# The law and economics of copyright, contract and mass market licences

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## Preface

In recent years new communications and information technologies, especially the Internet, have given rise to important new means for distributing copyright material. They reduce the costs of access to copyright material and the costs of reproducing such material. Developing technologies and copyright markets raise many challenging issues for copyright policy.

This paper examines fundamental issues concerning the relationship between copyright and contract law. The use of mass market licences, such as shrinkwrap and clickwrap licences, has the potential to affect the traditional understanding of the relationship between copyright and contract. There remain considerable uncertainties concerning the legal enforceability of such licences. If enforceable, mass market licences may define the respective interests of copyright owners and users in ways that differ from the balance of interests established under copyright law. On the understanding that copyright protection performs important economic functions, this paper adopts a 'law and economics' framework for analysing policy issues relating to mass market licences. At the same time, it accepts that this form of analysis has some limitations.

The paper was commissioned by the Centre for Copyright Studies as a contribution to the debate, in Australia and elsewhere, relating to the use of mass market licences for the distribution of copyright material, including computer software and other digital material. At the very least, the paper is intended to help identify the relevant policy issues, and to stimulate further debate. To this end, the paper is explicit about the policy framework adopted, and the assumptions underlying the analysis. The complexity of the issues is readily acknowledged. Given this complexity, the paper does not pretend to be definitive. On the other hand, neither does it shirk from arguing a point of view.

The paper was written by David Lindsay, a Research Fellow at the Centre for Media, Communications and Information Technology Law, which is based at the Law School at the University of Melbourne. Associate Professor Megan Richardson of the University of Melbourne's Law School was a consultant to the project. Associate Professor Richardson contributed many valuable insights in relation to ways of thinking about the main issues that significantly influenced the shape of the final paper, and provided advice on a multitude of specific issues. Mr Yanson Ching formerly of the University of Melbourne's Economics and Commerce Faculty, and now of Mallesons Stephen Jaques, was employed as an expert consultant to the project, with a special role in advising on economic issues. Mr Ching produced perceptive outlines of the main economic issues dealt with in the paper, including analysis of a high degree of sophistication.

In addition to the contributions of Associate Professor Richardson and Yanson Ching, David Lindsay would like to thank the following for their kind assistance during the course of this project. Ms Mary Wyburn, from the Centre for Copyright Studies, provided important comments on drafts of the paper, and insisted that the temptation to use jargon be resisted. She was extremely patient in waiting for successive drafts and re-drafts of the paper. The financial support of the Centre for Copyright Studies enables work of this kind to proceed. Ms Frances Hanks from the University of Melbourne's Law School provided extremely valuable and perceptive comments. Professor Wendy J

Gordon, from the University of Boston, identified the importance of the economics of adverse selection to the analysis of mass market licences at an early stage of the project. Helpful comments and suggestions were also made by Mr David Brennan from the University of Melbourne's Law School, Associate Professor Andrew Christie, Director of the Intellectual Property Research Institute of Australia (IPRIA), based at the University of Melbourne, and Dr Kathy Bowry from the University of New South Wales. Professor Sam Ricketson, the Acting Director of the Centre for Media, Communications and Information Technology Law, was extremely supportive of the project throughout.

Responsibility for the analysis presented in the paper, together with full responsibility for any errors, rests entirely with David Lindsay.

## Chapter 1 – Introduction

> *As far as the great field of the law of property and contract are concerned, we must … above all beware of the error that the formulas 'private property' and 'freedom of contract' solve our problems. They are not adequate answers because their meaning is ambiguous. Our problems begin when we ask what ought to be the contents of property rights, what contracts should be enforceable, and how contracts should be interpreted or, rather, what standard forms of contract should be read into the informal agreements of everyday transactions.*
>
> Friedrich Hayek, *Individualism and Economic Order* (H Regnery & Co, Chicago, 1972) p 113.

This paper is primarily an economic analysis of the relationship between copyright and contract law. More specifically, it examines public policy issues relating to actual and potential changes in the respective roles of copyright and contract law in the protection of copyright and of non-copyright material. Changes in the relationship between copyright and contract law are largely a response to changes in market practices, especially in the distribution of copyright material, and to changes in technologies for delivering copyright material.

It is no surprise that changes in markets and technologies disrupt existing legal regimes. The public policy issues relate to whether the law should be changed to better deal with the changing practices and technologies and, if so, how. In a period of rapid change, there is also a question of timing. Precipitate or piecemeal legal responses based on inadequate information concerning developing market practices may well inhibit changes that improve social welfare. In any case, proposals for legal change should be predicated upon a clear identification of the public policy objectives sought to be achieved by such proposed changes and the extent to which the change may or may not promote such objectives. These are properly matters for considered debate, and this paper is intended to contribute to that necessary public debate.

To date there has been no consistent response, at either a national or international level, to the increased importance of private contracts in protecting copyright material. The most intense debates have been in relation to proposals for law reform in the United States. Under United States law, as under Australian law, there are considerable uncertainties concerning the legal enforceability of private mass market agreements, such as shrinkwrap and clickwrap licences. The main areas of uncertainty relate to whether the agreements are binding on consumers in the absence of express consent, and to the proper legal characterisation of the agreements.

