

REVISING CANADIAN DATABASE PROTECTION: WHAT LESSONS FROM EUROPE?

David Freedman*

Oxford

We must take care to guard against two extremes equally prejudicial; the one, that men of ability who have employed their time for the service of the community, may not be deprived of their just merits, and the reward of their ingenuity and labour; the other, that the world may not be deprived of improvements, nor the progress of the arts be retarded.

- LORD MANSFIELD C.J.¹

We must stop thinking of intellectual property as an absolute and start thinking of it as a function — as a process, which, if it is to be successful, must meet diverse aims: the assurance of a fair reward to creators and inventors and the encouragement of research and creativity, on the one hand; and on the other hand, the widest possible dissemination of the ideas and products of which the world, and all the individuals in it, have great need.

- McLACHLIN C.J.C.²

The legal treatment of collections of factual information presents problems for the law of copyright. There are three main problems for law-makers charged with revising protections: little economic analysis of existing or possible models; loss of access to data and markets due to maintaining proprietary interests; and a greater explicit acceptance of unfair competition doctrine as a result of the implementation of sui generis proprietary rights. Notwithstanding these difficulties, and a dispiriting lack of momentum towards harmonized legal treatment of databases at the international level, the protection of databases is very much on the agenda in the revision of the Canadian Copyright Act and difficult decisions will have to be taken soon. Canadian law-makers could benefit from the valuable lessons learned in the context of the European two-tiered approach to the protection of original and unoriginal databases.

Le traitement juridique de collections de données factuelles soulève des problèmes de droit d'auteur. Les juristes chargés de réviser la protection de ces données font face à trois problèmes principaux : le peu d'analyse économique de modèles existants ou possibles; la perte d'accès aux données

* David Freedman, Fellow & Tutor in Law, St Peter's College and CUF University Lecturer, of the Faculty of Law, University of Oxford, Oxford, United Kingdom.

¹ *Sayre v. Moore* (1785, KB), cited in *Cary v. Longman* (1810), 102 E.R. 138, 139-140 at fn(b) (KB, per Lord Kenyon C.J.).

² "Intellectual Property — What's It All About?", in G. Henderson (Ed), *Trade-Marks Law of Canada* (Toronto: Carswell, 1993), 397. Cited with approval by Linden JA. in *Pink Panther Beauty Corporation v. United Artists Corporation* [1998] 3 F.C. 584 (Fed. C.A.) at para. 17.

et aux marchés en raison d'intérêts propriétaires; l'acceptation plus grande et explicite d'une doctrine de compétition déloyale découlant de la mise en œuvre de droits propriétaires sui generis. Malgré ces difficultés, et malgré le fait, décourageant, que le traitement juridique harmonisé des bases de données soit en perte de vitesse au plan international, la protection de telles bases occupe une très bonne place dans l'ordre du jour de la révision de la Loi canadienne sur le droit d'auteur; des décisions difficiles devront être prises bientôt. Le législateur canadien pourrait tirer profit des précieuses leçons qui se dégagent de la double approche européenne à la protection de bases de données originales et non originales.

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Introduction

The legal treatment of compilations presents problems for the law of copyright, and this is especially true in respect of electronic collections of factual information. Institutional complications arise in respect of the tests employed in determining subsistence of copyright. Whether framed as a creativity-based standard or arising on the investment of "labour, skill or judgment" in either collection or presentation of contents or some combination thereof, these tests are notoriously difficult to apply. There are also concerns in respect of the

³ Directive 96/9/EC of the European Parliament and Council of 11 March 1996, on the legal protection of databases, [1996] O.J. L028/11.

copyright protection of the contents of such compilations; if copyright subsists in such subject-matter, there is thought to be a real risk of independent proprietary protection inadvertently extending to data itself. Notwithstanding the complex nature of the problems, and a dispiriting lack of momentum towards harmonized legal treatment of databases at the international level,⁴ the protection of databases is very much on the agenda in the revision of the Canadian *Copyright Act*⁵ and difficult decisions will have to be taken soon.

There are three main problems which face law-makers tasked with revising present protections: first, and given that the public policy justification for protection is an intrinsically economic one, there is little in the way of empirical economic analysis to aid in considering the effect of existent or revised legal models on new and emerging industries. Determining the level and scope of optimal protection through the dominant economic incentive paradigm becomes a very uncertain business. Second, the implications of maintaining proprietary interests in such collections may yield unwanted secondary effects and result in over-containment of data, with negative implications for access to data and markets alike. Recent studies indicate that this is of particular concern in respect of data used in scientific research. Third, whilst *sui generis* rights in such subject-matter may avoid the imperfections of an overly-robust proprietary approach, such a model may require a greater explicit acceptance of unfair competition doctrine than has hitherto been the case.

As a threshold matter, I would suggest that databases are indeed subject-matter that are worthy of protection and, further, that revision of the *status quo* is desirable. The present regime makes available an uncertain degree of protection through the law of copyright. It features high administrative and transactions costs in non-optimized security expenditures in the form of technological mechanisms and legal costs, risks over-containment through overly restrictive contractual arrangements that must be litigated elsewhere where dominant market positions are abused, and

⁴ Notwithstanding the adoption of the *status quo* in Article 5 of the WIPO Copyright Treaty, the protection of databases is still a matter being discussed by the WIPO Standing Committee on Copyright and Related Rights (S.C.C.R.) and was last spoken to at the 7th session in May, 2002; WIPO Doc. S.C.C.R./7/10. The proposal still at the heart of the discussions is the "Basic Proposal for the Substantive Provisions of the Treaty on Intellectual Property in Respect to Databases;" WIPO Doc. CRNR/DC/6 (1996). One study submitted for consideration during the 7th session considered the economic implications of database protection primarily in developing countries was encouraging of protection from an economic perspective, but was largely narrative and offered no new empirical analysis; see Y.M. Braunstein, "Economic Impact of Database Protection in Developing Countries and Countries in Transition;" WIPO Doc. S.C.C.R./7/2. Database protection remains on the S.C.C.R. agenda for continuing consideration.

⁵ The protection of databases is expressly within the Canadian government's plans for copyright reform; see *A Framework for Copyright Reform*, available online at: <http://strategis.ic.gc.ca/SSG/rp01100e.html>.

allows for obscured judicial policy-making in determining questions of subsistence of copyright. A revised regime should aim to take better account of the economic implications of protection (but avoid any temptation to import economic considerations directly into legal models, obviating the need to turn judges into economists for the purposes of doctrinal development), be more transparent in its construction and development of policy, allow for socially desirable access that is not market-driven, be constructed with a view to international harmonization, and, be sensitive to Canadian legal traditions. I am conscious of the fact that it may seem somewhat awkward to advocate a nationalist agenda within a paper that considers the utility of comparative sources and experience, but I suggest that Canadian policy-makers should take care not to allow the questions for decision to be framed in terms of the policy preferences that dominate elsewhere, particularly in respect of American conceptions of 'fair use' rights.

The position advocated here is that Canadian law-makers ought to have close regard for the recent European experience in the protection of both original and unoriginal databases under the E.U. *Database Directive*, which makes available both a copyright in databases and a non-proprietary *sui generis* "database right". Though developed in Europe in a somewhat haphazard way, and implemented problematically, the idea of a two-tiered system seems an attractive one. Such an approach has the capacity to differentiate between compilations that are truly the result of a principled view of authorship and worthy of full copyright and accompanying moral rights, and compilations that are less-worthy but still protectable based on the sufficiency of the investment of labour and resources expended in their creation (much as is done in present circumstances through pragmatic constructions of originality in determining subsistence of copyright). Provided that these *sui generis* rights are carefully balanced with appropriate public interest permissions and defences (and perhaps subject to mandatory licensing provisions in respect of single-source data as well), it is my suggestion that a suitable two-tiered regime could be a desirable way forward both to better protection of databases in Canada, and, perhaps of equal utility, to the reawakening of presently dormant negotiations towards internationally harmonized treatment through a WIPO-administered Database Treaty on the same basis.

I. Of Protection and Access: Describing The Public Interest Justifying Protection of Databases

The subject-matter at issue here is sometimes referred to using the various terms of art that dominate in a given intellectual property law system — *compilations*, *tables*, or *catalogues* for example — but should be regarded in a more generic sense when considering the public interest in legal protection. For the purposes of this discussion, it may be easiest to refer to the generalized definition of a database as set out in the E.U. Database Directive: "a collection of independent

works, data or other materials arranged in a systematic or methodical way and individually accessible by electronic or other means.”⁶ Databases, then, need not be digitized works in electronic form (the modern association) but may include collections of information in print. At the same time, however, it is the modern technological environment that has changed the situation profoundly; digitization has given the database maker the ability to maintain comprehensiveness of contents at the same time as preserving continuing access to the work in a way that is new, and has made databases an important economic commodity as a result. That business people and individual users recognise the utility of such information resources is evidenced by the size of the database market; observers estimate the global database industry at tens of billions of dollars per year, with no good reason to think that both commercial and private interest in databases will do anything but increase in the future.⁷ In general terms, then, the justification for protection is intrinsically an economic one. Databases are expensive to create, expensive to verify as accurate, expensive to maintain as comprehensive, expensive to gain access to by consumers, but quite cheap to copy (especially in electronic form). The economic value of the work naturally produces a strong desire both to protect the investment of resources expended in its creation against misappropriation, and, at a broader level, to encourage the creation of new wealth through the production of more such works. At the same time, protections constructed to achieve these goals need to be balanced against interests in preserving adequate access to, and use of, the work based in the public interest. This question of balance between protection and other interests is as foundational in intellectual property law as elsewhere. Indeed, and notwithstanding the trend in recent years to ever-strengthening rights, I would suggest that it is as mother’s milk for intellectual property lawyers to accept that perpetual intellectual property protection does not yield new stores of intellectual property perpetually any more than does a greater volume of intellectual property law result in more intellectual property (though it probably does produce more intellectual property lawyers). In this section, I would like to set out briefly the nature of the considerations relevant to law-makers undertaking this balancing exercise.

A. *The General Economic Paradigm and the Economics of Databases*

With apologies to the well versed, it is helpful to begin by restating in broad terms the classical economic incentive paradigm underlying much of intellectual

⁶ E.U. Directive 96/9 *on the legal protection of databases*, [1996] O.J. L77/20, Recital 17. Whether this is a desirable definition for the purposes of defining doctrine is another matter.

⁷ L.D. Tyson and E.F. Sherry, “Statutory Protection for Databases: Economic and Public Policy Issues” (Commissioned Study Prepared for the Law and Economics Consulting Group, 1997).

property law.⁸ Indeed, this welfare-economics approach tends to dominate contemporary approaches to copyright.⁹

Proceeding from the basic assumption that intellectual property, or *information goods* as the economic literature would prefer, is generally more valuable when in the hands of consumers than producers, the goal of policymakers is to construct and maintain a system which enables such goods to be traded successfully in the market. Trading these goods allows producers to recoup investment, and competition between rivals leads to an optimally efficient market. In such an optimal market, supply and demand reach an equilibrium price which alone drives production such that an optimal number of information goods are created using an optimal amount of the finite resources that may be made available for such purposes. In such optimal conditions, the market is self-regulating and there is no need for regulatory intervention.

The difficulty faced by those dealing with information goods is primarily attributable to their intangible nature. The distribution and consumption of such goods does not diminish their availability and does not result in scarcity; they are *non-excludable*¹⁰ and *non-rival*.¹¹ This public goods character of intellectual property results in a situation whereby the fixed cost of independent creation tend to be very high, but the cost of reproduction and distribution tend to be very low — thus providing a strong incentive for rivals to ‘free-ride’ on the producer’s investment of resources rather than invest independent resources to create these same goods or pay license fees to the producer. Where the good is appropriated without payment by such a free-rider and a copy is made available

⁸ There are a wide range of sources with much ongoing scholarship. The classic piece is K. Arrow, “Economic Welfare and the Allocation of Resources for Invention” in *The Rate and Direction of Inventive Activity* (N.B.E.R. No. 609, 1962), reprinted in P. Drahos (Ed.), *Intellectual Property* (Aldershot: Ashgate Dartmouth, 1999), 5. See also R. Posner, *Economic Analysis of Law* (Boston: Little, Brown, 1986), ch. 3.

⁹ The most influential argument continues to be W.M. Landes and R.A. Posner, “An Economic Analysis of Copyright Law” (1989), 18 J.L.S. 325. For an introduction to the subject, see also R. Watt, *Copyright and Economic Theory: Friends or Foes?* (Cheltenham: Edward Elgar Publishing, 2000); R. Towse, “Copyright as an Economic Incentive” (1997), 5 Hume Papers on Public Policy 32; C. Kuboldt, “Intellectual Property and Optimal Copyright Protection” (1995), 19 J. of Cultural Econ. 131. Robert Merges has been influential in emphasising the institutional framework in which intellectual property rights exist and expanding the types of considerations that are brought into the analysis: “Intellectual Property Rights and the New Institutional Economics” (2000), 53 Vanderbilt L.R. 1857, 1877; “The Economic Impact of Intellectual Property Rights: An Overview and Guide” (1995), 19 J. of Cultural Econ. 103.

¹⁰ Once the good is produced, producers cannot exclude others from being benefited by it.

¹¹ There is no cost incurred in producing an additional good. Thomas Jefferson’s analogy is widely referred to in the literature: “Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instructions himself without lessening mine; as he who lights his taper at mine, receives light without darkening me;” *The Writings of Thomas Jefferson* (Washington, Thomas Jefferson Memorial Association, 1905), 13:326-338, quoted in S. Vaidhyathanan, *Copyrights and Copywrongs* (N.Y.: New York University Press, 2001), 24.

for sale, the producer of the good faces competition in which the rival's sale price reflects only the marginal costs of reproduction. If the producer must lower her price to compete with the free-rider, the producer will not be able to recoup the investment in production. If the producer doesn't lower her price, she recoups none of the investment and any incentive to produce evaporates. This causes market failure. Thus, the allowance of 'free-riding' is highly undesirable as it disturbs the self-regulating market preventing optimal efficiency being achieved.

The ease by which information goods can be appropriated by a rival gives rise to two welfare losses — under-production (through lack of sufficient market pressure) and under-utilization (where the price charged is not sufficiently attractive to consumers). These effects can be addressed through regulation,¹² either in the form of direct or indirect subsidy¹³ (thus lowering the producer's fixed costs and transferring the cost of free-riding to consumers as a whole) or through the legal enforcement of some form of temporary monopoly in the form of property rights.¹⁴ The dominant approach is to prefer the latter over the former, although there are dissenting voices¹⁵ (and have been for some time).¹⁶

Monopolies (created through property rights) give the producer the power to charge a supra-market price and to slow the dissemination of these goods in the market.¹⁷ The strength of the right is important as the fixed costs of potential

¹² Gallini and Scotchmer have recently presented a useful summary of the options with reference to the economics literature; see N. Gallini and S. Scotchmer, "Intellectual Property: When is it the best incentive system?" forthcoming in A. Jaffe, J. Lerner and S. Stern (Eds.), *Innovation Policy and the Economy*, Vol. 2 (M.I.T. Press). The concentration is on patent protection.

¹³ Subsidy systems are advocated by some economists. For example, S. Shavell and T. Van Ypersele, "Rewards Versus Intellectual Property Rights" (2001), 44 J. of Law and Econ. 525, who suggest that a reward system, whereby innovators are paid for innovations directly by the government (possibly on the basis of sales) and where their innovations pass immediately into the public domain would be more efficient than a system of monopoly rights. Given the impracticalities, they suggest an optional reward system be developed.

¹⁴ P.A. David, "A Tragedy of the Public Knowledge 'Common'? Global Science, Intellectual Property and the Digital Technology Boomerang" (SIEPR Discussion Paper 00-02, 2000), 2.

¹⁵ H. Demsetz, "Information and Efficiency: Another Viewpoint" (1969), 11 J. of Law and Econ. 1; S. Breyer, "The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies and Computer Programs" (1970), 84 Harv. L.R. 281; A.C. Yen, "The Legacy of Feist: Consequences of the Weak Connection between Copyright and the Economics of Public Goods" (1991), 52 Ohio State L.J. 1343.

¹⁶ A. Plant, "The Economics of Copyright" (1934), *Economica* 167.

¹⁷ This description is admittedly crudely drawn. I have not included, for example, consideration of price discrimination to mitigate against the negative effects of deadweight loss. These issues are covered admirably elsewhere. See, for example, J. Putnam, "Copyright and the New Economy" forthcoming in J. Putnam (Ed.) *Intellectual Property and Innovation in the Knowledge-Based Economy* (University of Calgary Press); W.J. Gordon, "Intellectual Property as Price Discrimination: Implications for Contract" (1998), 73 Chi.-Kent L. Rev. 1367; M. O'Hare, "Copyright: When is a Monopoly Efficient?" (1985), 4 J. of Policy Analysis & Mngt 407; F. Scott Kieff, "Property Rights And Property Rules For Commercializing Inventions" (2001), 85 M.N.L.R. 697.

entrants into the market are affected (the more the potential rival can ‘borrow’ from the producer without payment, the lower the costs of production as licensing costs, independent research and other transaction costs are saved). The danger, then, is that “while trying to diminish the social welfare loss due to underproduction, the welfare loss due to underutilization is increased.”¹⁸

The content and features of the right become crucial.

The duration of the right (the length of the right), the subject-matter that it encompasses (the depth of the copyright), and the nature of what acts are considered infringing (the breadth of the right) are all significant. There is a need to balance between the desire to maintain an adequate incentive to create information goods (favouring a high degree of protection) and full availability of such goods to those in the market that are willing to pay at least the costs of production (favouring a low degree of protection) in determining the content of the right and its overall strength. According to Posner and Landes, the most important implications of this welfare model in relation to copyright works, primarily relevant to the subject-matter at issue, are that the optimal amount of protection is higher for classes of subject-matter that are more valuable socially, and that increasing copyright above the optimal level leads to the production of more works but with lower welfare per work.¹⁹ This, then, presents the fundamental dilemma for policymakers in structuring legal rules to achieve more efficient market conditions — without a legal monopoly, too little information will be produced; but with a legal monopoly, too little information will be used.

