such as *Donaldson v Becket*,³⁴ or in breach of confidence. Thus, in the same case, an author could derive his rights in his unpublished works under "common-law copyright" or under the law of confidence. One might even argue that the "common-law copyright" was really the origins of, and developed into, the law relating to breach of confidence.³⁵ In any event, the use of the term "common-law *copyright*" when such a right could co-exist, or might even have merged, with a right under the law of confidence – which is concerned with the protection

²⁷ RT Nimmer, *The Law of Computer Technology* (1985), at 1-6; P Goldstein, *Copyright* (1989), at 77.

²⁸ Or renaissance, if one takes the view that the origins of the principle are found in *Miller v Taylor*, *supra*, note 20.

²⁹ *Supra*, note 23.

³⁰ LR Patterson, *supra*, note 21, at 175.

³¹ Drone, *A Treatise on the Law of Property in Intellectual Productions in Great Britain and the United States* (1879), at 101.

³² (1849) 18 LJ Ch 120.

³³ *Ibid*, at 127.

³⁴ *Supra*, note 23.

³⁵ For instance, in support of the existence of the "common-law copyright", Drone cited cases like *Abernethy v Hutchinson* 1 H & Tw 28 (47 ER 1313) and *Prince Albert v Strange*, *supra*, note 32, which are often viewed as cases relating to the law of confidence: see, *supra*, note 31.

of information “in substance and not in form”³⁶ – was unfortunate and could have caused considerable confusion in the nineteenth century when the fact/expression dichotomy in copyright law (or more specifically “statutory copyright” law) was crystallising. It was only in the Copyright Act 1911 that it was made clear that copyright in an unpublished work could subsist only in accordance with the provisions of the Act.³⁷

This background on the historical development of copyright could perhaps explain the very generous approach of the English courts in granting copyright protection in compilations of facts during the nineteenth century. If the fact/expression dichotomy had not crystallised in the United Kingdom and the boundaries between copyright law and the law of confidence were not clearly demarcated, it would not be surprising that English courts during the most part of the nineteenth century did not make a concerted effort to draw a distinction between fact and expression when granting copyright protection.

It was during this period that *Kelly v Morris*³⁸ and *Morris v Ashbee*³⁹ were decided. These two English cases are almost invariably cited by writers and courts as instances of English courts protecting the “sweat of the brow”. The governing statute then was the Copyright Act 1842,⁴⁰ the descendant of the Statute of Anne. In *Kelly v Morris*, the plaintiff was the publisher

³⁶ See Cornish, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (2nd ed, 1989), at 217.

³⁷ See s 31 of the Copyright Act 1911 (1 & 2 Geo 5, c 46). This provision, however, specifically preserved the rights under the law of confidence.

³⁸ (1866) LR 1 Eq 697.

³⁹ (1868) LR 7 Eq 34.

⁴⁰ 5 & 6 Vict c 45. S 15 provided that copyright subsisted in “any book”. It is tempting to dismiss cases decided under the 1842 Act as being irrelevant to the assessment of originality in a compilation of facts. It could be argued that these cases no longer represent good law today because the 1842 Act did not require that the book be original before it enjoyed copyright protection. This argument was in fact advanced by Cross J in *Robertson v Lewis* [1976] RPC 169, who considered that it was “at least arguable” that *Walter v Lane* [1900] AC 539 decided under the 1842 Act was no longer good law under the 1911 Copyright Act. There, the House of Lords had decided that a reporter who had taken down verbatim in shorthand Lord Roseberry’s hitherto unrecorded speech was the “author” of the shorthand report under the 1842 Act, and therefore enjoyed copyright therein. Such an argument is, however, untenable. It has been pointed out that, in giving the reporter the copyright in the reported speech, the majority of the House of Lords did place a fair degree of emphasis on the labour, skill and effort of the reporter in taking down the speech: see G Wei, *The Law of Copyright in Singapore* (1989), at 21. In other words, even though the 1842 Act and the Statute of Anne did not set out specifically the originality requirement, English courts in granting copyright protection under these statutes appeared to have taken into account the amount of skill, judgment and labour expended in making the work. The introduction of the originality requirement in the Copyright Act 1911 merely codified the criterion exerted by the courts. In fact, the reservation of Cross J was rejected by Nicholas

of the “Post-Office London Directory” which contained twelve divisions or directories, such as the “Street Directory” and the “Court Directory”. The defendant initially published a directory of the names and addresses of persons in trade and business. The defendant then published a more comprehensive directory called “The Imperial Directory of London” containing fourteen divisions, which included the “Trade” and “Business” Directories from his earlier directory. In compiling the further twelve divisions, the defendant sent canvassers from house to house to verify the information contained in the “Post-Office London Directory”. This information was then reproduced in the defendant’s directory. One of the defendant’s canvassers did not take the trouble to make the necessary inquiries, so that most of the errors in the plaintiff’s directory appeared in the defendant’s directory. The plaintiff applied for an interlocutory injunction by way of motion, alleging copyright infringement. In giving judgment for the plaintiff, Sir Wood VC said:

In the case of a dictionary, map, guide-book, or directory, where there are certain common objects of information which must, if described correctly, be described in the same words, a subsequent compiler is bound to set about doing for himself that which the first compiler has done. In the case of a road-book, he must count the milestones himself. In the case of a map of a newly-discovered island...he must go through the whole process of triangulation just as if he had never seen any former map, and generally, he is not entitled to take one word of the information previously published without independently working out the matter for himself, so as to arrive at the same result from the same common sources of information, and the only use which he can legitimately make of a previous publication is to verify his own calculations and results when obtained. So in the present case the Defendant could not take a single line of the Plaintiff’s Directory for the purpose of saving himself labour and trouble in getting his information.⁴¹

It is this passage that has fuelled the “sweat of the brow” controversy in the United Kingdom. It suggests that a defendant is liable for copyright infringement even when he copies only information from the plaintiff’s

Browne-Wilkinson VC in *Express Newspapers Plc v News (UK) Ltd* [1990] FSR 359, who considered *Walter v Lane* “undeniably good law” (at 366) under the Copyright Designs & Patents Act 1988. Therefore, one cannot disregard the cases decided before the 1911 Copyright Act, such as *Kelly v Morris* and *Morris v Ashbee*, when reviewing the English position on the “sweat of the brow” doctrine.

⁴¹ *Supra*, note 38, at 702.

factual compilation, and not the selection or arrangement of such information.⁴² The objection to such conduct on the part of the defendant was that he was thereby availing himself of the plaintiff's labour or 'sweat' expended in the process of collecting the information. Such an interpretation would mean that the English court is prepared to protect the "sweat of the brow" involved in collecting the information.