In an attempt to clarify the legal enforceability of such agreements, the National Conference of Commissioners on Uniform State Laws (NCCUSL) engaged in a process aimed at drafting a model contract law to apply to computer information transactions, including agreements relating to computer software, electronic databases and online information. The process has been highly controversial, with proposals aimed at ensuring the enforceability of mass market agreements meeting with considerable opposition from consumer groups, academics, some industry groups, library associations and some government agencies.[1]

The model law was initially intended to become a new Article 2B of the United States commercial contract code, the Uniform Commercial Code (UCC). UCC articles are drafted by the NCCUSL in conjunction with the American Law Institute (ALI). In 1999, however, the ALI withdrew its support for proposed Article 2B as a result of disagreements concerning the content of the law. Thereafter, the NCCUSL proceeded alone with a proposal for a free-standing law, now known as the Uniform Computer Information Transactions Act (UCITA). A final version of UCITA was endorsed by the NCCUSL in mid-1999, but it has since met with a mixed response from state legislatures. The great majority of the states have refused to adopt the model law, at least until its effects are better understood.[2]

UCITA is long and complex. The most controversial provisions relate to the rules established for validating mass market licences, including shrinkwrap licences. The rules generally provide that a mass market licence is enforceable if the licensee 'manifests assent' to the agreement after having an opportunity to review the terms.[3] A licensee is deemed to have an opportunity to review a term if it is made available in a manner that ought to call the attention of a reasonable person to the term. Assent may be manifested by an act or a failure to act, including retaining a product after having an opportunity to return it. UCITA deals with particular problems relating to shrinkwrap licences, where the end user only has an opportunity to review terms following purchase. UCITA essentially provides that shrinkwrap licences are enforceable if the licensee has reason to know that additional terms will be proposed after the initial purchase and the licensee has a right to return the product after purchase.[4]

The United States policy debates surrounding the enforceability of mass market licences attracted considerable academic attention.[5] The academic response was as polarised as that of other groups of stakeholders. The polarised responses were based on different analyses of the desirability of private contracts replacing copyright law as the principal

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1 The literature on the drafting process is vast. For good summaries, see Pratik A Shah, 'The Uniform Computer Information Transactions Act' (2000) 15 *Berkeley Technology Law Journal* 85; Brian D McDonald, 'The Uniform Computer Information Transactions Act' (2001) 16 *Berkeley Technology Law Journal* 461.

2 To date, UCITA has been adopted in only two states, Maryland and Virginia. For information on the adoption of UCITA by state legislatures see: http://www.ucitaonline.com.

3 UCITA, ss 112, 209.

4 UCITA, s 209.

5 A 1998 symposium on proposed Article 2B of the UCC resulted in two valuable collections of academic papers: see 'Symposium, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information Commerce' (1998) 13 *Berkeley Technology Law Journal* 809; 'Symposium, Intellectual Property and Contract Law for the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Information Commerce' (1999) 87 *California Law Review* 1.

means for defining legal restrictions on the use of copyright material. Some academics tended to the view that the substitution of private agreements for copyright law would undermine important public values embodied in the system of copyright protection. The thrust of the objections is succinctly captured by Lawrence Lessig in his recent book, *The Future of Ideas*:

> Often a copyrighted work is sold or licensed subject to a set of terms imposed in a license. Sometimes the terms imposed by the license are inconsistent with the balance that copyright law aims for. If the balance in copyright law is important, then it should not be undermined by a different kind of law – contract law. While not every license is in conflict with copyright law, many licenses are in conflict with the limited protection copyright law is to give.[6]

Concerns relating to the potential for private contracts to supplant copyright law are commonly coupled with concerns that technological forms of protection, such as encryption, will give copyright owners effective control over access to, and uses of, copyright material in digital form. The imposition of terms restricting permissible use at the point of access, together with technologies for enforcing contractual restrictions, including copy-protection and use-protection technologies, are thought to have the potential to give copyright owners much more control over copyright material than copyright law gives them. This combination of concerns was explained by Julie Cohen in the following terms:

> New developments in digital technology offer copyright owners the tantalizing possibility of near-absolute control of their creative and informational content, even after its delivery to end users, via self-enforcing digital contracts. Copyright owners, along with purveyors of other (noncopyrightable) informational content, envision using these contracts to secure – and redefine – their "informational rights." Within this vision of private ordering and technological self-help, contract law rather than copyright law is paramount. Limits on information ownership set by the public law of copyright are conceived as optional restrictions that can be avoided using appropriate contractual language.[7]

An underlying theme of those seeking to defend the 'copyright paradigm' has been that privately enforced arrangements have the potential to upset important public policies embodied in copyright law, which are premised on establishing a balance of interests. Thus, in relation to the precursor of UCITA, David Nimmer et al. maintained that:

> ... the copyright laws are designed to achieve a "delicate balance" between the rights of copyright proprietors and copyright users. This balance is disrupted when state law is permitted to enlarge the rights of copyright proprietors at the expense of copyright users ... [B]y making provisions of software licenses presumptively enforceable while providing no limitations on overreaching contract terms that proprietors unilaterally decide to impose, Article 2B facilitates known practices designed to alter the "delicate balance" and places the costs of defending the proper

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6 Lawrence Lessig, *The Future of Ideas* (Random House, New York, 2001) p 257.

7 Julie E Cohen, 'Copyright and the Jurisprudence of Self-help' (1998) 13 *Berkeley Technology Law Journal* 1089 at 1090.

