

DATABASE PROTECTION DOWN UNDER: WOULD A ‘SWEATY’ AUSTRALIA BE BETTER OFF WITH A NORTHERLY CHANGE?

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INTRODUCTION

Databases are created, used and modified on an extremely frequent basis in many commercial and not-for-profit industries. Often makers of these compilations reutilise significant amounts of data in an attempt to augment the existing knowledge base, and transform a copied database into a significantly new and useful end product. Both the modified compilation and the copied database are typically safeguarded by one or more of a number of legal or non-legal measures, yet in the present legal climate this common ‘value-adding’ database practice is considerably imperilled. This article examines, from both a theoretical and practical perspective, the multiple avenues for protecting compilations of information. The practical focus is achieved through a straightforward, non-technical hypothetical example, which is used to highlight the legal implications of pursuing the various approaches available to protect databases in Australia.

Consider the following hypothetical.¹

Jim owns a local travel company that specialises in providing tours to most parts of Australia. Wishing to enhance the range of travel-related services on his company’s website, Jim creates a weather database that displays current weather information. It allows users to select from an extensive list of Australian towns and cities to find out weather information about the chosen location (such as current and forecast temperatures, chance of rain, humidity, etc). Being the ‘tech-head’ that he is and hoping to ‘brighten up’ his database, Jim has also incorporated a function into the software that creates ‘weather symbols’ next to

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1 This scenario is drawn from a number of examples of commercial uses of data and databases currently in operation or in development.

the user's results, depending on the weather conditions (for instance, a thunderbolt if the current or forecast weather is for thunderstorms).

Jim uses a web robot to copy the data for his weather compilation from the Australian Bureau of Meteorology's ('Bureau') website. The robot is programmed to invisibly search, copy and retrieve the data every day so that Jim's database is updated with the latest weather information. Jim has arranged his data with towns and cities listed alphabetically under relevant state and territory categories. He assumes this to be the most user-friendly and logical order, and although this is similar to how the Bureau arranges its compilation, Jim's presentation is much neater and clearer.

At the time of development, Jim thought that weather data could be used freely, but he has recently discovered that Telstra successfully sued for copyright infringement of its telephone directory. He is worried that the Bureau may pursue him in a similar vein. He has also heard of a 'database right' but is unsure of the implications of this on database makers such as himself.

Jim is not alone in expressing his concerns about database² protection. The issue of whether, and if so how, databases should be protected has long plagued the thoughts of academics, members of the judiciary, the scientific community, and commercial database users (to name a few). The law has protected compilations of information for hundreds of years but it is only quite recently with the advent of the digital revolution that the debate has escalated.

This database conundrum is generally accepted to be a result of the inherent difficulty in balancing two competing goals. On the one hand there is a social interest in ensuring access to information traditionally held in the public domain, while on the other hand, there is a presumed need to provide compilers of information with sufficient incentive to continue to invest in the creation of databases. That the law has struggled with determining the appropriate balance of protection is attested to by the numerous avenues that have recently developed in dealing with databases.

In Australia, as in most common law jurisdictions, the traditional domain of database protection has been the law of copyright. In May 2002, the Full Federal Court of Australia in *Desktop Marketing Systems Pty Ltd v Telstra Corporation Ltd*³ ('*Desktop Appeal*') thwarted an attempt to introduce a requirement of a spark

2 A 'database' is defined by art 1(2) of the *Directive of the European Parliament and of the Council on the Legal Protection of Databases*, 96/9/EC (11 March 1996) to mean 'a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means'. In this article such a broad definition will be applied.

3 [2002] FCAFC 112.

of creativity into Australia's standard of originality for literary works known as 'compilations'.⁴

More recently, the High Court of Australia has effectively endorsed the Full Federal Court's decision by refusing Desktop Marketing Systems' application for special leave to appeal against the earlier finding.⁵ In so doing, a conservative High Court bench saw no fault in the Full Federal Court's analysis of the applicable standard of originality in Australian copyright law, and seemingly agreed with the lower Court's application of precedent on this issue to the Desktop Marketing facts. Unfortunately, the consequence of such an abstract inquiry at this application stage is that deliberation of the practical complexities ensuing from the Full Federal Court's determination of originality (especially in the context of databases containing raw public data such as Telstra's White and Yellow Pages) was excluded from the High Court's appellate agenda.

The time is ripe to review the implications of the High Court's refusal and examine the desirability (or otherwise) of Australia's present legal approach to the protection of databases. This article will not only examine why Australia should follow the 'creativity' path in determining originality in databases, but also confirm that most 'industrious' or 'sweat of the brow' compilations⁶ deserving of legal protection are adequately guarded by measures outside of copyright law.

Database producers have exploited such alternative forms of legal and non-legal protection either to supplement or complement the existing copyright regime. Lately however, several international developments have been focused on the *sui generis*⁷ treatment of databases.⁸

In an age of harmonisation of intellectual property laws, this article also seeks to examine whether, despite the push by Europe for a global 'database right', there is any need for Australia to follow suit. More specifically, this discussion is aimed at ascertaining the justifications for and against introducing a proprietary right in compilations of data. This essentially begs the question of how (if at all) industry and society benefit from the imposition of a database right.

4 This decision sets Australia apart from most other jurisdictions around the world. As discussed to a greater extent later in this article, Australia currently observes an 'industrious collection' or 'sweat of the brow' standard of originality within its copyright regime. This allows copyright to be awarded to compilations when there has been a sufficient degree of effort expended in their production (especially effort in gathering or collecting the data) even if there is no ingenuity in arranging or presenting that data. In contrast, many other jurisdictions around the world attribute copyright protection to a database only if there has been a degree of 'intellectual effort' or 'creativity' involved in the creation of the work. See further discussion in Part II of this article.

5 Desktop Marketing Systems' application for special leave to appeal was refused (with costs) on 20 June 2003.

6 Justice Finkelstein explains that an 'industrious collection' or 'sweat of the brow' standard of originality refers to the effort expended in producing the work, especially effort in gathering or collecting the factual data, even if there is no ingenuity in arranging or presenting that data. See *Desktop* [2001] FCA 612, [9].

7 *Sui generis* means 'of its own kind': Arthur Delbridge et al (eds) *Macquarie Dictionary* (3rd ed, 2001) 1878.

8 See, eg, *Directive of the European Parliament and of the Council on the Legal Protection of Databases*, 96/9/EC (11 March 1996); a proposed *WIPO Database Treaty on Intellectual Property in Respect of Databases*, CRNR/DC/6 (30 Aug 1996); and a number of legislative proposals in the United States. A detailed discussion of the *sui generis* treatment of databases will be undertaken in Part II of this article.

It will be apparent that Australia does not require a database right, especially since the High Court has secured a place for a common law equivalent of such a right in this country. Even if the Australian judiciary were to introduce a 'creative' standard for originality in copyright, the database right is both an unattractive and unnecessary addition to the protective mechanisms forming part of the database regime.

Part I of this article examines the existing measures that serve to protect databases in Australia, in order to determine whether such techniques sufficiently preserve compilations of data. Attention will mainly be given to copyright law although other forms of database protection will also be considered with examples provided where relevant.

Part II centres on whether Australia requires a legislative right to database protection. A critical appraisal of the *Directive of the European Parliament and of the Council on the Legal Protection of Databases*, 96/9/EC (11 March 1996) ('*Database Directive*') is undertaken not only by reference to its particular features, but also by examining the inherent reasons against implementing an analogous regime in this country. The analysis in this Part continues with a consideration of whether the excessive degree of legal protection afforded to holders of a database right can be mitigated by applying competition law principles and/or instituting a compulsory licensing regime.

This Part finally looks at the viability of introducing into Australia an alternative regime to that of a database right. Options for consideration focus on recent United States developments including the application of unfair competition principles and the rather novel use of the trespass to chattels doctrine in respect of informational products.

Part III of this article explores the practical ramifications of legislating in favour of a database right in Australia. Actual industry examples will be provided with a view to appreciating not only that an Australian database right would have far-reaching and somewhat absurd consequences, but also that its institution is quite unnecessary given the protections already available. It will certainly become evident that establishing a database right in this country creates far greater problems than solutions for the 'database dilemma'.

I EXISTING MEASURES OF DATABASE PROTECTION

A Copyright

Producers of databases in Australia have typically relied on the law of copyright to safeguard their selection and arrangement of data. Although 'databases' are not specifically defined within the *Copyright Act 1968* (Cth) ('*Copyright Act*'), tables or compilations expressed in words, figures or symbols fall within the province of literary works.⁹ Copyright in literary works arises under s 31(1)(a) of the *Copyright Act*.

⁹ *Copyright Act 1968* (Cth) s 10(1). Databases are typically viewed as compilations of facts and/or information, and as such, the terms will be used interchangeably throughout this article.

The question of copyright in databases has been the subject of numerous Australian and United Kingdom cases, and as a result, many compilations have fallen within the definition under the *Copyright Act*. These include: accounting forms,¹⁰ sequences of numbers or letters for a bingo game,¹¹ a motorcycle parts catalogue,¹² and a football-betting coupon.¹³ In accordance with an overriding objective of copyright law, protection (in theory) is extended only to the expression of the database (the selection or arrangement of the information) and not to the ideas within the database (the information itself).¹⁴

In order for copyright to subsist in a database, the requirements of material form¹⁵ and authorship by a qualified person¹⁶ must be satisfied. However, by far the most contentious issue in determining whether copyright will exist in a database is the requirement of originality.¹⁷ It is important to bear in mind that originality is also a key consideration in assessing copyright infringement. The High Court in *Data Access Corporation v Powerflex Services Pty Ltd*¹⁸ noted that in determining whether a ‘substantial part’ of the copyright work has been taken by the alleged infringer, it is relevant to refer to the originality of that taken part.¹⁹

Originality is not defined in the *Copyright Act* and has been the subject of much judicial interpretation.²⁰ At the very least, originality refers to the work originating from the author – that is, that the work was not copied from another work.²¹

Such an ‘all or nothing’ interpretation of originality is not however, the end result. In the *Desktop Appeal*, Lindgren J notes that ‘[a]nthologies and many compilations include copied elements but are treated as original if the anthologist or compiler has contributed *sufficient labour, skill or judgment* in bringing the work into being’.²² It is this *degree* of originality that has caused the most judicial consternation.²³

Many past United Kingdom and Australian judgments concerning compilations have expressed similar formulations to that of Lindgren J above. Some variations include: ‘knowledge, labour, judgment or literary skill or

10 *Kalamazoo (Aust) Pty Ltd v Compact Business Systems Pty Ltd* (1985) 5 IPR 213.

11 *Mirror Newspapers Ltd v Queensland Newspapers Pty Ltd* [1982] Qd R 305.

12 *A-One Accessory Imports Pty Ltd v Off Road Imports Pty Ltd* (1996) 34 IPR 306.

13 *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 WLR 273.

14 See *Hollinrake v Truswell* [1894] 3 Ch 420 at 427. The questionable operation of the idea-expression dichotomy under current Australian copyright law is discussed later in this Part.

15 See *Copyright Act 1968* (Cth) ss 10(1), 22.

16 See *Copyright Act 1968* (Cth) s 32.

17 *Copyright Act 1968* (Cth) s 32.

18 (1999) 73 ALJR 1435.

19 *Ibid* 1450.

20 See generally, Lindgren J in the *Desktop Appeal* [2002] FCAFC 112.

21 *University of London Press Ltd v University Tutorial Press Ltd* [1916] 2 Ch 601.

22 *Desktop Appeal* [2002] FCAFC 112, [96] (emphasis added).

23 As Thomas J notes in *Kalamazoo (Aust) Pty Ltd v Compact Business Systems Pty Ltd* (1985) 5 IPR 213, 233: ‘[t]here are conflicting and quite irreconcilable judicial statements as to the degree of originality required’.

taste’;²⁴ ‘work, labour and skill’;²⁵ ‘skill, industry or experience’;²⁶ and ‘concentration, care, analysis and comparison’.²⁷ Both Finkelstein J at first instance,²⁸ and the Full Federal Court in the *Desktop Appeal* recognise that previous cases fail to define with any precision, the *amount* of skill, labour and expertise required to justify copyright protection of a compilation.²⁹ All that presently remains clear is that ‘in every case [the amount of labour, skill and judgment] must depend on the special facts of that case, and must in each case be very much a question of degree’.³⁰

Furthermore, the members of the Federal Court in the *Desktop Appeal* and Finkelstein J in *Telstra Corporation Ltd v Desktop Marketing Systems Pty Ltd* (*‘Desktop’*), strongly advocate that the current Australian standard of originality is one of ‘sweat of the brow’ or ‘industrious collection’.³¹ Justice Finkelstein believes that, in the case of a compilation, originality may exist by reason of *either* sufficient intellectual effort in the selection or arrangement of the facts *or* sufficient work engaged in, or sufficient expense incurred in, gathering the facts.³² Moreover, Lindgren J states that ‘there is no principle that the labour and expense of collecting, verifying, recording and assembling (albeit routinely) data to be compiled are irrelevant to, *or are incapable of themselves* establishing, origination, and therefore originality’.³³

Referring back to the introductory example, based on the discussion thus far it seems that Jim’s fears are well founded. Should the Bureau wish to assert copyright in the selection and arrangement of its weather information, it is highly probable that it will have no difficulties in doing so. Quite clearly the Bureau expended a substantial degree of time, effort and expense in gathering, verifying and recording the weather data to be arranged in its database. On this footing, the Bureau’s database is original for copyright purposes under current Australian law. Since Jim has almost entirely replicated the contents of the Bureau’s database, it is difficult to see how he will avoid copyright infringement.