Proprietary models have their own institutional requirements from the economist’s perspective. If property rights are to be made available in order to regulate the market, they must be set down with certainty (although some do point to “pre-modern” copyright rules as attractive due to their doctrinal flexibility).²⁰ The market requires clear rules in order for players to compete and to predict outcomes; otherwise rent-seeking will occur based on opportunistic exploitation of inconsistencies or uncertainties.²¹ Each right must have an owner and must be delineated with precision. Rational exploitation of the right is then a decision for the owner of the right alone, and such decisions are presumptively not taken in anyone’s interests but that of the owner. A further difficulty in constructing rules, relating again to the intangible nature of information goods, is that they need to be contained on some carrier that itself

¹⁸ C. Thönebe, “The Legal Protection of Databases in Europe – An Economic Analysis” (Unpublished dissertation, Université Aix-Marseille III, 2000), 14.

¹⁹ W.M. Landes and R.A. Posner, “An Economic Analysis of Copyright Law” (1989), 18 J.L.S. 325, 343-44.

²⁰ Paula Baron advocates use of pre-1850 English precedents which combine proprietary and unfair competition/misappropriation norms to construct *sui generis* rights; “Back To The Future: Learning From The Past In The Database Debate” (2001), 62 Ohio State L.J. 879.

²¹ N. Siebrasse, “A Property Rights Theory Of The Limits Of Copyright” (2001), 51 University of Toronto L.J. 1, 24, 28.

may be tangible (like a book) or intangible (like a data stream). The rules must distinguish between the package (the book or data stream) and the content which is the protected subject-matter. This becomes key in the database question.

The related advances in the development of innovative information technology, networked communications, and globalization have created new market opportunities for database producers whether they are electronic or paper-based. Whilst empirical studies are not numerous, there is evidence of a profound increase in the number of producers of databases, records stored in electronic form, and database production in the last 20 years.²² According to one observer, and notwithstanding the difficulty in identifying markets for such generalized goods with precision, commercial competition is waged in at least three broad markets, each of which is significant.²³ Technology, then, not only presents market opportunities to producers, it presents threats by reducing the marginal costs for potential rivals wishing to enter the market as free-riders and thus tends to market failure. There is also a new threat arising from those seeking to destroy the market, and liberate the subject-matter from legal control and market pressure, through unauthorized mass distribution of protected material.²⁴

The further point that needs to be made is an uncomfortable one for law and economics advocates – whilst the economic analysis is of great utility to policy-makers, it is a fraught business for lawyers, judges, and parliamentarians and seems destined to result in skewed models when legal rules are sought to be created or amended to take direct account of the economic considerations. This

²² See R. Cowan and E. Harison, "Intellectual Property Rights in a Knowledge-Based Economy" (MERIT Infonomics Research Memorandum 2001-027, Universteit Maastricht, 2001), 40, who accept Williams' American figures as applicable to Europe as well. In the period 1979-1999, Williams found that the American database industry increased by a factor of 19, stored records by a factor of 32, and producers increased from 221 to 2312 (although this was based on proprietary data rather than independently created). See M.E. Williams, "The State of Databases Today: 1997" in *Gale's Directory of Databases*. Scotchmer and Maurer have presented a more updated analysis but within the context of a differently constructed study; S.A. Scotchmer and S.M. Maurer, "Across Two Worlds: Database Protection in the U.S. and Europe" forthcoming in J. Putnam (Ed.) *Intellectual Property and Innovation in the Knowledge-Based Economy* (University of Calgary Press). See also the OECD's *Information Technology Outlook* (Paris: OECD Publications, 2000).

²³ G.M. Hunsucker, "The European Database Directive: Regional Stepping Stone to an International Model?" (1997), 7 *Fordham Intell. Prop., Media & Ent. L.J.* 697. The markets identified are the "one-stop-shopping market" (general information content is offered to a broad customer base), the "problem—focused" market (specific information content, focused on particular problems, is offered to consumer groups that have or address these needs), and the "industry-focused" market (both general and specific information content is offered to specific industry and professional markets).

²⁴ So-called "information Samaritans", see Hunsucker, fn 22, 702; M.J. Bastian, "Protection of "Noncreative" Databases: Harmonization of United States, Foreign and International Law" (1999), 22 *B.C. Int'l. & Comp. L.R.* 425, 429; M. Freno "Database Protection: Resolving The U.S. Database Dilemma With An Eye Toward International Protection" (2001), 34 *Cornell Int'l. L.J.* 165, 187.

is so because of the lack of information available to decision-makers and the need to create certain rules. Professor Siebrasse has written:²⁵

While there is indeed a level of copyright protection that strikes the optimal balance between incentives to create and restrictions on dissemination, it does not follow that the goal of the law should be to strike that balance. Determining the optimal level of protection requires far more information than is available to the courts or, for the most part, to the legislature, and the attempt to achieve the impossible goal of striking the optimal balance is likely to do more harm than good.

To hold otherwise, as Siebrasse argues convincingly, is to make “heroic assumptions about the ability of judges to draw accurate economic conclusions.”²⁶ The point, then, is that there is a need for law-makers to translate these economic considerations into appropriate legal models rather than attempting to apply these considerations directly, as some courts have attempted. I would suggest that Siebrasse must be correct as to do otherwise is to practice both bad economics and even worse law.

Databases are different from other works in that they rely primarily on their continuing comprehensiveness and accuracy to make them attractive in the market. Thus, the costs of production fall not only to gathering and verifying information (as well as presenting it in a suitable format with appropriate user-friendly tools), but to maintenance of the database on an ongoing basis. One would be less willing to use a database without some degree of confidence that the contents are accurate as of the date of access regardless of product qualities such as the ease of use of an electronic search facility. Thus, the degree to which databases are updated and their contents verified as accurate is vital, and a meaningful rights regime should provide a suitable incentive to encourage the continuing maintenance of databases. Indeed, I would suggest that the form of this incentive is a crucial issue that the economic model must grapple with — can legal protection provide an adequate incentive to producers to update their works whilst tailoring the right to avoid updating that is not socially useful? This is of concern because the supplier of database services can induce a rent-shift from consumer-surplus to producer-profits if the term of protection is renewed; hence, there may be an incentive to update even if it is not socially optimal to do so.²⁷

B. *The Public Interest in Preserving Access to Data*

The key consideration in respect of factual databases is that the contents, the data, should not be protectable at all. The independent protection of facts *per se* is not required to provide an incentive for their collection and presentation, and such independent protection of facts would be a perversion of the underlying premise for

²⁵ Siebrasse, *supra* note 21 at 1.

²⁶ *Ibid.* at 20-21.

²⁷ C. Kuboldt, “The E.U.-Directive on the Legal Protection of Databases and the Incentives to Update: An Economic Analysis” (1997), 17 *Int’l. Rev’ of Law & Econ.* 127 at 128.

creating laws to encourage the production and dissemination of intellectual property generally. The basic point, then, is that a balancing of interests must be struck in the copyright area as elsewhere, whether one tries to frame the issue in respect of originality (as is usually the case in respect of compilations, discussed in the next section), or the “idea-expression dichotomy” (but, as the English courts note, it all depends on what you mean by an “idea”²⁸ and it may be best to avoid these type of aphorisms altogether),²⁹ or what constitutes the composite of an “original literary work,”³⁰ or a concern for the public domain,³¹ or through slogans like “information wants to be free”³², or, even based on the position that the digital context makes legal protections redundant and attempts to enforce legal regimes that are wasteful and wrong when we should be creating wholly new systems to encourage protection and preserve access to such works.³³

Rather than discussing the issue in the abstract, I would point to one specific type of data and use as reflective of the very difficult decisions that must be taken in revising database regulation, and make the point that generalized proprietary solutions may not be particularly helpful in the balancing exercise.

Professor David,³⁴ drawing on Vaver’s criticisms of the trend to increasingly-strong intellectual property rights,³⁵ takes the position that the present

²⁸ *L.B. Plastics Ltd. v. Swish Products Ltd.*, [1979] R.P.C. 551, 629.

²⁹ *Ibcos Computers Ltd v. Barclays Mercantile Highland Finance Ltd*, [1994] F.S.R. 275.

³⁰ For example, *Exxon Corp. v. Exxon Insurance Consultants Ltd.*, [1982] R.P.C. 69.

³¹ David Lange has been influential in framing the debate in these terms; see “Recognizing the Public Domain” (1981), 44 *Law & Contemp. Prob.* 147. Also: J. Litman, “The Public Domain” (1990), 39 *Emory L.J.* 965; Y. Benkler, “Free As The Air To Common Use: First Amendment Constraints On Enclosure Of The Public Domain” (1999), 74 *N.Y.U.L.R.* 354; R.C. Denicola, “Freedom to Copy” (1999), 108 *Yale L.J.* 1661; L. Lessig, *The Future of Ideas: The Fate of the Commons in a Wired World* (N.Y.: Random House, 2001).

³² The phrase is attributed to Stewart Brand; see S. Brand, *The Media Lab: Inventing the Future at MIT* (Penguin Books, 1987), 202: “Information Wants To Be Free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine—too cheap to meter. It wants to be expensive because it can be measurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, ‘intellectual property’, the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better.” The phrase has been picked up and has become a rallying cry for those espousing a neo-libertarian agenda for development of the Internet, sometimes bordering on what can be regarded as a form of cyber-anarchy.

³³ J.P. Barlow, “The Economy of Ideas”, available online at: www.eff.org/~barlow/EconomyOfIdeas.html. The essay is also available in print; A.D. Moore (Ed) *Intellectual Property: Moral, Legal and International Dilemmas* (Rowan & Littlefield, 1997).

³⁴ David, *supra* note 14, also, “Will Building ‘Good Fences’ Really Make ‘Good Neighbours’ in Science” (unpublished paper, 2001).

³⁵ D. Vaver, “Intellectual Property: The State of the Art” (2000), 116 *L.Q.R.* 621. Another powerful critic of this trend is Laddie J. See, writing extra-judicially, H. Laddie, “Copyright: Over-Strength, Over-Regulated, Over-Rated” [1996] *E.I.P.R.* 253; similarly, and also extra-judicially, R. Jacob, “Industrial Property – Industry’s Enemy”, [1997] 1 *I.P.Q.* 3.

international regime of copyright protection, and specifically the copyright protection of databases, threatens to retard progress. Moreover, he argues, increased rights in information technology presents a range of access issues that have largely been smothered in the public consciousness by the more emotive issue of intellectual property rights in genetic material. Of crucial importance to David are threats to scientific research and the institutional infrastructure of 'open collaboration' in such research. These concerns have been addressed elsewhere at and there is an extensive literature by Maurer³⁶ and others³⁷ which has led to criticisms of extended database protection in Canada on this amongst other bases.³⁸ Whilst acknowledging the appropriation problem tending to market failure, David criticises an over-dependency on proprietary protections.³⁹

The problem is not so much intellectual property rights mechanism itself, which although imperfect, has been found to work well enough when it comes to stimulating private investment in the exploitation of commercial opportunities based upon existing bodies of scientific and engineering knowledge. What is more problematic for the long run, however, is that an unchecked bias towards expanding of the domain of information-goods within which private property institutions and market mechanisms flourish, is steadily encroaching upon the domain of public information. In doing so, it has tended to weaken, and may in the end seriously undermine those non-market institutions which historically have proved themselves to be especially effective in sustaining rapid growth in the scientific and technological knowledge base that is available to be exploited.

David goes on to argue that the availability of a communications infrastructure that allows for the sharing and efficient searching of relevant information will go unexploited, with negative effects for both the organisation and funding of research projects in the future (the more so since government subsidies to scientists have been reduced in recent years).⁴⁰ All of this leads to the 'digital dilemma', the resolution of this dilemma has thus far favoured producers at the expense of the public domain.⁴¹

As a consequence of the construction of novel and potentially legal rights in intellectual property, and the encouragement of public and quasi-public institutions in making use of these to attract private sector funding as a way of meeting the high first-costs of making digitized archives available on electronic networks, larger and

³⁶ S. Maurer, "Raw Knowledge: Protecting Technical Databases for Science & Industry" (unpublished report prepared for the National Research Council's "Workshop on Promoting Access to Scientific and Technical data for the Public Interest", 1999).

³⁷ S. Maurer and S. Scotchmer, "Database Protection: Is it Broken and Should We Fix It?" (1999), 284 Science 1129 (1999); S. Maurer, R. Firestone & C. Scriver, "Science's Neglected Legacy" (2000), 405 Nature 117 (2000); S. Maurer, P.B. Hugenhotz & H. Onsrud, "Europe's Database Experiment" (2001), 294 Science 789.

³⁸ S.A. Scotchmer and S.M Maurer, "Across Two Worlds: Database Protection in the U.S. and Europe" forthcoming in J. Putnam (Ed.) *Intellectual Property and Innovation in the Knowledge-Based Economy* (University of Calgary Press).

³⁹ David, *Supra* note 14 at 3.

⁴⁰ *Ibid.* at 5, 16.

⁴¹ *Ibid.* at 7.

larger portions of the public data 'commons' are being 'enclosed' and transformed into private monopolies.

David is not alone in raising these concerns. The question of the impact of database protection on scientific research was one of the matters that was the subject of inquiries by WIPO,⁴² during the failed attempt to create a Database Treaty, and a range of respondents indicated their concern that the need to ensure the free circulation of data in the interest of scientific research be maintained in any protection system. UNESCO observed:⁴³

Databases financed with public funds, whose purpose is the efficient accomplishment of public-interest missions (at both the national and the international level), cover a variety of very extensive fields. UNESCO and the World Meteorological Organization (WMO), for instance, produce this kind of database in connection with subjects like earth sciences, the environment, ecology, water, oceanography or space... The rules that will govern exchanges involving this type of database and databases produced for commercial purposes should not, therefore, be derived from the logic of competitive exploitation which is a feature of commerce. For the scientific community, the public-interest mission underlying the *raison d'être* of databases produced by public institutions is sufficient in itself to make people acknowledge that their producers should be allowed free and full access, on a non-discriminatory basis, to all sources of data (in whatever form) that might be useful for updating the databases and improving their performance.

The resolution of this issue is a difficult one once proprietary entitlements enter the picture. Some argue that the best solution to maintaining appropriate access in the face of such strong protections is informal in the sense of voluntary agreements involving rights-holders who undertake to enforce their rights only against certain uses or users. Thus, Reichman and Uhler have recently presented a working paper with the outlines of a top-down voluntary system ("a dynamic e-commons"), similar to Stallman's GNU open-source license scheme,⁴⁴ which would essentially form a public interest co-operative of scientific researchers who are also rights-holders. This association of public-spirited scientists would license to industry but give free access to data for pure research purposes, all secured by contract.⁴⁵ It would be administered by funding agencies, universities and research bodies

⁴² See the Information Meeting on Intellectual Property in Databases discussion paper, WIPO Doc. DB/IM/4, and the analytic table of questions raised upon which consultation was sought; WIPO Doc. DB/IM/6.

⁴³ UNESCO, WIPO Doc. DB/IM/5 (1997). See also S. Dusollier, Y. Pouillet, and M. Bydens, "Copyright and Access to Information in the Digital Environment" (2000), 34 Copyright Bulletin 4; National Research Council, *Bits of Power: Access to Global Scientific Data* (Washington: National Academy Press, 1997).

⁴⁴ See the GNU website, www.gnu.org for a range of Stallman's materials and approach to the issues; D. McGowan, "The Legal Implications of Open Source Software" [2001] Univ. Ill. L.R. 241.

⁴⁵ J.H. Reichman and P.F. Uhler, "Promoting Public Good Uses of Scientific Data: A Contractually Reconstructed Commons for Science and Innovation" (Delivered 10 November 2001, at the Conference on the Public Domain at Duke University Law School. See also, by the same authors, "Database Protection at the Crossroads: Recent Developments and their Impact on Science and Technology" (1999), 14 Berkeley Tech. L.J. 793.

and would, it is suggested, benefit industry by providing more opportunities for commercialisation of research. The underlying premise is the encouragement of pure science and a recognition of the large financial support to the scientific community directly or indirectly through public funds leading to commercial restrictions on developed data. It relies to an extent, as the authors acknowledge, on the formal inability of the American government to control public information through proprietary copyright protection and which places such information into the unprotectable public domain;⁴⁶ the same is not true in Europe, Canada, or in the U.K. and thus the model may not be attractive as an international solution.⁴⁷ In any case, it will be interesting to see both the final version of this proposal and the reaction of the academic research community.

This question of access to scientific data is a very emotive issue. Neither Maurer, David nor UNESCO suggests that scientists that benefit from some form of public subsidy voluntarily eschew intellectual property rights in their inventions or other rights-bearing vehicles in the way that Reichman and Uhler do. Some dissenting voices argue that the collaborative tradition might in fact immunise scientists against the rise of greater legal protections in databases without the GNU approach⁴⁸ and that the threat of monopoly pricing of databases that scientists rely upon is exaggerated and that market forces may supply correction⁴⁹ which complicates matters for decision-makers. I will resist the temptation to offer my own voice in support of one position or another to this vexing issue as I have presented the problem here as indicative of the need to balance access rights to data in crafting the legal treatment of databases, regardless of whether protections be framed as proprietary or liability models. However, I believe that even this cursory review of the literature and the positions advanced by interested parties makes it clear that such questions of public interest exemptions from liability for scientific research cannot be determined through abstract questions of the public good by non-interested parties, no matter how well meaning, like legal academics. Indeed, I would go farther and suggest that the balancing exercise is unhelpfully complicated by the automatic entitlements that flow necessarily from a proprietary approach. As one commentator has astutely observed, "in the contest between property rights and access rights, property rights have the home field advantage. The incentives created by property rights are clear and the rhetoric is powerful."⁵⁰ In practice, the reliance on a proprietary model (which is an all-or-nothing equation absent a specific permission or defence to cover the specific use) encourages the

⁴⁶ 17 U.S.C. § 101, 105.

⁴⁷ Reichman and Uhler, *supra* note 45 at 20.

⁴⁸ M. Freno "Database Protection: Resolving The U.S. Database Dilemma With An Eye Toward International Protection" (2001), 34 Cornell Int'l. L.J. 165, 190; but see also J.H. Reichman and P. Samuelson, "Intellectual Property Rights In Data?" (1997), 50 Vand. L. Rev. 51, 115.

⁴⁹ K.W. Dam, "Intellectual Property and the Academic Enterprise" (John M Olin Law & Economics Working Paper No. 68, University of Chicago, 1998), 15-16.