> bounds of copyright on copyright users. The result is neither desirable nor necessary.[8]

Other academics and commentators have been less concerned about the potential for private arrangements to replace or supplement copyright protection. Those who support the enforceability of mass market licences commonly have a more positive view of private ordering and a less sanguine view of the legislative process. Some have argued that policy concerns relating to private arrangements are best dealt with under principles of contract law and competition law. Raymond Nimmer, for example, maintained that:

> Among the arguments based on the unfounded fear that contract will eliminate important facets of information policy is one that intellectual property law preempts contract law, precluding contracts that are inconsistent with the property rights created (or denied) under copyright law. There is virtually no support for this proposition nor should there be any acceptance of the argument ... When intermittent abuses are identified and courts act to prevent or minimize their effect, the methodology consists of developing and applying themes created in common law, in contract statutes, and in competition law ... that restrict enforcement of particular contract clauses in particular contracts. These principles indicate simply and correctly that, to the extent of abuse, the traditional solutions lie in particularized adjudication, rather than in generalized invalidation of the right to make contracts.[9]

The underlying issues that arose in the United States in connection with debates concerning the enforceability of mass market agreements have become part of a public policy debate in Australia. In April 2001, the Copyright Law Review Committee (CLRC) was given a reference by the Commonwealth Attorney-General to report on the relationship between copyright and contract. The terms of reference for the report were, on the whole, directed at the extent to which private agreements should be able to displace provisions of copyright law that 'provide for reasonable access to copyright material'.[10] The CLRC released a short *Issues Paper* in June 2001, and is required to report by the end of April 2002.

As the debate in the United States indicates, the relationship between copyright and contract, in the context of developing market practices and rapid technological change, raises fundamental policy issues. At base, a proper understanding of these issues depends, in large measure, upon the views adopted regarding the respective roles of property and contract in a market economy and, indeed, of the respective roles of the law and of the market. In academic circles, these topics are, as one might expect, highly contested and complex. Over and above this, it is important to appreciate the important

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8 David Nimmer, Elliot Brown and Bary N Frischling, 'The Metamorphosis of Contract into Expand' (1999) 87 *California Law Review* 17 at 22–23.

9 Raymond T Nimmer, 'Breaking Barriers: The Relation Between Contract and Intellectual Property Law' (1998) 13 *Berkeley Technology Law Journal* 827 at 831. For arguments generally favouring market-based private ordering, see David Friedman, 'In Defense of Private Orderings: Comments on Julie Cohen's "Copyright and the Jurisprudence of Self-Help" ' (1998) 13 *Berkeley Technology Law Journal* 1151; Robert P Merges, 'The End of Friction? Property Rights and Contract in the "Newtonian" World of On-line Commerce' (1997) 12 *Berkeley Technology Law Journal* 115 at 122.

10 See Copyright Law Review Committee, *Copyright and Contract: Issues Paper* (CLRC, Canberra, June 2001), Appendix A – Terms of Reference, p 35.

differences between property rights in tangible material and property rights in intangible material, such as the exclusive rights that comprise copyright. Although it seems a simple point, the importance of clarifying the policy objectives of the copyright system cannot be over-emphasised. Moreover, identifying the objectives of copyright protection requires something more than the simple repetition of slogans, such as copyright law must 'maintain an appropriate balance between the rights of copyright owners and the rights of copyright users'.[11] These sorts of formulations say nothing about why the objective of copyright law should be to balance owner and user interests, what an appropriate balance should be, and whether the balance established by the current complex combination of exclusive rights and exceptions is anywhere near appropriate.

While each of the above issues requires careful consideration and clarification, in considering the potential shift to private agreements as a means for protecting copyright material, one policy issue is of central practical importance. That issue is the extent to which public policy objectives relating to the protection of copyright material must be dealt with from within the structure of copyright law, as opposed to the extent to which such objectives can be achieved through the operation of the market, supported by existing laws, such as contract law and competition law.

In Australia, this issue has previously been considered in other contexts. For example, the final report of the Intellectual Property and Competition Review Committee (IPCRC), which considered the relationship between intellectual property rights and competition policy, concluded that the economic objectives of intellectual property rights should be dealt with by legal limitations within the intellectual property laws, as well as by competition law.[12] As a general principle, it stated that:

> The interaction of intellectual property laws and of competition policy ... occurs at two levels: first, competition concerns must play an important part in the design of the intellectual property laws themselves, ensuring that the rights granted are not over-broad; and second, effective remedies must be available if the rights are abused.[13]

Whether or not this conclusion is correct in the context of the relationship between intellectual property rights and competition policy, the policy objectives of the limits placed on copyright protection must now be considered in the context of the relationship between copyright and contract law. In other words, if there is a shift to private agreements and away from copyright protection, the issue is whether public policy limits should be placed on such agreements so as to replicate the limits set on the exclusive rights of copyright owners under copyright law. An extreme version of this view would be to legislatively prohibit any terms of private agreements that purport to override the statutory limits to copyright protection, including limits established by exceptions to copyright infringement.

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[11] *Ibid.*

[12] Intellectual Property and Competition Review Committee (IPCRC), *Review of Intellectual Property Legislation under the Competition Principles Agreement*, Final Report (September 2000) p 6.

[13] *Ibid.* p 7.

The main thesis of this paper is that prohibitions on contracting around the limits of copyright protection are generally undesirable. The view that such restrictions are needed overestimates the ability of the law to establish optimal rules for the protection of copyright material, at the expense of the considerable advantages to be derived from private market-based arrangements. It also overestimates the extent to which copyright owners, operating in a competitive market, are capable of unilaterally imposing terms on end users. Insofar as private agreements may result in less than optimal outcomes, they should be dealt with under established principles of contract law, competition law or consumer protection law. The attention of policy-makers should therefore focus on examining whether existing principles of contract law, competition law and consumer protection law are able to deal adequately with mass market agreements for the distribution of copyright material, rather than on imposing rigid prohibitions on freedom to contract. On the other hand, there may be an argument for imposing some restrictions on freedom of contract to the extent that copyright policy is directed at promoting objectives other than economic objectives. If that is the case, it is important that non-economic objectives be clearly specified and that any prohibitions be narrowly focused on achieving such objectives.