Whatever Sir Wood VC meant to say, however, it is submitted that this passage was only *obiter* in *Kelly v Morris*, for the actual scope of protection granted to the plaintiff's directory was limited to the arrangement of the information in the compilation. On the facts of the case, what the Vice-Chancellor found was that the defendant had copied the "Street Directory" in the plaintiff's directory in which "the Plaintiff has adopted a very ingenious form of *arrangement* [emphasis added]".⁴³ He therefore granted an injunction restraining the defendant from publishing his directory containing the portions called the "Street" and "Court" Directories. The motion as to the other portions of the defendant's directory was then directed to stand over to meet the case upon certain points which had been raised by the plaintiff's affidavits. But the defendant subsequently submitted to a perpetual injunction against publication of all portions of his directory, except the "Trade" and "Business" divisions, which were taken from the defendant's earlier directory.⁴⁴ It is submitted that the real objection was that the defendant had taken the plaintiff's categorisation of the information – which is a form of arrangement at the macro level – into the twelve divisions, as well as the arrangement of the information within one particular division, namely, the "Street Directory". Therefore, whatever the implications may be in the passage quoted above, the Court in *Kelly v Morris* did not go so far as to protect the "sweat of the brow" expended by the plaintiff in collecting the information for his directory.

Unfortunately, *Kelly v Morris* has been relied upon in later cases as authority for a much wider proposition than it stands for. One such case is *Morris v Ashbee*,⁴⁵ decided just two years later in 1868. The plaintiff's directory contained the names and addresses of merchants and traders carrying on business in London. The plaintiff's directory was also an advertising medium. By paying the plaintiff a sum of money, persons in the trade who wished to advertise their business in the plaintiff's directory would have a fuller description of their business called "extra lines" inserted immediately after their names which would be printed in capital letters.

⁴² Such a suggestion is contrary to the fact/expression dichotomy, see *supra*, note 16 and the accompanying main text.

⁴³ *Supra*, note 38, at 702.

⁴⁴ *Supra*, note 38, at 703.

⁴⁵ *Supra*, note 39.

The defendants published a trade directory containing the particulars of certain traders and merchants. In making this compilation, the defendants had cut slips from the plaintiff's directory containing the paid-for matter, *ie*, the names in capitals and "extra lines". The defendants' canvassers, supplied with these slips, would approach the persons whose names appeared in the slips to verify the information contained therein, and if possible, to obtain payment from these persons for advertising in the defendants' directory using the same mode of advertisement used in the plaintiff's directory. The plaintiff complained that the defendants' taking of the names in capitals and the "extra lines" constituted copyright infringement. Sir Giffard VC agreed. After considering *Kelly v Morris*, the judge concluded that:

The simple upshot of the whole case is, that the Plaintiff's directory was the source from which [the defendants] compiled very material parts of [their directory], and [the defendants] had no right so to resort to that source.⁴⁶

If Sir Giffard VC meant that a defendant in compiling his directory could not refer to the plaintiff's work as a starting point, such an extension of *Kelly v Morris* is questionable.⁴⁷ In any event, the *ratio decidendi* of the case is more restrictive. The defendants had argued that they were justified in doing what they had done because they had obtained the various merchants' and traders' authorization to insert their respective names and "extra lines" in the defendants' directory as they appeared in the plaintiff's directory. Dismissing this argument, Sir Giffard VC said that while these merchants and traders could authorise the printing of their own name in capitals and "extra lines" wherever they chose, they could not authorise "the taking of the names *as arranged* [emphasis added]"⁴⁸ from the plaintiff's directory. This arrangement of these names had been done by the plaintiff, whom the Court found "had incurred the labour and expense first of getting the necessary information for the arrangement and compilation of the names as they stood in his directory, and then of making the compilation and

⁴⁶ *Supra*, note 39, at 41.

⁴⁷ In *Morris v Wright* (1870) LR 5 Ch 279, Giffard LJ clarified that he did not mean to say in *Morris v Ashbee* that a subsequent compiler could not refer to an earlier directory as a guide to ascertaining the information therein (*eg*, where a particular person lived), if he then went to the original sources and compiled his own directory. The defendants in this case had used the information in the plaintiff's directory to guide them to the houses of the relevant persons, and obtained from such persons the information they needed to compile their own directory. The plaintiff's application for an injunction was dismissed.

⁴⁸ *Supra*, note 39, at 40.

arrangement.”⁴⁹ It appears that the defendants were found liable for copyright infringement because they had taken the plaintiff’s arrangement of the names and “extra lines”.

Therefore, just as in *Kelly v Morris*, the court in *Morris v Ashbee* on the facts protected only the skill, judgment and labour expended in arranging the information in the directory. Thus analyzed, these two cases are no different from the other non-controversial English cases involving compilations of facts where the scope of copyright protection was obviously limited to the arrangement and/or selection of the information.⁵⁰ As for the passages in the judgments of the two Vice-Chancellors which suggest that the English courts would adopt the “sweat of the brow” doctrine, it is submitted that one should not place too much significance on such *obiter* today because the passages were made in the days when, for the reasons given above, English judges were not conscious of the need in copyright law to distinguish between the facts and the expression in a work.

The other controversial case decided during this period is *Exchange Telegraph Company Limited v Gregory & Co.*⁵¹ The plaintiffs published information as to the buying and selling price of “the great majority, if

⁴⁹ *Ibid.*

⁵⁰ See, eg, *Scott v Stanford* (1867) LR 3 Eq 718 at 723 (where the plaintiff had “at the expense of much time and expense, compiled and arranged in very clear and lucid order” statistics relating to the importation of coal into London); *Cox v Land and Water Journal Company* (1869) LR 9 Eq 324 (where compiling information relating to the various packs of hounds in the United Kingdom such as the name of each hunt, with the nearest town convenient for strangers, the number of hounds in the pack, the hunting days, the names of the masters, huntsmen, and whips and the address of the kennel, involved selection of the particulars to be included in the compilation); *Trade Auxiliary Company v Middlesborough and District Tradesmen’s Protection Association* (1889) 40 Ch D 425 at 435 (where the compilation, which contained lists of bills and sales and of deeds of arrangements registered under the Bills of Sales Act 1882 and the Deeds of Arrangement Act 1887 respectively, was not a “mere collection of copies of public documents” but something involving “abridgment and mental work”); *Cate v Devon and Exeter Constitutional Newspaper Company* (1889) 40 Ch D 500 (where the making of the publication, which contained lists of bankruptcies, bills of sale and other information likely to be useful to persons engaged in trade, involved selection of the matters to be included in the publication); *Leslie v J Young & Sons* [1894] AC 335 (where a compilation of tours taken from the tables of railway companies involved selection and arrangement); *Collis v Cater, Stoffell, and Fort Limited* (1898) 78 L T 864 (where the making of the chemist catalogue involved arranging the articles and drugs sold by the chemist under headings and sub-headings); *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 All ER 465 (where the making of the football betting coupon involved selection of the wagers, from an infinity of choices); *Elanco Products Limited v Mandops (Agrochemical Specialists) Limited* [1979] FSR 46 (where there was selection of the data to be included in sales literature); *Macmillan Publishers Limited v Thomas Reed Publications Limited* [1993] FSR 455 (where there was sufficient skill and labour exercised by the plaintiffs in the compilation of selected information for their chartlets).