⁵⁰ H. Perlman, "Taking the Protection-Access Tradeoff Seriously" (2000), 53 Vand. L.R. 1831, 1834.

judicial tendency to shape the subsistence analysis (the construction and application of originality doctrine by which copyright protection is recognized as subsisting in the object under scrutiny) to produce a desired consequence to compensate for the lack of explicit permissions within the statute. This is at the heart of the database problem and requires a more detailed consideration.

II. *Copyright Protection of Databases: Canadian and Comparative Law*

In compliance with international agreements and established precedent, the present protection of databases in Canada is through the law of copyright which affords protection to compilations created by the selection and arrangement of literary, dramatic, musical or artistic works (or parts of those works), and, to the selection and arrangement of data as a literary work under the Copyright Act.⁵¹ Revision of doctrine in respect of the core criterion of originality⁵² in compilations in this area has been on the horizon in recent years due to three significant developments: the decision of the United States Supreme Court in 1991 to alter the construction of the originality standard under the American statute, Canada's accession to the North-American Free Trade Agreement (NAFTA) in 1992, and, the adoption of the Database Directive by the European Union in 1996. In this section, I propose to examine the present copyright protection in the context of the British⁵³ and American approaches and to evaluate the utility of a proprietary approach through the law of copyright *per se*.

It is useful to begin by recognising that the debate over the appropriate treatment of databases though copyright is quite reflective of both the inherent tensions that arise in protecting such subject-matter, discussed above, and the shifting nature of copyright law. This is as true across jurisdictions as in the Canadian context. The inhibition that the law places upon those wishing to use what some see as common cultural property requires a continuing reassessment of the justification of such intrusion. Various approaches are commonly advanced, and the arguments that are constructed are shaped by the legal systems and cultures in which they are rooted.⁵⁴ Teleological approaches focus on the economic implications of legal protections for market efficiency and greater social welfare and proceed based on the desirability of forecasted consequences; as one might expect, contemporary "law and economics"

⁵¹ The Copyright Act was amended to comply with NAFTA in respect of defining compilations, Art. 1705(1)(b) through the North American Free Trade Agreement Implementation Act, S.C. 1993, c.44, s.53. The Act does preserve protection of tables as compilations, and in the past the two have been used as inter-changeable terms, see: *Chappell & Co. v. Redwood Music Ltd.*, [1980] 2 All E.R. 817, 820, 824; *Tele-Direct (Publications) Inc. v. American Business Information Inc.* (1997), [1998] 2 F.C. 22 (Fed. C.A.); leave to appeal to S.C.C. dismissed [1997] S.C.C.A. No. 660.

⁵² Copyright Act, R.S.C. 1985, c.85, as amended, s.5.

⁵³ The pre-1998 British law still is relevant to the protection of computer programs.

⁵⁴ L. Bentley and B. Sherman, *Intellectual Property Law* (OUP, 2001), 31; P. Goldstein, *International Copyright: Principles, Law, and Practice* (OUP, 2001), §1.1.

scholars have been influential in setting the policy agenda in recent years. Deontological approaches, whether based on a Kantian concern for the creators of copyright works (an ethical reluctance to regard an author as a means to an end, rather than as an end in herself) or some Hegelian construction (the creator's self-identity in a civil society is acknowledged by others through the property grant in the work that he has created), are creator-centred and tend to revolve around questions of duty and desert. In copyright one often finds these arguments being ventilated when considering the nature of "authorship." These deontological arguments adapt easily to the access-concerned approach that rightly features on the Internet and in different communities, and fits neatly into much of the rights-theory scholarship in contemporary legal theory as well as civilian *droit d'auteur* traditions. Ultimately, I suggest, dispassionate observers can only conclude that answers provided by such competing visions necessarily flow from the manner in which questions are framed, with unfortunate complications arising for policy-makers charged with determining the public interest. Indeed, that such complications arise in reality and not merely in theory is well borne out by the unfortunate division of the Supreme Court of Canada in the recent *Theberge* litigation. This inability to define a singular justification for copyright protection (and legal model arising therefrom, a universal theory of copyright as it were) is no bad thing. To hold otherwise is to presume that such a singular approach is possible and desirable. The goal of examining competing models is not to settle this ongoing debate, but to participate in it. As McLaghlin C.J.C. wrote, we should think of the law of copyright as a process to meet diverse aims, rather than the sole solution to a singular problem.

In respect of the question at hand, I would suggest that copyright doctrine in all three jurisdictions reviewed below — the United Kingdom, the United States, and Canada — reveals an uncertain and inconsistent level of protection of databases through artificial construction of the core question of originality, made worse at times by a liberal sprinkling of legal fictions. Perhaps of greater concern, I would suggest further that the present proprietary models do not adequately speak to either the economic justification for protection of databases as copyrightable works, nor do they provide an adequate structure to balance competing interests in respect of such works. This uncertainty is quite undesirable — it adds expense and encourages the use of informal protections which are equally capable of over-constraining data much as more formal models.

A. *The International Context*

The Berne Convention⁵⁵ is the oldest of the international intellectual property treaties, and establishes the international treatment of copyright

⁵⁵ *Berne Convention for the Protection of Literary and Artistic Works*, adopted 1886; revised 1909 (Berlin), 1928 (Rome), 1948 (Brussels), 1967 (Stockholm), and 1971 (Paris). Canada became a signatory to the Convention as a sovereign power in 1928, and to the latest revision on June 26, 1998 though its law was in substantive compliance.

protection⁵⁶ to give effect to the core principle of national treatment.⁵⁷ The Convention aims to establish a union of contracting states in which certain minimum protections are afforded, which require no formalities and operate independently of other legal treatment, and are enforced for the protection of authors; it does not, however, dictate the manner in which signatories structure their own laws or the norms that feature in the national systems of contracting states. The Convention, then, is neutral as to how states effect compliance (whether through enabling legislation or through self-execution) bearing in mind their own constitutional structures and legal cultures.⁵⁸ The Berlin Revision (1909) added Article 2(5), which provides:

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

There are two points that bear examination: subject-matter and subsistence.

In terms of definition, Article 2(5) seems tied to collections of works that are themselves independently protectable as literary works, rather than mere data. It is not entirely clear whether this restriction is consistent with the earlier provisions of Article 2 which cover the wider range of protectable subject-matter, such that data may be included subject to other requirements being fulfilled.⁵⁹ There is no authoritative interpretation to settle the issue.

Second, the term 'intellectual creation' is used in relation to collections specifically, and not in respect of literary works in general under Art 2(1), though it does seem to be implicit in respect of the more generalized provisions. The natural question which arises, and which has featured prominently in the Canadian jurisprudence in respect of similar provisions in NAFTA, is whether the Convention intends a specific standard or whether this is a matter of national appreciation. The phrase itself is not a matter of agreed-upon guidelines within the Berne Convention. Professor Ricketson's authoritative analysis of the Convention contends that it is a matter to be left to signatory states for implementation, notwithstanding that differing results might occur in the

⁵⁶ A good overview of the general copyright issues set in an international context is A. D'Amato and D. Estelle Long, *International Intellectual Property Law* (The Hague: Kluwer Law International, 1997), ch. 2.

⁵⁷ "Authors shall enjoy, in respect of works for which they are protected under this Convention, in countries of the Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights specially granted by this Convention;" Berne Convention, Art. 5(1).

⁵⁸ See S. Ricketson, *The Berne Convention for the Protection of Literary and Artistic Works: 1886-1986* (London: Kluwer, 1986), 130-131 and ch. 4 generally; W. Nordemann, K. Vinck and P. Hertin, *International Copyright and Neighbouring Rights Law* (trans. R. Livingston) (Weinheim: VCH Verlagsgesellschaft, 1990), 20.

⁵⁹ D. Gervais, *The TRIPS Agreement: Drafting History and Analysis* (London: Sweet & Maxwell, 1998), 82.

protection of factual compilations,⁶⁰ concluding that the Convention is cognisant of the common law approach to copyright that might accommodate unfair competition norms, notwithstanding its debasement of a purer concept of creativity-centred authorship.⁶¹

As part of the general trend to international approximation, if not harmonization, of laws, an augmented version of the Berne standard ("Berne-plus", to include data explicitly) has been brought into both the World Trade Organisation administered TRIPS agreement and the WIPO Copyright Treaty in largely the same terms. These treaties incorporate and build upon the existing Berne standards, and, in relation to databases, represent a codification of existing practice rather than creation of new norms⁶² except in so far as they mandate the inclusion of compilations of data within the protection of literary works.⁶³ Whilst some argue that TRIPS departs from the general rule leaving questions of originality to contracting states by tying substantive standards to selection and arrangement of data,⁶⁴ resolution of this issue is far from clear and I would dispute the conclusion that it is now definitively settled.

The important point that arises in considering these various sources is whether a mandatory orientation or threshold for protection is established as binding on signatory states. It is my suggestion that these various instruments do not mandate either a creativity-linked or industrious collection standard of originality in relation to collections, nor do they limit copyrightability exclusively to selection and arrangement of contents; rather, a more simple principle is established. National jurisdictions may devise and implement substantive copyright doctrine reflective of their own public policy interests and legal cultures, but data itself falls outside the scope of protection that may be afforded to collections not for lack of creativity or effort, but as these individual items as individual items necessarily fail to meet the requirement that they are the product of the author's own efforts. States may build upon this foundation consistent with the principle of national treatment.

B. *The United Kingdom*

It is beyond the scope of this paper to try and present an historical analysis of the protection of compilations as literary works in British copyright law. It is a large subject due to a myriad of pre-modern cases, and interested readers

⁶⁰ Ricketson, *supra* note 58 at 301. A. Sterling, *World Copyright Law* (London: Sweet & Maxwell, 1998), 254-55.

⁶¹ *Ibid.* at 901.

⁶² M. Blakeney, *Trade-Related Aspects of Intellectual Property Rights: A Concise Guide to the TRIPS Agreement* (London: Sweet & Maxwell, 1996), 50.

⁶³ P. Katzenberger, "TRIPS and Copyright Law" in Friedrich-Karl Beier and Gerhard Schricker (Eds), *From GATT to TRIPS – The Agreement on Trade-Related Aspects of Intellectual Property Rights* (Munich: Max Planck Institute – VCH, 1996), 84-85.

⁶⁴ S. Handa, "A Review Of Canada's International Copyright Obligations" (1997), 42 McGill L.J. 961, 977-78.

would do well to consult Sherman and Bentley's fine history of British intellectual property law until 1911 to gain an overall appreciation of developments in this area.⁶⁵ What can be taken from an historical analysis is that from a general interest in protecting mental labour and creativity in the older cases there developed a more refined, more mercantile, and more pragmatic attempt to bring some doctrinal order to a morass of judgements and statutes relevant to copyright protection in the latter half of the 19th century. As today, much of this change was part of an international agenda of reform⁶⁶ that was market and technology-driven. Thus, as copyright in the first copyright statute, the Statute of Anne,⁶⁷ was a legislative reaction to the new technology of movable type, the first (but confined) statutory requirement of originality was the legislative reaction to Daguerre's invention of a chemical process to develop photographic plates in 1839.⁶⁸ Development of the originality standard became one tied up with both the protection of creativity and investment, but it was the latter value that came to dominate when the requirement became of general application in the general codification of existing jurisprudence for the copyright protection of literary, dramatic, musical and artistic works in the Copyright Act 1911.⁶⁹ The 1911 Act was also significant in that it expressed for the first time in statute form that 'compilations' were protectable as literary works, though there was much litigation that settled the point in the affirmative from very early on. Interestingly for lawyers, much of that case law concerned law reports.⁷⁰

For present purposes, it is sufficient to present a model of the current doctrine. It is important to note that original compilations (other than databases) remain protectable as literary works under the Copyright Designs and Patents Act 1988.⁷¹ The terms of the Database Directive exclude the protection of computer programs from its operation, and thus, the situation that was existent before the implementing provisions of the Database Directive came into force in 1998 continues with respect of software. Given the wide definition of a

⁶⁵ B. Sherman and L. Bentley, *The Making of Modern Intellectual Property Law* (CUP, 1999). Recent commonwealth judgements provide extensive historical analysis of British doctrine; *Telstra Corporation Limited v. Desktop Marketing Systems Pty Ltd*, [2002] F.C.A.F.C. 112 (Aust. Fed. Ct.), application for leave to appeal pending; *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2002] F.C.A. 187 (Fed. C.A.).

⁶⁶ See WIPO, *Introduction to Intellectual Property: Theory and Practice* (Kluwer Law International, 1997), 385.

⁶⁷ 8 Anne 1710, c.19.

⁶⁸ The Fine Art Copyright Act 1862 required originality in respect of the protection of paintings, drawings and photographs. See *Graves' Case* (1869) L.R. 4 Q.B. 715; the issues arose again in recent cases in respect of photographs on the Internet: *Bridgeman Art Library Ltd v. Corel Corporation* 36 F. Supp. 2d 191 (SDNY 1999); *Antiquesportfolio.com Plc v. Rodney Fitch & Co. Ltd*, [2001] F.S.R. 23. 1&2 Geo., c.46.

⁶⁹ 1&2 Geo., c.46.

⁷⁰ *Gyles v. Wilcox* (1740) 2 Atk. 143; *Butterworth v. Robinson* (1801) 5 Ves. Jr. 709; *Saunders v. Smith* (1838) 3 My. & C. 711; *Sweet v. Shaw* (1839) 8 L.J. Ch. 216; *Sweet v. Maugham* (1840) 11 Sim. 51; *Hodges v. Smith and Welsh* (1840) 2 Ir. Eq. 266; *Sweet v. Benning* (1855) 16 C.B. 459.

⁷¹ s.3(1).

database in the Directive, whether there is any scope in the statute for compilations that are neither databases nor computer programs seems to be an open question.

The 1988 Act provides in s.3(1) that copyright may subsist in original literary works in the form of tables or compilations (other than databases); this continues the availability of similar provisions in the 1911⁷² and 1956⁷³ Acts. No definition is given to the terms original literary work, table, or compilation. The differences between tables and compilations are regarded as slight. Whilst a compilation is a collected body of material where the author's contribution is found in the arrangement, selection or collection of the various elements, a table is a systematic listing of facts with the contribution of the author found in the design or choice of the organising system.⁷⁴ The two terms obviously overlap and for that reason the term compilation is used generically in the cases.

Whilst there is a great deal of authority on the presence or absence of originality in compilations, the definitional issue has not featured as a controlling device. It has been held that the elements that are included within the compilation need not themselves be independently protectable in copyright, and that all manner of subject-matter can be included. For example, receipt books,⁷⁵ an index of timetables,⁷⁶ questions and answers on matters of scientific interest,⁷⁷ trade catalogues,⁷⁸ advertisements with trading details,⁷⁹ street directories,⁸⁰ lists of football fixtures,⁸¹ coupons listing football wagers,⁸² computer programs,⁸³ mining reports,⁸⁴ stock trade information,⁸⁵ hunting information,⁸⁶ television listings,⁸⁷ details of land sales and deeds,⁸⁸ biographical details of

⁷² s.35(1).

⁷³ 4&5 Eliz., c.74, s.48(1).

⁷⁴ See H. Laddie, P. Prescott, M. Vitoria, A. Speck, and L. Lane, *The Modern Law of Copyright and Designs*, 3rd Ed (London: Butterworths, 2000), vol. 1, 67; K. Garnett, J. James, and G. Davies, *Copinger and Skone James on Copyright* (London: Sweet & Maxwell, 1999), 62-65.

⁷⁵ *Matthewson v. Stockdale* (1806) 12 Ves. 270. See also *Church v. Linton* (1894) 250 O.R. 131.

⁷⁶ *Blacklock v. Pearson*, [1915] 2 Ch. 376.

⁷⁷ *Jarrold v. Houlston* (1857) 3 K. & J. 708.

⁷⁸ *Collins v. Cater* (1898), 78 L.T. 613; *Purefoy v. Sykes Boxall* (1955), 72 R.P.C. 89.

⁷⁹ *Maple & Co. v. Junior Army and Navy Stores* (1882) 21 Ch.D. 369.

⁸⁰ *Kelly v. Morris* (1866) 1 Eq. 697; *Morris v. Ashbee* (1868) 7 Eq. 34.

⁸¹ *Ladbroke (Football) Ltd. v. William Hill (Football) Ltd.*, [1964] 1 W.L.R. 273.

⁸² *Football League v. Littlewoods*, [1959] Ch. 637.

⁸³ *Ibcos Computers Ltd v. Barclays Mercantile Highland Finance Ltd.*, [1994] F.S.R. 275; *Cantor Fitzgerald International v. Tradition Bond Brokers Ltd*, [2000] R.P.C. 95; *Mars U.K. Ltd v. Teknowledge Ltd (No.1)*, [2000] F.S.R. 138.

⁸⁴ *Kenrick v. Danube Collieries* (1891) 39 W.R. 473.

⁸⁵ *Stevens & Sons v. Waterlow & Sons Ltd*, [1877] 41 J.P. 37.

⁸⁶ *Cox v. Land and Water Journal Co.* (1869) L.R. 9 Eq. 324.

⁸⁷ *Independent Television Publications v. Time-Out*, [1984] F.S.R. 64.

⁸⁸ *Trade Auxiliary Co. v. Middlesbrough Tradesmen's Protection Ass'n* (1889) 40 Ch.D. 425.

golfers,⁸⁹ horse breeding details,⁹⁰ a list of books,⁹¹ and a list of railway stations⁹² have all been made subject of copyright protection.

In British copyright law, the construction of the originality requirement is usually not one that seeks to set the high creativity-linked standard of civilian *droit d'auteur* systems as a minimum threshold, but rather operates as a *de minimus* control to filter out that which lacks even the slightest literary composition with reference to the labour, skill or judgement expended by the author in the creation of the work. It is, as it is widely regarded, a "sweat of the brow" standard. The most oft-cited description of the dominant British approach to the originality requirement is that of Peterson J. in *University of London Press Ltd v. Universal Tutorial Press Ltd*:⁹³

The word 'original' does not in this connection mean that the work must be the expression of original or inventive thought. Copyright Acts are not concerned with the originality of ideas, but with the expression of thought in print or writing. The originality which is required relates to the expression of thought. But the Act does not require that the expression must be in an original or novel form, but that the work must not be copied from another's work -it should originate from the author.