The argument is presented in six substantive chapters, followed by a conclusion. The paper assumes that copyright policy has important economic objectives, and is therefore written from within the established 'law and economics' tradition of analysis. Chapter 2 explains the assumptions underlying the analytical approach used in the paper. Chapter 3 is an introduction to the economic objectives of copyright policy. It explains, in general terms, the main economic benefits and costs of the copyright system. Chapter 4 deals with the economics of the legal limits to copyright protection in more detail. It explains how, from an economic perspective, the objective of copyright policy is not, strictly speaking, to balance the interests of copyright owners and users, but to maximise the net benefits of copyright protection, as a system of property rights in copyright material. It then examines whether the existing legal limits of protection approach optimality. Chapter 5 explains that material falling outside copyright protection may be protected by a combination of contract law and confidentiality law. It deals with the economics of confidentiality law and with the benefits and costs of protecting material under confidentiality law, as opposed to copyright law. Chapter 6 deals with the application of copyright law and contract law to mass market agreements, such as shrinkwrap licences. It explains the historical development of arrangements such as shrinkwrap licences and clickwrap licences. It further explains how, in the digital environment, private mass market agreements may be a more efficient means of conferring exclusivity over copyright material than copyright law. Chapter 7 deals with legal and economic issues relating to the enforceability of mass market agreements. It examines the uncertainties relating to the enforceability of such agreements under contract law. It explains how, under certain circumstances, standard terms in mass market agreements may be less than optimal. It further examines the extent to which existing principles of contract law and competition law are adequate to deal with standard form mass market agreements. The conclusion summarises the arguments presented in the paper.

## Chapter 2 – The Analytical Framework

This paper is written from within an established tradition of scholarship known as 'law and economics'. The application of economics to the law may sometimes result in confusion. This is partly because lawyers and economists can have different understandings of technical terms, including terms as fundamental as 'property' and 'monopoly'. The purpose of this chapter is to explain the analytical framework used in this paper so as to minimise the possibility of confusion.

### 2.1 Law and Economics

The law and economics discipline has been defined by Rowley as 'the application of economic theory and econometric methods to examine the formation, structure, processes and impact of law and legal institutions'.[14] The modern application of economic analysis to the law first emerged in the 1960s, with the publication of two seminal articles: Coase's analysis of social cost,[15] which is more fully dealt with later in this chapter, and Calabresi's analysis of the economics of accidents and tort law.[16] Since then, law and economics has developed into an influential form of legal analysis, with economic analysis being applied to almost every area of the law.[17] There has been a growing sophistication in the level of analysis, accompanied by an increasing diversity of perspective within the discipline itself. Whereas the initial focus was almost exclusively on the application of economic analysis to the law, Hadfield has argued that law and economics should now be seen as working together, each perspective informing and shaping the other.[18] What this suggests is that, as in all good interdisciplinary work, it is important to understand the respective assumptions and values underlying both economics and the law. Furthermore, it is important to appreciate what economic analysis can and cannot do.

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[14] Charles K Rowley, 'Public Choice and the Economic Analysis of the Law' in Nicholas Mercuro (ed.) *Law and Economics* (Kluwer, Boston, 1989) p 125.

[15] Ronald H Coase, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1.

[16] Guido Calabresi, 'Some Thoughts on Risk Distribution and the Law of Torts' (1961) 70 *Yale Law Journal* 499.

[17] Richard Posner has been particularly prolific in this respect: see especially Richard A Posner, *Economic Analysis of Law* (5th ed., Aspen Law & Business, New York, 1998); see also William M Landes and Richard A Posner, 'The Influence of Economics on Law: A Quantitative Study' (1993) 36 *Journal of Law and Economics* 385.

[18] Hadfield explains this more 'critical' form of law and economics in the following terms: 'More and more, to do true *law and* economics means to recognise that law has its own knowledge, and that knowledge has to be respected alongside economics. *Law and* economics is about a partnership, rather than a hierarchy': (emphasis in original) Gillian Hadfield, 'The Second Wave of Law and Economics: Learning to Surf' in Megan Richardson and Gillian Hadfield (eds) *The Second Wave of Law and Economics* (The Federation Press, Sydney, 1999) p 54. An early example of what has become known as the 'second wave' of law and economics is Trebilcock's analysis of contract law: see Michael J Trebilcock, *The Limits of Freedom of Contract* (Harvard University Press, Cambridge, MA., 1993).

Given the increasingly central economic role of intellectual property rights, economic analysis would seem to be particularly suited to the analysis of intellectual property law, including copyright.[19] Economics provides useful tools for assessing the social consequences of legal rules. At the same time, economics certainly is not, nor can it be, the sole guide for policy-making. As Posner points out:

> ... economists do not claim the competence to make ultimate value judgments. They can illuminate the effects of public policies, actual or proposed, on efficiency in its economic sense or senses, but they cannot tell the policy maker how much weight to assign efficiency as a policy goal, though they may be able to advise him concerning the feasibility of achieving other goals, such as a more equal distribution of income.[20]

## 2.2 Positive and Normative Analysis

Economic analysis of the law may be positive or normative. Positive economic analysis is concerned with providing an economic explanation of the law as it is, and explaining the economic consequences of legal rules.[21] Normative analysis, on the other hand, is concerned with what the law ought to be.[22] Thus positive analysis is descriptive or predictive, whereas normative analysis is prescriptive.