In contrast to the ‘sweat of the brow’ (‘sweaty’) Australian approach, most of the jurisdictions around the world have adopted a higher standard of originality, namely a criterion that demands a degree of ‘creative spark’ or ‘intellectual effort’ in the creation of a database. Among the most prominent of these ‘creative’ jurisdictions are the United States,³⁴ Canada³⁵ and most European

24 *Macmillan & Co Ltd v Cooper* (1923) LR 51 Ind App 109, 125.

25 *G A Cramp & Sons Ltd v Frank Smythson Ltd* [1944] AC 329, 340.

26 *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 WLR 273, 289.

27 *Kalamazoo (Aust) Pty Ltd v Compact Business Systems Pty Ltd* (1985) 5 IPR 213, 237.

28 *Telstra Corporation Ltd v Desktop Marketing Systems Pty Ltd* [2001] FCA 612.

29 For a discussion of whether the amount of skill and labour must be ‘more than negligible’ (*Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 WLR 273, 285 (Lord Hodson)) or ‘substantial’ (*Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 WLR 273, 289 (Lord Devlin)) see *Kalamazoo (Aust) Pty Ltd v Compact Business Systems Pty Ltd* (1985) 5 IPR 213, 233.

30 *Macmillan & Co Ltd v Cooper* (1923) LR 51 Ind App 109, 113.

31 See *Desktop* [2001] FCA 612, [9].

32 *Desktop* [2001] FCA 612, [64].

33 *Desktop Appeal* [2002] FCAFC 112, [160] (emphasis added).

34 See especially *Feist Publications, Inc v Rural Telephone Service Co, Inc* 499 US 340 (1991).

35 See *Tele-Direct Publications Inc v American Business Information Inc* (1997) 154 DLR 4th 328.

countries.³⁶ Furthermore, international copyright instruments envisage the application of a 'creative' originality standard by member states.³⁷

This means that, in these jurisdictions, copyright protection does not extend to 'garden-variety'³⁸ type databases, such as telephone directories,³⁹ in which 'the creative spark is utterly lacking or so trivial as to be virtually non-existent'.⁴⁰ Further, as was the case in *Feist Publications, Inc v Rural Telephone Service Co, Inc* ('*Feist*'), for copyright to exist 'the selection and arrangement of facts cannot be so mechanical or routine as to require no creativity whatsoever'.⁴¹ Thus, the effort exerted in compiling the database is simply irrelevant to an inquiry of whether copyright subsists in the work.

If originality is determined by reference to the amount of intellectual effort involved in the development of a database, the resultant copyright in such a 'creative' compilation is 'thin'.⁴² In *Feist*, O'Connor J explained this to be the case since even though a second-comer should not be able to exploit the same selection or arrangement of a copied database, the subsequent compiler should be allowed to use the same facts held within that database; the facts themselves would not 'become original through association'.⁴³

In our example, Jim's copyright concerns would be alleviated under a 'creativity' approach. Arguably the Bureau's alphabetically arranged list of weather information would not constitute an original work as the coordination of such a compilation is devoid of any intellectual effort and in any case (following a *Feist* approach), Jim would be able to utilise the factual weather data held within the Bureau's database.

The issue for present consideration is whether Australia should raise its originality bar to a more creative level. Why should industrious or 'sweaty' compilations benefit from protection under our copyright regime? What policy reasons are there in favour of excluding such works from copyright law's ambit? Was the High Court mistaken in refusing to consider this issue?

As alluded to earlier, the greatest concern for allowing a 'sweat-based' standard to remain is that it effectively erodes the idea-expression distinction which has long been a central tenet within Australian copyright law.⁴⁴ Preserving the time, labour and expense involved in collecting data for a compilation effectively extends protection to the data itself, where there is only a limited number of ways in which facts and information can be expressed in a table or compilation form. In such cases users of databases typically expect the data to be displayed in line with conventions of presentation – for instance, it is assumed that the phone book will be alphabetically presented. In fact in most of these compilation cases there is very little, if any at all, skill or labour involved in the

36 See *Database Directive*, art 3(1).

37 See below n 69 and accompanying text.

38 *Feist Publications, Inc v Rural Telephone Service Co, Inc* 499 US 340, 362 (1991).

39 As was the case in *Feist Publications, Inc v Rural Telephone Service Co, Inc* 499 US 340 (1991).

40 *Ibid* 359.

41 *Ibid* 362.

42 *Ibid* 349.

43 *Ibid*.

44 See above n 14. This was the main criticism of the 'sweat' approach by O'Connor J in *Feist*.

expression of the collected data.⁴⁵ Furthermore, graphic display technologies anticipate the usual conventions and often provide pre-built functions that can be selected and applied to the particular data inputted.

By granting protection to a database for the mere collection of data, Australian courts leave no alternative open for a second-comer wishing to use that information, other than to regather the data for themselves.⁴⁶ Not only is this suggestion practically untenable in most cases, it is simply impossible when the copyright holder is the only source of that data. In such circumstances, there is a genuine concern that second-comers are unfairly denied an opportunity of creating a value-added database that could transform and augment the existing compilation. On this point, even Sackville J in the *Desktop Appeal* notes that ‘affording copyright protection to the compiler of a factual compilation, who happens to enjoy monopoly privileges that facilitate the making of the compilation, is [not] necessarily a satisfactory state of affairs’.⁴⁷

A common claim against the adoption of a ‘creative’ standard is that the scope of copyright protection under this approach is too ‘thin’.⁴⁸ Opponents argue that a ‘creative’ model will not prevent a second-comer from copying all of the underlying material contained in the compilation, so long as the copier does not take the creative elements of selection, coordination or arrangement that made the database copyrightable.

Surely, this is clear-cut evidence of the idea–expression dichotomy at play. Granting protection only to the ‘database-ness’⁴⁹ of the work allows public access to the underlying information – exactly what the principle is geared towards. Later discussion will prove that database makers concerned about the lack of protection for the underlying ideas under a ‘creativity’ approach, have other options open to them in order to safeguard their information.

A further justification for ridding Australian law of the ‘industrious collection’ standard is that it runs afoul of basic policy foundations underpinning the law of copyright. It is generally accepted that copyright law aims to ‘encourage, protect and balance’.⁵⁰ Although Australian law differs from the United States approach in that the goal of copyright is not constitutionally mandated,⁵¹ our system implicitly encourages and enhances societal knowledge and progress. It does this

45 Gerald Dalton, ‘Copyright: Protecting Original Expression or the Efforts of Authors? A Review of the Approach to Originality by Australian Courts in Recent Cases’ (2000) 11(3) *Australian Intellectual Property Journal* 129, 131.

46 *Desktop* [2001] FCA 612, [64]. Of course the second-comer can attempt to negotiate a licence with the owner in order to reapply the protected information, but when this is considered in the context of factual data, this suggestion seems rather farcical.

47 *Desktop Appeal* [2002] FCAFC 112, [428].

48 *Feist* 499 US 340, 349, (1991).

49 See *British Horseracing Board Ltd v William Hill Organisation Ltd* (Unreported, High Court of Justice (Chancery Division), Patents Court, Laddie J, 9 February 2001). In this case, William Hill argued that the ‘database-ness’ of a collection of information refers to the data being arranged in a ‘systematic or methodical way’ (under the *Database Directive*, art 1(2) definition).

50 Matthew James Mullan, ‘Copyright and Databases’ (1996) 30 *Computers & Law* 19, 24.

51 *United States Constitution* art I, §8, cl 8 empowers Congress to make laws ‘to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries’.

by rewarding copyright owners with a limited monopoly for socially desirable products,⁵² penalising offenders only in circumstances where a ‘substantial part’ of the copyright work has been taken,⁵³ and by providing for ‘fair dealing’ and other exceptions to copyright infringement.⁵⁴

As mentioned, a sweat of the brow approach prevents second-comers from reworking the data and building upon earlier works. Not only does this significantly impair the progress and development of society,⁵⁵ it also conflicts with a policy of encouraging the dissemination of informational works.⁵⁶ Quite simply, an ‘industrious collection’ standard results in many published facts effectively being locked away from the public domain,⁵⁷ with the copyright owner unjustly enjoying a period of exclusivity over the use of this information.

In assessing the suitability of a ‘sweaty’ standard, it is important to detect what it is that constitutes copyright protection for the compilation, and determine whether such constituents should be recognised under copyright law. In *Desktop*, Telstra’s enormous business expense in compiling its White and Yellow Pages seemingly motivated the Court to find ‘sweat’, but there are references to other, less obvious factors.

Significantly, Finkelstein J seems to be impressed by those modern-day technologies which assist a large corporation in its data entry and database management practices: ‘A casual reader of a directory might be surprised to learn of the complexities involved in its preparation’.⁵⁸ Yet, most businesses nowadays tend to electronically accumulate and process information and the image of an original author spending numerous hours accumulating data manually is no longer accurate.⁵⁹

Moreover, and quite disturbingly, both Finkelstein J (in *Desktop*) and Sackville J (in the *Desktop Appeal*) seem to suggest that the skill in *not* selecting particular data (in the form of Yellow Pages Headings) is something that should be valued in an originality assessment.⁶⁰ It is alarming to consider how widely the judges have expanded the notion of ‘industrious collection’ such that dismissing an idea can be encompassed as a ‘skill’.⁶¹

52 Justice Lindgren in the *Desktop Appeal* notes that ‘it is commonplace that an objective of the grant of copyright, including that given in Australia, is to encourage the production of ... works in the public interest’: *Desktop Appeal* [2002] FCAFC 112, [202].

53 *Copyright Act 1968* (Cth) s 14(1)(b) provides that ‘a reproduction ... or copy of a work shall be read as including a reference to a reproduction ... or copy of a substantial part of the work’.

54 See *Copyright Act 1968* (Cth) pt III, divs 3, 4, 4A, 5, 6, 7 and pt IV, div 6.

55 See especially *Desktop* [2001] FCA 612, [83] (Finkelstein J).

56 Thomas Arden, ‘The Conflicting Treatments of Compilations of Facts under the United States and United Kingdom Copyright Laws’ (1992) 3(2) *Entertainment Law Review* 43, 44.

57 See Anne Wells Branscomb, *Who Owns Information?: From Privacy to Public Access* (1994).

58 *Desktop* [2001] FCA 612, [11].

59 Wesley Austin, ‘A Thoughtful and Practical Analysis of Database Protection Under Copyright Law and a Critique of *Sui Generis* Protection’ (1997) 3(1) *Journal of Technology Law & Policy* 3, [61] <<http://journal.law.ufl.edu/~techlaw/3-1/austin.html>> at 20 November 2003.

60 See *Desktop* [2001] FCA 612, [18] (Finkelstein J); *Desktop Appeal* [2002] FCAFC 112, [290]–[291] (Sackville J).

61 Similar reasoning was also adopted by Drummond J in *A-One Accessory Imports Pty Ltd v Off Road Imports Pty Ltd* (1996) 34 IPR 306, 563–4 in assessing originality for a catalogue of motorcycle parts.

Coincidentally, it has long been accepted that the law does not provide protection for ‘all the intangible elements of value ... which may flow from the exercise by an individual ... of the use of ingenuity, knowledge, skill or labour’.⁶² By awarding copyright for the skill in *omitting* data for compilations, the Court in both *Desktop* and the *Desktop Appeal* seemingly disturb this basic principle. Furthermore, since it is virtually impossible to ascertain the labour or skill that goes into the discarding or ignoring of certain information, the judges in both the *Desktop* decisions appear to have also averted from the material form requirement.⁶³

There is a further argument that the Court in both *Desktop* and the *Desktop Appeal* oversimplified the manner in which earlier courts have applied the originality formulation.⁶⁴ Awarding copyright protection to Telstra’s directories solely on the basis of labour employed in collecting the data overlooks the fact that many courts in the past have ‘tended to ask whether sufficient “skill, judgment and labour” has been expended in producing the compilation’.⁶⁵

A related observation is that the nature of precedent on this issue has been far from consistent. Indeed Lindgren J comments that there has never been a definitive statement in the past suggesting that mere effort in respect of collecting data for a compilation will not suffice for copyright purposes.⁶⁶ Yet the reverse also holds true; there has been no previous judicial assertion that unequivocally provides that industry or effort alone should prevail. As noted, a number of cases have supported a much higher originality standard than that promulgated in *Desktop* and the *Desktop Appeal*.

Furthermore, the ‘creativity’ standard is often criticised for its ambiguity and lack of specificity.⁶⁷ Yet the same can be said of the ‘sweat of the brow’ doctrine. As mentioned earlier, the requisite amount of labour, skill and investment for originality to attach itself to a compilation has never been accurately defined.

Arguably the incongruous nature of the originality concept in its application to ‘sweat of the brow’ works suggests that, whilst copyright law has been regularly expanded to accommodate a broader range of subject matter, it has been unable to generate a sufficient definition of the property deserving protection, often jumping between utilitarian and creative justifications, where appropriate.⁶⁸

62 *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor* (1937) 58 CLR 479, 490 (Dixon J).

63 Copyright law requires that those works and other subject matter to which it affords protection possess some element of tangibility: see *Copyright Act 1968* (Cth) ss 10(1), 22.