Clearly, then, the construction of the originality requirement does not speak to any required reflection of the personality of the author in the work, nor novelty of thought, and is not aided by the types of American 'copyrightability' concerns that prevent certain types of expressions being characterized as anything more than an unprotectable idea. Copyright in the functional field is used to compensate for the lack of what Professor Cornish has sometimes called "a roving concept of unfair competition," and is reflective of a pragmatic and practical approach in a system that has a mercantile rather than natural-rights based orientation. Not coincidentally, the same conceptual problems that are raised in respect of the desirability of a tort of unfair competition⁹⁴ are raised in respect of subsistence of copyright in compilations. Avoided is the idiosyncratic, subjective judicial scrutiny of the micro-morality of certain types of transactions through a generalized tort, but also avoided is a more transparent approach to the issues when obscured in the language of copyright.

⁸⁹ *Nisbet (J.) & Co. Ltd. v. The Golf Agency* (1907) 23 T.L.R. 370.

⁹⁰ *Weatherby & Sons v. International Horse Agency and Exchange Ltd.*, [1910] 2 Ch. 297.

⁹¹ *J. Whitaker & Sons Ltd v. Publishers' Circular Ltd.*, [1946-47] Mac. C.C. 10.

⁹² *Leslie v. Young*, [1894] A.C. 335.

⁹³ [1916] 2 Ch. 601, 608. Similarly, *Ladbroke (Football) Ltd. v. William Hill (Football) Ltd.*, [1964] 1 W.L.R. 273, 279, 291 per Lord Pearce; *Walter v. Lane*, [1900] A.C. 539.

⁹⁴ See generally W.R. Cornish, *Intellectual Property*, 4th ed. (London: Sweet & Maxwell, 1999) at 12-18; A. Kamperman Sanders, *Unfair Competition Law* (Clarendon Press, 1997), 52-55; S. Frankel, "Unfair Competition Law – 'Over Protection Stifles the Very Creative Force it is Supposed to Nurture'" in C.E.F. Rickett and G.W. Austin, *International Intellectual Property and the Common Law World* (Oxford: Hart Publishing, 2000).

In the protection of tables and compilations, as in the protection of literary works in general under the Act,⁹⁵ rare has been the compilation which has failed to meet the originality requirement. One such case was *Cramp v. Smythson*.⁹⁶ Here the parties both were publishers of pocket diaries. The plaintiff brought an action against the defendant's diary; the plaintiff's diary had the usual calendar pages accompanied by pages containing information — postal information, a selection of "days and dates" for the year, tables of weights and measures, comparative time tables, a percentage table, etc. A former employee of the plaintiff left and went to work for the defendant and copied seven of the tables in the plaintiff's diary. It was held that these works were unprotected. The Lord Chancellor held:⁹⁷

There would, indeed, as it seems to me, be considerable difficulty in successfully contending that ordinary tables which can be got from, or checked by, the postal guide or the Nautical Almanac are a subject of copyright as being original literary work. One of the essential qualities of such tables is that they should be accurate, so that there is no question of variation in what is stated. The sun does in fact rise, and the moon set, at times which have been calculated, and the utmost that a table can do on such a subject is to state the result accurately. There is so far no room for taste or judgment. There remains, I agree, the element of choice as to what information should be given, and the respondents contend that the test of originality is satisfied by the choice of the tables inserted, but the bundle of information furnished in the respondents' diary is commonplace information which is ordinarily useful and is, at any rate to a large extent, commonly found prefixed to diaries, and, looking through the respondents' collection of tables, I have difficulty in seeing how such tables, in the combination in which they appear in the respondents' 1933 diary, can reasonably claim to be an "original work." There was no evidence that any of these tables was composed specially for the respondents' diary. There was no feature of them which could be pointed out as novel or specially meritorious or ingenious from the point of view of the judgment or skill of the compiler. It was not suggested that there was any element of originality or skill in the order in which the tables were arranged. My own conclusion is that the selection did not constitute an original literary work.

Lord MacMillan held in much the same terms that the necessary degree of originality was lacking:⁹⁸

To my mind, the collection is of an obvious and commonplace character, and I fail to detect any meritorious distinctiveness in it... The inclusion or exclusion of one or more of the tables constituting the ordinary stock material of the diary-compiler seems to me to involve the very minimum of labour and judgment.

Thus, aside from whether the basic touchstone of originality (self-generation) was satisfied,⁹⁹ the skill and labour brought to bear on creation of the work was held to be inadequate to attract copyright as it was not sufficiently "meritorious."

⁹⁵ Laddie, Prescott & Vitoria, *supra* note 74 at 83.

⁹⁶ [1944] A.C. 329.

⁹⁷ *Ibid.* at 336.

⁹⁸ *Ibid.* at 338.

⁹⁹ *Ibid.*

Notwithstanding that the claim was not made in respect of the arrangement of information in the tables, Viscount Simon's position seems to be that the investment of labour and skill to produce a table of factual information that is already available from another source is itself not worthy of protection, and, highly problematic, that originality itself in factual information is a difficult proposition given that accurate information can only be presented in one form. This comes close to the American merger principle, since expressly disavowed in British and Canadian copyright law,¹⁰⁰ doesn't assist in constructing a rule to reflect the economic interest in providing an incentive to maintain a database that is continuously verified as complete and accurate, but can be justified to the extent that even functional matter must be the product of principled construction of authorship ("taste or judgment") to attract proprietary protection.

What is required, then, for subsistence, is a showing of "substantial labour, skill, or judgement."¹⁰¹ While this is usually described as not needing not be large¹⁰² or more than a trivial effort,¹⁰³ is really a standard with no real guiding principle as to the extent, nature, or merit of this desired effort in the case of compilations. Moreover, these uncertainties reveal the tensions between a construction of copyright that is predicated on a model of creative authorship and one that avoids the question during the subsistence analysis, only to revisit it later in assessing the quality of that taken at the substantiality stage of the claim, if copying is found to have occurred). Beyond this there arises the practical question of leaving these judgements to be taken by the trier of fact where, in Lord MacMillan's words, "the question must always be one of degree and on questions of degree different minds may naturally reach different conclusions."¹⁰⁴ This uncertainty quite naturally results in higher administrative costs in the functional field (such as lawyers' fees and litigation-related costs) which are ultimately borne by consumers.

In terms of infringement, the action was once brought under one of two theories, piracy (unauthorized and substantial copying) or literary larceny ("the illegitimate appropriation of the fruits of the author's labour embodied in" the work).¹⁰⁵ The law now combines the two — one may copy an insubstantial amount from the compilation, but beyond lies the possibility of liability for infringement. Thus the balancing gate-keeping device of substantiality becomes important. The classic statement of the substantiality test was given by Lord

¹⁰⁰The doctrine neither is good law in Britain or Canada. See *Ibcos Computers Ltd v. Barclays Mercantile Highland Finance Ltd*, [1994] F.S.R. 275, 290; *Apple Computer Inc v. 115778 Canada Inc.*, [1987] 1 F.C. 173 (T.D.); appeal dismissed, [1990] 2 S.C.R. 211; K.A. Janus, "Defending the Public Domain in Copyright Law" (1999), 14 I.P.J. 379, 385.

¹⁰¹*Ladbroke (Football) Ltd. v. William Hill (Football) Ltd.*, [1964] 1 W.L.R. 273, per Lord Hodson at 273.

¹⁰²Laddie, Prescott & Vitoria, *supra* note 74 at 86.

¹⁰³See also *Autospin (Oil Seals) v. Beehive Spinning*, [1995] R.P.C. 683.

¹⁰⁴*Cramp v. Smythson*, [1944] A.C. 329, 338; similarly *Biotrading & Financing OY v. Biohit Ltd.*, [1998] F.S.R. 109, 116.

¹⁰⁵J.B. Richardson, *The Law of Copyright* (London: Jordan & Sons, 1913), 101. See *Dicks v. Yates*, [1891] 18 Ch.D. 90.

Pearce in *Ladbroke (Football) Ltd. v. William Hill (Football) Ltd.*¹⁰⁶ “[w]hether a part is substantial must be decided by its quality rather than its quantity.” Recently Lord Hoffmann elaborated holding that a purposive approach must be taken:¹⁰⁷

But what quality is one looking for? That question, as it seems to me, must be answered by reference to the reason why the work is given copyright protection. In literary copyright for example, copyright is conferred (irrespective of literary merit) upon an original literary work. It follows that the quality relevant for the purposes of substantiality is the literary originality of that which has been copied. In the case of an artistic work, it is the artistic originality of that which has been copied.

Given that the originality requirement looks to the substantial labour, skill, or judgement expended by the author in the arrangement, selection or collection of the various elements in compilations, substantiality mirrors the originality inquiry (and its defects) in considering whether the copying constitutes an infringement through an over-borrowing or misappropriation of that same investment. The basic consideration then becomes whether the copyist has conveyed the unprotected facts to the public in a manner which has misappropriated the author’s investment in his own conveyance of those same facts.¹⁰⁸ Merely re-ordering the material or using different language to present it will be insufficient to forestall a finding of liability.¹⁰⁹

A prime difficulty becomes the strength of this mechanism, specifically in respect of information that is not otherwise available, or, even where it is otherwise available and the copyist is lead to the source through the original.¹¹⁰ In *Football League v. Littlewoods*,¹¹¹ the plaintiffs owned copyright in the compilation of the scheduling of football fixtures. The court found that the making of the chronological list was not difficult but it required hard work and a painstaking accuracy. The defendants sent out to their customers coupons containing lists of fixtures which were admittedly copied from the League’s chronological list of which they had procured a copy. Notwithstanding then that the information was not available from any other source, infringement was found. The refusal to license is seen as more properly a competition concern rather than a copyright matter and must ultimately be resolved through

¹⁰⁶ [1964] 1 W.L.R. 273, 293 and also per Lord Reid (276-77), Lord Evershed (283), Lord Hodson (288).

¹⁰⁷ *Newspaper Licensing Agency Ltd v. Marks & Spencer plc*, [2001] 3 W.L.R. 290, para. 19.

¹⁰⁸ *Lewis v. Fullarton*, [1839] 2 Beav. 6, 8 per Lord Langdale; *Jarrold v. Houlston* (1857) 3 K. & J. 708, 716 per Page Wood VC; *Pike v. Nicolas*, [1869] L.R. 5 Ch. 251.

¹⁰⁹ *Whittingham v. Wooler*, [1817] 2 Sw. 418; *Bell v. Whitehead*, [1839] 8 L.J. Ch. 141.

¹¹⁰ *Kelly v. Morris* (1866) 1 Eq. 697 where the copyist sent agents to verify the addresses and details of places noted in the plaintiff’s original street directory. See also *Morris v. Wright* (1870), L.R. 5 Ch. App. 279 and *Morris v. Ashbee* (1868), L.R. 7 Eq. 34.

¹¹¹ [1959] Ch. 637. Similarly, *Independent Television Publications v. Time-Out*, [1984] F.S.R. 64.

competition regulation; this is important in terms of both the domestic economy in isolation, and in the context of a regional arrangement such as the European Union which is based on the free movement of goods and services.¹¹²

Again, the matter becomes one of case by case analysis framed as a question of fact rather than of law. It is suggested that there is in fact no binding principle that narrows the general inquiry or makes more predictable the analysis. The resolution of such issues is very much a question of evidence to determine, to draw on the words of *Page Wood VC*,¹¹³ whether the defendant has taken away the plaintiff's labour expended in producing the work, with the competitive nexus between the parties being quite influential in the application of the substantiality test.¹¹⁴

C. *The United States*

The American copyright law is quite similar to its British progenitor, but with quite substantial differences in respect of the protection of functional works such as factual compilations.

First, the federal protection is constitutionally-based¹¹⁵ and with the set jurisdictional boundaries necessary in such a federal system.¹¹⁶ It sits, problematically, alongside state misappropriation and unfair competition protection.¹¹⁷

¹¹²*RTE and Independent Television Publications v. Commission*, [1995] 4 C.M.L.R. 18 (E.C.J.).

¹¹³*Scott v. Sandford* (1867), L.R. 3 Eq. 718, 724.

¹¹⁴*Kelly v. Morris* (1866) 1 Eq. 697, 701 per *Page Wood VC*; *Trade Auxiliary Co. Middlesbrough Tradesmen's Protection Ass'n* (1889) 40 Ch. D. 425, 428-29.

¹¹⁵Article 1§8 of the American Constitution provides that "Congress shall have the power... To promote the Progress of Science and the useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

¹¹⁶On the relationship between the "copyright clause" and the "commerce clause" (which allows the federal congress to legislate in matters of inter-state, rather than intra-state, commerce), see "Database Protection and the Circuitous Route Around the United States Constitution" in Charles Rickett and Graeme Austin (Editors), *International Intellectual Property and the Common Law World* (Oxford: Hart Publishing, 2000).

¹¹⁷The infamous misappropriation tort established in *International News Service v. Associated Press*, 248 U.S. 215 (1919), has been cut back through the years both through the application of federal pre-emption doctrine and changing conceptions of the utility of wide-ranging economic torts. However it still exists together with state unfair competition protection alongside the federal patent and copyright grants. See *Restatement (Third) of Unfair Competition* §38; S. Baird, "Common Law Intellectual Property & the Legacy of *International News Service v. Associated Press*" (1983), 50 U. Chi. L.Rev. 411; L. Raskind, "The Misappropriation Doctrine as a Competitive Norm of Intellectual Property Law" (1991), 75 Minn. L.R. 875; D.P. Olsen, "Common Law Misappropriation in the Digital Era" (1999), 64 Miss. L.Rev. 837.

Second, since at least *Baker v. Selden*,¹¹⁸ the American copyright law has constructed the “idea-expression dichotomy” not only in terms of the differing protections of patent and copyright at a conceptual level, but as a controlling device in terms of the development of copyright doctrine and the types of works and the nature of authorship that legitimately falls within the constitutional grant. Though courts have been known to adopt a more pragmatic stance,¹¹⁹ there is a systemic reluctance to protect the purely functional rather than the creative (some may say wisely).¹²⁰ This differing approach to functional expression is clearly brought out in the American¹²¹ and British¹²² approaches to the protection of computer programs. Whilst the former places a clear emphasis on questions of authorship and subsistence of copyright and uses such judicially constructed doctrines as merger¹²³ and *scenes à faire*¹²⁴ to limit ‘copyrightability’ as a matter of law, the British law concentrates its attention at the substantiality stage and the determination of the issues through questions of fact — though I would hazard that both reach the same conclusions in the majority of cases.

Third, unlike British law which (usually) prizes certainty far above flexibility and which does not favour generalized public interest defences,¹²⁵ the American law clearly speaks to copyright as a flexible property right which is granted in the public interest and which must be construed and applied to serve the public

¹¹⁸ 101 US 99 (1879).

¹¹⁹ “The first axiom of copyright is that copyright protection covers only the expression of ideas and not ideas themselves... The second axiom of copyright is that the first axiom is more of an amorphous characterization than it is a principled guidepost;” *Chuck Blore & Don Richman, Inc. v. 20/20 Advertising, Inc.*, 674 F. Supp. 671, 676 (D. Minn., 1987).

¹²⁰ *Ibcos Computers Ltd v. Barclays Mercantile Highland Finance Ltd*, [1994] F.S.R. 275, 291, 292 per Jacob J.

¹²¹ For example, *Computer Associates International, Inc. v. Altai, Inc.*, 982 F. 2d 693 (2d Cir. 1992); *Lotus Development Corporation v. Borland*, 49 F. 3d 807 (1st Cir. 1995).

¹²² For example, *Cantor Fitzgerald International v. Tradition (U.K.) Ltd*, [2000] R.P.C. 94.

¹²³ “Copyright protection will be denied to even some *expressions* of ideas if the idea behind the expression is such that it can be expressed only in a very limited number of ways. The doctrine is designed to prevent an author from monopolizing an idea merely by copyrighting a few expressions of it;” *Toro Company v. R & R Products Co.*, 787 F. 2d 1208, 1212 (8th Cir. 1986). See *Kern River Gas Transmission Co. v. Coastal Corp.*, 889 F. 2d 1458 (5th Cir. 1990); cert. denied, 489 US 952 (1990) in respect of factual compilations.

¹²⁴ For example, *Mitel, Inc. v. Iqtel, Inc.*, 124 F. 3d 1366 (10th Cir. 1997).

¹²⁵ The defence has featured of late in the horizontal application of the Human Rights Act 1998 in the copyright field, in much the same way as the defence of public interest disclosure features in the law of confidence. It is not, however, of the same latitude as the American fair use defence. See *Ashdown v. Telegraph Group Ltd*, [2001] 4 All E.R. 666 rejecting the position in *Hyde Park Residence Ltd v. Yelland*, [2000] 3 W.L.R. 215; R. Burrell, “Defending The Public Interest”, [2000] E.I.P.R. 394; G. Dworkin, “Judicial Control of Copyright on Public Policy Grounds” in J.J.C. Kabel and G.J.H.M. Mom (eds.), *Intellectual Property and Information Law: Essays in Honour of Herman Cohen Jehoram* (The Hague: Kluwer Law International, 1998), 103-104.

interest. Hence the importance of the quasi-equitable fair use defence,¹²⁶ which is especially significant in the institutional balancing of protection and access interests. This is more than a doctrinal difference; it is a matter of legal culture — where balancing decisions will be made, by whom, and whether in the context of private litigation. It is a characteristic of fundamental importance in the American system, and fundamental difference to other common law copyright regimes.

Like British law, American treats the compilation and its contents separately. Unlike British law, the American law hesitates over the manner in which copyright might attach to facts. Both systems may protect elements of a compilation as original literary works in their own right, but facts¹²⁷ are not considered to be copyrightable subject-matter *per se* in the United States based on constructions of the idea-expression dichotomy,¹²⁸ again through such devices as the merger doctrine¹²⁹ and conceptions of authorship.¹³⁰ As copyright protection of compilations is “thin”, these fact considerations become quite significant. This system differs from the British law, where the issue is framed merely as one of originality in the sense of conveying information or instruction without need to deny the protection merely as it might protect a fact.¹³¹

In respect of compilations, the Copyright Act of 1976 provides¹³² that “a work formed by the collection and assembling or preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship” may be protected. *Feist Publications, Inc. v. Rural Telephone Service Co. Inc.*¹³³ was a case which concerned telephone directories. Rural Telephone Services published local yellow and white page directories for its subscribers. It was bound to do so under

¹²⁶ 17 USC §117; *Campbell v. Acuff-Rose Music Inc.*, 114 S. Ct. 1164 (1994).