As Hadfield points out, however, legal analysis is, above all, a normative exercise.[23] In general, legal analysts are concerned with questions relating to what the law should be. As this paper is concerned with policy analysis, it concentrates on a normative analysis of the relationship between copyright and contract law. In simple terms, the paper examines whether, given developments in markets and technologies, the interface between copyright and contract under current Australian law is optimal, concentrating primarily on the objective of economic efficiency.

## 2.3 Efficiency

The distinctive feature of the economic approach to law is the emphasis on efficiency as the most important, if not the sole, criterion for social choice. This emphasis is both a strength and a weakness of economic analysis.

The underlying assumptions of the normative analysis presented in this paper are that laws should be designed, as much as possible, to maximise social utility, meaning the sum of individual utility measured in terms of the preferences of individuals; that individuals are in the best position to judge their own welfare; and that preferences are

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[19] See William M Landes and Richard A Posner, 'An Economic Analysis of Copyright Law' (1989) 18 *Journal of Legal Studies* 325 at 325.

[20] Posner (1998) p16.

[21] Posner (1998) pp 26–29; Trebilcock (1993) pp 3–6; Rowley (1989) pp 125–129.

[22] Posner (1998) pp 26–29; Trebilcock (1993) pp 7–9; Rowley (1989) pp 129–137.

[23] See Hadfield (1999) pp 54–55.

stable over time.[24] It is, nevertheless, notoriously difficult to determine individual utility. Given this difficulty, economists often use what is known as the Pareto criteria. Under this standard, if a change in resource allocation would increase the welfare of at least one individual, and not decrease the welfare of any other individual, the change is desirable, and is known as Pareto superior.[25] If it is impossible to make any such improvements in resource allocation the situation is known as Pareto optimal.[26]

The Pareto standard is a weak guide for policy-making, as almost all changes in policy result in losses for some individuals. For this reason, a modified standard, known as the Kaldor-Hicks (or 'potential Pareto superiority') criterion, is commonly used. Under this standard, a change is preferred if it results in welfare improvements for winners that are more than enough to compensate the losses to any losers, even if no compensation is made.[27] The Kaldor-Hicks standard is therefore essentially a form of cost-benefit analysis, asking whether the overall gains of a particular policy outweigh the costs.

The Pareto and Kaldor-Hicks criteria have been subject to considerable criticism. For example, both tests take existing individual preferences as given, providing no guidance as to whether such preferences are socially desirable.[28] Moreover, the existing distribution of wealth is also taken as given. As preferences are usually determined by willingness to pay, and as willingness to pay depends upon the ability to pay, both tests disregard social distribution concerns.[29] Furthermore, in the absence of a voluntary transaction, it is extremely difficult to calculate individual preferences. This is a particular difficulty with Kaldor-Hicks efficiency, which entails hypothetical exchanges.[30]

Provided the limitations of the analysis are understood, however, the Kaldor-Hicks criterion provides a useful starting point for assessing the costs and benefits of legal rules. At the same time, it is readily acknowledged that values other than economic efficiency may need to be taken into account in policy-making. One important benefit of adopting an economic framework is that it should ensure that competing values are made explicit. This paper therefore identifies objectives other than economic efficiency where they are relevant to the overall argument.

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[24] See Heico Kerkmeester, 'Methodology: General' (1999) in *Encyclopedia of Law and Economics*, available at http://encyclo.findlaw.com/lit/; see also Posner (1998) pp 12–13.

[25] See, for example, Rowley (1989) p 130.

[26] See, for example, Kerkmeester (1999) p 386.

[27] See, for example, Thomas J Miceli, *Economics of the Law* (OUP, New York, 1997) p 6; Posner (1998) pp 14–17.

[28] See, for example, Trebilcock (1993) p 21.

[29] See, for example, Michael Trebilcock, 'The Value and Limits of Law and Economics' in Megan Richardson and Gillian Hadfield (eds) *The Second Wave of Law and Economics* (The Federation Press, Sydney, 1999) pp 20–21; Posner (1998) p 15.

[30] See Trebilcock (1999) *ibid* pp 21–22; Posner (1998) *ibid* pp 15–16.

## 2.4 The Roles of Property, Tort and Contract in a Market Economy

The legal system in a market economy performs the function of establishing the necessary preconditions for private ordering through the market. Economists have a general preference for private decisions of individuals over collective decisions made by legislatures or bureaucrats. As Trebilcock has pointed out, this preference is largely derived from the presumption that if two parties enter into a voluntary transaction then they will, in the absence of market failure, both be better off.[31] Private ordering through the market, however, depends upon the legal definition of entitlements to resources and of the conditions under which resources can be exchanged. In other words, the legal system must define initial entitlements to a resource, must protect those entitlements and must determine whether or not to recognise attempts to exchange those entitlements.[32] These roles are performed by property, tort and contract law, respectively.

Property, tort and contract law constitute the main areas of what is traditionally known as 'private' law.[33] Together, these three areas provide the foundations for private exchanges by performing the functions identified in Table 1.[34]

**Table 1**

| Property | Tort | Contract |
|---|---|---|
| Creates and defines entitlements (exclusive rights) to resources. | Protects entitlements to resources (with criminal law).<br><br>Defines entitlements, eg nuisance (with property law). | Provides for the transfer of entitlements. |

These areas of the law are necessarily interdependent. For example, if exclusive rights to a resource are inadequately defined, or inadequately protected, market-based exchange

31 See Trebilcock (1993) p 7.

32 See, for example, Clifford G Holderness, 'A Legal Foundation for Exchange' (1985) 14 *Journal of Legal Studies* 321 at 321–2.