64 Tanya Aplin, ‘When are Compilations Original?’ (2001) 23 (11) *European Intellectual Property Review* 543, 546.

65 *Ibid* (emphasis added). See, eg, *G A Cramp & Sons Ltd v Frank Smythson Ltd* [1944] AC 329: ‘work, labour and skill’; *John Fairfax & Sons Pty Ltd v Australian Consolidated Press Ltd* [1960] SR (NSW) 413: ‘skill and labour’; *Bookmakers’ Afternoon Greyhound Services Pty Ltd v Wilf Gilbert (Staffordshire) Ltd* [1994] FSR 723: ‘skill, labour and judgment’; *Autospin (Oil Seals) Ltd v Beehive Spinning (a firm)* [1995] RPC 683: ‘skill and effort’; *TR Flanagan Smash Repairs Pty Ltd v Jones* (2000) 102 FCR 181: ‘sufficient skill, judgment and labour’.

66 *Desktop Appeal* [2002] FCAFC 112, [147].

67 *Desktop* [2001] FCA 612, [75].

68 Kathy Bowrey, ‘The Outer Limits of Copyright Law – Where Law Meets Philosophy and Culture’ (2001) 12(1) *Law and Critique* 1.

A 'creative' standard of originality would be more preferable for the further reason that Australia would at least here be aligned with prevailing international standards. An overriding trend to harmonise copyright has dominated the international sphere with most instruments now providing that '[c]ompilations 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'.⁶⁹

On a final note, many advocates of an 'industrious collection' approach argue that its abandonment within copyright would threaten the development of databases since, so the contention goes, without adequate protection 'the investment of time and money that is required to produce those compilations will not be forthcoming'.⁷⁰

Such a claim is simply implausible. Not only is there a lack of empirical evidence that database producers are financially harmed by a higher originality threshold,⁷¹ but (as we will soon see) a range of alternative mechanisms can be, and readily are, exploited by database makers who fail to meet a 'creative' standard. It will become apparent that in reality, many compilations are adequately safeguarded from 'database pirates' by measures outside of copyright law. This is reason enough for a 'creative spark' to begin electrifying the current status of originality in Australian copyright law.

B Contract

Contract law serves as a major source of database protection for many database producers (including those making 'sweaty' works). Although it is rare for a database maker to rely solely on contractual principles to preserve their compilation, agreements are nonetheless commonplace features in most modern database contexts.

Contracts may be in standard form (such as the user agreement at the footer of eBay's website)⁷² or negotiated so that terms and conditions of use can be tailored to the needs and requirements of particular individuals or companies (such as licence agreements between major financial institutions and Reuters).⁷³ Aside from traditional print versions, contracts within the electronic database

69 *Agreement on Trade-Related Aspects of Intellectual Property Rights ('TRIPS')*, opened for signature 15 April 1994, 1869 UNTS 299, art 10(2) (entered into force 1 January 1995). See also *WIPO Copyright Treaty*, opened for signature 31 December 1997, CRNR/DC/94, art 5 (entered into force 6 March 2002); *Berne Convention for the Protection of Literary and Artistic Works*, opened for signature 9 September 1886, 828 UNTS 221, art 2(5) (entered into force 5 December 1887, revised in Paris, 24 July 1971) – although this only extends to collections of literary or artistic works such as encyclopaedias and anthologies.

70 *Desktop* [2001] FCA 612, [83].

71 For a United States perspective see Gary Lea, 'In Defence of Originality' (1995) 7(1) *Entertainment Law Review* 21, 22.

72 See eBay <<http://www.ebay.com.au>> at 20 November 2003.

73 United States Copyright Office, *Report on Legal Protection for Databases* (1997) 22 <<http://www.copyright.gov/reports/db4.pdf>> at 20 November 2003.

industry may also be of a shrink-wrap⁷⁴ or click-on⁷⁵ nature or appear within a 'terms and conditions' link on a website (browse-wrap agreements).⁷⁶

Although database contracts contain terms particular to each industry and/or user,⁷⁷ all agreements generally specify restricted terms of access to, and use of, the contents of the database as well as the permissible conditions of using the data.⁷⁸ Most electronic compilations expressly or impliedly require users to assent to a licence as a precursor to accessing and/or downloading the contents of the database. For those databases that do not adequately alert users to the terms and conditions of use, there is some doubt surrounding the enforceability of such contracts.⁷⁹

Recently, the Copyright Law Review Committee ('CLRC') considered,⁸⁰ amongst other things, the enforceability of shrink-wrap, click-on and browse-wrap agreements in Australia. The CLRC accepted that the 'question of incorporation of terms is particularly relevant to shrink-wrap and browse-wrap agreements, where purported terms are not notified until after a product is purchased, or until after access to a website has been granted'.⁸¹

In respect of the enforceability of shrink-wrap contracts, the CLRC noted that while this issue has yet to be considered by an Australian court, the terms of such agreements 'may be enforceable on the basis of the so-called ticket cases'.⁸² Attention was also paid by the CLRC to the leading United States case⁸³ on this

74 This type of contract commonly accompanies software products. Terms are sealed inside ('shrink-wrapped') and/or appear when software is installed. The terms of these agreements are not accessible until after a product is purchased and opened/installed. The outside of the wrapping may or may not indicate that terms are forthcoming. Where terms are displayed upon installation, the user may also be required to click an 'I agree' or similar icon before installation can be completed. See Copyright Law Review Committee, *Final Report on Copyright and Contract* (2002) [5.04] <<http://www.law.gov.au>> at 20 November 2003.

75 In this kind of agreement a party indicates assent to the terms offered online by clicking on an 'I agree' or similar icon: Copyright Law Review Committee, *ibid*.

76 Many web site operators use this type of online contract. The agreement deems that the act of browsing the web site constitutes acceptance of its terms: *ibid*.

77 Thus allowing flexibility in tailoring the permissible conditions of use according to the particular type of database and particular user. US Copyright Office, *above* n 73, 78.

78 For example, part of the online LexisNexis Butterworths Licence Agreement (forming part of its subscription-based service at <<http://www.lexisnexis.com.au/aus/default.asp>> 20 November 2003) provides that:

In consideration of Customer paying the Fee for a Licensed Product, Butterworths grants to Customer a non transferable, non exclusive licence only to:

- (a) use the Licensed Products specified on the Order Form; and
- (b) copy parts (but not all) of the Licensed Product as part of its business of supplying professional services to its clients...

79 See, eg, *Ticketmaster Corp v Tickets.com, Inc* (Unreported, US District Court, Central District of California, Hupp J, 27 March 2000) and *Ticketmaster Corp v Tickets.com, Inc* (Unreported, US District Court, Central District of California, Hupp J, 6 March 2003).

80 Copyright Law Review Committee, *above* n 74.

81 *Ibid* [5.05].

82 Thus, in accordance with cases such as *Thornton v Shoe Lane Parking* [1971] 2 QB 163, the terms will be enforceable so long as reasonable notice has been given, and there is a reasonable opportunity to reject the terms. The CLRC, *above* n 74, notes that 'the more unusual and/or harsh a term, the greater the effort that must be made to bring it to the attention of the party to be bound': at [5.06].

83 *ProCD Inc v Zeidenberg*, 86 F 3d 1447 (7th Cir, 1996).

subject, which held valid, a shrink-wrap licence that restricted unauthorised commercial uses of a computer program and database.

On the basis of several other United States cases, which have rejected the enforceability of browse-wrap agreements primarily due to a lack of notice of the terms,⁸⁴ the CLRC observed that these agreements might be more difficult to enforce than shrink-wrap agreements.⁸⁵ Ultimately the CLRC recognised that although click-wrap agreements are likely to be enforceable, ‘whether ... shrink-wrap and browse-wrap agreements might be enforceable in Australia must await judicial clarification’.⁸⁶

In situations where, like in the introductory hypothetical, technology such as web spiders or robots is employed to copy data from the database, it is unlikely that these competitors are bound by the terms of a standard user agreement.⁸⁷ A degree of protection from such antagonistic behaviour can be invoked by including ‘access and interference’ clauses within user contracts that deem such processes to be a breach of the agreement.⁸⁸

However, the main obstacle for database makers relying on the law of contract to protect their databases is the doctrine of privity.⁸⁹ Terms of a contract relating to access and use of the database will only bind those users who have directly consented and not any unrelated third parties.

Aside from these uncertainties though, contract law is still an attractive addition to the various protections available to a maker of a compilation. Producers of electronic compilations can exploit the benefits of contract law by ensuring that users are made aware of the terms and conditions of use (for example, by placing a clear and prominent link on the front page of their website).⁹⁰ Furthermore, as will be discussed below, database makers can implement technological safeguards in conjunction with relying upon contract law principles to further secure their investment.

84 See, eg, *Pollstar v Gigmania Ltd*, 170 F Supp 2d 974 (ED Cal, 2000) and *Specht v Netscape Communications Corp*, 150 F Supp 2d 585 (SDNY, 2001).

85 Copyright Law Review Committee, above n 74, [5.08].

86 *Ibid* [5.16].

87 Than Yeng, ‘Protecting Online Database – Part 1’ (2002) 4(9) *Internet Law Bulletin* 93, 95.

88 See, eg, *eBay’s User Agreement*, ebay <<http://www.pages.ebay.com.au/help/community/ping-user.html>> at 20 November 2003 which includes such a term:

Our Site contains robot exclusion headers and you agree that you will not use any robot, spider, other automatic device, or manual process to monitor or copy our web pages or the content contained herein without our prior expressed written permission. You agree that you will not use any device, software or routine to bypass our robot exclusion headers, or to interfere or attempt to interfere with the proper working of our Site or any transaction being conducted through our Site.

89 *Price v Easton* (1833) 4 B & Ad 433.

90 See, eg, Ticketmaster’s web site, <<http://www.ticketmaster.com>> at 20 November 2003 which includes the following header on its home page: ‘Use of this site is subject to express terms of use, which prohibit commercial use of this site. By continuing past this page, you agree to abide by these terms.’

C Confidential Information

It is possible that particular types of databases are also protected under the law of confidential information.⁹¹ Although this equitable doctrine aims to protect relationships of trust rather than the information itself,⁹² a successful claim for breach of confidence inevitably results in the preservation of certain kinds of ‘trade secrets’.

Thus, companies are able to protect their client database,⁹³ marketing strategies and financial data,⁹⁴ as well as valuable business manuals and processes.⁹⁵ Even though protection offered under the law of confidence depends on the nature of the particular database (due to the limited circumstances under which this action arises) it is nevertheless a useful instrument in the matrix of protective tools available to a database maker.

D Passing Off / Misleading and Deceptive Conduct

A narrow scope of database insulation is also available on the basis of the common law action of passing off⁹⁶ and/or under s 52 of the *Trade Practices Act 1974* (Cth).⁹⁷ These related actions are especially relevant for well-known databases, such as Thomson’s legal databases or Bloomberg’s financial compilations.

Cases of database infringement involving deep linking, framing and potentially the use of ‘electronic agents’⁹⁸ are also well suited to claims of this type, where the database maker has some level of reputation (such as the Bureau of Meteorology in the hypothetical, being the official source of weather data).

91 In *Coco v AN Clark (Engineers) Ltd* [1969] RPC 41, Megarry J found that three elements are necessary to establish a breach of confidence: the information must be of a confidential nature; the information must have been communicated in circumstances importing an obligation of confidence; and there must have been unauthorised use of that information to the detriment of the party communicating it. For a more detailed analysis of the scope of this action, see, eg, Jill McKeough, Kathy Bowrey and Philip Griffiths, *Intellectual Property Cases and Materials* (3rd ed, 2002) ch 12.

92 See *Federal Commissioner of Taxation v United Aircraft Corporation* (1943) 68 CLR 525.

93 *Robb v Green* [1895] 2 QB 315.

94 *Thomas Marshall (Exports) Ltd v Guinle* [1978] 3 All ER 193.

95 *Warman International v Envirotech Australia Pty Ltd* (1986) 6 IPR 578.

96 This action prevents a competitor from misrepresenting, or passing off, their goods or services as being, or having a connection with, the goods or services of another party: see *Reddaway v Banham* [1896] AC 199. In order to establish a case of passing off it is necessary to show: subsistence of reputation or goodwill on the part of the plaintiff; deceptive conduct on the part of the defendant; and the existence or threat of damage to the plaintiff as a result of that conduct: see generally *Conagra Inc v McCain Foods (Aust) Pty Ltd* (1992) 23 IPR 193.

97 Section 52(1) provides that ‘a corporation shall not, in trade or commerce, engage in conduct that is misleading or deceptive, or is likely to mislead or deceive’.

98 Those computer programs such as web spiders and web robots that automatically browse, retrieve and store web content. See generally Henning Grosse-Ruse, ‘Electronic Agents and the Legal Protection of Non-creative Databases’ (2001) 9(3) *International Journal of Law and Information Technology* 295.

E Cyber-Crime Provisions

Provisions within recently enacted ‘cyber-crime’ laws in Australia⁹⁹ add a further layer of protection for databases that have been unscrupulously tampered with, by making unauthorised access or modification to, or impairment of a database, a criminal offence. As noted by the Model Criminal Code Officers Committee,¹⁰⁰ the primary concern of these laws is to protect the ‘security of the [computer] system itself from unauthorised access, corruption or sabotage, rather than prevention of predatory gain or access to confidential information’.¹⁰¹

Computer crime legislation in New South Wales for example, provides a number of avenues by which database owners can prosecute copiers of data that is held within a restricted-access (say by means of a password or encryption) database. The summary offence under s 308H of the *Crimes Act 1900* (NSW) (‘*Crimes Act*’) for instance, would apply in circumstances where an offender intentionally and knowingly caused unauthorised access to, or modification of, restricted data.¹⁰² The maximum penalty that could be enforced against a cyber-criminal for an offence of this type is two years imprisonment.¹⁰³

It must be remembered that database protection upon these grounds involves criminal proceedings, which for a successful outcome requires a finding ‘beyond reasonable doubt’. Even so, producers of compilations have at their disposal a threatening cause of action carrying serious consequences against larger-scale ‘database pirates’.