¹²⁷ That which is objectively and permanently true; *Nester's Map & Guide Corp. v. Hagstrom Map & Guide Corp.*, 796 F. Supp. 729 (E.D.N.Y., 1992).

¹²⁸ *Harper & Row Publisher, Inc. v. Nation Enters.*, 471 U.S. 539 (1985).

¹²⁹ However, it is clear that where there is more than one way to express a fact and that the expression in question can be said to reflect creative choices in presentation, then the merger doctrine can be overcome and copyright may subsist under the American statute. See generally *CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc.*, 44 F. 3d 61 (2d Circ., 1994); *Kregos v. Associated Press*, 937 F. 2d 700 (2d Circ., 1991).

¹³⁰ 17 USC §102 (first statutory definition of such subject-matter in the American copyright regime); *Feist Publications, Inc. v. Rural Telephone Service Co. Inc.*, 499 US 340, 344-45 (1991); *Victor Lalli Entertainments, Inc. v. Big Red Apple, Inc.*, 111 S. Ct. 1282. See J. Ginsburg, “Creation and Commercial Value: Copyright Protection of Works of Information” (1990), 90 Colum. L.R. 1865.

¹³¹ *Exxon Corp v. Exxon Insurance Consultants International Ltd*, [1982] R.P.C. 69. The approach in Canada is less onerous, only an expression of an idea is required; *IBM Corporation v. Spirales Computers Inc.* (1984), 12 D.L.R. (4th) 351 (Fed. C.A.).

¹³² 17 USC §101 (definition of compilations), 103(a) (inclusion of compilations within literary works).

¹³³ 499 US 340 (1991).

state law. Feist sought to license the data and to release its own directory, but to include a larger catchment area than Rural Telephone's directory and thus be attractive in the market to a differing class of consumers. Rural refused to license the information,¹³⁴ and Feist copied the listings without authorisation to do so. Feist went further and took steps to verify Rural's collection as accurate before using the data within its own directory. Ultimately the issue for the Supreme Court was to reconcile the authorities on the nature of the degree or originality that must be proven, with the cases below speaking to the sweat of the brow approach¹³⁵ as well as a creativity-linked standard¹³⁶ and sometimes the two approaches being used in a complementary fashion. At the end of the day, the United States Supreme Court preferred a creativity-linked standard based on the construction of the federal power to legislate in the area of intellectual property as one directed at the public interest in encouraging new works, rather than merely protecting the investment of resources in the work at issue.¹³⁷ In a famous passage, O'Connor J. held:¹³⁸

This protection is subject to an important limitation. The mere fact that a work is copyrighted does not mean that every element of the work may be protected. The *sine qua non* of copyright is originality. To qualify for copyright protection, a work must be original to the author. Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity. To be sure, the requisite level of creativity is extremely low; even a slight amount will suffice.

And further:¹³⁹

It may seem unfair that much of the fruit of the compiler's labor may be used by others without compensation. As Justice Brennan has correctly observed, however, this is not "some unforeseen byproduct of a statutory scheme".... It is, rather, "the essence of copyright."... and a constitutional requirement. The primary objective of copyright is not to reward the labor of authors, but "[t]o promote the Progress of Science and useful Arts. ... To this end, copyright assures authors the right to their original expression, but encourages others to build freely upon the ideas and information conveyed by a work... This principle, known as the idea/expression or fact/expression dichotomy, applies to all works of authorship. As applied to a factual compilation, assuming the absence of original written expression, only the compiler's selection and arrangement may be protected; the raw facts may be copied at will. This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art.

¹³⁴Subsequently held to be violative of anti-trust principles, *Rural Telephone Service Co. Inc. v. Feist Publications Inc.*, 737 F. Supp. 610 (D.C. Kansas 1990).

¹³⁵For example, *Illinois Bell Telephone Co. v. Haines & Co.*, 905 F. 2d 1081 (7th Circ. 1990); *Hutchinson Telephone Co. v. Frontier Directory Co.*, 770 F. 2d 128 (8th Circ. 1985).

¹³⁶For example, *Burrow-Giles Lithograph Co. v. Sarony*, 111 US 53 (1884).

¹³⁷499 US 340, 349 per O'Connor J.

¹³⁸*Ibid.*

¹³⁹*Ibid.* at 350.

Thus, an original work of authorship under the copyright statute is one which is the product of the author's own efforts which includes at least some minimal degree of creativity. The creativity standard here is not akin to the "author's own intellectual creation" standard in those civilian systems in which the personality of the author must be reflected in the work, but furthers the same policy goals that are familiar to British copyright: rewarding the judgement and taste of the author through the copyright grant, encouraging others to act likewise, but in no case making unavailable the general ideas or discrete matters of fact that ought to be available to them. The protection encourages and supports a principled construction of authorship, not ownership of knowledge.

In enforcing this "modicum of creativity"¹⁴⁰ approach, the experience post-*Feist* has not been an unduly restrictive one – as one court put it, copyright protection in compilations may be thin,¹⁴¹ "but not anorexic."¹⁴² Thus, original compilations have been protected in the form of directories of businesses,¹⁴³ lists of the statistics of baseball pitchers on nine selected criteria,¹⁴⁴ a model building code,¹⁴⁵ facts for software user interface,¹⁴⁶ guides to the used prices of cars¹⁴⁷ and collectible coins,¹⁴⁸ and codes and descriptions of dental procedures.¹⁴⁹ Reports of judgements have been refused protection,¹⁵⁰ as have a yellow pages directory,¹⁵¹ a list or part numbers automatically created with

¹⁴⁰ *Ibid.* at 339.

¹⁴¹ That is, protection is restricted to the original parts of the compilation's selection, coordination or arrangement.

¹⁴² *Key Publications, Inc. v. Chinatown Today Publishing Enterprises*, 945 F. 2d 509, 514. (2d Circ. 1991).

¹⁴³ *EPM Communications, Inc. v. Notara, Inc.*, 56 U.S.P.Q. 2d (B.N.A.) 1144 (S.D.N.Y., 2000); *Key Publications, Inc. v. Chinatown Today Publishing Enterprises*, 945 F. 2d 509 (2d Circ. 1991).

¹⁴⁴ *Kregos v. Associated Press*, 937 F. 2d 700 (2d Circ. 1991).

¹⁴⁵ *Veeck v. Southern Building Code Congress International, Inc.*, 158 F. 3d 693 (5th Circ. 2001).

¹⁴⁶ *Engineering Dynamics, Inc. v. Structural Software, Inc.*, 26 F. 2d 1335 (5th Circ. 1994).

¹⁴⁷ *CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc.*, 44 F. 3d 61 (2d Circ. 1994).

¹⁴⁸ *CDN, Inc. v. Kapes*, 197 F. 3d 1256 (9th Circ. 1999).

¹⁴⁹ *American Dental Association v. Delta Dental Plans Association*, 126 F. 3d 977 (7th Circ. 1997).

¹⁵⁰ *Matthew Bender & Co. v. West Publishing Co.*, 158 F. 3d 674 (2d Circ. 1998), and , 158 F. 3d 693 (2d Circ. 1998); but see also, *Oasis Publishing Co. v. West Publishing Co.*, 924 F. Supp. 918 (D. Minn. 1996).

¹⁵¹ *Bellsouth Advertising & Publishing Corp. v. Donnelly Information Publishing, Inc.* 999 F. 2d 1436 (11th Circ. 1993). Alphabetisation of names is an insufficient system of arrangement, as were headings for the various business types. But see *Warren Publishing v. Microdos Data, Inc.*, 53 F. 3d 950 (11th Circ. 1995) where a directory of facts ("Directory of Cable Systems") respecting cable and terrestrial television stations was protected as the organising principle was around systems rather than geographic regions, which was sufficiently creative.

the manufacturer's numbering system,¹⁵² charters of horse racing statistics,¹⁵³ and a Hebrew bible with symbols to allow for searching.¹⁵⁴

The requisite creative efforts may be expended upon the *selection* of the data. As the selection must be creative, there is an obvious problem in automatic selection of all relevant data—for example, the telephone directory in *Feist* itself—or criteria which is itself unoriginal. Equally obvious is that where there are creative choices in using unoriginal criteria,¹⁵⁵ the requisite modicum of creativity will be shown. Thus, a list of “best” objects as selected by the author will do. In respect of *co-ordinating* and *arranging* data, the same considerations in respect of automatic factors like page numbering¹⁵⁶ and unoriginal criteria apply with the additional control of the merger doctrine. Expressive choices in selecting the right fact in the right way will suffice.¹⁵⁷

How much for the better the law has changed in practice by virtue of the application of the *Feist* standard is certainly open to debate, and the paradox in relying on a creativity norm as a means of encouraging more utilitarian works in the form of “creative” factual compilations (which by their very nature may intrude on the objective veracity of the contents presented) hasn't gone unnoticed.¹⁵⁸ The result is to leave protection of databases in an uncertain state complicated by varying interpretations of the *Feist* decision in the various federal circuits.¹⁵⁹ This institutional uncertainty propels the wary business person to seek support elsewhere—in contract¹⁶⁰ or misappropriation¹⁶¹

¹⁵²*Southco, Inc. v. Kanebridge Corp.*, 258 F. 3d 148 (3d Circ. 2001).

¹⁵³*Victor Lalli Entertainments, Inc. v. Big Red Apple, Inc.*, 936 F. 2d 671 (2d Circ. 1991).

¹⁵⁴*Torah Soft Ltd. v. Drosnin*, 136 F. Supp. 2d 276 (S.D.N.Y., 2001).

¹⁵⁵For example, industry convention: *O.P. Solutions, Inc. v. Intellectual Property Network, Ltd.*, 52 U.S.P.Q. 2d 1818 (S.D.N.Y. 1999).

¹⁵⁶*Matthew Bender & Co. v. West Publishing Co.*, 158 F. 3d 674 (2d Circ. 1998) and 158 F. 3d 693 (2d Circ. 1998).

¹⁵⁷For example, selecting the right prices from various sources for coins; *CDN, Inc. v. Kapes*, 197 F. 3d 1256 (9th Circ. 1999).

¹⁵⁸For example, J. Ginsburg, “U.S. Initiatives to Protect Works of Low Authorship” in R. Dreyfuss et al. (Eds.), *Expanding the Boundaries of Intellectual Property* (O.U.P., 2001).

¹⁵⁹Compare *Southco, Inc. v. Kanebridge Corp.*, 258 F. 3d 148 (3d Circ. 2001), *American Dental Association v. Delta Dental Plans Association*, 126 F. 3d 977 (7th Circ. 1997), *Warren Publishing v. Microdos Data, Inc.*, 53 F. 3d 950 (11th Circ. 1995).

¹⁶⁰*ProCD, Inc. v. Zeidenberg*, 86 F. 3d 1447 (7th Circ. 1996).

¹⁶¹*Ibid.* at 354 (misappropriation may still apply to facts). After *Feist*, the state misappropriation action can only be maintained if it protects intellectual property not within the subject matter of copyright and/or asserts rights not equivalent to copyright; something more is needed, particularly timeliness if the claim seeks to analogise to the mostly-accepted doctrine in *INS v. AP* in relation to “hot news.” See *National Basketball Association v. Motorola, Inc.*, 105 F. 3d 841 (2d Circ. 1997); *Fred Wehrenberg Circuit of Theatres, Inc. v. Moviefone, Inc.*, 73 F. Supp 2d 1044 (E.D. Mo. 1999); *Pollstar v. Gigmania Ltd.* 170 F. Supp 2d 974 (E.D. Cal., 2000). In *United States Golf Association v. Arroyo Software Corp.*, 49 U.S.P.Q. 2d 1979 (Cal. App. 1999) the claim in respect of a handicapping system was not pre-empted.

(which would not appear to be a spent force as far as time-sensitive dynamic databases are concerned)¹⁶² as well as whatever proprietary-based cause might come to hand to the circumstances.¹⁶³

Based on these concerns, the uncertain nature of ancillary actions at the state level, the efficacy and cost of technological self-help measures, and the presence of the E.U. Database Directive with its reciprocity provision, a number of proposals have suggested legislative reform to construct *sui generis* protection of databases in the U.S.¹⁶⁴ (though such proposals languish in Congress).¹⁶⁵

D. Canada

As in other jurisdictions, the protection of factual compilations in Canadian law has brought into focus the difficulties in determining originality in this form of utilitarian subject-matter. However, and arising in part from the tensions inherent in Canada's bijural tradition and the influence of American law on domestic doctrine, the most recent cases have tended to complicate matters by alternatively pulling towards and pushing away from conceptions of creative authorship in general and specifically in respect of compilations of factual material. In the process, the law has become uncertain both in doctrine and direction – the cases seem to say that “intellectual creation” as used in the definition of a “compilation”¹⁶⁶ under the statute requires self-generation (not copying from another) and

¹⁶²J.C. Ginsburg, “Copyright, the Common Law, and S. Generis “Protection of Databases in the United States and Abroad” (1997), 66 U. Cin. L.R. 151, 157-164.

¹⁶³For example, *eBay, Inc. v. Bidder's Edge, Inc.* where a database was protected indirectly in trespass against deep-linking; 100 F. Supp. 2d 1058 (N.D. Cal. 2000). See also *Ticketmaster Corp. v. Tickets.Com Inc.*, 54 U.S.P.Q. 2d (B.N.A.) 1344 (C.D. Cal. 2000); *Register.com v. Verio, Inc.*, 126 F. Supp. 238 (S.D.N.Y. 2000).

¹⁶⁴Various proposals have been made; for example, The Database Investment and Intellectual Antipiracy Act of 1996, H.R. 3531; The Consumer and Investor Access to Information Act of 1999, H.R. 1858; The Collections of Information Antipiracy Act of 1999, H.R. 2652; see generally, A. Sullivan, “When the Creative is the Enemy of the True: Database Protection in the U.S. and Abroad” (2001), 29 A.I.P.L.A. Q.J. 317, 356-71; J. Ginsburg, “U.S. Initiatives to Protect Works of Low Authorship” in R. Dreyfuss et al. (Editors), *Expanding the Boundaries of Intellectual Property* (O.U.P.), (2001).

¹⁶⁵One might expect that current legislative priorities will prevent these questions being resolved in the short term. At the May, 2002 meeting of the WIPO Standing Committee on Copyright and Related Rights (S.C.C.R.), the American delegation reported on Congressional developments and indicated that “[d]iscussions were continuing between two Congressional Committees, the House Subcommittee on Intellectual Property, Courts and the Internet, and the House Committee dealing with communications matters. The two Committees which had, in the past, developed competing bills, were now attempting to resolve their differences and prepare a joint draft text;” WIPO Doc. S.C.C.R./7/10.

¹⁶⁶Copyright Act, s.2: “*compilation* means (a) a work resulting from the selection or arrangement of literary, dramatic, musical, or artistic works or of parts thereof, or (b) a work resulting from the selection or arrangement of data;” S.C. 1993, c.44, s.53(3).

“something in addition to not being copied.”¹⁶⁷ Much like the British jurisprudence which Canadian law, in the main, aligns itself with,¹⁶⁸ that something more is an indistinct category (that may now include creativity in addition to the usual vagaries such as taste, discretion, skill, judgment, industry and labour) ensuring that the investment or resources and effort is of the right sort and which controls the extent of the entitlement that might be claimed in such subject-matter. In essence, like British law prior to the Database Directive, the Canadian law recognises that the further one gets away from traditional literary works, the inter-related questions of subsistence and infringement are difficult to determine in the circumstances of an individual case and particularly so in factual compilations.¹⁶⁹ Again, like British doctrine, it is hard to pin down exactly what the magical quality of “something more” is with any precision. The present copyright revision exercise, though framed in term of the agenda set out through the substantive provisions of the relevant WIPO treaties, may yet settle the issue of database protection more satisfactorily than the judges have been able to do thus far within the constraints of the *Copyright Act*.

As a preliminary matter, it is worthwhile to consider the nature of the right set out in the *Copyright Act*. Like the 1911 British statute on which it was originally modelled,¹⁷⁰ the Canadian statute creates a right to control reproduction and exploitation of various forms of protectable expression (not all requiring originality). Unlike other jurisdictions, however, Canadian courts have been quite reluctant to label the right as a proprietary one in preference to its characterization simply as a “statutory right.”¹⁷¹ Notwithstanding, I would

¹⁶⁷ *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2002] F.C.A. 187 (Fed. C.A.) at para. 214 per Rothstein JA.; similarly, “something more than merely copying” existing elements per Linden JA. at para. 55.

¹⁶⁸ *Slumber-Magic Adjustable Bed Co. Ltd. v. Sleep-King Adjustable Bed Co. Ltd.* (1984), 3 C.P.R. (3d) 81, 84 (B.C.S.C.); *U&R Tax Services Ltd. v. H&R Block Canada Ltd.* (1995), 62 C.P.R. (3d) 257, 264 (F.C.T.D.); *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2002] F.C.A. 187 (Fed. C.A.).

¹⁶⁹ Cf. *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2002], *supra* note 167 at para. 55 per Linden JA.; *Hager v. ECW Press Ltd.*, [1999] 2 F.C. 287 (F.C.T.D.), para. 42 per Reed J.

¹⁷⁰ See *Théberge v. Galerie d'Art du Petit Champlain Inc.*, [2002] S.C.C. 34 at para. 12 per Binnie J; para. 114 per Gonthier J.