⁵¹ [1896] 1 QB 147.

not all⁵² of the stocks and shares transacted on the Stock Exchange for the day. This information was collected by the Stock Exchange and supplied to the plaintiffs under an agreement made between the Stock Exchange and the plaintiffs. The plaintiffs' list was furnished to the plaintiffs' subscribers whose contract with the plaintiffs prohibited disclosure of the information to non-subscribers. The defendant, a broker, who knew about this term nevertheless obtained the plaintiffs' list from one of the plaintiffs' subscribers and posted it on the boards and other places of his office. There was a dispute as to whether the defendant posted the plaintiffs' list before, or after, the publication of the list by the plaintiffs. The Court of Appeal held that if the defendant posted the list before the plaintiffs published their list, there was infringement of the plaintiffs' "common law right of property"⁵³ in the unpublished information, and if the defendant posted the list after the publication of the list, there was infringement of the plaintiffs' "statutory copyright"⁵⁴ in the published list. An injunction was accordingly granted.

There are two comments to be made of this decision. First, the Court of Appeal took the position that the "common law right of property" was a right in the *information* in the unpublished list. Thus, this is one instance where the author's "common law right of property" – or the so-called "common-law copyright" – in his unpublished work was equated with his rights under the law of confidence.⁵⁵ Second, the Court of Appeal in holding that the plaintiffs had "statutory copyright" in the list, made no attempt to determine if there was original expression, *ie*, selection or arrangement of the information, in the list for it to qualify for copyright protection. The Court of Appeal assumed that if there was a "common law right of property" in the *information* contained in the unpublished list, there was a "statutory copyright" in the *list* when it was published. Whether an English court will make such an assumption today is more doubtful. There is now greater awareness that the subject-matter protected by a "common law right of

⁵² *Ibid*, at 152.

⁵³ *Ibid*, at 155.

⁵⁴ *Ibid*, at 153, 155 and 157. The copyright statute applicable in this case was the Copyright Act 1842.

⁵⁵ It has been suggested earlier that the "common law right of property" had merged with the law of confidence: see *supra*, notes 32-36 and the accompanying main text. In this case, the defendant, an indirect recipient of the confidential information contained in the plaintiffs' list, could be liable for breach of confidence because he obtained and published such information from the plaintiffs' subscriber with the knowledge that such information was given to the subscriber on condition that it was not to be published to non-subscribers: *Prince Albert v Strange*, *supra*, note 32. The defendant might also be liable under the general law of tort: for inducing or procuring breach of contract made between the plaintiffs and their subscriber.

property”, or the law of confidence, is different from that protected by copyright: the former protects the information in a work whereas the latter protects the expression of the information in the work. While it is possible for both these rights to subsist in one work,⁵⁶ the existence of a right to prevent publication of a work under the law of confidence in one action does not necessarily mean that a copyright also subsists in that same work.

In any event, on the facts of *Exchange Telegraph Company Limited v Gregory & Co*, it is arguable that there was an element of selection of the information to be collected for the list because the list might not contain all the transactions done for that day. Further, this was not a case where the defendant had taken bits of information from the list; what he had taken was the plaintiffs’ compilation itself, for he had obtained a copy of the plaintiffs’ list, and posted it wholesale in his office.

(b) *In the twentieth century*

Perhaps it was not just a coincidence that in 1926, when the fact/expression dichotomy and the inter-relation between copyright law and the law of confidence had crystallised, Astbury J in *British Broadcasting Company v Wireless League Gazette Publishing Company*⁵⁷ suggested that the effort and labour in collecting the information for a compilation would not be protected by the English court. The plaintiffs, a broadcasting company, published Radio Times, a compilation setting out the seven radio programmes for the seven days in the ensuing week. Astbury J found that the compilation enjoyed copyright because:

... the compilation required considerable work, and was not a mere collection of what had already been prepared. [Emphasis added]⁵⁸

The implication arising from this, is that a compilation whose creation is the result only of “sweat of the brow” in collecting the contents, would not be protected by copyright.

However, in spite of Astbury J’s message to the English courts, the twentieth century in the United Kingdom still saw cases in which the scope of copyright protection in factual compilations came close to endorsing the “sweat of the brow” doctrine.⁵⁹ Of these cases, some can be explained away with less difficulty, on the basis that the making of the factual compilation

⁵⁶ See, eg, *Hubbard v Vosper* [1972] 2 QB 84.

⁵⁷ [1926] 1 Ch 433.

⁵⁸ *Ibid*, at 443.

⁵⁹ In the report of the case *J Whitaker & Sons Ltd v Publishers Circulars Ltd* made by MacGillivray [1946-47] Mac Cop Cas 10, there was very explicit endorsement of the

concerned involved some arrangement of the data which is worth protecting. For example, in *Weatherby & Sons v International Horse Agency and Exchange Limited*,⁶⁰ Parker J found that there was copyright in the plaintiffs' publication, the "Stud Book", which listed all the thoroughbred brood mares at the stud in Great Britain. The arrangement of the data was presented in the following manner: the publication had three sections, the first being a list, alphabetically arranged, of the brood mares with their produce; the second section being a list of thoroughbred horses and mares sent abroad; and the third section being a list of brood mares arranged under their sires, whose names were in alphabetical order. In this case, what the defendants had taken were the first and the third sections of the plaintiffs' publication. It was this categorisation of the data – arrangement at the macro level – which Parker J intended to protect when he found the defendants liable, because the learned judge took the view that the plaintiffs' publication was not a "mere list of names".⁶¹

Similarly, in *Waterlow Directories Limited v Reed Information Services Limited*,⁶² a case decided six months before the Supreme Court's decision in the *Feist* case and which is the reason for a writer's belief in the "continued validity of the sweat of the brow doctrine under UK law",⁶³ the defendant had taken the plaintiffs' categorisation of the data in their

"sweat of the brow" doctrine:

Henn Collins J, who tried the case, held that the plaintiffs' lists of books were the proper subject matter of copyright as 'compilations' and he relied on the analogy between such lists and a directory. When a list is intended to be comprehensive and complete that kind of judgment which is necessary for selection plays no part in the compilation, but the very fact that it is intended to be comprehensive involves greater labour in seeing that it is complete so far as research can make it so. It does not matter that the particular items in themselves are not the subject matter of copyright. What does matter, as it seemed to the learned judge, is the skill and labour involved in collecting commonplace material – commonplace in the sense of being within common knowledge and accessible separately to anyone – into a convenient list by reason of which an interested section of the public get something which they want and which they would not get but for the labour and ingenuity of the plaintiffs and other compilers of the available material.

It is doubtful if there is any value in this passage since it is not clear if it represented an observation of MacGillivray in his report of Henn Collins J's judgment, or if the judge expressed such an opinion in his judgment. Further, on the facts of the case, the plaintiffs' list contained details of recently published books gathered from publishers and sometimes the authors themselves. There would, therefore, have been a selection of the sorts of information to be included within the list.

⁶⁰ [1910] 2 Ch 297.

⁶¹ *Ibid*, at 303-304.

⁶² [1992] FSR 409.