F Technological Measures

A variety of non-legal defences against unlawful access to, and appropriation of, electronic compilations have been developed by members within the database industry. These technological ‘self-help’ measures¹⁰⁴ considerably aid in bridging the gaps left by other forms of database protection.

A popular mechanism used by many database owners to limit access to their online and CD-ROM products is the use of passwords. Compilations ranging from the *Australian Prescription Products Guide* to the *Attorney-General’s Information Service* require users to enter their login name and password in order

99 See, eg, *Criminal Code 2002* (ACT) pt 4.2; *Crimes Act 1900* (NSW) pt 6; *Criminal Code Act 1995* (Cth) pt 10.7.

100 Model Criminal Code Officers Committee, *Chapter 4 – Damage to Property Report* (2001) <[http://sgeag001web.ag.gov.au/www/rwpattach.nsf/viewasattachmentPersonal/49FD897E86EE1077CA256BB30002C7AA/\\$file/modelcode_ch4_Computer_Offences_report.pdf](http://sgeag001web.ag.gov.au/www/rwpattach.nsf/viewasattachmentPersonal/49FD897E86EE1077CA256BB30002C7AA/$file/modelcode_ch4_Computer_Offences_report.pdf)> at 20 November 2003.

101 Ibid 87.

102 The *Crimes Act 1900* (NSW) defines ‘modification of data held in a computer’ to refer to the alteration or removal of, or any addition to, the data: s 308A.

103 The *Crimes Act 1900* (NSW) s 308C concerns the unauthorised access or modification of data, or impairment of electronic communications with the intention of committing, or facilitating the commission of a serious indictable offence. The maximum penalty is the same as for the serious indictable offence.

104 It should be noted that only a selection of technological measures is presented here for purposes of illustration only. It is beyond the scope of this article to extensively deal with all of the main technological forms of database protection.

to gain authorised access to the contents of the product. Password protection is almost always used in conjunction with other means of database protection.¹⁰⁵

Furthermore, some online compilations are not, in their entirety, available for users to download. Rather, owners restrict access to the underlying information by making the database ‘search-only’. An example of such a practice is that used by online newspaper publishers such as the *Sydney Morning Herald* for its database of archived articles.

A related technological practice for database protection is to limit the quantity of information that can be freely accessed and downloaded online.¹⁰⁶ For example, the pharmaceutical giant Merck & Co, Inc provides a sample of *The Merck Index: An Encyclopedia of Chemicals, Drugs, and Biologicals* online for free public access, while requiring subscription to the full-text version (which is available in electronic or printed form).¹⁰⁷

Database encryption is an increasingly common practice within most industries seeking to protect data from compromise or abuse (both outside of, and within firms). Through encryption, access to data is controlled, ensuring that only authorised users (those with the relevant ‘keys’) can view the data in ‘clear text’.¹⁰⁸

It has recently been suggested that database encryption can be used to bolster contractual safeguards online.¹⁰⁹ In order to bind users and any automatic copying devices to the terms of an online user agreement, it is proposed that the database is encrypted until the terms and conditions of use have been actively accepted.¹¹⁰ An application of this in practice (albeit in a CD-ROM form) is Dun & Bradstreet’s *Business Solutions in a Box* product.¹¹¹

A range of technological devices that, although may not prevent unauthorised copying per se, will enable tracing the source of illegal copies, are also at the disposal of database owners.¹¹² These database copy protection mechanisms, such as ‘digital watermarks’, are analogous to a range of devices used to protect software, music, and DVDs.¹¹³ Such technological tools not only assist in tracking offenders, but tampering with or removing ‘electronic rights management information’¹¹⁴ is also prohibited under the *Copyright Act*.¹¹⁵

105 In many instances, passwords supplement the use of contract law as a means of protecting databases. By granting users a unique identifier, database owners not only reinforce protection for themselves, they inadvertently strengthen the exclusivity of the licenced product for users (in terms of users being able to control who gets the benefit of exploiting the licence by restricting knowledge of the password).

106 National Research Council, *A Question of Balance – Private Rights and the Public Interest in Scientific and Technical Databases* (1999) <http://www.nap.edu/html/question_balance/ch3.html> at 20 November 2003.

107 See Merck website, <<http://merck.com/pubs/mindex/index.html>> at 20 November 2003.

108 National Research Council, above n 106.

109 Than Yeng, ‘Protecting Online Database – Part 2’ (2002) 4(10) *Internet Law Bulletin* 105, 107.

110 Ibid.

111 US Copyright Office, above n 73, 27.

112 National Research Council, above n 106.

113 Sherif El-Kassas, *Study on the Protection of Unoriginal Databases, World Intellectual Property Organisation Standing Committee on Copyright and Related Rights (Seventh Session)* (2002).

114 See *Copyright Act 1968* (Cth) s 10(1).

115 *Copyright Act 1968* (Cth) s 116B.

It is clear from this non-comprehensive array of technological measures that owners of electronic compilations are able to assert a significant degree of control over their investments. Parties campaigning for greater database protection often argue that these technological measures are insufficient since they only apply to electronic databases.¹¹⁶ However, this contention overlooks the fact that in current times print versions constitute a marginal proportion of databases in use.¹¹⁷ In fact, some believe that technological measures provide *too* much protection for database producers: '[i]n such an age – in a time when the [technical] protections are being perfected – the real question for law is not, how can law aid in that protection but rather, is the protection too great?'¹¹⁸

G Market-Based Approaches

Database makers can also make use of a range of business practices to further safeguard their investment. Apart from compilations of historical information, most databases derive their value from their timeliness (for example, the Bureau's weather database). Since a copied database is inescapably a more obsolete imitation of the original, making frequent updates provides a degree of protection against 'database piracy'.¹¹⁹

Another approach involves the production of customised versions of databases. Tailoring variations of the one compilation to different market segments not only captures a greater proportion of users, it also makes it more difficult for a pirate to compete with, and consequently undermine the practices of the database producer.¹²⁰

Furthermore, it is important to remember that many CD-ROM and online databases are enhanced with advanced search software. This means that even though the underlying information is non-copyrightable, the software itself can be protected. As a result, competitors are essentially forced to either produce a less attractive imitation or make the effort by investing in their own product.¹²¹

H Some Conclusions on Current Protections

On the basis of the discussion in this Part, it is interesting to explore the application of these measures to the introductory hypothetical.

116 US Copyright Office, above n 73, 85.

117 In 2001, out of 13 921 databases surveyed in the *Gale Directory of Databases*, 49 per cent were online while 36 per cent were available in CD-ROM format: Erin Holmerberg (ed), *Gale Directory of Databases* (2001).

118 Lawrence Lessig, *Code and Other Laws of Cyberspace* (1999).

119 Arguably, the fact that second-comers will be forced to regularly revise their imitations in order to compete with the original database, serves as a potential disincentive to copying the compilation in the first place. See National Research Council, above n 106.

120 See Carl Shapiro and Hal Varian, 'Versioning: The Smart Way to Sell Information' *Harvard Business Review*, (November–December 1998) 106.

121 See Stephen Maurer, 'Raw Knowledge: Protecting Technical Databases for Science and Industry', *Proceedings on the Workshop on Promoting Access to Scientific and Technical Data for the Public Interest: An Assessment of Policy Options* (1999) The National Academy of Sciences <http://books.nap.edu/html/proceedings_sci_tech/appC.html> at 20 November 2003.

1 *Copyright*

Mention has already been made that under the current ‘industrious collection’ or ‘sweat of the brow’ standard of originality in Australia, it is probable that the Bureau’s weather compilation will be protected due to the substantial degree of labour and expense invested in creating its database. Although copyright may exist in an infringing work,¹²² it is questionable whether Jim has made ‘qualitatively significant changes to the copied material’¹²³ in order for his weather database to attain copyright status. It is possible that Jim’s added feature of ‘weather symbols’ amount to such a ‘qualitative change’, but essentially Jim has ordered his data in substantially the same way as the Bureau has presented its weather database (being the most logical manner of presentation). In any case Jim has clearly taken a substantial part of the Bureau’s compilation and would be liable for copyright infringement.

2 *Contract*

Both Jim and the Bureau could protect their respective weather compilations on the basis of contract law by means of a browse-wrap agreement. As the law currently stands, it seems that a prominent link on the home page of each of the parties’ websites to the terms and conditions of use of their weather database may suffice to bind subsequent users of their compilations. Furthermore, both the Bureau and Jim could include an ‘access and interference’ clause within their terms and conditions as a way of counteracting competitors’ belligerent use of ‘electronic agents’.

3 *Confidential Information*

It seems that neither the Bureau nor Jim would benefit from this equitable branch of the law in the present circumstance.

4 *Passing Off/ Misleading and Deceptive Conduct*

As noted earlier, the Bureau, as an official (thus, reputable) source of weather data, may be able to take advantage of these related actions. However, it is arguable that Jim could potentially avoid any claim of ‘misrepresentation’ on his part by referencing the Bureau as the source of his data.

5 *Computer Crime*

Due to the nature of Jim’s behaviour in this case, it is unlikely that the Bureau could seek criminal action against him.

122 See *Redwood Music Ltd v Chappel Co Ltd* [1982] RPC 109.

123 *A-One Accessory Imports Pty Ltd v Off Road Imports Pty Ltd* (1996) 34 IPR 306, 319.

6 *Technological Mechanisms*

It is unlikely that the Bureau will want to significantly restrict access to its weather database by technological means as it is essentially providing society with a public service. It is probable that the Bureau provides only a limited amount of weather information for 'free' (such as basic temperature and precipitation readings) whilst restricting access (in conjunction with contract law) to more sophisticated and specific weather data (such as satellite images and specialised weather charts). There is no reason why Jim would wish to protect his compilation technologically, as the hypothetical suggests that his weather database is a basic marketing tool, designed to attract clients to his business by impressing them with a wide variety of online travel-related services. This is not to say however, that Jim could not resort to a number of technological controls in order to protect his investment, if he so wished.

7 *Market-Based Measures*

The Bureau gains a degree of market protection each time its weather database is updated (quite possibly every few hours). This provides the Bureau with a competitive advantage over second-comers such as Jim, as those weather enthusiasts seeking the most current information will, presumably, always consult the most up-to-date source.

From the analysis in this Part a few issues are certainly clear:

- Although there is no single foolproof alternative, database owners in Australia have a rich assortment of options available to them in order to conserve their investment.
- This range of alternatives is especially strengthened by the fact that presently in Australia, the law of copyright protects an 'industrious collection' of information.
- Converting the current Australian originality standard to a 'creative' one would be preferable for a number of reasons.
- If a 'creativity' standard of originality applied in Australia, owners of 'sweat' compilations would not be as disadvantaged as it would initially appear. It is difficult to conceive of many databases that are not adequately protected by one or more of the alternative measures.

II AN AUSTRALIAN DATABASE RIGHT?

A *The Database Directive – Some Features and Problems*

In March 1996, the European Parliament and the Council of the European Union introduced the *Database Directive*. This ground-breaking piece of legislation established a two-tier structure for database protection: a 'creative'

standard of originality was adopted for copyright protection of compilations,¹²⁴ in addition to the introduction of a new *sui generis* database right aimed at protecting those databases falling outside of the ‘creative’ copyright standard (‘non-original’ databases).¹²⁵

Article 7 provides for the *sui generis* database right.¹²⁶ This right aims to conserve investment (in the form of human, technical and financial resources as well as time, effort and energy) in the obtaining, verification or presentation of the contents of a database.¹²⁷ The database right is proprietary in the sense that it may be transferred, assigned or licenced.¹²⁸

Protection under the *sui generis* scheme allows database makers to prevent unauthorised extraction¹²⁹ and/or reutilisation¹³⁰ of all, or a substantial part of the contents of their database.¹³¹ Furthermore, repeated and systematic extraction and/or reutilisation of *insubstantial* parts of the contents implying acts that conflict with the normal exploitation of that database or which unreasonably prejudice the legitimate interests of the database maker are not permitted.¹³² Recital 42 makes it clear that this right is aimed not only at the manufacture of parasitical competing products, but also at any user who causes significant detriment¹³³ to the database maker’s investment.

Under the *Database Directive*, lawful users of a database are entitled to extract and/or reutilise *insubstantial* parts of its contents (measured qualitatively and/or quantitatively) for any purposes whatsoever.¹³⁴ Furthermore, article 9 establishes a set of exceptions to the *sui generis* right, namely that a substantial part of a database may be extracted and/or reutilised without the maker’s authorisation for private use, for the purposes of illustration for teaching or scientific research, or in regard to public security or administrative/judicial procedures.¹³⁵

124 Article 3 of the *Database Directive* provides that ‘databases which, by reason of the selection or arrangement of their contents, constitute the author’s own intellectual creation shall be protected as such by copyright’. This has the effect of harmonising the originality standard in copyright law across Europe.

125 It is beyond the scope of this article to closely scrutinise the whole of the *Database Directive*. The focus in this Part will be on the *sui generis* right as opposed to the harmonisation of copyright.