¹⁷¹ The Canadian Act is somewhat exceptional in not defining, but treating, the right as a property right. See *Compo Co. Ltd. v. Blue Crest Music Inc.*, (1979), [1980] 1 S.C.R. 357 at 372-73 where Estey J. said: “...copyright law is neither tort law nor property law in classification, but is statutory law. It neither cuts across existing rights in property or conduct nor falls in between rights and obligations heretofore existing in the common law. Copyright legislation simply creates rights and obligations upon the terms and in the circumstances set out in the statute. This creature of statute has been known to the law of England at least since the days of Queen Anne when the first copyright statute was passed. It does not assist the interpretative analysis to import tort concepts. The legislation speaks for itself...”; approved, *Théberge v. Galerie d'Art du Petit Champlain Inc.*, [2002] S.C.C. 34 at para. 5 per Binnie J., para. 113 per Gonthier J.; *Bishop v. Stevens*, [1990] 2 S.C.R. 467 at 477 per McLachlin J.

suggest that the protection created under the Canadian statute is indeed proprietary in the conventional sense. Though created by statute in relation to an intangible, the right sufficiently satisfies the traditional incidents of ownership under the so-called "Hohfeld¹⁷² / Honoré¹⁷³ orthodoxy"; that is, the claim-rights of possession, use, management, and the reception of income; the power to transfer, waive, exclude, and abandon; the immunity from expropriation by the state; and liability for execution of a judgement are all present in relation to the right. At the same time, the right is not a creature of common law nor is it unlimited in term or extent; like a patent, the right is limited by time and statutory (and perhaps equitable) defences operate to limit its enforcement. Whilst the judicial disinclination to apply the term property to the right obviously reflects a pragmatic concern for the delicate balancing of interests that is the essence of intellectual property law, I would suggest that withholding the property label starts the analysis on the wrong foot.

Property, properly understood, is not such a rigid concept that its application to copyright automatically alters the balance between the provision of economic incentives to create protectable expression and legitimate interests in the dissemination of such works;¹⁷⁴ in other words, it need not be seen as concluding rather than beginning an inquiry into the proper balancing of competing interests.¹⁷⁵ Moreover, given the definitional clarity derived from the statute and the internal provision of criminal proscriptions, the sorts of concerns that arose in relation to an indefinite category of valuable intangibles like confidential information¹⁷⁶ do not arise here. Rather than rejecting an association with property concepts, I would suggest that it is not undesirable to align the content of copyright with the larger law and theory in respect of legal entitlements. One need not adopt the rigid taxonomic precision of the Birksian school of restitution to recognise that labels have meaning and doctrines in different areas are conceptually linked. With respect, and regardless of whether one takes a

¹⁷² See W.N. Hohfeld, "Some Fundamental Legal Conceptions as Applied in Judicial Reasoning" (1913) 23 Yale L.J. 16; "Fundamental Legal Conceptions as Applied in Judicial Reasoning" (1917) 26 Yale L.J. 710. Hohfeld's analysis of the correlative rights and duties in respect of both in rem and in personam rights has been subject of criticism and development since publication; see generally J. Waldron, *The Right to Private Property* (1988); J.E. Penner, "The 'Bundle Of Rights' Picture Of Property" (1996) 43 U.C.L.A. L. Rev. 711; J. Williams, "The Rhetoric of Property" (1998) 82 Iowa L.Rev. 277; U. Mattei, *Basic Principles of Property Law: A Comparative Legal and Economic Introduction* (Westport: Greenwood Press, 2000).

¹⁷³ A.M. Honoré, "Ownership" in A.G. Guest, (ed.), *Oxford Essays in Jurisprudence* (Oxford: Clarendon Press, 1961) at 109. See S.R. Munzer, *A Theory of Property* (Cambridge: C.U.P., 1990) at 22.

¹⁷⁴ *Théberge v. Galerie d'Art du Petit Champlain Inc.*, *supra* note 169 at para. 30 per Binnie J., approving Willes J's famous dicta in *Millar v. Taylor* (1769), E.R. 201 at 218.

¹⁷⁵ See A. Beckerman-Rodau, "Are Ideas Within the Traditional Definition of Property: A Jurisprudential Analysis" (1994) 47 Arkansas L.Rev. 603, 604.

¹⁷⁶ *Stewart* (1988), 50 D.L.R. (4th) 1 (S.C.C.).

traditionally conservative or more expansive socially-constructed view of property rights,¹⁷⁷ property as a concept and legal institution is a meaningful one, and conceptual alignment between these two areas of the larger law of entitlements seems to me to be a useful one. The point is not to throw off intellectual property law for a return to free-ranging common law protections, which may be the root fear, but to construct meaningful contexts in which to determine the content of socially-desirable entitlements to resources and things of value.

Indeed, as revealed in the latest judgement of the Supreme Court of Canada touching substantive copyright doctrine and the troubling regional split in that court,¹⁷⁸ Canadian copyright law is caught between the tensions generally associated with common law copyright and civilian *droit d'auteur* traditions. It has been suggested that at least part of the problem in *Théberge* is a reluctance to accept a unique Canadian implementation of a universal principle; the lost truth being that "copyright is the same everywhere, the only nuances being provided artificially by legal tools and techniques, which differ from one State to the next"¹⁷⁹ and that undue reliance on received common law visions distort the efficacy of any independent analysis. This is somewhat simplistic. I agree that each jurisdiction must be taken independently and assessed with regard to its own developed traditions and needs; Canada is sovereign in its own law-making. However, and flowing from rather than opposed to the need for jurisprudential self-determination, I would dispute the claim that copyright is (or should be) the same everywhere. Differing jurisdictions judge the nature and level of personal entitlement differently in respect of discrete forms of subject-matter, and are informed by differing theoretical perspectives on the nature of both personal and public entitlement; these differences can be both substantive and structural. Conceptions in respect of the genus property, informed by public policy considerations in respect of the species intellectual property, should not be eliminated completely from the analysis. It is the conceptual framework in which the analysis should be conducted. At the same time, not all entitlements need be "full-blown property rights" (to use Professor Harris's phrase), and that is a point that I suggest is important in database protection. Perhaps it is not a failure to consider the international or comparative context that is at the root of the problem, rather than a reluctance to place the difficult theoretical issues within a conventional doctrinal frame. To be fair, I would suggest that Binnie J. did just that in *Théberge*.

¹⁷⁷For discussion of socially constructed property rights in valuable intangibles, see A. S. Weinrib, "Information and Property" (1988), 36 U.T.L.J. 117; K. Gray, "Property in Thin Air" (1991) 50 C.L.J. 252; S. Ricketson, "'Reaping without Sowing': Unfair Competition and Intellectual Property Rights in Anglo-Australian Law" (1984) U.N.S.W.L.J. 1; C. Rotherham, "Property and Justice" in M.H. Kramer, ed., *Rights, Wrongs and Responsibilities* (Basingstoke: Palgrave, 2001).

¹⁷⁸*Théberge v. Galerie d'Art du Petit Champlain Inc.*, *supra* note 170.

¹⁷⁹N. Tamaro, *The 2002 Annotated Copyright Act* (Toronto: Carswell, 2002) at xii.

Turning to the issue at hand, perhaps the most controversial decision in the Canadian copyright law in recent years is that of the Federal Court of Appeal in *Tele-Direct (Publications) Inc. v. American Business Information Inc.*¹⁸⁰ Here, and using the amendments to the 1993 Copyright Act as a point of departure, the court took the view that Canadian copyright law has been, and should be, accommodative of creative authorship. Hence, and with an eye towards regional harmonization of laws through NAFTA, the Canadian law in respect of the copyright protection of factual compilations ought to draw itself in line with the *Feist* approach in the United States – authorship, and not mere self-generation, should become the focal point of judicial concern. It is a controversial position, and has been subject of much scrutiny.

The *Tele-Direct* case itself occurred after the decision of the Canadian Radio-television and Telecommunications Commission (CRTC) to regard raw telephone subscriber data as not protectable in copyright and properly subject to mandatory licensing,¹⁸¹ and involved the question of the copyright protection of a yellow pages directories published and distributed in both the provinces of Ontario and Quebec. At trial,¹⁸² McGillis J. held that the subscriber data were not subject to copyright (and thus were not independently protected), and that the sub-compilation of these data was structured according to industry convention such that the headings created by the publishers to accompany the data were similarly commonplace (and thus that the originality test was not met, even on the standard of labour, skill and judgement). Even if there was copyright in the *Tele-Direct* compilation, there was no infringement. On appeal,¹⁸³ the trial judgement was upheld on different reasoning.

In the Federal Court of Appeal, and after reviewing the record below, Decary JA. turned to the importance of the changes to the Copyright Act through the NAFTA enabling legislation¹⁸⁴ which it was held did two things: it broadened the categories of compilations beyond literary works (to include artistic, dramatic and musical works) and amended the Act to reflect Article 1705(1)(b) of NAFTA which provides, in the same terms as TRIPS, Article 10(2):¹⁸⁵

Compilations of data or other material, whether in machine readable or other form, which by reason of the selection or arrangement of their contents constitute intellectual creations, shall be protected as such.

¹⁸⁰(1997), [1998] 2 F.C. 22, 38 (F.C.A.); leave to appeal to S.C.C. dismissed, [1997] S.C.C.A. No. 660.

¹⁸¹Telecom Decisions C.R.T.C. 90-12 (June 14, 1990); 92-1 (March 3, 1992); G.A. Knight, "The Fall and Rise of Sweat of the Brow" (1998-1999) 13 I.P.J. 337, 348.

¹⁸²74 C.P.R. (3d) 72.

¹⁸³[1998] 2 F.C. 22.

¹⁸⁴The Copyright Act was amended to comply with NAFTA in respect of defining compilations, Art. 1705(1)(b) through the North American Free Trade Agreement Implementation Act, S.C. 1993, c.44, s.53.

¹⁸⁵Both TRIPS, Art. 10(2) and NAFTA, Art. 1705(1)(b) provide further that such protection "shall not extend to the data or material itself, or prejudice any copyright subsisting in that data or material."

The effect of these provisions, it was held, was a deliberate departure from the prevailing sweat of the brow approach, discussed above in relation to comparable British law, towards the adoption of the *Feist* test. Decary JA. held:¹⁸⁶

Clearly, what the parties to the Agreement wanted to protect were compilations of data that “embody original expression within the meaning of [the Berne] Convention” and that constitute “intellectual creations”. The use of these last two words is most revealing: compilations of data are to be measured by standards of intellect and creativity. As these standards were already present in Anglo-Canadian jurisprudence—as we shall see later—I can only assume that the Canadian government in signing the Agreement and the Canadian Parliament in adopting the 1993 amendments to the Copyright Act expected the Court to follow the “creativity” school of cases rather than the “industrious collection” school.

After re-iterating that the law has always been that only original compilations may attract copyright and that the threshold of originality is a low one, Decary JA. held:¹⁸⁷

It is true that in many of the cases we have been referred to, the expression “skill, judgment or labour” has been used to describe the test to be met by a compilation in order to qualify as original and, therefore, to be worthy of copyright protection. It seems to me, however, that whenever “or” was used instead of “and”, it was in a conjunctive rather than in a disjunctive way. It is doubtful that considerable labour combined with a negligible degree of skill and judgment will be sufficient in most situations to make a compilation of data original. One should always keep in mind that one of the purposes of the copyright legislation, historically, has been “to protect and reward the *intellectual* effort of the *author* (for a limited period of time) in the work” (my emphasis). The use of the word “copyright” in the English version of the Act has obscured the fact that what the Act fundamentally seeks to protect is “le droit d’auteur”. While not defined in the Act, the word “author” conveys a sense of creativity and ingenuity. I do not read these cases which have adopted the “sweat of the brow” approach in matters of compilations of data as having asserted that the amount of labour would in itself be a determinative source of originality. If they did, I suggest that their approach was wrong and is irreconcilable with the standards of intellect and creativity that were expressly set out in NAFTA and endorsed in the 1993 amendments to the Copyright Act and that were already recognized in Anglo-Canadian law.

Adopting the *Feist* test,¹⁸⁸ it was held that the test of originality in respect to compilations of data is properly one of “labour, skill and judgement” based on some low threshold of creativity on the part of the author of the database; the policy concern being to support a robust conception of authorship in structuring the statutory entitlement and not to extend that entitlement directly to factual material. Though the standard of creativity was set at a minimum threshold, this was a significant departure from existing practice.

A number of points can be made in relation to *Tele-Direct*.

¹⁸⁶[1998] 2 F.C. 22 at para. 15. The presumption was rejected by Linden JA. in *CCH Canadian Ltd. v. Law Society of Upper Canada*, [2002] F.C.A. 187 at para. 40, 55 (Fed. C.A.).

¹⁸⁷*Ibid.* at para. 29.

¹⁸⁸*Ibid.* at para. 34.

First, the court adopts an attitude towards American constitutional and intellectual property law that is itself not very nuanced. It takes no account of the differing construction of the “idea-expression dichotomy” in American jurisprudence, of judicially-developed principles such as the merger doctrine, nor of the systemic hostility to functional expression. To paraphrase Lord Hailsham, it is true that each of Canada, Britain, and the United States doesn’t allow copyright to attach to facts, but it all depends what you mean by a “fact”. To remove *Feist* from its context and drop it into the Canadian law of copyright is problematic.

Second, and perhaps most important, it is unclear as to what Decary JA. intends by labelling Canada as a *droit d’auteur* system and emphasizing authorship. As Binnie J. recently held in the *Theberge* litigation,¹⁸⁹ the distinction between personal author-centred interests associated with protection of moral rights¹⁹⁰ and owner-centred mercantile interests associated with copyright is both a real and profound one in Canadian law. Copyright is of much less exalted status, and is an exploitation-oriented right bound up with “a conception of artistic and literary works essentially as articles of commerce.”¹⁹¹ Creative authorship in the civilian tradition is foreign to such a conception of copyright; authors and owner-assignees are protected in copyright, but authorship less so. Given the mercantile orientation of the copyright, the traditional hostility of common law jurisdictions to creative authorship is primarily due to the difficulties in leaving such an open-ended creativity standard to judges in the context of a system that is predicated on the vindication of narrow economic interests towards economic goals rather than the fulfilment of authorship-centred duties. Typical are the recent comments by Linden JA. on the point:¹⁹²

Inevitably, judges will be forced to create their own definitions of creativity, resulting in substantial uncertainty and further jeopardizing the public benefit that accrues from the production of new and original works. The fact that an objective and coherent definition of ‘creative’ is elusive at best and that ‘creativity’ can sometimes connote qualities that are not required of an ‘original’ work makes it preferable to avoid such unpredictable labels when assessing originality.

This is not to say that such a creativity-linked entitlement is either undesirable or impractical in principle, though it may be unsuitable for inclusion in the system of copyright as presently set out in the prevailing statute and accumulated jurisprudence in this indirect manner.

Third, the position accepted by Decary JA. in relation to NAFTA has raised the bar in relation to the protection of compilations through a more stringent

¹⁸⁹ *Théberge v. Galerie d’Art du Petit Champlain Inc.*, *supra* note 170 at para. 59-60.

¹⁹⁰ The 1924 Act accommodated the 1928 revisions to the Berne Convention, Art. 6bis, in 1931, S.C. 1931, c.8; presently the relevant protections are provided for in ss. 14.1, 14.2, 28.1, 28.2 of the statute.

¹⁹¹ *Théberge v. Galerie d’Art du Petit Champlain Inc.*, *supra* note 170 at para. 12, 15, 22 per Binnie J.

¹⁹² *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 167 at para. 58 (Fed. C.A.).

construction of the Berne / NAFTA / TRIPS phrase "intellectual creation" is dubious.¹⁹³ As an initial point, it is questionable whether the relevant sections of NAFTA speak to such substantive standards in a purposeful way at all, rather than merely tying the accepted status quo to regional trade-based arrangements.¹⁹⁴ Indeed, chapter 17 of the NAFTA itself arises from the work of the GATT official who drafted TRIPS, and found its way into the treaty when the NAFTA negotiators abandoned their own documents to proceed from the draft TRIPS agreement once it was complete.¹⁹⁵ Second, the proposition that it was in the mind of the Canadian negotiators (and later legislators) to adopt the *Feist* standard in relation to factual compilations seems artificial, given that the American law was not fully developed at the time the treaty was negotiated and the matter was not a specific topic of negotiation. Finally, to the extent that one could argue that NAFTA goes beyond TRIPS, on the basis that NAFTA is more deferential to Berne than TRIPS, such an argument would seem to undercut the principle of TRIPS itself. That such a requirement may be desirable is one thing, but that it is mandated by international or regional agreement is a novel, and unconvincing, assertion.

Indeed, that *Tele-Direct* should be properly regarded as fundamentally altering Canadian conceptions of originality seems untenable after such an impression was recently "corrected" by a differently constituted panel of the Federal Court of Appeal. In *CCH Canadian Ltd. v. Law Society of Upper Canada*,¹⁹⁶ the question of originality in various types of legal materials ranging from headnotes to monographs and at large was given extensive consideration. Both Linden JA., for the majority, and Rothstein JA., concurring, explicitly rejected any reading of *Tele-Direct* as fundamentally altering Canadian copyright from the general approach shared with British law or of altering subsistence of copyright at large¹⁹⁷ and all members of the court supported a traditional view of originality as requiring that the protected work originate from the author and be produced by more than mere copious effort expended in slavishly copying another work.¹⁹⁸ Creativity, then, does not feature as a foundational criterion.

¹⁹³ This point was rejected by Linden JA. in *CCH Canadian Ltd. v. Law Society of Upper Canada*, *ibid.* at para. 27.

¹⁹⁴ R.J.T. Corbett, "Impact of NAFTA And TRIPS on Intellectual Property Rights Protections In Canada and The United States" (2000) 6 NAFTA: L. & Bus. Rev. Am. 591 at 593.

¹⁹⁵ M.D.H. Woodward, "TRIPS And NAFTA'S Chapter 17: How Will Trade-Related Multilateral Agreements Affect International Copyright?" (1996) 31 Texas Int'l. L.J. 269 at 274.

¹⁹⁶ [2002] F.C.A. 187 (Fed. C.A.).

¹⁹⁷ *Ibid.*, per Linden JA.: paras. 38, 40, 43-46; per Rothstein JA.: para. 218.

¹⁹⁸ Linden JA., at para. 31, approved the dicta of Lord Oliver in *Interlego A.G. v. Tyco Industries Inc.*, [1989] A.C. 217, 262-3 (P.C.): "[s]kill, labour or judgment merely in the process of copying cannot confer originality." Lord Oliver went on to say that "[a] well executed tracing is the result of much labour and skill but remains what it is, a tracing." *Interlego*, however, was not a compilation case but one involving derivative works in the context of an attempt to extent patent and design rights which had terminated. In the context of an artistic work, as was the nature of the work at issue, more than slavish copying was required—specifically a discernable visual dissimilarity between the original and the copy.