33 The traditional labels of 'private' and 'public' law are, to a certain extent, misnomers. As Radin and Polk Wagner explain, 'Contrary to laissez-faire ideology, the "private" legal regimes of property and contract presuppose a "public" regime of enforcement and policing, a baseline of background rights': Margaret Jane Radin and R Polk Wagner, 'The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace' (1998) 73 *Chicago-Kent Law Review* 1295 at 1295.

34 See Trebilcock (1993) p 9; Posner (1998) p 35.

will be impossible or difficult.[35] From an economic perspective, the legal distinctions between property, tort and contract law are of limited significance. Economic analysis necessarily restates these areas of the law in economic terms, concentrating on distinctions that are significant from an economic perspective.

The most fundamental economic distinction is between the role of the law and the role of the market. In a market economy, the law can be seen as a system of incentives for inducing individuals to behave efficiently. As explained further below, where the cost of entering voluntary transactions is low, the law should encourage market-based exchanges, but where the cost of voluntary transactions is high, the law should generally mimic the market.[36] In this sense, property, tort and contract law are best seen as a unified field of study subject to a common analysis. As Posner points out, from an economic perspective, a tort problem can be re-cast as a contract problem by asking what the parties to an accident would have agreed to beforehand had they been able.[37] Similarly, the definition of property rights can be re-cast in contractual terms, by asking what the resulting allocation of resources would have been if the costs of reaching agreement in defining rights to the resource were not prohibitive.[38] The remainder of this chapter explains the economic distinctions that are significant for an understanding of the relationship between property and contract.

## 2.5 The Economic Concept of Property

The economic understanding of property differs from the legal understanding. Few undertakings are more complex than deriving a legal definition of property.[39] Despite influential criticisms, the accepted contemporary legal understanding of property is that it consists of a 'bundle of rights' held against all others.[40] Furthermore, common to most legal definitions of property is the inclusion of rights of exclusive use and alienability. Importantly, the legal concept of property does not include all valuable rights.[41]

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35 As Cheung points out, 'In the absence of exclusive rights to the use of the … (resource) …, the right to contract so as to stipulate its use does not exist …': Steven NS Cheung, 'The Structure of a Contract and the Theory of a Non-Exclusive Resource' (1970) 13 *Journal of Law and Economics* 49 at 50.

36 See Posner (1998) pp 271–272.

37 *Ibid.* p 272.

38 *Ibid.* p 273.

39 The better legal analyses include: Stephen R Munzer, *A Theory of Property* (Cambridge University Press, Cambridge, 1990); JE Penner, *The Idea of Property Law* (Clarendon Press, Oxford, 1997); Thomas C Grey, 'The Disintegration of Property' in J Roland Pennock and John W Chapman (eds) *Property: Nomos XXII* (New York University Press, New York, 1980).

40 See JE Penner, 'The "Bundle of Rights" Picture of Property' (1996) 43 *UCLA Law Review* 711; Penner (1997); Munzer (1990).

41 See Penner (1997) p 64. As Dixon J famously observed in *Victoria Park Racing and Recreation Grounds Co v Taylor*, '… courts of equity have not in British jurisdictions thrown the protection of an injunction around all the intangible elements of value, that is, value in exchange, which may flow from the exercise by an individual of his powers or resources whether in the organization of a business or undertaking or the use of ingenuity, knowledge, skill or labour. This is sufficiently evidenced by the history of the law of

In comparison with legal definitions, the economic concept of property is simple: it includes all rights of individuals to valuable resources.[42] Thus the economic understanding of property includes more than lawyers would understand by the term. For example, the economic concept of property would include the right to bodily integrity and the right to one's labour. Moreover, from an economic perspective, it is irrelevant whether a right to use a resource is defined by property law or tort. To give the classic example, whether a railroad is liable for damage caused by sparks emitted from its engines is determined by tort law, but as it defines rights relating to the railroad's right of way, economists would regard a right to emit sparks as a property right.[43]

The reason for the difference between the legal and economic understanding of property is that the definitions serve different purposes. Legal definitions are intended to distinguish property from other areas of the law – essentially a task of categorisation.[44] The economic definition of property, on the other hand, is concerned with the role of exclusive rights to an economic resource in promoting the efficient use and allocation of the resource. Partly as a result of differences between legal and economic concepts of property, economic analysis sometimes refers to 'entitlements' rather than property rights.[45]

## 2.6 The Coase Theorem

It is impossible to explain the modern economic understanding of property without reference to the work of Ronald Coase. Coase's 1960 article, 'The Problem of Social Cost', led to a paradigm shift in the way economists understand the relationship between property rights, broadly defined, and transaction costs.[46]

The problem ostensibly addressed by Coase's article was how to deal with social costs associated with individual conduct that are not incurred by the parties to a transaction, and therefore not taken into account by the parties. These costs are known as externalities. Until Coase, it had been assumed that government intervention, such as in the form of Pigouvian taxes, was necessary to deal with the problem of external costs.

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copyright and by the fact that the exclusive right to invention, trade marks, designs, trade name and reputation are dealt with in English law as special heads of protected interests and not under a wide generalization': (1937) 58 CLR 479 at 509.

42 Alchian was evidently the first to articulate the view that property rights are 'the rights of individuals to the use of resources': Armen A Alchian, 'Some Economics of Property Rights' (1965) 30 *Il Politico* 816 at 817.