126 A database maker is entitled to a database right if there has been a substantial investment in either the obtaining, verification or presentation of the database contents (evaluated qualitatively and/or quantitatively): *Database Directive*, art 7(1).

127 *Database Directive*, recitals 39, 40.

128 *Database Directive*, art 7(3).

129 Extraction refers to ‘the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form’: *Database Directive*, art 7(2)(a).

130 Re-utilisation means ‘any form of making available to the public all or a substantial part of the contents of the database by the distribution of copies, by renting, by online or other forms of transmission’: *Database Directive*, art 7(2)(b).

131 This is evaluated qualitatively and/or quantitatively: *Database Directive*, art 7(1).

132 *Database Directive*, art 7(5).

133 To be evaluated qualitatively and/or quantitatively.

134 *Database Directive* art 8(1) and recital 9. Note art 8(2), however, which (as noted above) prohibits lawful users from performing acts which conflict with the normal exploitation of that database or which unreasonably prejudice the legitimate interests of the database maker.

135 It is important to note that the institution of these exceptions into domestic European database law is not mandatory. See *Database Directive* art 9, recitals 50, 51, 52.

Databases qualifying for protection under the database right are protected for a period of 15 years.¹³⁶ In addition, any substantial change made to the contents of the database resulting in it being a substantial new investment, allows the database as a new investment, to be protected for a further 15 years.¹³⁷

The database right is primarily for the benefit of European nationals.¹³⁸ It will not apply to databases made by persons outside the European Union unless these database producers reside in a jurisdiction that provides comparable database protection to EU compilations.¹³⁹ It is also worthy to note that appropriate remedies in respect of breach of the database right are to be formulated by the member states themselves.¹⁴⁰

Following this brief outline of the main database right provisions under the *Database Directive*, a number of problematic issues can be delineated.

1 *Definition of 'Database'*

'Databases' under the *Database Directive* are extremely broadly characterised. Article 1(2) provides that a database refers to 'a collection of independent works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means'. Such a wide ambit has allowed protection to be extended to the results of a search on a website,¹⁴¹ the contents of a web page,¹⁴² and a catalogue of links on a website.¹⁴³ One only has to wonder where the justification lies for needing to safeguard such banal materials.

2 *Vague Interpretation Generally*

A further concern with the database right under the *Database Directive*, is the overall lack of clarity in most of the provisions. Many terms are undefined, leaving interpretation in the hands of individual member states. This inevitably results in definitional discrepancies between jurisdictions, which seems to contradict the overriding harmonisation objective of the *Database Directive*. What are, for instance, the types of 'acts which conflict with a normal exploitation of the database'? Who is a 'lawful user'? What constitutes 'repeated and systematic extraction'? Such key notions remain open to conflicting elucidation.

136 Calculated from the date of completion of the making of the database: *Database Directive*, art 10(1).

137 Substantial changes are to be measured qualitatively and/or quantitatively and include any changes resulting from the accumulation of successive additions, deletions or alterations: *Database Directive*, art 10(3).

138 The database right applies to databases whose makers or right-holders are nationals of a member state or who have their habitual residence in the territory of the Community. This includes bona fide EU companies or firms: *Database Directive*, arts 11(1), (2).

139 *Database Directive*, recital 56.

140 *Database Directive*, art 12, recital 57.

141 *Berlin Online*, Landgericht Berlin, 8 October 1998 [1999] *Computer und Recht* 388.

142 *Baumarkt.de*, Oberlandesgericht (Court of Appeal) Düsseldorf, 29 June 1999 [1999] *Multimedia und Recht* 729.

143 *Kidnet/Babynet*, Landgericht Köln, 25 August 1999 [2000] *Computer und Recht* 400.

3 Impact of the 'Substantial' Provision

The concept of 'substantiality', which appears throughout the text of the *Database Directive*, is referable to both qualitative and quantitative measurement. This in itself is uncontroversial, however when considered in the context of certain provisions, it results in an expansive degree of protection afforded to makers of databases under the *sui generis* right.

In relation to the notion of 'substantial investment' (one of the prerequisites to securing a database right), it seems plausible that most kinds of investment in any database context will be substantial. This is all the more so since 'investment' itself is defined so broadly and is referable to obtaining, verifying *and* presenting the contents of the database. Thus, even the most mundane compilations, such as Greater Union's list of cinema screening times, will be protected since there has been some input of time, money or effort through technical, financial or human means. Again, the rationale underlying such a far-reaching form of intellectual property law has to be seriously questioned.

A related consideration is whether there has been 'substantial investment' if the database maker has invested in generating information for a purpose other than primarily creating a database, but has inadvertently produced a compilation.¹⁴⁴ In the Netherlands, for instance, databases flowing from ongoing data collection practices, such as those created by telephone companies or television stations, are classified as mere 'spin-offs' from the main commercial activity and as such, have frequently been refused protection under the right.¹⁴⁵

In the context of database right infringement, most extractions and/or reutilisations will qualitatively consist of a 'substantial part', if that part is of some benefit to the end user.¹⁴⁶ Furthermore, regardless of how significant the data is or how it has been selected or arranged, merely extracting and/or reutilising a large amount of information from a compilation results in infringement of the database right. This quantitative measure for infringement purposes not only provides greater database protection than is the case in copyright law, it also effectively results in protection of the data itself.¹⁴⁷

4 Exceptions

An additional imperfection within the *Database Directive* is in relation to the recommended exceptions to the database right. These exemptions suffer not only from uncertain explication,¹⁴⁸ but are also terribly restrictive. It seems as though the European Parliament believed that the right to extract and reutilise

144 Jane Ginsburg, 'Copyright, Common Law, and *Sui Generis* Protection of Databases in the United States and Abroad' (1997) 66 *University of Cincinnati Law Review* 151, 174.

145 See, eg, the decision in *De Telegraaf v NOS and HMG*, Netherlands Competition Authority, 10 September 1998.

146 See *NVM v De Telegraaf*, President District Court of The Hague, 12 September 2000.

147 Mark Davison, 'Sui Generis or Too Generous: Legislative Protection of Databases, its Implications for Australia and Some Suggestions for Reform' (1998) 21 *University of New South Wales Law Journal* 729, 737.

148 For instance, it is unclear what constitutes a permitted use 'for the purposes of illustration for scientific research' under art 9(b) of the *Database Directive*.

insubstantial parts of a database would provide adequate scope for users to exploit the contents of a protected database.¹⁴⁹ But will this really assist users? The answer to this of course falls back to a consideration of what is meant by the term 'insubstantial'. In addition to this problem, the exceptions significantly omit any fair dealing provisions for criticism, review, or for reporting news (unlike provisions within copyright law).

5 *Unlimited Duration of Protection*

The database right effectively provides for perpetual protection of compilations so long as the maker regularly updates the contents. Assumedly, regular revisions of the database material (which, in almost all industries occurs at least annually)¹⁵⁰ would qualify the compilation for a further and additional database right.

6 *Sole-Source Databases*

Another problem emanating from the *Database Directive* is the absence of any provisions concerning databases that consist of information exclusively within the control of the maker. Due to the relative ease with which a maker can acquire a database right as well as the likelihood of continuously maintaining protection over the information, it is bewildering (to say the least) that there is no legislative response to the probable monopoly status a right-holder will attain *and* sustain.¹⁵¹

7 *Licensing and Assignment*

The two-tier scheme of protection results in convoluted licensing and assignment arrangements when databases are subject to both a database right and copyright.¹⁵² There are further complexities concerning the possibility of database protection for enhancements made to an existing database. Clearly, if more than one database right applied in respect of the one compilation, the impracticality of separating out the subject matter corresponding to the different rights would be enormous.

8 *Reciprocity*

A clearly unsatisfactory outcome arising out of the *Database Directive* is the restrictive nature of the reciprocity provision. As the situation currently stands, Australian database makers remain unprotected in Europe due to the lack, in this

149 P Bernt Hugenholtz, 'The New Database Right: Early Case Law from Europe' (2001) (Paper presented at the Ninth Annual Conference on International Intellectual Property Law and Policy, Fordham University School of Law, New York, 19–20 April 2001).

150 Maurer, 'Raw Knowledge: Protecting Technical Databases for Science and Industry', above n 121.

151 A large proportion (at least 50 per cent) of the database right cases considered in Europe thus far involve actions instituted by owners of 'synthetic' databases, such as sports statistics and telephone listings. Since second-comers cannot feasibly obtain such 'synthetic' data by collecting it themselves, the right effectively gives owners an unfettered monopoly: Stephen Maurer, P Bernt Hugenholtz and Harlan Onsrud, 'Europe's Database Experiment' (2001) 294 *Science* 789.

152 The database right applies irrespective of the eligibility of that database for protection by copyright or by other means: *Database Directive* art 7(4).

country, of an equivalent database right. Furthermore, it is questionable whether Australian producers will receive any European copyright protection either, since our current originality standard (as defined in the *Desktop Appeal*) fails to accord with the requisite level stipulated in the *Database Directive*.¹⁵³

9 *Non-Discriminatory Effect*

There is an implicit assumption within the *Database Directive* that all types of databases are entitled to the same kind of protection. It may be difficult to incorporate a distinction within the *Database Directive* between those databases requiring a shorter period of protection, and those compilations worthy of greater private safekeeping. However, there is no recognition of the fact that perhaps some databases should only be excluded from the public domain for a very limited period of time (if at all).¹⁵⁴

10 *Unclear Subject Matter*

Finally, the *Database Directive* is tremendously ambiguous with respect to depicting the exact subject matter for database protection. Is it the investment in obtaining, verifying or presenting the contents, is it the database as a collection of materials, or is it information contained in a 'substantial part' of the database?¹⁵⁵ It seems that in the case of the *Database Directive*, a solution has been formulated prior to any meaningful interpretation of the actual problem that is to be remedied.

11 *Concluding Thoughts*

The outcome of this inquiry into the many anomalies within the database right under the *Database Directive* is clear: 'the most suspect and borderline of all the objects of protection ever to enter the universe of intellectual property discourse paradoxically obtains the strongest scope of protection available'.¹⁵⁶ However, the curious fact is that this problem is as much a result of the particular features of the *Database Directive* as it is due to the inherent complications within the concept of the database right itself.

B A Database Right – Pure Agony with No Ecstasy?

The discordant situation for Australian database producers necessitates a consideration of our adopting a European regime. In assessing whether a database right is really just a waste of Australia's legislative time, it is important to consider the purported motivations behind instituting such a mechanism. An

153 Although there is no reciprocity provision for copyright protection under the *Database Directive*, the standard proclaimed by the Europeans is a 'creative' one: Davison, above n 147, 743.

154 Especially databases incorporating 'public goods' such as weather data, financial information and sports statistics.

155 Simon Chalton, 'Database Right: Stronger Than it Looks?' (2001) 23(6) *European Intellectual Property Review* 296, 299.

156 Jerome Reichman and Pamela Samuelson, 'Intellectual Property Rights in Data' (1997) 50 *Vanderbilt Law Review* 51, pt III.

oft-cited reason¹⁵⁷ for introducing a property right in compilations is that makers of such products will be less inclined to invest in their creation if there is a (perceived) absence of database protection. Since substantial resources are employed in collecting data and maintaining the database, and since digital technology allows fast and cheap copying and dissemination of the contents, proponents of a database right believe that without adequate protection, producers will refrain from compiling information.

But on what basis does this proposition lie? Is there any proof of producers deciding against the manufacture of databases due to a presumed lack of legal protection? It seems that there is no available empirical evidence to substantiate such a claim.¹⁵⁸ In any case, the outcome of the *Desktop Appeal* has certainly remedied any fears of a lack of protection in Australia.¹⁵⁹

This fallacious premise is linked to a mistaken belief that non-original databases, not creative enough to fall within the copyright sphere but compiled with considerable effort, are left unprotected in a forbidding world of 'database piracy'. Again, in promulgating this view, database right activists are seemingly ignorant of the extensive array of protective measures available to makers of such 'sweaty' databases.

Aside from the flaws in these pro-database right arguments, there are a multitude of reasons why a database right should not be introduced into the Australian database domain.

Broadly speaking, a database right results in protection of the underlying information, lessens the ability to access and use data within the public realm, creates excessive transaction costs, effectively prohibits the development of value-added compilations, encourages a concentration of market power in database providers, and broadens the gap between industrialised and developing countries. Each of these issues will be examined in turn.

1 *Protection of Data Per Se*

Unlike 'creative' copyright, which differentiates between the grant of protection for the database by reason of selection and arrangement of its contents and protection for the contents alone, the database right makes no such distinction. A database right, like protection for 'sweat' databases under Australian copyright law, is conferred primarily for investment undertaken in manufacturing the database. This means that when there has been a sufficient exertion of time, energy and effort in creating a database comprised of non-

157 See, eg, Laura Tyson and Edward Sherry, *Information Industry Association – Statutory Protection for Databases: Economic and Public Policy Issues* (1997) <<http://www.house.gov/judiciary/41118.htm>> at 20 November 2003.

158 The National Research Council undertook a project in 1997, the results of which show a lack of concrete evidence of database producers halting the compilation process due to a fear of inadequate legal protection for their investment: National Research Council, *Bits of Power – Issues in Global Access to Scientific Data* (1997) <<http://www.nap.edu/readingroom/books/BitsOfPower/>> at 20 November 2003.

159 One perversely wonders whether the result of the *Desktop Appeal* – a capacious non-creative originality standard for Australian compilations – is really a masked attempt at saving us from a database right.

original material,¹⁶⁰ this material forming part of the database, is necessarily protected together with the database itself.