However, and whilst strictly obiter, the majority held that there was no alteration of subsistence requirements after *Tele-Direct* at all, whilst the minority held that there might be a change specifically in the area of factual compilations. Thus, Linden JA. held:¹⁹⁹

I acknowledge that it is more difficult to apply the standard of originality to some types of works, such as compilations, than to traditional forms of expression, such as novels, sculptures or plays. The further one gets away from traditional literary works, the less obvious it becomes that a work has not been copied. Compilations of data, for instance, typically do not display an author's uniquely identifiable flare, nor "exhibit, on their face, indicia of the author's personal style or manner of expression" ... This makes it difficult to establish whether compilations are original or are merely copies. In addition, some compilations may be comprised of elements that are copied from other works or parts of works in which copyright may or may not otherwise subsist. Because the selection and arrangement of the underlying elements, not the elements themselves, must be original, a compiler must demonstrate something more than merely copying those elements into a new work before the Act will award copyright protection. However, Anglo-Canadian copyright law does not require "creativity" to establish that such a work is not a mere copy.

Rothstein JA.:

I recognize that *Tele-Direct*, *supra*, may be read to eliminate the industrious collection approach to originality that has sometimes been used for compilations. I also recognize that debate continues over whether industrious collection or creativity is the better approach for determining the originality of compilations... However, I am mindful of the words of Estey J. in *Compo Co.*... not to decide copyright cases on broader grounds than necessary...

The position that emerges, consistent with other views of *Tele-Direct*,²⁰⁰ is that a creativity-linked test of originality may be discredited as matter of general application, but may still have currency with respect to factual compilations. However, given both the explicit rejection of a creativity-linked standard by the majority in *CCH Canadian Ltd. v. Law Society of Upper Canada* as undesirable in principle and the endorsement of an equally traditional view of copyright as a narrow economic right which is teleologically constructed as an incentive to creation rather than deontologically constructed as the lynchpin of creative authorship by the majority of the Supreme Court in *Théberge*, this leaves the law in a most unsatisfying state. Clearly something more than mere labour is required to allow a compilation of fact to be considered as an original "intellectual creation"; what that quality is, however, remains imprecise. It "will vary in the circumstances."²⁰¹

¹⁹⁹ *Ibid.* at para. 55.

²⁰⁰ See *Hager v. ECW Press Ltd.*, [1999] 2 F.C. 287, para. 42 per Reed J. It was held that *Tele-Direct* does not have "a broad effect" in re-aligning Canadian copyright law with American law and away from British law in respect of creativity. Reed J. acknowledges then that there is some effect, but not "a significant departure from the pre-existing law." Presumably the change is only manifested in respect of compilations of fact.

²⁰¹ *CCH Canadian Ltd. v. Law Society of Upper Canada*, *supra* note 167 at para. 221 (Fed. C.A.) per Rothstein JA.

E. *Common Problems*

Copyright protects compilations, both in the form of collections of original works and of facts and of the two combined; each must be original for the protection to subsist as a matter of law. The British law, both before the implementation of the Database Directive and after its 1998 implementation in domestic law in respect of the narrow class of computer programs, uses a “sweat of the brow” approach. The law is easy to describe but difficult to predict at the stage of identifying infringement rather than protection; the nature and extent of the protection is very much dependent on the circumstances — the nature of the work and the type and extent of “labour, skill or judgement” brought to bear by the author on his or her creation inform judgments of originality as well as substantiality of copying to determine whether there has been an “over-borrowing” from the original compilation.²⁰² This blurring of subsistence and substantiality reflects the nature of British copyright as a means to allied, but shifting, goals as befit the circumstances.

Thus, for example, in protecting an anthology of poetry, the court might look to the skill of the author in selecting from amongst the poet’s accumulated works and the sympathetic ordering of the poems. The anthologist fits the picture of the romantic author so revered in the popular conception of copyright. In protecting a functional work like a coupon of football wagers, the court is more circumspect; considering the effort that went into collecting the data and presenting it accurately and suitable to purpose. It protects the former happily, and the latter grudgingly. Yet it does protect them both. It does so notwithstanding that the dominant policy considerations are different as befits the differing nature of the subject-matter — the two works and the justification for protecting each “are poles apart.”²⁰³ Copyright’s mixed justifications give rise to doctrine that covers the shared concerns of these two rights-holders: to publish the work or withhold publication, to exploit the work economically in selected markets, to translate the work, etc. However, it is the functional nature of the coupon that draws the work away from the creative and to a concern with competition which shades the protection differently. Copyright law explicitly recognises these functional differences and tries to stay its hand where it regards protection as inappropriate.

The American law articulates its hostility to interfering with free markets differently. Various devices, sometimes bordering on the fictional, are employed to deny protection rather than forestall a finding of infringement. It has done this through judicial construction of the idea-expression dichotomy in respect of “copyrightability” and through doctrine that seeks to safeguard a principled view of authorship. The *Feist* test considered the nature of functional subject-matter in the form of factual compilations and decreed a “modicum of creativity”

²⁰² Cf. *Telstra Corporation Limited v. Desktop Marketing Systems Pty Ltd*, [2002] F.C.A.F.C. 112 (Aust. Fed. Ct.) at para. 16, 160 per Lindgren J.

²⁰³ *William Hill (Football) Limited v. Ladbroke (Football) Limited* (1962), [1980] R.P.C. 539, 555 (C.A., per Diplock LJ).

must be present to achieve copyright's goals, and the Federal Court of Canada agreed (though a cloud now sits over that agreement). Authorship of a factual compilation "conveys a sense of creativity and ingenuity" according to Decary JA. in the *Tele-Direct* case, which appears as binding on the matter.

One might take the view that these tests are as hard to apply in a predictable and certain manner as sweat of the brow, and may not be as significant in practice as one might anticipate after reading the judgments in *Feist* and *Tele-Direct*. Consider subject-matter as mundane as a list of used car prices.

In *CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc.*,²⁰⁴ the issue before the United States Court of Appeals for the Second Circuit was whether a publication title the *Automobile Red Book—Official Used Car Valuations* was protected in copyright. The Red Book was published eight times a year, in different versions for each of three regions of the United States plus a single state, and set out values for each automobile make, model number, body style, and engine type that were included in the compilation. Circuit Judge Leval found that the compilation was an original compilation under the *Feist* test: the prices were not historical statistics but "predictions" and thus were protectable expression rather than uncopyrightable facts. That these predictions were laid out in the most logical ordering was insufficient to hold that the expression had merged with the idea or that the presentation of the material was not original.²⁰⁵

The fact that an arrangement of data responds *logically* to the needs of the market for which the compilation was prepared does not negate originality. To the contrary, the use of logic to solve the problems of how best to present the information being compiled is independent creation.

Moreover, this was what *Feist* had in mind according to Judge Leval.²⁰⁶

The thrust of the Supreme Court's ruling in *Feist* was not to erect a high barrier of originality requirement. It was rather to specify, rejecting the strain of lower court rulings that sought to base protection on the "sweat of the brow," that *some* originality is essential to protection of authorship, and that the protection afforded extends only to those original elements. Because the protection is so limited, there is no reason under the policies of the copyright law to demand a high degree of originality.

Similarly, in *Edutile Inc. v. Automobile Protection Assn.*,²⁰⁷ the Federal Court of Appeal considered whether a guide to the process of used cars and trucks were original compilations under *Tele-Direct*. These guides were published for consumers rather than car dealers as was the case in *CCC Information Services*.

²⁰⁴ 44 F. 3d 61 (2d Circ., 1994); *cert. denied*, 516 U.S. 817 (1995). See *Mason v. Montgomery Data, Inc.*, 967 F. 2d 135 (5th Circ. 1992); *Marshall & Swift v. BS&A Software*, 871 F. Supp. 952 (W. S. Mich. 1994).

²⁰⁵ *Ibid.* at 67.

²⁰⁶ *Ibid.* at 66.

²⁰⁷ (2000) C.P.R. (4th) 211 (F.C.A.); leave to appeal dismissed, [2001] 1 F.C. i (S.C.C.).

The guides listed three values for each vehicle in side-by-side columns: trade-in, private sale, and retail values. It was this arrangement that made the compilation not only original, but brilliant and innovative. Decary JA. reviewed some of the testimony at trial and held:²⁰⁸

I conclude from this testimony that the fact of setting out the “private sale” market and the “retail” market side by side in columns was a “brilliant”, “innovative” move. The trial judge could not ignore this decisive testimony... It is not easy in compilation situations to draw a line between what signifies a minimal degree of skill, judgment and labour and what indicates no creative element... A guide organized in this way is, to use this Court’s words in *Tele-Direct*, at para. 28, “a work that was independently created by the author and which displays at least a minimal degree of skill, judgment and labour in its overall selection or arrangement”... Copyright accordingly subsists, resulting not from the three-column layout nor from the selection or designation as such of the three markets used by the appellant, but from the selection and layout of two juxtaposed columns, one dealing with the “private sale” market and the other dealing with the “retail” market.

Though I anticipate that the language used would be less effusive, I think it is beyond doubt that a British court would also extend protection to each of these prices guides, as would a pre-*Tele-Direct* Canadian court using a comparable standard, as would an Australian court using a standard of “substantial” labour or expense incurred in the collection and presentation of data.²⁰⁹ Indeed, though couched in the language of creativity, the *Edufile* court itself looked to the traditional test of labour, skill or judgement and appears merely to have expanded the traditional list to include creativity as a relevant element.

With respect, the reasoning in each of *Edufile* and *CCC Information Services* seems quite artificial and not directed to preserving the creativity and ingenuity inherent in any view of creative authorship; the judgments do make good commercial sense in protecting the investment of labour that went into the obtaining, selection and verification of the data, and to some smaller degree, its arrangement. However, the judgments obscure the policy reasons justifying protection, construct doctrine in a manner that does not anticipate the need to address the same concerns where the data might be presented in digital form, and act in a traditional manner reflective of the pre-*Feist* jurisprudence whilst attempting to employ some augmented *Feist* standard. The result is that the *Edufile* and *CCC Information Services* may provide a pragmatic commercial balance through the construction and application of the originality standard in respect of factual compilations to a limited extent, but over-looked is the economic interest in continuing verification and maintenance of the contents of the database. The incentive created through the copyright is focussed on initial creation of the work, and does not address the equally significant issue of ongoing maintenance.

²⁰⁸ *Ibid.* at paras. 13, 15.

²⁰⁹ *Telstra Corporation Limited v. Desktop Marketing Systems Pty Ltd.*, *supra* note 202 at para. 209 per Sackville J.

Beyond the uncertainty of subsistence, the treatment of such factual compilations is on par with any other literary work such that concerns respecting access to data (and the problem of overly-strong proprietary protections curtailing access) and data aggregation are left to the general defences or competition authorities. Arguably, the American system is best placed to overcome these problems given the flexibility of the fair use defence but the uncertain application of that doctrine doesn't really address the concerns raised in any meaningful way.

Hence, the problem in all three jurisdictions examined is uncertainty and unpredictability in respect of developed doctrine. It is not that the doctrine yields the wrong results; the problem is more in respect of the difficulty in applying these tests to factual compilations, and particularly routinely assembled and verified collections of data in electronic form. As a result, where formal legal models of protection display uncertainty, informal models become important – contract and technological measures – though these may result in over-containment as much as more formal models. It may be that the tensions that arise in the law based on the functional nature of the subject-matter are not capable of a final resolution in constructing copyright doctrine; the balance of interests needs continuous monitoring and occasional rebalancing in respect of new types of works, new uses, and new markets. This is of course in addition to concerns that copyright doctrine be structured to further a principled model of authorship in constructing an entitlement that is economically, philosophically, and culturally justifiable.

Perhaps another approach altogether is warranted.

III. *The E.U. Database Directive*.²¹⁰ *A Two-Tiered Approach*

The Database Directive now forms part of the copyright and neighbouring rights regime established by the European Union thus far in five Directives presently in force,²¹¹ and two awaiting implementation.²¹² Prior to the adoption of the Directive, differing approaches were taken to the core originality criterion

²¹⁰ Directive 96/9/EC of the European Parliament and Council of 11 March 1996, *on the legal protection of databases*, [1996] O.J. L028/11.

²¹¹ The others: Council Directive of 14 May 1991 *on the legal protection of computer programs*, 91/250/EEC, [1991] O.J. L122/42; Council Directive of 19 November 1992 *on the rental and lending right and on certain rights related to copyright in the field of intellectual property*, 92/100/EEC, [1992] O.J. L346/61; Council Directive 93/83/EEC of 27 September 1993, *on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmissions*, [1993] O.J. L290/9; Council Directive 93/98/EEC of 20 October 1993 *harmonizing the term of protection of copyright and certain related rights*, [1993] L290/9.

²¹² Directive 2001/84/EC of the European Parliament and of the Council of 27 September 2001 *on the resale right for the benefit of the author of an original work of art*, [2001] O.J. L272/32; Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 *on the harmonization of certain aspects of copyright and related rights in the information society*, [2001] O.J. L167/10.

for the protection of factual compilations amongst the various member states of the European Union.²¹³ The United Kingdom, Ireland, the Netherlands, France, Portugal and Spain all afforded full protection to collections of facts in one form or another. Germany and Italy required the collection to be a “personal intellectual creation”. Denmark used the Scandinavian catalogue right which was to be a model for the database right, providing for a term of ten years’ protection. Only Belgium and Luxembourg limited protection in any real sense. All of this was alongside the differing scope of unfair competition protections. The negotiators of the Database Directive were tasked with developing a uniform approach that would afford better and more effective protection of databases.

In any regime, new or old, assumptions are made and uncertainties arise and it is not my intention to dissect the provisions of the Directive in exhaustive detail. The problems in the Database Directive are more profound and can be revealed without a highly technical analysis. In general I suggest that the Directive casts a net that is too broad, too unchecked by institutional balancing mechanisms, and is too uncertain in many of its provisions to be a model for others to emulate. Some of these uncertainties and flaws may yet be eliminated when a database jurisprudence emerges from the European Court of Justice. However, given the tendency for Member States to implement the Directive with what some might term a particular European efficiency, there hasn’t been an abundance of case law yet, and the situation may remain fluid for some time. One might note that some observers think the situation is so dire that the Directive ought to be repealed in its entirety as soon as possible.²¹⁴ For my part, I think that this is a rather drastic solution to a set of discrete problems, each of which may be cured or minimised through less radical means.

A. *The Goals of the Directive*

Released as part of an ongoing exercise to reform the copyright laws of the European Union, the 1988 *Green Paper on Copyright and the Challenge of Technology* identified database protection as an area that should be addressed in the reform agenda,²¹⁵ and by 1991 the Commission felt that reform should be undertaken without delay.²¹⁶ The first proposal for a directive was submitted on 15 April 1992.²¹⁷ By this time, *Feist* had been decided as had some European decisions strongly preferring a creativity-linked approach to the protection of

²¹³ See generally S. Smith, “Legal Protection Of Factual Compilations And Databases In England — How Will The Database Directive Change The Law In This Area”, [1997] 4 I.P.Q. 450.

²¹⁴ S. Maurer, P.B. Hugenholtz & H. Onsrud, “Europe’s Database Experiment” (2001), 294 Science 789, 790.

²¹⁵ *Green Paper on Copyright and the Challenge of Technology: Copyright Issues Requiring Immediate Action*, COM (88) 172 (June 7, 1988).

²¹⁶ *Follow-up to the Green Paper*, COM (90) 584.

²¹⁷ Proposal for a Council Directive on the Legal Protection of Databases, COM (92) 24 (May 13, 1992); [1992] O.J. C156/4.

factual compilations.²¹⁸ The Explanatory Memorandum that accompanied the proposal took account of the developments in the United States, as well as the WIPO and GATT-TRIPS negotiations, and stated a preference for some degree of protection that would arise on the basis of effort rather than creativity. Thus, protection of databases would not be limited in principle by that which might arise under a rigid regime oriented to protecting creativity-linked conceptions of authorship. The point was to construct a protection for databases that would be tied to their functional, rather than aesthetic nature, obviating the need for an artificially weak construction of creativity. Thus, from its earliest stages, the Directive was envisaged as one that should relate to the nature of the subject-matter and the economic interest in protection, but the form of the protection was still firmly tied to a proprietary approach. By 1993, in the Amended Proposal²¹⁹ released after the process of initial consultation and revision, there was interest in a supplementary *sui generis* database right to copyright protection – a right that would be a non-proprietary and that could be modelled on the 10-year catalogue right in the Scandinavian countries.²²⁰ The Amended Proposal was amended and re-amended as it made its way through the various institutions in the European legislative process, and became the final version of the Database Directive when adopted by the European Parliament and the Council of Ministers in 1996. As agreed in final form, the Directive creates a two-tiered approach to database protection: copyright protection on the basis of a creativity-linked test of originality with a term of the life of the author plus seventy years, and, the new *sui generis* database right with a term of fifteen years. Made explicit in the negotiations and final form of the Directive was the restriction that data is not to be the subject of independent protection in providing protection to the database in which it is arranged and presented.²²¹

B. *Copyright Under the Directive*

Under the terms of the Directive, copyright protection only subsists in those databases which “by reason of the selection or arrangement of their contents,

²¹⁸P.B. Hugenholtz, “Implementing the Database Directive” in J.J.C. Kabel and G.J.H.M. Mom (eds.), *Intellectual Property and Information Law: Essays in Honour of Herman Cohen Jehoram* (The Hague: Kluwer Law International, 1998), 184. For example, the Dutch case of *Van Dale Lexicografie B.V. v. Rudolf Jan Romme*, the trial court holding that the creativity test (“the author’s personal view”) had been met in organising a dictionary of the Dutch language; upheld on appeal, 1994 Nederlandse Jurisprudentie 58 (Court of Appeals).

²¹⁹Amended Proposal; COM (93) 464 (October 4, 1993) [1993] O.J. 308/1.

²²⁰The copyright acts of all five Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) contain provisions expressly protecting non-original compilations of data, such as catalogues, tables and similar compilations, provided they comprise “a large number” of items; Hugenholtz, *supra* note 218 at 184; G.W.G. Karnell, the Nordic Catalogue Rule in E.J. Dommering and P.B. Hugenholtz (eds.), *Protecting Works of Fact* (Deventer/Boston, 1991).