⁶³ TP Arden, "The Conflicting Treatment of Compilations of Facts under the US and British Copyright Laws", *supra*, note 3, at 46.

compilation. The compilation concerned was a directory of the names and addresses of solicitors and barristers. The plaintiffs had arranged the data according to categories, such as a section on solicitors in private practice catalogued under the town where the solicitor practised, a section on solicitors and barristers in public authorities and industry, listed under the public authority or company name. The defendants also published a legal directory. For their 1991 directory, the defendants decided that it should have a section on solicitors and barristers in public authorities and industry, just like the one in the plaintiffs' directory. To create this section, the defendants first compiled a list of the names of organisations from public sources, and then checked this list against the entries in the plaintiffs' directory which had been keyed into the computer. By this process, a list of about 2,500 organisations was compiled. The defendants wrote to these organisations requesting for the necessary information for incorporation into the defendants' directory.

The plaintiffs applied for an interlocutory injunction. Aldous J, who heard the application, relied on *Kelly v Morris*⁶⁴ and *Morris v Ashbee*,⁶⁵ which he said stood for the proposition that "a person may not copy entries from a directory and use that information to compile his own directory".⁶⁶ On this basis, the defendants were found to have infringed the plaintiffs' copyright in the work, having taken a "substantial part" of the work.⁶⁷ Apart from explaining this case on the basis that the defendants had copied from the plaintiffs' directory a part of the plaintiffs' choice in categorising the information,⁶⁸ one should regard this case with caution also because the decision was founded on two cases whose authority on the proper scope of copyright protection in a factual compilation is questionable.⁶⁹

The case which, in the writer's opinion, poses the greatest difficulties

⁶⁴ *Supra*, note 38.

⁶⁵ *Supra*, note 39.

⁶⁶ *Supra*, note 62, at 415.

⁶⁷ The exclusive rights granted by copyright include the right to reproduce the whole or any substantial part of the work: s 16 of the Copyright, Designs & Patents Act 1988.

⁶⁸ Even if the defendants had copied only one category from the plaintiffs' directory, namely, the section on the solicitors and barristers in public authorities and industry, this might constitute a "substantial part" of the plaintiffs' expression in their directory because whether a part is 'substantial' or not is decided by its quality rather than quantity: see *Ladbroke (Football) Ltd v William Hill (Football) Ltd*, *supra*, note 50, at 293. The fact that the defendants wanted this section in their 1991 directory is indicative of the significance of such a category in a legal directory.

⁶⁹ On 8 December 1989, *The Times* reported that in *Waterlow Publishers Ltd v Rose*, a case also involving a legal directory, the Court of Appeal found the defendant liable for infringing the copyright in the plaintiffs' directory. According to a summary of this case by Thorne in "The Infringement of Database Compilations: A Case for Reform?", *supra*, note 4, the defendant claimed to have rearranged the information sourced from the plaintiffs'

is *H Blacklock & Co Limited v C Arthur Pearson Limited*.⁷⁰ The plaintiffs published the “Bradshaw’s Guide” which set out, in an altered form, the time-tables of every railway in the United Kingdom. The index to the book was an alphabetical list of all stations and other places mentioned in the book and references to the page where each station or place appeared in the body of the book. When the defendants wished to publish a list of all the names of the railway stations in the United Kingdom and Ireland for a competition, they started by compiling a list from public sources. However, they completed the task by taking about 319 names of stations, which they did not find from their own research, from the plaintiffs’ index. Joyce J found that the compilation of this index, “in particular the making up of the list of names of stations from the time-table...would obviously be a work of labour and therefore of expense.”⁷¹ The defendants were held liable for copyright infringement because they had gotten the benefit of the labour and expense expended by the plaintiffs in compiling the index. Since this was an index setting out all the railway stations appearing in the book, compiling the list of names of the stations in the index did not involve any element of selection. In such a case, the only labour and skill involved in compiling the index appeared to be the “sweat of the brow” expended in collecting the names of the stations. If so, was not Joyce J protecting the plaintiffs’ “sweat of the brow” when he penalised the defendants for misappropriating the plaintiffs’ labour and expense?

This analysis, however, overlooks the significance of the skill, judgment and labour expended by the plaintiffs in arranging the names of the stations in alphabetical order. One should not dismiss too easily the alphabetical listing as an original mode of arrangement. When the Supreme Court in the *Feist* case held that such a method of presenting information was not original, it was because it was “practically inevitable”⁷² in the context of the white pages of a telephone directory. This suggests that the very notion of the white pages dictates that the arrangement of the data be made by way of listing alphabetically the surnames of the subscribers. Thus, the finding of fact by the Supreme Court has sometimes been explained on the basis that the expression, *ie* the alphabetical arrangement, has merged with the idea, *ie*, compiling the white pages of a telephone directory,⁷³ in which event copyright cannot protect such expression for to do so would

directory. However, because this case is not reported, it is not possible to assess whether, on the facts of the case, the Court of Appeal actually applied the “sweat of the brow” doctrine. Another summary of the case can be found in [1990] 4 EIPR D-77.

⁷⁰ [1915] 2 Ch 376.

⁷¹ *Ibid*, at 380.

⁷² *Supra*, note 15.

⁷³ See, *eg*, G Wei, “Problems in Applying the Form of Expression and Idea Principle in Copyright Law”, *supra*, note 11, at 12.

be protecting the idea itself.

When one is thinking of making an index to the Bradshaw's Guide, however, one is not constrained by such an idea to have an alphabetical listing of the names of railway stations; there is at least one other way of arranging this information which users of the Bradshaw's Guide would find useful, namely, by reference to the railway lines running across the country (within which arrangement, the names of the stations on each line could be presented in alphabetical order or according to their position on the line). So long as there was availability of choices, however limited, in the way the index of the stations could be presented, the plaintiffs' selection of the alphabetical listing might, in Joyce J's assessment, just cross the low threshold of originality.⁷⁴ If one questions Joyce J's assessment, it would only be a disagreement on a question of fact.⁷⁵ Looked at in this light, *H Blacklock & Co Limited v C Arthur Pearson Limited* may be very close to the line, but Joyce J stopped just one step short of protecting the "sweat of the brow" in collecting the data in the compilation.

(c) *Overview*

What the writer has attempted to show from this review of the English cases is that the scope of copyright protection granted thus far has not gone beyond the compiler's skill, judgment and labour in selecting and/or arranging the facts in the compilation. At the same time, what has also emerged from this review is the casual attitude of the English judges towards the fact/expression dichotomy, so much so that they could be said to have protected the "sweat of the brow" in collecting the facts. It has been earlier suggested that, in the older cases, this casual attitude could be traced to historical reasons, in particular the later emergence of the fact/expression dichotomy. However, these historical reasons cannot account for the more recent cases where the English judges continued to be less than precise about the boundaries between fact and expression in English copyright law. Their imprecision is even clearer in cases where the judges are confronted with the dichotomy between idea and expression. The nebulous concept of an idea with its various levels or "series of abstractions"⁷⁶ has allowed judges to blur the distinction between idea and expression by denying copyright protection only to "general ideas" but allowing copyright protection to "detailed ideas". In *L B Plastics v Swish*, for example, Lord Hailsham's recognition that "it is trite law that there is no copyright in

⁷⁴ *Supra*, note 8.