Indeed, in a relatively recent United Kingdom High Court of Justice decision¹⁶¹ concerning an alleged infringement of a database right, Laddie J held that despite indirect¹⁶² acts of extraction and reutilisation by William Hill, the British Horseracing Board's ('BHB') database right was nevertheless infringed. More significantly though, protection was not confined to the 'database-ness', or the systematic arrangement of the collected information. The judge believed that the object of the *Database Directive* is to protect the investment in producing a database, and such investment is compromised not only by reproducing the database itself but also by exploiting the *accuracy of the data*.¹⁶³

The outcome of this remarkable finding is that compilations protected under the database right remain sheltered from external access and use, despite manipulation and rearrangement of the protected data even when the infringing acts originate from other sources.¹⁶⁴ As a consequence of Justice Laddie's reasoning, the database right will protect data so long as that information has been previously included within a compilation qualifying for *sui generis* protection – the right necessarily 'following' the data.¹⁶⁵ His Honour's interpretation of the *Database Directive* essentially results in a right in data itself on a first come, first served basis – the first database maker's investment is seemingly overvalued at the expense of the possible creation of derivative works. Such a position is all the more extraordinary when one considers the objectives stated in recitals 45¹⁶⁶ and 46¹⁶⁷ of the *Database Directive*.¹⁶⁸

160 In the case of compilations comprising of copyrightable works, copyright protection would be afforded to these contents in addition to a database right attaching to the compilation itself: *Database Directive* art 7(4).

161 *British Horseracing Board Ltd v William Hill Organization Ltd* (Unreported, High Court of Justice (Chancery Division), Patents Court, Laddie J, 9 February 2001).

162 In this case, data relating to races was derived by William Hill from a third party – Satellite Information Services' data feeds – which were themselves derived from the British Horseracing Board's database.

163 *British Horseracing Board Ltd v William Hill Organization Ltd* (Unreported, High Court of Justice (Chancery Division), Patents Court, Laddie J, 9 February 2001) [35].

164 Even though in copyright law indirect reproduction of a copyright work may constitute infringement, William Hill argued (albeit unsuccessfully) that since the right of extraction concerns the concept of 'removal', the right should correlate only to that protected database (ie, the database right should not follow the information, if that information is in a re-expressed form).

165 Chalton, above n 155, 299.

166 'Whereas the right to prevent unauthorised extraction and/or re-utilisation does not in any way constitute an extension of copyright protection to mere facts or data': *Database Directive* recital 45.

167 'Whereas the existence of a right to prevent the unauthorised extraction and/or re-utilisation of the whole or a substantial part of works, data or materials from a database should not give rise to the creation of a new right in the works, data or materials themselves': *Database Directive* recital 46.

168 On appeal, William Hill argued that the *Database Directive* should be construed more narrowly. It urged the Court to restrict the database right to one that enables the owner to control both access to the database and use of the information in the same or similar format to that of the database itself. William Hill cited a number of European cases which show a divergence of views concerning the application of the *Database Directive*. The Court of Appeal decided to refer a number of issues for clarification to the European Court of Justice. It is expected that the matter will take up to three years (from the date of referral) to resolve. See *William Hill Organization Ltd v British Horseracing Board Ltd*, [2001] EWCA Civ 1268 (Court of Appeal (Civil Division)) (Unreported, Gibson, Kay and Clarke LJ, 31 July 2001).

2 *The ‘Tragedy of the Commons’*¹⁶⁹

Incidentally extending protection to data, and granting perpetual protection to databases that are modified, results in the considerable diminution of the ‘public domain’ of information. The significance of keeping information public is apparent: ‘facts and ideas constitute building blocks of intellectual discourse’.¹⁷⁰

There is a strong ‘public good’ aspect underlying much of the data used and produced within the Australian information society. This applies not only to the scientific and academic sectors but also to everyday business and consumer users of information. Locking up data from commercial stakeholders,¹⁷¹ for instance, will only serve to hinder any opportunities they may have to further enhance their database, in that access to other sources will also be more limited and costly, making it more difficult for business users to add to their existing knowledge base.¹⁷² Restricting access by means of a database right simply doesn’t make commercial sense.

Furthermore, from an economic viewpoint, resources will be more optimally allocated if data can be freely disseminated and accessed.¹⁷³ On the other hand, conferring a property right to information results in unlimited transaction costs.¹⁷⁴ After all, ‘[a] “use” right is the dream of any intellectual property monopolist’.¹⁷⁵ Clearly, *sui generis* protection of databases creates unnecessary impediments to the free-flowing effects of competition within the database market.

3 *Stifling the Creation of ‘Value-Added’ Databases*

It is clear that the same data set can serve a variety of uses in many ways. Yet since the database right casts its protective net as far as pronouncing infringement for ‘acts which conflict with a normal exploitation’ of the database or ‘which unreasonably prejudice’ the maker’s interests,¹⁷⁶ ‘unless the right is abandoned or

169 This refers to the impairment of access to and use of information held within the ‘public domain’: see Paul David, ‘A Tragedy of the Public Knowledge Commons?’ – Global Science, Intellectual Property and the Digital Technology Boomerang’ (2000) *Oxford Intellectual Property Research Centre Electronic Journal of Intellectual Property Rights* 6 <<http://www.oiprc.ox.ac.uk/EJWP0400.pdf>> at 20 November 2003.

170 See National Research Council, *Bits of Power*, above n 158.

171 For example, Bloomberg compiles market research data from public sources such as the New York Stock Exchange (‘NYSE’). If the NYSE asserted its database right, Bloomberg would find it much more costly and time-consuming to produce its compilations. In Australia, this would, in turn, burden financial institutions and the public that use Bloomberg’s facilities on a daily basis.

172 Andrew Oram, *The Sap and the Syrup of the Information Age: Coping with Database Protection Laws* (2000) <http://www.praxagora.com/andyo/professional/collection_law.html> at 20 November 2003.

173 Howard Knopf, ‘The Database Dilemma in Canada: Is “Ultra” Copyright Required?’ (1999) 48 *University of New Brunswick Law Journal* 163, 180.

174 With greater database protection comes higher costs of accessing and using information, not only because firms providing access to databases seek to maximise profits, but the ultimate price will also reflect costs incurred by firms in accessing information for their own database purposes.

175 Knopf, above n 173, 170.

176 *Database Directive* arts 7(5), 8(2).

[declined to be used], the concept of incremental innovation has been forsaken'.¹⁷⁷

What is the rationale behind this prohibition against 'transformative' uses of data? There is seemingly a greater risk of market harm in disallowing 'value-adding' practices since the right-holder effectively becomes the only maker of databases within a potentially wide market sector. The only way in which the database maker is 'unreasonably prejudiced' by permitting value-added databases to flourish is that they didn't think of this value-added use themselves.¹⁷⁸

Obviously the implications for science and research purposes are immense. Even though current scientific practice involves a mix of commercial and not-for-profit databases, the traditional focus within scientific circles has been sharing of data.¹⁷⁹ In order to bolster open and collaborative research, databases are often treated as dynamic tools – each researcher adding to, or manipulating the previous scientist's work. With the intervention of a database right, this cooperative culture is effectively destroyed as it necessarily compels the privatisation of data,¹⁸⁰ even though individuals and firms may wish to provide information on a non-profit basis.¹⁸¹ The inherent burden of negotiating licences to use scientific data which results from the database right, may either slow down the scientific discovery process or discourage some scientists from constructing further databases altogether. Theoretically speaking, this may yield a contradictory outcome in that the number of research databases produced may inevitably decrease – exactly what the right was striving to conquer.¹⁸²

4 'Monopolistic Aggregations' of Databases¹⁸³

Granting a database right to makers of compilations will only exacerbate existing positions of power within the database industry. Large database companies will be able to assert their financial authority in gaining rights to information that would otherwise be freely available.¹⁸⁴ In the case of drafting the *Database Directive*, there was no apparent consultation with members from all walks of life within information society. As a result, there seemed to be no rational determination by the legislators of whether there was really a *societal* need for greater protection of databases. This can be contrasted with the present position in the United States whereby all database stakeholders have been

177 Catherine Colston, 'Sui Generis Database Right: Ripe for Review?' (2001) 3 *The Journal of Information, Law and Technology* [4.1] <<http://elj.warwick.ac.uk/jilt/01-3/colston.html>> at 20 November 2003.

178 Oram, above n 172, 11.

179 Stephen Fox, 'Joint Attorney-General's/Australian Academy of Science Workshop on Draft WIPO Database Treaty' (1997) 10(3) *Australian Intellectual Property Law Bulletin* 39, 40.

180 Yeng, 'Protecting Online Database – Part 2', above n 109, 109.

181 Stephen Maurer and Suzanne Scotchmer, 'Database Protection: Is It Broken and Should We Fix It?' (1999) 284 *Science* 1129. This logic would seem to apply to industries outside of science and academia too.

182 Ibid.

183 Knopf, above n 173, 181.

184 Ibid.

actively involved in the ‘database debate’ (thus making it more likely that a balanced outcome will result).¹⁸⁵

5 *Impact on Developing Nations*

A database right substantially strengthens the supremacy of industrialised nations in their database investment activities, which results in significantly broadening the gap between rich and poor.¹⁸⁶ In fact, a recently published report¹⁸⁷ concerning intellectual property rights and developing countries concluded that the *Database Directive* ‘goes too far in providing protection for assemblages of material and will unduly restrict access to scientific databases required by developing countries.’¹⁸⁸

6 *The Clear Absence of Any Need for a Database Right*

As mentioned earlier, there is no available evidence of any significant instances of ‘database piracy’ or any other proof of harm to makers of compilations, which justifies the imposition of a database right. The database industry has been growing rapidly and producers have enjoyed strong profits absent any *sui generis* protection.¹⁸⁹

In addition, the impetus for introducing the *Database Directive* seemed to be more about harmonising database laws throughout the EU as opposed to fulfilling any genuine demand for greater database protection. Indeed, the European Parliament’s intention was focused mainly on the free movement of databases within the bounds of the European market,¹⁹⁰ as well as providing a competitive advantage to European producers.¹⁹¹ This is really a case of legal aesthetics rather than the satisfaction of a concrete legal need. There is plainly no rational policy basis underlying the *Database Directive*.

Moreover, that the pre-eminent international intellectual property body still has its reservations about instituting a database treaty¹⁹² illustrates that legislating in the EU manner is not something to be taken lightly.¹⁹³ Indeed, reaching a

185 Al Teich, et al (eds), *AAAS Science and Technology Policy Yearbook* (2000) <<http://www.aaas.org/spp/rd/yrbk00/ch22.pdf>> at 20 November 2003.

186 Oram, above n 172, 8.

187 United Kingdom Commission on Intellectual Property Rights, *Integrating Intellectual Property Rights and Development Policy Final Report* (2002) <http://www.iprcommission.org/graphic/documents/final_report.htm> at 20 November 2003.

188 Ibid 108.

189 National Research Council, *A Question of Balance*, above n 106, [2]. See also Jean Cantrell, *Dun & Bradstreet Letter on Proposed WIPO Database Treaty* (1996) <<http://www.public-domain.org/database/db.html>> at 20 November 2003.

190 As contemplated by *Database Directive*, recitals 2, 3, 4.

191 *Database Directive*, recital 11 – note the effect of the reciprocity provision in art 11.

192 Negotiations at the WIPO level range back to 1996 and there is still no consensus.

193 Oram, above n 172, 8.

common global understanding on the ‘database dilemma’ appears to be eons away.¹⁹⁴

C Counteracting the Database Right

It is worthwhile to consider whether, despite all of the above shortcomings, the excessive degree of control and protection afforded to holders of a database right can be offset in any way. Two options are briefly examined.

1 Competition Law

The European database right regime provides scope for competition principles to apply.¹⁹⁵ In fact, prior to the commencement of the *Database Directive* the European Court of Justice prevented abuses of dominant positions in relation to a refusal to provide information.¹⁹⁶ More recently, the Netherlands Competition Authority has acted in a similar manner.¹⁹⁷

In Australia, if a database maker refused access to, or use of, the contents of their database to others wishing to create a competing product, it is conceivable that an action under s 46 of the *Trade Practices Act 1974* (Cth) may arise in respect of the maker’s possible misuse of market power.¹⁹⁸ However, it is quite unlikely that competition law will have a large role to play in the database context since such a claim is rather complex and costly. Furthermore, a database owner could defend their position by arguing that they are simply enforcing the database right and/or copyright they rightfully hold.¹⁹⁹

194 Jörg Reinbothe and Silke Von Lewinski, ‘The WIPO Treaties 1996’ (2002) 24(4) *European Intellectual Property Review* 207. A number of studies have been undertaken by the *WIPO Standing Committee on Copyright and Related Rights*. Most cast doubt on the effectiveness of the *Database Directive* and point out that there are far more problems than solutions created by this approach. Although these studies are not binding upon WIPO’s final determination, it is questionable whether WIPO will follow the European model if these criticisms are at least considered: see El-Kassas, above n 113. The Committee has recently deferred further consideration of the ‘database dilemma’ to 2004: World Intellectual Property Organisation, *Report of the Standing Committee on Copyright and Related Rights (Ninth Session)* (2003) <http://www.wipo.org/eng/meetings/2003/sccr/pdf/sccr9_11.pdf> at 20 November 2003.

195 Recital 47 of the *Database Directive* provides that ‘protection by the sui generis right must not be afforded in such a way as to facilitate abuses of a dominant position, in particular as regards the creation and distribution of new products and services which have an intellectual, documentary, technical, economic, or commercial added value’.