43 See Posner (1998) pp 55–61.

44 Or what Penner calls 'individuation': see Penner (1997) pp 32–67.

45 See, for example, Guido Calabresi and A Douglas Melamed, 'Property Rules, Liability Rules and Inalienability: One View of the Cathedral' (1972) 85 *Harvard Law Review* 1089. A useful definition of an 'entitlement' is 'the collectively imposed assignment of use rights as between rival claimants': Thomas W Merrill and Henry E Smith, 'What Happened to Property in Law and Economics' (2001a) 111 *Yale Law Journal* 357 at 380.

46 Ronald H Coase, 'The Problem of Social Cost' (1960) 3 *Journal of Law and Economics* 1.

For example, if a factory causes harm in the form of pollution, the government can minimise the harm by taxing the party causing the harm, the polluter.

Coase, however, showed that, provided rights to resources are adequately defined, and in the absence of transaction costs, the problem of external costs can be solved through private bargains in the market. In other words, external costs (such as pollution) could be dealt with by a trade between those deriving a benefit from the externality (the factory) and those harmed by the externality (nearby residents), with the best allocation of resources being determined by the highest value user. In other words, if the residents put a higher value on freedom from pollution than the factory places on the ability to pollute, they will purchase the entitlement to pollute from the factory. Calabresi has summarised the Coase Theorem as follows:

> ... if one assumes rationality, no transaction costs, and no legal impediments to bargaining, *all* misallocations of resources would be fully cured in the market by bargains.[47]

As Calabresi and Melamed later explained, 'transaction costs', broadly defined, refers to all impediments to efficient contracting, including the costs of establishing and enforcing property rights.[48] Accepting this broad definition of transaction costs, Coase's analysis implies that the market can deal with imperfections in the allocation of an economic resource, provided that entitlements to the resource are well defined. Moreover, if external costs can be dealt with by means of private bargains, the resulting allocation of rights to a resource will be efficient regardless of the initial allocation of rights. In other words, if the stringent conditions specified by Coase are satisfied, the initial assignment of property rights is irrelevant.

The effect of Coase's insight was to shift the focus of economic analysis from imperfections in the allocation of resources (externalities) to transaction costs – including the bargaining costs of private parties and the costs of establishing and enforcing entitlements. This is because if transaction costs are greater than the benefits of a bargain there will be no exchange, in which case the initial allocation of rights becomes important. Coase explained this in the following terms:

> In order to carry out market transactions it is necessary to discover who it is that one wishes to deal with, to inform people that one wishes to deal and on what terms, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection needed to make sure that the terms of the contract are being observed, and so on. These operations are often extremely costly, sufficiently costly at any rate to prevent many transactions that would be carried out in a world in which the pricing system worked without cost.[49]

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[47] Guido Calabresi, 'Transaction Costs, Resource Allocation and Liability Rules: A Comment' (1968) 11 *Journal of Law and Economics* 67 at 68 (emphasis in original).

[48] Calabresi and Melamed (1972) *ibid.*; see also Guido Calabresi, 'The Pointlessness of Pareto: Carrying Coase Further' (1991) 100 *Yale Law Journal* 1211. In a similar vein, Allen defined transaction costs as 'the costs of establishing and maintaining property rights': Douglas W Allen, 'What Are Transaction Costs?' (1991) 14 *Research in Law and Economics* 1.

[49] Coase (1960) p 15.

## 2.7 The Efficiency of Contract and Property

Economists generally regard property and contract as efficient. This is because property and contract law allow for private transactions between individuals in the marketplace, and private transactions are more likely to be efficient than collective decisions.[50] As Milton Friedman put it:

> The possibility of co-ordination through voluntary co-operation rests on the elementary – yet frequently denied – proposition that both parties to an economic transaction benefit from it, *provided the transaction is bi-laterally voluntary and informed*.[51]

An understanding of the Coase theorem, and of the analytical framework used in this paper, depends upon a clear understanding of the assumptions underpinning the belief that property and contract are efficient.

First, it is a fundamental tenet of neo-classical economic analysis that voluntary exchanges are value-maximising, in that resources will be transferred from low-value to high-value users. If transaction costs are negligible, then parties will bargain for their mutual benefit until the resource is held by the highest value user who, by definition, will make the most efficient use of the resource. As Coase explained, a value-maximising exchange will take place 'when the increase in the value of production consequent upon the rearrangement is greater than the costs which would be involved in bringing it about'.[52]

Second, if property rights – meaning rights to an economic resource – are not clearly defined and allocated, transaction costs will be high and private bargains inhibited. Well-defined property rights are therefore necessary for the operation of markets. Allen has explained the importance of well-defined property rights as follows:

> The property rights literature argues there is a monotonic relationship between property rights and wealth. Given that trade is the transfer of property rights, there can be no trade (and hence no gains from trade) in the absence of property rights. Also, when property rights are perfectly defined, the Coase theorem states that the gains from trade are maximized. Assuming there is a continuum between these two extremes, as property rights become better defined, the gains from trade increase ... Other things equal, individuals prefer better defined property rights to poorer defined ones because they prefer more wealth to less.[53]

Third, property rights – meaning exclusive rights to a resource – promote both static and dynamic efficiency. Static analysis concentrates on a particular point in time and assumes that all adjustments to change occur instantaneously.[54] Dynamic analysis, on the

[50] See, for example, Trebilcock (1993) pp 15–16.

[51] Milton Friedman, 'The Relation between Economic Freedom and Political Freedom' in *Capitalism and Freedom* (University of Chicago Press, Chicago, 1962) p 13 (emphasis in original).

[52] Coase (1960) p 15.

[53] Douglas W Allen, 'Transaction Costs' (1999) in *Encyclopedia of Law and Economics*, available at http://encyclo.findlaw.com/lit/ p 898.