⁷⁵ *Supra*, note 9 and the accompanying main text.

⁷⁶ *Nichols v Universal Pictures Corporation* 45 F (2d) 119 at 121.

ideas⁷⁷ was immediately followed by this qualification:

But of course as the late Professor Joad used to observe it all depends on what you mean by 'ideas'. What the respondents had in fact copied from the appellants was no more than general idea.⁷⁸

The disinclination of the English judges to give rigorous effect to the dichotomy can also be seen in a very recent decision, *Ibcos Computers Ltd v Barclays Mercantile Highland Finance Ltd*.⁷⁹ When asked to apply the idea/expression dichotomy to determine the subsistence and scope of protection in the plaintiffs' computer program,⁸⁰ Jacob J dismissed the dichotomy as an "aphorism...likely to lead to confusion of thought",⁸¹ offering in its place the following formula:

[A] good guide is the notion of overborrowing of the skill, labour and judgment which went into the copyright work.⁸²

By directing the focus of the inquiry on the conduct of the defendant, rather than the distinction between idea/fact and expression, Jacob J is further diluting the role of the dichotomy in English copyright law.⁸³ If there is no need to distinguish between the various types of skill, judgment and

⁷⁷ *Supra*, note 18.

⁷⁸ *Ibid*.

⁷⁹ [1994] FSR 275.

⁸⁰ Computer programs are copyrightable: see ss 1(1)(a) and 3(1)(b) of the Copyright, Designs & Patents Act 1988.

⁸¹ *Supra*, note 79, at 291.

⁸² *Supra*, note 79, at 302.

⁸³ For another example of the dilution of the dichotomy by Jacob J, see *Anacon Corporation Limited v Environmental Research Technology Limited* [1994] FSR 659. The plaintiffs in this case claimed that there was copyright in their circuit diagram. This circuit diagram featured components, resistors, transistors, capacitors and so on, which were shown by the conventional symbols for these components. Against each of these components was a written piece of information indicating the appropriate rating or whatever on that particular component. What the defendants had done was to make a "net list" from examining the plaintiffs' circuit, which was made using the circuit diagram but looked nothing like it. A "net list" was a list of all the components in the circuit and in relation to each component what other components it was connected to and, if necessary, where. The controversial part of this case lies in the plaintiffs' claim that the circuit diagram, since it contained written information, was an "original literary work". Jacob J agreed with the plaintiffs, taking the view that "when the defendants came to make their net list they reproduced the *information which is the literary work* contained in the circuit diagram" (emphasis added) (at 663). This is effectively ignoring the dichotomy and saying that copyright protects information! It is to be noted, however, that Jacob J expressly left this issue open because there was no argument at all from the defendants. The defendants against whom this action had proceeded had

labour involved in the creation of a factual compilation, copyright protection could be extended to the compiler's "sweat of the brow". In fact, in some English cases, copyright has already been extended to protect the skill, judgment and labour in generating or creating facts.⁸⁴ Hence, to protect the skill, judgment and labour in collecting the facts would be but a "small step" for the English courts to take.⁸⁵

4. Should 'sweat' be copyrightable?

Many would argue that such a "small step" should be taken by the English courts. Factual compilations facilitate location of information and faster and more comprehensive research. Their value to society is such that their creation should be encouraged. If subsequent compilers can take data from such a compilation – in essence, the first compiler's "sweat of the brow" – with impunity, and are thereby able to sell competing compilations at a lower price, there would be little incentive to invest in the creation of factual compilations in unchartered areas. Any advantages of lead time may be diminished in this industry where the buying public would be attracted to the later compilations because they are usually an updated version. There must therefore be some form of legal protection accorded to the labour and expense expended in collecting data. In the United States, the labour and expense of a compiler is protected to a certain extent because the second compiler may be prohibited from free loading under the law relating to unfair competition.⁸⁶ The Supreme Court in the *Feist* case, so the argument goes, could therefore afford to deny copyright protection to

gone into liquidation. Although the liquidator had consented to the action being pursued, the defendants did not appear at the hearing before Jacob J.

⁸⁴ See *Football League Ltd v Littlewood Pools Ltd* [1959] 1 Ch 637 (where fixtures drawn by the plaintiff football league were held to be original compilations because the plaintiff had expended a vast amount of skill, ingenuity and labour in creating the information set out in the fixtures, *ie*, which football club would be playing which football club, and where and when the game would take place); *The British Broadcasting Corporation v Time Out Limited* [1984] FSR 64 (where daily television and radio programme schedules were held to be original compilations because the plaintiff broadcasting corporation had expended a great deal of skill and labour in arriving at generating the information set out in the schedules, *ie*, what programme to broadcast at what time over which channel); *Greyhound Services Ltd v Wilf Gilbert (Staffordshire) Ltd* [1994] FSR 723 (where advance programmes of greyhound races were held to be original literary works because of the considerable skill, labour and judgment involved in generating the information set out in the advance programmes, *ie*, which dog to run in which race, which trap to place each dog, the time, length and type of each race, and the prize money).

⁸⁵ G Wei, "Problems in Applying the Form of Expression and Idea Principle in Copyright Law", *supra*, note 11, at 16.

⁸⁶ M Nimmer & D Nimmer, *Copyright* (1990) Vol 1, at para 3.04 ("Protection for the fruits of such research [*ie*, "sweat of the brow"] may in certain circumstances be available under

'sweat'. In countries such as the United Kingdom and Singapore, which have not developed any law relating to unfair competition, the only legal framework which can conceivably accommodate the protection of the labour and expense of the compiler in collecting facts, is the copyright regime.

Although the concern expressed above is a legitimate one, the solution does not, in the opinion of the writer, lie in trying to "fit a square peg into a round hole".⁸⁷ The objective of copyright is to provide an incentive to authors to create works with a view to "promote the progress of science and useful arts"⁸⁸ or for "the encouragement of learning".⁸⁹ With such an objective, copyright law aims to strike a balance between the author's rights and the public's needs and interests, and may not be tailored to deal with the concerns addressed in unfair competition law. The fact/expression dichotomy in copyright law represents one aspect of this carefully struck balance: when facts are worked on by authors, it is only the results, *ie*, the expression of the facts, which should be protected for a limited duration to allow the author to reap the rewards of his work, but the facts themselves must remain free for others to work on so that the public will benefit from further additions to the pool of results. To protect "sweat of the brow" under copyright law is to give the first compiler a quasi-monopoly over the facts set out in the compilation.

However, the validity of this objection has been questioned by some writers. Thus it is said:

[Protection of] the facts in plaintiffs' directories ... did not prohibit defendants from consulting the same preexisting sources that plaintiffs consulted. As a result, plaintiffs' copyright did not remove facts from the public domain; it simply prohibited a single, albeit more efficient, route to unearthing them.⁹⁰

In other words, subsequent compilers could always, in the words of Sir

a theory of unfair competition"). However, federal preemption doctrines may prevent the operation of unfair competition laws in claims against copying compilations: see Ginsburg, "No 'Sweat'? Copyright and Other Protection of Works of Information after *Feist v Rural Telephone*" (1992) 92 *Colombia LR* 338.