196 See especially *RTE and ITP v EC Commission* (1995) FSR 530 where the Court held that a refusal to licence television listings information constituted an abuse of a dominant position.

197 See *De Telegraaf v NOS and HMG*, Netherlands Competition Authority, 10 September 1998.

198 Conduct falling within s 46 does not attract the protection available to the exercise of traditional intellectual property rights under s 51(3). For more detail on how a s 46 claim may arise in the database context, see Davison, above n 147, 746; Mary Wyburn, ‘Copyright, Databases & Misuse of Market Power’ (1997) 15(1) *Copyright Reporter* 46.

199 ‘[T]o exercise in good faith an extraneous legal right, though the effect may be to lessen, or even eliminate, competition, is to take advantage of that right, not of market power’: *Warman International v Envirotech Australia Ltd* (1986) ATPR ¶40-714, 47,827 (Wilcox J). Whether this case is still valid authority or not is unclear due to the High Court’s approach in *Queensland Wire Industries Pty Ltd v Broken Hill Proprietary Co Ltd* (1989) 167 CLR 177. See Stephen Corones, *Restrictive Trade Practices Law* (1994) 189.

2 *Compulsory Licensing*

An alternative technique to allow second comers to access and make use of the contents of a protected database is through a compulsory licensing regime. Although this approach will ensure the availability of protected data while setting a reasonable fee for its use, price regulation is generally viewed to be a cumbersome mechanism in intellectual property rights settings.²⁰⁰ Furthermore, economists dispute the viability of establishing an artificial device that stifles, and lags behind, the beneficial effects of market forces.²⁰¹

3 *Concluding Thoughts*

From this succinct overview, it would certainly be preferable to introduce a more balanced database protection regime at the outset, rather than rely on a patchwork of emergency measures in an attempt to neutralise the problematic consequences of a database right.²⁰² But are there any feasible alternatives to a database right that could allow for the Australian database domain to be more appropriately regulated?

D *Alternative Avenues of Database Protection*

It is useful to briefly consider two alternative mechanisms that are current subjects of (potential and actual) database protection in the United States and adjudge whether these surrogate means are likely to make an impact on the Australian database domain.

1 *Unfair Competition*

Recent emphasis within the United States legislative arena has been placed on the possibility of creating a regime stemming from unfair competition principles in order to remedy unauthorised extraction of information held within databases.²⁰³ Unfair competition actions in the United States are based on the doctrine of misappropriation,²⁰⁴ allowing compilers of information to persecute

200 Jane Ginsburg, 'Creation and Commercial Value: Copyright Protection of Works of Information' (1990) 90(7) *Columbia Law Review* 1865, 1925.

201 Charles von Simson, 'Feist or Famine – American Database Copyright as an Economic Model for the European Union' (1994) 20(3) *Brooklyn Journal of International Law* 729, 765.

202 A compulsory licensing regime was also proposed in the context of counteracting the current scope of copyright protection afforded to Australian database makers by Sackville J in the *Desktop Appeal*. His Honour suggests that a compulsory licensing regime might appropriately reward the monopolist's labour and expense, yet leave room for innovative competitors who cannot gain access to the basic information required to establish databases of potential commercial value. Inevitably he leaves this issue to be resolved by Parliament: [2002] FCAFC 112, [428]–[429].

203 Three of the more recent United States database protection models are essentially based on unfair competition law: see *Collections of Information Antipiracy Act* HR 354, introduced into Congress on 19 January 1999; *Consumer and Investor Access to Information Act* HR 1858, introduced into Congress on 20 May 1999; *Database and Collections of Information Misappropriation Act* HR 3261, introduced into Congress on 8 October 2003. At the time of writing, none of these Bills had been enacted into United States database protection law.

204 This doctrine originated with the United States Supreme Court in the case of *International News Service v Associated Press* 248 US 215 (1918).

infringing parties when they have ‘reaped where they have not sown’.²⁰⁵ More recently, this common law action has been circumscribed by the Second Circuit²⁰⁶ to ‘hot news’ claims – whereby proprietors who have invested in the creation of time-sensitive databases can take action against those direct competitors who ‘free ride’ on the compiler’s efforts.²⁰⁷

Unfortunately, an analogous action is unavailable in Australia,²⁰⁸ even though protection for compilations on the basis of an unfair competition approach appears to be far more beneficial for database users and owners alike than a database right regime. The many definitional uncertainties inherent in the right under the *Database Directive*, for example, are overcome in a misappropriation action by focusing instead on the *type* of parasitic conduct that is most likely to cause commercial harm to the database maker. Furthermore, targeting only *direct* ‘database piracy’ allows for value-added developments to be made to existing databases by second-comers, thus avoiding the ‘chilling effect’ of the database right.²⁰⁹

However, it is highly unlikely that an Australian court will allow for a doctrine, which is unfamiliar both in scope and application in this country, to be utilised by makers of informational products any time in the near future.²¹⁰

2 *Trespass to Chattels*

There has been a recent wave of United States case law²¹¹ involving an expansion of the established ‘trespass to chattels’ principle to allow for protection of electronic databases against wrongful interference by means of competitors’ use of web spiders.²¹² However, it is questionable whether stretching this doctrine into the realm of cyberspace is appropriate, both in a legal and practical sense.²¹³

Legally speaking, finding that a database owner holds a possessory interest in the processing power of its computer server is arguably quite a tenuous application of the traditional ‘trespass to chattels’ doctrine.²¹⁴ Moreover, as the Court in *TicketMaster Corp, et al v Tickets.com, Inc* found at first instance, it is

205 Ibid 239–40.

206 See *National Basketball Association v Motorola, Inc* 105 F 3d 841 (2nd Cir 1997).

207 Ibid 845.

208 See especially *Moorgate Tobacco Co Ltd v Philip Morris Ltd* (1984) 156 CLR 414, 445–6 (Deane J).

209 US Copyright Office, above n 73, 85.

210 It is even more questionable whether, despite claims to the contrary, the law of unjust enrichment can be expanded to such an extreme as to afford protection to database owners for the unauthorised appropriation of data by infringers. See Brian Fitzgerald and Leif Gamertsfelder, ‘A Conceptual Framework For Protecting the Value of Informational Products Through Unjust Enrichment Law’ (1997–1998) 16 *Australian Bar Review* 257.

211 *eBay v Bidder’s Edge* 100 F Supp 2d 1058 (ND Cal, 2000); *TicketMaster Corp v Tickets.com, Inc* (Unreported, US District Court, Central District of California, Hupp J, 6 March 2003); *Register.com, Inc v Verio, Inc* 126 F Supp 2d 238 (SDNY, 2000).

212 See generally Mark Evans, ‘Protection of Data on the Internet’ (2002) 6(1) *Intellectual Property Quarterly* 50.

213 Laura Quilter, ‘The Continuing Expansion of Cyberspace Trespass to Chattels’ (2002) 17(1) *Berkeley Technology Law Journal* 421.

214 Ibid 438.

difficult to see how ‘entering a publicly available website could be called a trespass, since all are invited to enter’.²¹⁵

From a practical perspective, permitting online database owners to sue on this basis has, at least in some of the United States applications considered thus far, inhibited the use of ‘electronic agents’ to produce valuable transformative products adapted from the protected compilation for the benefit of the broader online community.²¹⁶

Australian courts have yet to grapple with an online ‘database piracy’ claim framed in these terms, but it is hoped that if such a case were to arise, our judicial members would recognise that ‘what is being attempted is to apply a medieval common law concept in an entirely new situation’.²¹⁷

E Conclusions – Should We Follow the Europeans?

As a result of the discussion in this Part, it is evident that the European model of database protection provides far from a perfect solution to combat the perceived threat of ‘database piracy’. The database right, a measure focused solely on the protection of compilations of information, is not more sophisticated, coherent or well developed than the existing legal regimes. It has instead left many gaps in its wake that theoretically require filling by further judicial interpretation, legislative amendment or ‘band-aid measures’, such as competition principles or compulsory licensing. The database right has been identified by its critics to be a ‘monstrous caricature of true intellectual property law’,²¹⁸ which represents a ‘low point in the history of intellectual property law’.²¹⁹ Not only does Australia not require a database right,²²⁰ it should not desire one.

III DATABASE RIGHT OR DATABASE WRONG? – PRACTICAL IMPLICATIONS

A Introduction

The discussion in the preceding Part has clearly demonstrated that, at least on a conceptual level, Australian legislators should avoid treading down the perilous path of database protection that the Europeans have chosen. Despite reaching this

215 *TicketMaster Corp v Tickets.com, Inc* (Unreported, US District Court, Central District of California, Hupp J, 27 March 2000).

216 For instance, in both *eBay v Bidder’s Edge* 100 F Supp 2d 1058 (ND Cal, 2000) and *TicketMaster Corp v Tickets.com, Inc* (Unreported, US District Court, Central District of California, Hupp J, 27 March 2000), ‘the spiders arguably provided a useful service to the public by aggregating data from multiple services and providing cost-comparison information to consumers’: Quilter, above n 213, 436.

217 *TicketMaster Corp v Tickets.com, Inc* (Unreported, US District Court, Central District of California, 6 March 2003).

218 Reichman and Samuelson, above n 156, 164.

219 Ibid.

220 Especially if the originality standard in copyright remains at its current ‘sweaty’ level.

conclusion, it is useful to determine whether the many theoretical disadvantages of instituting a database right in this jurisdiction would still apply in practice.

This Part concerns an examination of some of the practical consequences flowing from an application of the database right in a number of key commercial industries. Such an inquiry will prove not only that the right creates undue complexities for the efficient functioning of these markets, but it will also be clear that a European-style approach is simply unnecessary in Australia in light of the existing protections supporting the multiplicity of available databases.

Furthermore, many producers of compilations that are found within these commercial industries tend to reutilise a substantial amount of 'public good' data, and it is in its application to these kinds of databases in particular, that the database right creates the greatest damage – an unnecessary depletion of information that commonly forms part of the public domain.

It is beyond the scope of this article to analyse the practical effect of the database right on non-commercial sectors (or those partly commercialised), such as scientific research disciplines. Given the range of practical complexities and absurdities ensuing from a 'property-ising' of data in commercial industries (as discussed further below), it is reasonable to assume that these problems are magnified in a non-commercial setting where there is a greater degree of public interest at stake. Furthermore, the concerns of database makers in research and scientific fields need to be considered in the broader context of the impact of commercialisation and intellectual property laws generally on their well-established collaborative database traditions.²²¹

B Compilations in Commercial Industry – Can A Database Right Be Accommodated?

Before examining an assortment of databases used in certain commercial sectors, it is useful to envisage compilations generally, along a continuum.²²² At one end of the database spectrum lie the extremely basic amalgamations of data, while at the other end of the scale are the more sophisticated databases.²²³ Ordinarily, a greater range of protective measures are at the disposal of makers of more complicated databases than there are for producers of simpler aggregations of data, although the current Australian standard of originality ensures that most of these basic databases receive copyright protection if sufficient effort has been put into them.

Even if Australia were to adopt a more 'creative' originality standard, it will be seen that, some form of protection would nevertheless be available for most simple compilations of data. Indeed if a 'creative' standard prevailed, for the

221 See, eg, the websites of the American Association for the Advancement of Science's Scientific Freedom, Responsibility and Law Program <<http://www.aaas.org/spp/sfrl/about.shtml>> at 20 November 2003; Center for the Public Domain <<http://centerforthepublicdomain.org/>> at 20 November 2003.

222 Imagining databases along a 'protective scale' will assist in analysing the practical ramifications of introducing a database right into Australian industry.

223 John Conley, et al, 'Database Protection in a Digital World' (Symposium 1999) 6(1) *Richmond Journal of Law and Technology* [96] <law.richmond.edu/jolt/v6i1/conley.html> at 20 November 2003.

most part it seems that only those databases consisting of *raw public data* would be devoid of any degree of protection.²²⁴

Introducing intellectual property law in the form of a database right raises the issue of whether these unprotected, ‘synthetic’²²⁵ compilations lying at the extreme end of the database spectrum are actually deserving of attaining ‘legal exclusivity’. In considering this issue one should bear in mind that the aim of any intellectual property regime is to achieve an equitable balance between the granting of an exclusive right and allowing for legitimate access to and use of the protected material.²²⁶

Mention has already been made that under the database right, due to the extremely broad definition of a ‘database’ as well as the expansive effect of the notion of ‘substantial investment’, most arrangements of data (including compilations of raw information) are susceptible to insulation from the public domain. Within any sector, database makers who extract and reutilise a ‘substantial part’ of such data sets would fear reprisal from monopolists holding the right to these ‘essential informational inputs’.²²⁷

Moreover, (and only if the monopolist so allows) these database makers would be required to obtain licences for each subsequent extraction and/or reutilisation of the protected compilation. The impropriety of negotiating such licences in a commercial setting, where information is processed in considerable amounts on a daily basis, is obvious. As mentioned previously, this ridiculousness is exacerbated in a not-for-profit environment whereby database makers and users alike tend to operate on a cooperative basis in order to aggregate available knowledge for the broader social interest.

Furthermore, as discussed earlier, because the conferral of a database right necessarily protects both the underlying data within the database and the database itself,²²⁸ potentially *any* subsequent reuse of the monopolist’s information will constitute infringement. This ‘property-ising’ of basic data yields ridiculous and onerous consequences for second-comers when considered in a practical sense.