²²¹Recital 45.

constitute the author's own intellectual creation." No other criteria is to be applied to determine their eligibility for that protection,²²² and the test will not admit of aesthetic or qualitative criteria.²²³ Professor Hugenholtz describes the final version of the originality test as reflective of the tortuous state of the negotiations: "[i]t is a typical European compromise, higher than the British requirement of 'skill and labour', but lower than the test of 'Überdurchschnittlichkeit' ['clear-originality']".²²⁴

In the E.U., member states with *droit d'auteur* systems typically use variations on a creativity standard that is equal to, and sometimes higher than, the *Feist* test. In such *droit d'auteur* systems, originality goes far beyond constructing a higher threshold of protection as a gate-keeping device to limit the protection of utilitarian subject-matter; it speaks to a different philosophical approach to the issues which is predicated on the protection of the personality of the author as captured in his or her creation.²²⁵ In any case, implementation of this aspect of the Directive in such civilian jurisdictions is relatively straightforward; their existing approaches to originality are already compliant, save where exceptional protections exist. There have been suggestions that those standards are too high and will have to be revised downwards to ensure compliance, but that has not yet been addressed in either implementing legislation nor in the jurisprudence.²²⁶

For the United Kingdom, Ireland and the Netherlands,²²⁷ more serious attention to compliance has been required. Whilst the term "intellectual creation" is based on the Berne Convention standard, and the term "the author's own intellectual creation" is the same as that used in the Software Directive, the position adopted by the U.K. is that what is intended in the Database Directive is a higher test of originality with application only to databases.²²⁸ This would mean that U.K. copyright law (aside from databases) would still be regarded as

²²² Article 3(1).

²²³ Recital 16.

²²⁴ Hugenholtz, *supra* note 218 at 187. See *Inkasso-Programm* [1985] GRUR 1041 (Bundesgerichtshof, 9 May 1985); G. Tritton, *Intellectual Property in Europe* (Sweet & Maxwell, 1996), 213.

²²⁵ N. Thakur, "Database Protection In The European Union And The United States: The European Database Directive As An Optimum Global Model", [2001] 1 I.P.Q. 100, 108. Some see the differences as exaggerated, specifically in respect of functional matter; G. Lea, "In Defence of Originality" [1996] 1 Ent. L.R. 21.

²²⁶ Hugenholtz, *supra* note 218 at 187 quoting Jens Gaster, who drafted the Directive.

²²⁷ The Netherlands has been unique in allowing a "pseudo-copyright" to attach to non-original expression. The Dutch Copyright of 1912, Article 10 was drafted to extend protection beyond that contemplated by the Berne Convention, based on the existent "printer's right" developed in 18th century Dutch law, and was maintained on the basis of a policy to encourage production of new factual compilations. See T. Cohen Jehoram, "Copyright in Non-Original Writings: Past-Present-Future?" in J.J.C. Kabel and G.J.H.M. Mom (eds.), *Intellectual Property and Information Law: Essays in Honour of Herman Cohen Jehoram* (The Hague: Kluwer Law International, 1998), 103-104.

²²⁸ See Bentley and Sherman, *supra* note 254 at 95 at fn 81.

generally compliant with the Berne Convention's use of the same standard, which itself has not seriously been doubted in the past. This position is bolstered by the Explanatory Memorandum which explains that the originality test should not be the same for databases as for literary works in general.²²⁹ Moreover, it seems perfectly sensible and consistent with the general assumption in the negotiations that the two-tiered approach adopted by the E.U. would be one that retains copyright in compliance with international obligations and national laws, but relegates it to a smaller role in the revised regime. In any case, the lack of objection from the Commission to the use of the higher standard either elsewhere in the U.K. copyright regime and specifically in respect of computer programs seems to indicate its acquiescence to the British approach.

Thus, it would seem that Directive has been successful in cutting down the broad application of copyright on the basis of a more refined model of authorship, consistent with the approaches favoured in civilian jurisdiction, the United States, and Canada.

C. *The Database Right*

The database right is the core and most important aspect of the Database Directive. It is a non-proprietary protection that is independent of any copyright or other intellectual property right which may exist in the database, or in any of the individual pieces of data or information collected together within the database. Article 7(1) of the Directive provides:

Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database.

The database right evolved significantly during the legislative process. The initial interest in protecting such subject-matter was the recognition that existing protections were inadequate given the ease by which digital databases, and their contents, could be reproduced – the traditional concern that the subject-matter at issue was expensive to compile and maintain, but was easy to copy. This naturally led to a rationale for protection predicated upon the same range of unfair competition principles that are present in common law copyright approaches. In this sense, the initial orientation of the Directive fit both the immediate copyright reform agenda, and, the on-again, off-again interest in harmonizing unfair competition protections.²³⁰

²²⁹ Explanatory Memorandum, para. 3.2.6.

²³⁰ See generally G. Schriker "Twenty-Five Years of Protection Against Unfair Competition", [1995] I.I.C. 782; F.-K. Beier, "The Law of Unfair Competition in the European Community, Its Development and Present Status", [1985] I.I.C. 139; E. Ulmer, "Unfair Competition Law in the European Community" [1973] I.I.C. 188.

There are three main problems with the database right: the absence of a strong link between the provisions as expressed and the justification for the protection, the protections as expressed are themselves overly-broad, and, there is uncertainty as to the level of investment required to attract or maintain database right.

In the first proposal for the Database Directive, the right of the maker of the database was against *unfair* extraction and/or utilization, in commercial circumstances.²³¹ This was changed on the reasoning that fairness of extraction or utilization was a more difficult matter to judge than unauthorized extraction or reutilization.²³² Yet even the word “unauthorized” was eliminated from the later Amended Proposal whilst the infringing acts retained as then drafted.²³³ The unfortunate result is that whilst the Directive is concerned with misappropriation of the investment in the creation and maintenance of databases, the Directive lacks a unifying principle to guide doctrinal development of “extraction” and “re-utilization” within its text. This seems particularly unfortunate as the break in the link between protection and justification denudes the Directive of the conceptual certainty that plagues the problematic application of differing models of copyright law to functional subject-matter. Indeed, this move away from a directed protection against misappropriation of investment by rivals and commercial actors to a protection of investment generally²³⁴ is a central weakness.

The protections themselves become susceptible to overly-broad application absent a limiting principle. For example, extraction as a singular basis for infringement leads to some surprising results—a hacker who accesses a database without a licence, looks at the data and memorises it may well be guilty of extraction according to one judge,²³⁵ as well as a “deep-linker” who seeks to aggregate information from disparate sources.²³⁶ These seem outside the justification for the right and intellectual property protections generally. Similarly, re-utilization alone would seem to cover a myriad of uses in respect of the Internet. The provisions in the Directive lack specificity in these contexts, and

²³¹ COM (92) 24, Art. 2(5) (“Member States shall provide for a right for the maker of a database to prevent the unauthorized extraction or reutilization, from the database, of its contents, in whole or in substantial part, for commercial purposes”).

²³² D.B. Rosler, “The European Union’s Proposed Directive for the Legal Protection of Databases: A New Threat to the Free Flow of Information”, [1995] 10 Berkeley Technology L.J. 105, 110.

²³³ Compare Article 2(5) of the First Proposal, 10(1) of the Amended Proposal, and Article 7(1) of the Directive. Yet Recital 6 still lists as justification the absence of a generalized law of unfair competition to prevent the unauthorized extraction and/or re-utilization of the contents of a database.

²³⁴ Recital 42.

²³⁵ [2001] R.P.C. 31, para. 57.

²³⁶ For example, *baumarkt.de* (Oberlandesgericht Düsseldorf 29 June 1999) and *kranten.com* (President District Court of Rotterdam, 22 August 2000); both noted by Hugenholtz, *supra* note 218.

one might expect that the Directive will have to be interpreted narrowly to avoid these implications.

Similarly, little guidance is given as to what constitutes a "substantial part" of the database for the purposes of judging infringement. This adds little to remedying the problem of differential national application of copyright norms, where a purposive approach renders the question intimately involved with questions of originality. Clearly, it is the database that is protected rather than the data, so that one might expect that the same sort of trap that the Australian High Court fell into respecting the value of every individual item in a computer program will not be repeated.²³⁷ This was the position accepted by Laddie J. in the recent *William Hill* case in the United Kingdom, presently before the European Court of Justice.²³⁸ However, what "database-ness" consists of seems elusive at present which is troubling given the breadth of the protections created by the Directive.

D. *Defences and Permissions*

The problems associated with a wide-ranging database right are compounded by the inadequate range of defences and exceptions included within the provisions of the Directive. This is most unfortunate given the early recognition in the negotiating process that protections recognized ought to be balanced against suitable permissions to enable appropriate access to data. Though there is scope for national action by Member States,²³⁹ the sole mandatory general user permission is a narrow one. Article 8 provides(1):

The maker of a database which is made available to the public in whatever manner may not prevent a lawful user of the database from extracting and/or re-utilizing insubstantial parts of its contents, evaluated qualitatively and/or quantitatively, for any purposes whatsoever. Where the lawful user is authorized to extract and/or re-utilize only part of the database, this paragraph shall apply only to that part.

The provision goes on in Art 8(2) to disallow the lawful user performing acts "which conflict with normal exploitation of the database or unreasonably prejudice the legitimate interests of the maker of the database." These limiting provisions bear resemblance to the Berne Convention, Article 9(2) which allows for national defences "provided that such reproduction does not conflict with the normal exploitation of the work and does not unreasonably prejudice

²³⁷ *Autodesk Inc v. Dyason*, [1992] R.P.C. 575; *contra*: H.P. Knopf, "The Database Dilemma In Canada: Is "Ultra" "Copyright Required?" (1999), 48 U.N.B.L.J. 163, 172 (regarding the draft WIPO Database Treaty).

²³⁸ [2001] R.P.C. 31, para. 47. See also *Dictionnaire Permanent des Conventions Collectives*, [1999] 181 R.I.D.A. 325 (Lyon).

²³⁹ Article 12 preserves defences existing in law in respect of copyright. Article 9 allows Member States to create exceptions for private use, teaching or scientific research, and public security or an administrative or judicial procedure.

the legitimate interests of another.”²⁴⁰ Article 9(1) was added to the Berne Convention in the Stockholm Revision (1967) to ensure that the right of reproduction would be a minimum protection in all Berne Union countries, notwithstanding that its existence under Berne had been assumed. Article 9(2) limits the right so as to allow countries to create exceptions, and should be construed narrowly so as not to interfere with the normal rights of exploitation associated with the copyright work.²⁴¹ The provisions were drafted by a special working party that was struck to address concerns respecting reprography (private copying in large numbers) and home taping of sound recordings and films broadcast on television. The Report of the Stockholm Conference²⁴² makes clear that national jurisdictions can create exceptions for special circumstances such as private use and for teaching and research, but that the reproduction right must be respected in respect of its normal exploitation.

E. *The Absence of Mandatory Licensing Provisions*

This paucity of meaningful and compulsory defences becomes more serious given the lack of mandatory licensing provisions within the Directive itself in respect of single-source data. The Directive contemplates that the refusal to license at all or on fair terms will allow for intervention as was the case in *Magill*,²⁴³ where the Commission was able to prevent the secondary market in television listings from being dominated unfairly by the data provider on the assumption that copyright existed in the programme listings. However, whether the failure to exercise the right to license the data according to the *sui generis* database right is the “exercise of an intellectual property right” is uncertain, and, more seriously, it may be possible for the database holder to mount the defence that as the right doesn’t attach to data and the data is presumably available elsewhere in an unprocessed or unpublished form, there is no scope for dominance according to *Magill*. Again, this is an area where there are a number of conceptual and doctrinal uncertainties which will require direction by the courts.²⁴⁴

The result is that the broad scope of the right is not balanced against meaningful defences or permissions, and that the wide allowance for the development of defences within particular jurisdictions undercuts the goal of

²⁴⁰ See also TRIPS, Article 13.

²⁴¹ Nordemann, Vinck and Hertin, *supra* note 58 at 107-108.

²⁴² Report of the Rapporteur Général (Svante Bergström), para. 85, quoted in translation in S.M Stewart and H. Sandison, *International Copyright and Neighbouring Rights* (London: Butterworths, 1989), 122.

²⁴³ *RTE and Independent Television Publications v. Commission*, [1995] 4 C.M.L.R. 18 (E.C.J.).

²⁴⁴ See G. Westkamp, “Balancing Database Sui Generis Right Protection With European Monopoly Control Under Article 82 E.C.” (2001), 22 Eur. Competition L.R. 13.

harmonized treatment. The result is that the *sui generis* database right has emerged as property-like protection without the institutional devices available in other intellectual property areas to provide market or public interest-based balance. In this way, the desire to provide an adequate level of protection whilst avoiding the prospect of over-containment through a proprietary model has led to just that — a wide right without adequate balancing mechanisms.

Conclusions: The Way Forward in Reform

The legal issues raised in respect of the protection of factual compilations are not new, but the business and legal environment is different today than in the past and may favour substantially revised legal models as a consequence. That environment is no longer a strictly national one, and, looking to the copyright revision exercise, it should be borne in mind that the best solutions are those that further the international interest in harmonization of laws. For the law of copyright, this means that functional expression should be treated for the utilitarian subject-matter that it is, with less emphasis on the protection of artificial authorial creativity and with more emphasis on the protection of investment against misappropriation. The reality is that Canadian law does protect factual compilations at present, where the originality test can be satisfied to allow copyright to subsist in such material. Like the United States and the United Kingdom, it does so hesitantly, with difficulty, and through uncertain doctrine prone to misapplication. The result is that legal protection is unclear (and thus the costs of determining and enforcing rights increase, with those costs passed to users), with the likely result that informal protections (contract, the use of technology) are employed by rational business people seeking to safeguard their investment. These informal models of protection should be of as much concern to those weighing the balance between protection and access interests as formalised proprietary models. Moreover, this approach fails to address the public interest concerns associated with specific uses of data (leaving them for the general defences that are made available in respect of all original literary works), fails to address the economics of databases meaningfully (specifically the interest in promoting an optimal degree of maintenance), and leaves the problem of data aggregation for competition authorities (not intrinsically bad, but a complication that could be resolved better internally).

Looking across jurisdictions and concluding that these problems are common to them, it is also apparent that copyright law seeks to protect factual compilations on a blending of various justifications but primarily on the basis of a generalized concept of unfair competition. Protecting such an interest traditionally poses problems for the law, and protection of a variety of forms of intellectual property through a direct tort on that basis has been avoided in the past on principle. Simply put, the cure of a roving tort not subject to internal balancing mechanisms in respect of valuable intangibles is felt to be worse than the disease of misappropriation of investment by trade rivals. Thus copyright has sufficed in protection of factual compilations, but uneasily.

If copyright is to continue in this area, as it must pending revision of international agreements at the very least, perhaps it is not wrong that it does so on the basis of the protection of a principled model of authorship. This leads to the desirable consequence of leaving purely utilitarian collections completely outside proprietary regimes and including only the very few collections that can meet a stricter test within the copyright system. Thus, the anthologist who meets a higher creativity-linked test is truly an author deserving of not only the right to exploit his or her work, but also of those non-economic moral rights which accompany copyright protection. The corporate maker of a database which is continuously updated through the use of automated technology is not regarded as being similarly situated.

Less-worthy ("unoriginal") databases are still worthy of some form of protection; protection that will provide an economic incentive to create and make widely available the comprehensive and verifiably accurate sets of pure data that are so important today. Thus, it may be that a two-tiered approach is most appropriate — copyright protection based on a higher standard, and, a new *sui generis* right to protect factual compilations (whether in digital or conventional form) that is directed at the protection of the substantial investment made in the selection, arrangement, presentation, or verification of the contents of the database. This answers the need unmet by copyright at present, the provision of an incentive to maintain the database on an ongoing basis. Provided that the term of the right and the test for subsistence are set appropriately, such a database right would be a positive contribution to the copyright reform exercise. Indeed, it is my suggestion that such a revised two-tiered regime may not only be a suitable way forward for Canada, but a revised Canadian regime along these lines would be useful in setting the agenda for a second attempt at a database treaty under the auspices of the World Intellectual Property Organization.

The European experience in this regard is instructive. What began as a directed vehicle for database protection that balanced competing interests became an unfocussed and asymmetric regime. It is a good idea gone wrong. What is required in a revised Canadian model is far greater certainty in specifying the justification for protection, the level of investment required to attract and maintain protection, and the term of the right. These are primarily economic matters and the empirical studies by leading international economists should be of great help in constructing a better system along the same broad lines as created in the Database Directive. Rather than obscured and artificial reasoning tied to either authorial creativity alone or as an element of a general test of "labour, skill or judgement," revised models should feature transparent economic criteria capable of more certain application. At the same time, it would be very useful to include provisions within the statutory framework to deal with the problem of data aggregation directly, rather than leaving the matter to competition law at large. This is also an area in which studies respecting the economics of databases would be of great assistance. Would that I were able to detail here the optimal term of protection and the level of investment required,

but, to paraphrase Siebrasse, such would make heroic assumptions about the ability of legal academics to draw accurate economic conclusions.

Moreover, I suggest that it is important to recognize that lawyers and judges are not economists, and neither is the singular goal of intellectual property law to create an optimally efficient market in intellectual property. As economic efficiency is to economists, so too is the "rule of law" to lawyers – an imprecise ideal that gathers together concepts of equality, fairness, human rights, and principled regulation. Thus, a meaningful mechanism for balancing competing interests is crucial. Ultimately, the question of public interest uses is a matter of policy rather than law and resolution is bound up with prevailing conceptions of legal culture. Thus, whether a given system prefers these decisions to be made by trial courts under the auspices of a quasi-equitable fair use defence (with the implicit requirement that litigation, if not encouraged, is at least not discouraged through the costs rules) or by the legislature which takes upon itself the task of enacting narrow provisions as required from time to time (as has been more of the tradition in Canada and the United Kingdom), it matters less for the narrow purposes of intellectual property protection what method is chosen but that the process establishes itself as a meaningful vehicle to weigh competing interests and re-balance the scale to accommodate changing new or changing circumstances. Thus, I suggest, it is both unnecessary and undesirable to create a series of public-interest based permissions in the abstract and much more desirable to leave such matters where they belong, with Parliament. With regret to those favouring complete models, I suggest that no more specific proposition is possible given it is the use of the subject-matter that is at issue, not its character.