⁸⁷ RT Nimmer & PA Krauthaus, "Information as Property: Databases and Commercial Property" (1993) 1 *International Journal of Law and Information Technology* 3 at 15.

⁸⁸ US Constitution, Art I, Sec 8, Cl 8.

⁸⁹ See the preliminary recital of the legislative purpose in the Statute of Anne.

⁹⁰ Litman, "The Public Domain" (1990) 39 *Emory LJ* 965 at 1016. See also JB Hicks, "Copyright and Computer Databases: Is Traditional Compilation Law Adequate?" (1987) 65 *Texas LR* 993 at 1010 ("...a subsequent compiler is required only to use noncopyrighted sources of those public domain facts rather than to copy directly from the [first compiler's] work.").

Wood VC in *Kelly v Morris*, go “count the milestones themselves”.⁹¹ The objection to granting copyright to the first compiler is not that he would be given a monopoly over the facts he collected, but really that there would be wastage of economic resources by demanding continual re-invention of the wheel. However, this argument in favour of giving copyright protection to the “sweat of the brow” ignores the fact that there are cases in which the information or data cannot be found in sources other than in the plaintiffs’ compilation. For example, where the plaintiffs are responsible for generating or creating the facts⁹² or where the plaintiffs have by contract obtained rights of exclusive access to the information,⁹³ the plaintiffs would indeed be enjoying a *de facto* monopoly over such information if they were given a copyright in their compilation of such information. If the plaintiffs refuse to license the use of the information found in their compilation, the public would be deprived of useful derivative works.⁹⁴ To vest in a single compiler the power to control the growth of the size of the pool of works for the consumption and benefit of the public, is highly undesirable.

The duration of copyright is another aspect of this balance. Granting copyright in a factual compilation means that the compiler can prohibit the copying of facts from his compilation during his lifetime and thereafter for another 50 years.⁹⁵ Even if the facts in the compilation can be obtained from other non-copyright sources, is it appropriate to demand duplication and wastage of economic resources for such a long period of time? It is

⁹¹ *Supra*, note 41.

⁹² See, *supra*, note 84.

⁹³ *Eg*, in *Waterlow Directories Limited v Reed Information Services Limited*, *supra*, note 62, the defendants had to resort to the plaintiffs’ directory to update the information which the defendants needed for their 1991 directory, instead of going to public sources like the records of the Law Society and Bar Council, because the plaintiffs apparently had an arrangement with these organisations which prevented parties other than the plaintiffs from having access to the information.

⁹⁴ *Eg*, in *Radio Telefis Eireann & Ors v Magill TV Guide Ltd & Ors* [1990] IRLM 534, the Irish High Court followed English cases like *Football League Ltd v Littlewood Pools Ltd* and *British Broadcasting Corporation v Time Out Ltd*, *supra*, note 84, and found that copyright subsisted in television and radio time schedules made by the various broadcasting stations (the plaintiffs) who had expended much skill and labour in generating the information set out in the time schedules. Each of the plaintiffs refused to license the use of their time schedules to the defendants who wished to publish a TV guide incorporating all the stations time schedules. By their refusal, the plaintiffs were depriving the public of a new and very useful work. The defendants brought an action to the European Commission complaining that the plaintiffs’ refusal amounted to anti-competitive behaviour and was therefore contrary to Art 86 of the Treaty of Rome. For more details, see *supra*, note 4.

⁹⁵ See s 12(1) of the Copyright, Designs & Patents Act 1988. This will soon be increased to life of author plus 70 years: see EC Directive Harmonising the Term of Protection of Copyright and Related Rights (Council Directive 93/98 EEC of 29 October 1993) which is to take effect in member states on 1 July 1995.

submitted that the need to encourage creation of new factual compilations by ensuring some sort of legal protection for a compiler's "sweat of the brow" is not so compelling as to justify protection for such a long time. This is not to deny that there is a pressing need to protect factual compilations which do not qualify as 'original' works. But the adverse impact of plugging this *lacuna* in the law by forcing these compilations within the copyright mould outweighs the benefit that can be derived from this stop-gap measure.

III. TRENDS IN THE INTERNATIONAL SCENE

The current trend in the international scene is towards limiting the scope of copyright protection in factual compilations to the selection and arrangement of the facts. This can be seen in the preparation of a possible protocol to the Berne Convention for the Protection of Literary and Artistic Works ('Berne Convention'),⁹⁶ the major international copyright convention dedicated to protection of authors' rights in their works. In 1991, a Committee of Experts was convened to prepare the protocol with a view to "clarify the existing, or establish new international norms where, under the present text of the Berne Convention, doubts may exist as to the extent to which the Convention applies."⁹⁷ One of the issues under study by the Expert Committee was whether 'database' is a subject-matter for protection under the Berne Convention. 'Database' was taken to mean all compilations of information (data, facts, etc), irrespective of whether they exist in print, in computer storage units or in other forms. The conclusion of the Expert Committee was that Article 2(5) of the Berne Convention should be extended to include databases. This article presently provides as follows:

Collections of literary or artistic works such as encyclopedias 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.

The recommendation of the Expert Committee was that the possible protocol:

- (a) provides that collections of mere data or other unprotected material are to be protected in the same way as the collections of works mentioned in Article 2(5) of the Berne Convention whenever such collections constitute intellectual creations *by reason of the selec-*

⁹⁶ Text of the Paris Act, 24 July 1971.

⁹⁷ Document AB/XXII/2, item 03(2).

tion, coordination or arrangement of such data or other material; and

- (b) clarify that the protection of collections of data or other unprotected material does not make the data or other unprotected material themselves eligible for copyright protection.⁹⁸

A similar position has been taken in the GATT Trade-Related Aspects of Intellectual Property Rights Agreement ('TRIPS') concluded in December 1993. Article 10(2) of this Agreement, which falls under the section dealing with copyright and related rights, provides that:

Compilations of data or other material, whether in machine readable or other form, which *by reason of the selection or arrangement* of their contents constitute intellectual creations shall be protected as such. Such protection, which shall not extend to the data or material itself, shall be without prejudice to any copyright subsisting in the data or material itself. [Emphasis added]

While the Berne Convention and the TRIPS Agreement set out only a minimum level of protection to be observed by member countries who are thus free to accord greater protection to factual compilations, such explicit limitation of copyright protection for factual compilations may be indicative of the global consensus that it is inappropriate to protect "sweat of the brow" within the copyright regime.

IV. IMPLICATIONS FOR COMPUTERIZED DATABASES

Perhaps to some extent, any resistance to streamline copyright protection in factual compilations to the selection and arrangement of the facts therein is attributable to the implications that this proposal has for factual compilations that are electronically stored, *ie*, computerized databases.