It is pertinent to examine how some of these negative repercussions from instituting a database right would arise in a selection of sectors, namely the travel, finance, health, entertainment and sports industries. A number of commonly used databases will be examined,²²⁹ ranging from the simple to the more advanced combinations of data.

224 Although the original source of these compilations, such as the Bureau of Meteorology in the introductory hypothetical, can always exploit non-legal measures to secure protection (or even allow re-utilisation of its data on the condition that a licence is obtained by the second-comer).

225 See above n 151.

226 Colston, above n 177, [3].

227 David, above n 169, 25.

228 Since the database right focuses on the level of investment or ‘sweat’ expended by makers of compilations, and protection is awarded for this investment (and not merely the arrangement of it). See earlier discussion in Part II.

229 This list is not intended to be exhaustive, but merely representative of the sheer variety of databases within this industry.

1 *Schedule of Arrival and Departure Times*

Compilations of transportation times in the travel industry clearly contain ‘synthetic’ data, and it seems that these databases are presently unprotected.²³⁰ If, for example, an astute database maker were to aggregate the departure times of all interstate buses travelling between major towns in New South Wales into a comparative traveller’s compilation, a database right would entitle the individual bus companies to demand either a licence fee for the continued reutilisation of their data sets by the second-comer, or to sue the maker for infringement.

2 *Television Guide*

Schedules of programs to be broadcast on commercial, national and pay TV are published in a variety of mediums and such information is typically treated as falling within the public domain. If such public data became ‘property-ised’ under the database right, the various broadcasters would effectively be entitled to assert ownership of that part of the television guide pertaining to their respective programming information, and could authoritatively require publishers of such data to gain permission in order to further extract and reutilise such information.

3 *List of Sports Statistics*

Copyright has been held to subsist in a chronological list of football fixtures,²³¹ however simple schedules of sports scores (such as a list of results from the latest round of English Premier League matches) or league tables (outlining the current standing of teams or individual players within their respective sporting disciplines) have typically been considered to contain ‘synthetic’ data. If a database right were exploited in this regard, providers of this information would be required to obtain a licence from the relevant sporting association in order to further use and publish such data legitimately.

4 *Compilation of Financial Data*

Financial databases comprising of information that has been significantly manipulated²³² are often protected by copyright, contract or technological measures. Yet basic lists of daily share prices or exchange rates (such as those schedules published in the *Sydney Morning Herald*) are generally accepted to form part of the public pool of information.²³³ Under a database right, commercial providers of such data would seemingly need to gain approval from the Australian Stock Exchange (for share prices), and the Australian foreign

230 Although it is arguable that following the *Desktop Appeal*, the original sources of such data may be able to assert their entitlement to copyright protection of such works.

231 *Football League Ltd v Littlewoods Pools Ltd* [1959] 1 Ch 637.

232 To provide, perhaps, specific market analyses for foreign currency investors. See, eg, the myriad of currency-related databases found within OANDA’s website, <<http://www.oanda.com>> at 20 November 2003.

233 Numerous sources of such financial data can be found online. See, eg, [tradingroom.com.au](http://www.tradingroom.com.au) <<http://www.tradingroom.com.au/markets/>> at 20 November 2003.

exchange market or its chief regulator, the Reserve Bank of Australia (for foreign exchange rate data) in order to continue these database practices.²³⁴

5 *Database of Health-Related Information*

Compilations featuring detailed commentary on health and medical issues,²³⁵ are likely to attain copyright protection.²³⁶ More complex computerised databases allowing the capture and manipulation of patient-specific data,²³⁷ would typically be provided by database makers on a subscription basis. Should this degree of protection extend to a simple catalogue of relevant vaccinations for travel to particular countries around the world, or to a list of current 'health alerts' worldwide relating to recent outbreaks of disease? If a database right were in force, Australian producers of such databases, such as *The Travel Doctor* website,²³⁸ would arguably need to consult the World Health Organisation in order to lawfully continue providing this type of 'synthetic' information.

6 *Accommodation Guides*

An abundance of accommodation catalogues are available for use by all segments of the travel market, ranging from comprehensive nationwide guides such as the NRMA's online accommodation service, to lists of the finest hotels in a particular capital city. These compilations are typically protected by copyright law due to the degree of creative effort expended in selecting the individual entries of hotels, motels, hostels, caravan parks, or bed-and-breakfasts that make up the database. Given this degree of protection, it is highly unlikely that a database right is necessary in this context.

It is worth noting that compilers of accommodation databases may, *in some cases*, be obstructed from creating these online compilations by virtue of the communication right²³⁹ under the *Copyright Act*. If, for instance, a second-comer arranges a list of links to various accommodation websites within Australia, or displays this external accommodation content within its own frames, these acts may well amount to infringement of the copyright owners' exclusive right to

234 Under the database right, each subsequent list of prices and rates would qualify for protection, since the contents of the database have been substantially changed (ie, yesterday's share prices and exchange rates are different from today's): see *Database Directive* art 10(3).

235 See, eg, Medical Online's medical database, <<http://www.medicalonline.com.au>> at 20 November 2003.

236 Presumably even under a 'creative' copyright regime, a sufficient degree of intellectual creation has been employed in the selection of the data.

237 Such as those customised databases produced by eMEDedit, Inc <<http://www.emedit.com>> at 20 November 2003.

238 The Travel Doctor – Traveller's Medical & Vaccination Centre <<http://www.tmvc.com.au>> at 20 November 2003.

239 See *Copyright Act 1968* (Cth) ss 31(1)(a)(iv), 31(1)(b)(iii), 85(1)(c), 86(c), 87(c). 'Communicate' is defined to mean 'make available online or electronically transmit (whether over a path, or a combination of paths, provided by a material substance or otherwise) a work or other subject-matter': s 10(1).

'make available online' its accommodation material.²⁴⁰ Although an absence of Australian authority on this subject makes precise interpretation of the scope of this right difficult, the communication right nevertheless creates a further stumbling block for creators of value-added online compilations.

7 *Index of Personal Information*

Lists of customer details held by travel agents and transport operators (such as Qantas' index of frequent flyer members) or a compilation of client-related data held by a financial services provider (such as Macquarie Bank's database of subscribers to its newest fixed interest product) are valuable business informational assets. In the medical field, databases containing patient-related information (such as data relating to medical history) are considered key to facilitating medical treatment. Such compilations containing personal data are currently subject to the law of confidential information and are also regulated by the national privacy principles under the *Privacy Act 1988* (Cth). It is therefore difficult to conceive of any useful role that the database right may play in this context.

8 *An Electronic 'Booking Agent'*

Full-service travel reservation databases are found at the most complex end of the imaginary database spectrum. Computerised systems, such as those engineered by specialist travel software companies Galileo and Sabre, allow travel service providers to access and utilise a plethora of travel-related databases. Available compilations range from lists of current airfares, catalogues of cars available for hire from rental companies, directories of hotels and lists of their current seasonal rates, and even marketing databases that can be tailored to the particular agency's needs.²⁴¹ These databases are currently protected through a range of legal, technological and market solutions. For instance, software is provided on a subscription basis allowing the major database producers to rely on contract law as a primary avenue of protection for their multitude of compilations. In addition, travel agencies can encrypt their marketing databases to secure valuable client and business data from potential abuse. A database right would only disturb the rich combination of mechanisms presently available.

9 *Concluding Thoughts*

The aim of this analysis has been to show the incongruous nature of the database right in a range of commercial industries. As a result of this overview, it

240 Section 22(6) of the *Copyright Act 1968* (Cth) provides that 'a communication other than a broadcast is taken to have been made by the person responsible for determining the content of the communication'. Arguably the compiler providing the links is responsible for 'determining the content' of the material to which the link takes users: see generally Ross McLean and Anne Flahvin, 'Aspects of the New Right to Communicate' (Paper presented at the University of New South Wales Continuing Legal Education Conference, Sydney, November 2000).

241 For a good overview of available compilations see Sabre Travel Network <<http://www.sabretravelnetwork.com>> at 20 November 2003 or Galileo <<http://www.galileo.com>> at 20 November 2003.

is evident that the development and maintenance of database use within such industries would only be burdened by a property right in compilations. Makers of refashioned and value-added databases would be wary of continuing their crusade, as each unit of information becomes the property of the first-comer. Similarly, those providing purely 'synthetic' databases for the benefit of the general public will be unnecessarily impaired by the demands of natural monopolists of such essential information infrastructure.

Aside from these hampering effects, it is clear that the database right adds nothing of value to the schema of protections already available. In fact, makers of compilations consisting of more than just raw sets of data²⁴² should not be alarmed by a perceived lack of legal protection for databases, as promulgated by the database right activists. For the most part, these databases are capable of protection by other legal and non-legal mechanisms.

C Conclusions – What Should We Do?

More than perhaps any other commodity, data must be allowed to move without barriers in order to allow the world economy to grow in the most efficient manner possible.²⁴³

By continuing to afford copyright protection for 'sweaty' compilations, Australian courts have created an undesirable state of database regulation in this country for the 21st century. As exemplified by the outcome in the *Desktop Appeal*, and further reinforced by the High Court's rejection of Desktop Marketing Systems' application for appeal, our present database protection regime unnecessarily and unjustly impedes the production of useful value-added informational products that build upon and transform existing combinations of data for the benefit of the wider community. Our current copyright scheme also suppresses the free flow of data throughout society by effectively insulating, from the public domain, basic information upon which both individuals and businesses heavily rely for much of their development. The low standard of Australian originality conflicts with the basic policy foundations upon which copyright law exists, and leaves Australia in a disharmonious position in comparison to the prevailing 'creative' level at which most of the other copyright jurisdictions operate.

Yet the alternative approach put forward by our friends in the North only exaggerates the database problems we currently face. Legislation under the *Database Directive* results in protection being awarded for an almost limitless array of compilations, for practically a limitless amount of time. European database makers are now endowed with one of the strongest intellectual property rights ever created without there really being any empirical justification for doing so. As we have seen from our brief observations of database practice within commercial industry, even if our copyright standard was more 'creatively'

242 Indeed, makers of raw compilations, such as the Bureau of Meteorology, should have little to worry about also, since the current 'sweaty' copyright standard would extend protection to most of these works anyhow.

243 von Simson, above n 201, 768.

aligned there are no apparent benefits of introducing a database right into Australia's legislative arsenal, nor are there any reasons to do so given the rich assortment of legal and non-legal weapons at a database maker's disposal.

If the development of a legislative database regime is on our Parliament's agenda, any measure created should only be aimed at those 'free-riders' who copy a database, slightly repackage it and offer it to the public in direct competition with the database maker. As a result, database protection should be limited to situations of 'wholesale theft' or 'blatant database piracy' where unlawful reproduction has threatened the existence and reputation of the original database.²⁴⁴

In other words, legislation should only target those databases that unduly interfere with the normal business practices of the first database maker 'without bringing a commensurate benefit to the public',²⁴⁵ but not those databases that are transformed into something new and useful. The principle of 'what is worth copying is prima facie worth protecting'²⁴⁶ cannot be accepted as a realistic indicator for liability in today's database market. 'Business developments in competitive economies have always turned in large measure upon the borrowing of ideas: intellectual property ... must be restricted to those exceptional cases where the borrowing is unequivocally parasitical.'²⁴⁷

Construing database protection in these terms requires a consideration of the types of antagonistic behaviour that would amount to database abuse. As we have seen, the *Database Directive's* acts of 'extraction' and/or 'reutilisation' are much too broad and encompass most commercial database reapplications. Perhaps liability could be imposed for the limited class of databases which 'reap without sowing', and directly impinge upon the producer's market without adding any transformative value, on the basis that the competitor's database is 'confusingly or misleadingly similar' to the original maker's product.²⁴⁸

Nevertheless, the issue of whether, and if so how, the Australian Parliament approaches the 'database dilemma' must be put to one side of practitioners' minds when considering the present reality. The effect of the database right must be recognised, even in Australia, when giving legal advice in respect of databases. Documents concerning the transfer of ownership of a database (such as licences or assignments) must refer to both copyright *and* the database right, to account for potentially divergent stakeholders claiming these rights. In addition, the database right must obviously be taken into account when providing advice

244 Maurer, Hugenholtz and Onsrud, 'Europe's Database Experiment', above n 151, 790.

245 Ginsburg, above n 200, 1897. This is an analogous approach to how copyright law seemingly functioned in the 1800s, whereby copyright infringement was examined in a broader social context, allowing 'value-added piracy' where it was of benefit to the public. See, eg, *Mawman v Tegg* (1826) 38 ER 380; *Spiers v Brown* (1858) 6 WR 352.

246 *University of London Press Ltd v University of Tutorial Press Ltd* [1916] 2 Ch 601, 615.

247 William Cornish, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (1999).

248 It is beyond the scope of this article to formulate, with any precision, a reform proposal for database protection legislation. It is merely suggested that a liability model based loosely on these terms would be preferable to a property rights approach, if Australian legislators determined that it is necessary to introduce some form of database law into this jurisdiction.

on alleged cross-jurisdictional database infringement (involving databases produced within those nations that have subscribed to a database right).

In terms of legal advice for our hypothetical Jim, although his weather database does not infringe any database right per se, if any of his other applications of data (published on his travel website) are taken from European compilations, Jim may have potentially abused database rights. With the overreaching effect of the *Database Directive*, it is imperative to give Jim as comprehensive legal advice as possible, and in the present climate the most sensible (albeit conservative) advice for Jim would be not to make further extractions and reutilisations of *any* data whatsoever without first obtaining consent to do so. This, unfortunately, is the grim reality that all database makers presently face.