The advent of computer technology now allows massive amounts of information to be stored, accessed, retrieved and manipulated very quickly and easily. Such capability means that compilers of computerized databases are able to include as much information of a relevant subject-matter as they want. Hence, a compiler of a computerized database of restaurants in a city is not constrained to set out just the names and addresses and telephone numbers of all the restaurants in that city; he can also include therein the type of cuisine served by each of these restaurants, their sitting capacity,

⁹⁸ [1992] Copyright at 36.

their opening hours and other information which may conceivably be of interest to users of the database. The value of computerized databases in fact lies in its comprehensive coverage of the particular subject-matter. It is apparent from this that the element of selection of the data or types of data to include in a computerized database may be very lacking in many computerized databases.

Not only has the compiler expended only negligible skill, judgment and labour in the selection process, he may not have expended any skill, judgment and labour in arranging the data. This is because, in a computerized database, the arrangement of data is dictated by the database search and retrieval software, whose creator or author may not be the compiler.⁹⁹ Even if the compiler was also the designer of this software, the skill, judgment and labour expended in creating this software is determinative of the subsistence of copyright in this software,¹⁰⁰ and should have no bearing on the copyrightability of the computerized database as such.¹⁰¹

The implications of limiting copyright protection in a factual compilation to the selection and arrangement of its facts, therefore, is that many computerized databases would not qualify for protection.¹⁰² Further, just as for traditional factual compilations in print form, the proper scope of

⁹⁹ See J Hughes & E Weightman, "EC Database Protection: Fine Tuning the Commission's Proposal" [1992] 5 EIPR 147 at 148 ("...there seems to be no reason why a database producer should benefit from copyright protection for an arrangement which is dictated by the underlying software, which has almost certainly been created by someone else and benefits from copyright protection in its own right.")

¹⁰⁰ In most copyright regimes, computer programs are protectable as a type of literary work, if they satisfy the originality requirement: see, eg, ss 1(1)(a) and 3(1)(b) of the Copyright, Designs & Patents Act 1988, and *Apple Computer, Inc v Franklin Computer Corp* 714 F 2d 1240 (3rd Cir 1983) (holding that computer programs were "literary works" within its definition in s 101 of the US Copyright Act 1976). See also Art 10(1) of the TRIPS Agreement which requires member states to protect computer programs as literary works.

¹⁰¹ Thus far, the discussion on the copyrightability of a computerized database has proceeded on the basis that it is a "compilation" and hence a type of "literary work", see *supra*, note 5. However, it might be possible in certain copyright regimes to treat the computerized database as a "computer program". Eg, in the Australian Copyright Act 1968 and the Singapore Copyright Act (Cap 63, 1988 Ed), a "computer program" is defined to mean "an expression, in any language, code or notation, of a set of instructions (*whether with or without related information*) intended,...., to cause a device having information processing capabilities to perform a particular function" [emphasis added]. If any information contained in the set of instructions which causes the computer to perform a particular function need not relate to such performance, a computerized database might arguably fall within this definition.

¹⁰² A writer has gone so far as to say that most computerized databases would not qualify for copyright protection: PH Miller, "Life after *Feist*: Facts, the First Amendment, and the Copyright Status of Automated Databases", *supra*, note 11, at 522.

protection would not prohibit the taking of what is most important in the database, namely, the labour and expense in collecting and updating the data: a second compiler will not have infringed the copyright in the computerized database, if any, if he takes all the data from that database and then uses another software to re-arrange them and present them in a different manner.

If it is thought desirable to encourage the creation of traditional hard copy compilations of facts, this will be even more so in the case of computerized databases because of the important role they play in a country's economic and societal development. In Singapore, for example, the Government's conviction that information technology will play a strategic role in the nation's development in the next century has resulted in the move to transform the nation into an "Intelligent Island".¹⁰³ The achievement of this vision requires, *inter alia*, increased access to and efficient location of information, needs which can be met by computerized databases. On the information superhighway, the benefits to be derived from a proliferation of computerized databases may justify overlooking or downplaying the adverse impact of protecting "sweat of the brow" within the copyright regime.

However, the moment one recognises that the only reason why the balance tips in favour of copyright protection is the absence of an alternative form of protection, the ideal solution becomes clear: formulate a new right aimed at preventing misappropriation of the true value of factual compilations, namely, the compiler's "sweat of the brow" in collecting the data. In this way, concerns relevant to the protection of this particular type of work may be specifically addressed. This is in fact what the European Commission is attempting to do in their Amended Proposal for a Council Directive on the Legal Protection of Databases¹⁰⁴ ('Amended Database Directive').

The Amended Database Directive is concerned only with computerized databases.¹⁰⁵ It is submitted that there is no reason why the new *sui generis* "unauthorised extraction right" contained therein should not also serve as

¹⁰³ In March 1992, the Singapore Cabinet endorsed the report made by the National Computer Board of Singapore called "IT2000 – A Vision of an Intelligent Island" (SNP Publishers Pte Ltd, Singapore, March 1992). The essence of IT2000 is "the synergistic development of a well-integrated and extensive nationwide information infrastructure that facilitates the unobstructed flow of information across and within all sectors in Singapore.": Michael Yap, "Singapore NII: Beyond the Information Highway" (1994) Information Technology (Journal of the Singapore Computer Society) Vol 6 No 1 at 11.

¹⁰⁴ COM (93) 464 Final – SYN 393, 4 October 1993.

¹⁰⁵ 'Database' is defined in Art 1.1 as "a collection of data, works or other materials arranged, stored or accessed by electronic means, including the materials necessary for operation of the database (such as its thesaurus, index or system for obtaining or presenting information),

a model for protecting traditional compilations in hard copy. Basically, the scope of this proposed new right is as follows:

- This new right prevents acts of extraction and re-use of the whole or a substantial part¹⁰⁶ of the contents of the database for commercial purposes, if the contents are not protected by copyright or neighbouring rights.¹⁰⁷
- There is no infringement of this new right if lawful users of the database extract and re-use insubstantial parts of the contents of the database for commercial purposes, if acknowledgement of the source is made.¹⁰⁸
- Where the contents of a database cannot be obtained from any other source, this new right is subject to compulsory licensing.¹⁰⁹ This is also the case where the database is made publicly available by public bodies under a duty to provide the information set out in the database, or by private entities with exclusive concessions from the public bodies.¹¹⁰
- The duration of such protection under this new right is 15 years. However, a fresh period of protection of 15 years arises whenever there is a substantial change to the database. A substantial change means successive accumulations of insubstantial additions, dele-

but excluding the computer program used in the making or operation of the database". See also Art 2.2 which provides that the definition of 'database' is without prejudice to the protection of collections arranged, stored or accessed by non-electronic means. Note that the Amended Database Directive applies, not only to computerized compilations of facts, but also computerized compilations of works or other materials, such as literary works and films, which in their own right can enjoy protection under copyright or neighbouring rights.

¹⁰⁶ Whether a part extracted is substantial or not is to be evaluated quantitatively and qualitatively in relation to the database: Art 11.8(a).

¹⁰⁷ See Art 10.1 and Art 10.2.

¹⁰⁸ See Art 11.5.

¹⁰⁹ See Art 11.1. This article actually provides for compulsory licensing where the "works and materials [in a database] cannot be obtained from any other source". It has been pointed out that, since the word 'data' appears in the definition of 'database', *supra*, note 95, but not in Art 11.1, this means that the compulsory licensing scheme does not apply to databases whose contents are raw data: see Chalton, "The Amended Database Directive Proposal" [1994] 3 EIPR 94 at 98. It is submitted that this cannot be the intention of the European Commission. The old definition of 'database' in the original version of the Database Directive (COM (92) 24 final – SYN 393) referred only to "collections of works or materials...." When the word 'data' was added to the definition of 'database' in the Amended Database Directive, the same must have been inadvertently omitted from Art 11.1.

¹¹⁰ See Art 11.2.

tions or alterations of the contents of the database resulting in substantial modification to all or part of the database.¹¹¹

It can be seen that the new right has taken into account the various concerns raised in Part II(4) of this article. In particular, the compulsory licensing scheme ensures that, where the facts are generated or created by the first compiler, there is still a free flow of the information so generated or created.¹¹²

With the provision of this new right, there would no longer be any temptation to distort copyright principles, in particular the fact/expression dichotomy, when protection for a compilation is in issue. The Amended Database Directive therefore reaffirms that a database enjoys copyright protection if the expression of the database, *ie*, the selection or arrangement of its contents, is original,¹¹³ and that such copyright protection does not extend to its contents.¹¹⁴ Since copyright and the new right protect different aspects in a database, both rights can subsist in the same database. The following table illustrates the inter-relation between the new right and copyright in a database as a whole:

	COPYRIGHT	UNAUTHORISED EXTRACTION RIGHT
Database with original selection and/or arrangement of non-copyright materials	Yes	Yes
Database with original selection and/or arrangement of copyright materials	Yes	No
Database with non-	No	Yes

¹¹¹ See Art 12.

¹¹² For the concern raised where the first compiler generates or creates facts, see *supra*, notes 92-94 and the accompanying main text.

¹¹³ See Art 2.3, read with its predecessor in the original version of the Database Directive (COM (92) 24 final – SYN 393). Since this article makes no reference to ‘data’, it may be taken to mean that databases, whose contents are raw data, cannot be protected by copyright even if the selection or arrangement of the data satisfies the originality requirement. It is submitted that the omission of the word ‘data’ in this article is inadvertent: see *supra*, note 109.

¹¹⁴ See Art 2.4.

	COPYRIGHT	UNAUTHORISED EXTRACTION RIGHT
original selection and/or arrangement of non-copyright materials		
Database with non- original selection and/or arrangement of copyright materials	No	No

There are three aspects of the Amended Database Directive which may require further consideration. First, it is questionable why the new right should be forfeited where the contents of the data are protected by copyright or neighbouring right. While such a restriction does not affect compilations of facts – because facts are not protected by copyright or neighbouring right – it means that databases which contain copyrightable material,¹¹⁵ such as LEXIS and CAESAR,¹¹⁶ will not be protected under this new right. It is difficult to see why this distinction is made; the fact that the contents of a database enjoy copyright or neighbouring right may be of little comfort to the compiler when he does not own such copyright or neighbouring right and is therefore powerless against subsequent compilers who extract the materials from his database. If the new right is to protect the effort and expense of compiling a database, taking the contents from a database without paying is misappropriation of such effort and expense, regardless of whether the contents themselves are protected by copyright or neighbouring right.

Second, there is a question of who should be vested with the ownership of this new right. In the Amended Database Directive, who is to be the beneficiary of this new right depends on whether the database is eligible for copyright protection: if the database is eligible for copyright protection, the beneficiary is the author, *ie*, the person who is responsible for the selection or arrangement of the contents of the database; otherwise, the beneficiary

¹¹⁵ See *supra*, note 105.

¹¹⁶ 'CAESAR', which stands for "Case Electronic Search and Retrieval System" is an electronic legal research tool developed jointly by the Law Faculty and the Computer Centre of the National University of Singapore. It is a database of all the Straits Settlement Law Reports, the Singapore Law Reports Old Series, the Malayan Law Journals and the current Singapore Law Reports.

is the “maker of the database”, which term is not defined. It has been suggested that the “maker of the database” should be the person who made the necessary arrangements for the creation of the database,¹¹⁷ who would in most cases be the person who has incurred the expense in collecting the contents of the database. If the new right is to allow the person who have invested effort and money in collecting the contents of the database to recoup his investment, the new right should be vested in this person, whether or not the selection or arrangement of the contents qualifies for copyright protection.

Third, for “on-line” databases, there may be a problem of hackers gaining unauthorised access to the databases. The new right, which only prevents unauthorised extraction and re-use of the contents of the database, will not provide a civil remedy to the right owner in such cases, although unauthorised access to a database may give rise to a criminal action under legislation dealing with computer misuse.¹¹⁸ As computer hacking will deprive the database creator of the subscription fees for the use of the database, it may be tempting to extend the scope of the new right to prohibit such activity. However, any dilution of the value of the database by unauthorised access is outside the concern of the new right, which is essentially to create a climate in which data processing can be stimulated and protected against misappropriation by competitors.

V. CONCLUSION

At the heart of the “sweat of the brow” controversy lies the fact/expression dichotomy. While the dichotomy is recognised in English copyright law, the manner in which the English judges would apply this principle is less clear. In the context of compilations of facts, it is true that the English judges have been very casual in drawing the boundaries between fact and expression. Nevertheless, it is submitted that they have not gone so far as to protect the compiler’s skill, judgment and labour in collecting the data. One should not, however, dismiss the possibility that they may do so, for to enforce the dichotomy as rigorously as their American counterparts have done in the *Feist* case, would leave totally unprotected many compilations, particularly those in electronic form. For the moment, in the absence of a regime which can protect “sweat of the brow”, it would be tempting to

¹¹⁷ G Wei, “Problems in Applying the Form of Expression and Idea Principle in Copyright Law”, *supra*, note 11, at 23.

¹¹⁸ Unauthorised access to any data held in a computer may be an offence under the UK Computer Misuse Act 1990, and under Singapore’s Computer Misuse Act 1993. For a discussion of the latter legislation, see Christopher Lee, “Offences Created by the Computer Misuse Act 1993” [1994] SJLS 263.

continue to be vague when applying the dichotomy so that copyright law can be used to frown upon subsequent compilers who “reap what they have not sown”. Whether such unfair competitive behaviour should be dealt with under copyright law is a question which the English court hearing the dispute between British Telecoms and Pro-CD Inc must answer.

The issues raised by the “sweat of the brow” controversy have to be answered, too, in Singapore, where our copyright law¹¹⁹ is based on the English copyright system and where there is no developed concept of unfair competition. Therefore, we in Singapore should also consider creating a new right for compilations, whether in print or electronic form, along the same lines as the “unauthorised extraction right” under consideration by the European Commission for computerized databases.

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¹¹⁹ Copyright Act 1987 (Cap 63, 1988 Ed).

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