[54] See Posner (1998) p 36.

other hand, takes into account changes over time. Ignoring the time dimension, if property is held in common, rational individual users will not take into account the negative effects of their activities on others.[55] For example, if rights to a pasture are held in common, each individual farmer has an incentive to maximise the number of cows grazing on the pasture but, as the land is held in common, will not take into account the costs of grazing an additional cow. This will lead to an overuse of the resource, known as the 'tragedy of the commons'.[56] The costs external to the farmers can be reduced by agreements, but the transaction costs of negotiating between multiple parties are high. Such costs can, however, be reduced by conferring exclusive rights to a resource on an individual, who will bear the full costs and benefits of his or her activities in relation to the resource. This is known as 'internalising the externality'.[57] Although this will not eliminate all externalities, such as negative spillovers onto neighbouring property, it substantially reduces bargaining costs, as only those immediately affected by the spillover need to bargain.

If adjustments are assumed to occur over time, it is easy to see how property rights promote dynamic efficiency. In the absence of property rights there is no incentive to use resources efficiently. For example, a farmer has no incentive to plant crops or improve the value of land absent the ability to exclude neighbours from taking the crop.[58] The establishment of exclusive rights to a resource allows the property owner to obtain the benefits of investing in the resource. As Posner points out, the static and dynamic advantages of exclusive property rights were known well before Coase.[59]

Fourth, the costs and benefits of a property rights system change over time. There are costs involved with defining and enforcing property rights. As the Coasian world of zero transaction costs is an unrealisable ideal, much economic analysis is concerned with balancing the advantages of internalising externalities against the costs of bargaining and the costs of a property rights system. It follows that exclusive property rights should be established if the benefits from internalising externalities are greater than the costs of establishing and exchanging property rights. Correspondingly, if the costs of a property rights system are greater than the benefits, property rights should not be established and the resource should be held in common. Moreover, the costs and benefits of establishing property rights may be altered by changes in technologies and/or markets. Demsetz, for example, attributed the establishment of property rights among the Montagnes Indians in Labrador to an increase in the value of furs in response to European demand.[60] The costs of overexploitation of the resource were greater than the costs of establishing a property system, leading to the development of exclusive rights in place of common ownership.

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[55] See, for example, Harold Demsetz, 'Toward A Theory of Property Rights' (1967) 57 *American Economic Review* 347.

[56] See Garrett Hardin, 'The Tragedy of the Commons' (1968) 162 *Science* 1243.

[57] See, for example, Harold Demsetz, 'Toward A Theory of Property Rights' (1967). 'Internalising externalities' establishes a link between the individual costs and benefits of an activity, on the one hand, and the social costs and benefits of the activity, on the other.

[58] This assumes that it is not cost-effective for the farmer to unilaterally enforce exclusivity.

[59] See Posner (1998) pp 36–39.

[60] Demsetz (1967).

Fifth, the costs of establishing and maintaining property rights explains not only why some valuable resources are not subject to private property, but also why property rights confer less than full exclusivity. All property rights have limits.[61] The optimal degree of exclusivity is reached by balancing the benefits of exclusive rights to use a resource against the costs of exclusivity, including bargaining and enforcement costs. As Posner has explained:

> The issue is rarely property right or no property right, but rather … limited property rights or unlimited property rights, with the limitation designed to induce the correct (not an insufficient or excessive) level of investment in the exploitation of a valuable resource.[62]

## 2.8 Property Rules and Liability Rules

Coase's emphasis on transaction costs has been developed by subsequent scholars. In one of the founding articles of the 'law and economics' tradition, Calabresi and Melamed made an important distinction between two rules governing the transfer of property rights, which they termed 'property rules' and 'liability rules'.[63]

The distinction defines two ways in which the law protects entitlements. A property rule protects entitlements by allowing the owner to prevent all attempts to acquire the entitlement otherwise than by a bargain. Under a property rule, the owner may prevent involuntary transactions. A liability rule, on the other hand, does not allow the owner to prevent involuntary transactions, but only to receive compensation for harm suffered from an involuntary transfer (or forcible seizure). For example, a rule specifying that a factory cannot pollute is the equivalent of conferring an entitlement on surrounding landholders and protecting the entitlement with a property rule, whereas a rule allowing pollution upon the factory paying compensation is a liability rule. While injunctive relief is available under a property rule, only damages are available under a liability rule.

It follows from this that if an entitlement is protected by a property rule the owner's consent is required for transfer of the entitlement. Under a liability rule, however, an involuntary transfer may occur without the owner's consent subject to the payment of compensation. The key to understanding the importance of the distinction between the two rules lies in the role of transaction costs. If transaction costs are low, then bargaining will result in the entitlement being transferred to the highest value user, suggesting that the entitlement should be protected by a property rule. If, however, transaction costs are high, efficient bargaining will be inhibited, suggesting that a liability rule should be preferred. Liability rules are therefore a substitute for voluntary transfers of property rights, and occur in the presence of high bargaining costs. They are, nevertheless, usually considered an inferior substitute, as compensation determined by a court is generally a

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61 As Coase pointed out: 'a system in which the rights of individuals were unlimited would be one in which there were no rights to acquire': Coase (1960) p 44.

62 Posner (1998) p 42.

63 Calabresi and Melamed (1972).

much more arbitrary measure of the value of an entitlement than a bargain struck in the market.[64]

## 2.9 Rights in Rem and Rights in Personam

Economic analysis of property rights explains how exclusivity and transferability promote economic efficiency. In this sense, property and contract perform complementary roles in defining exclusive rights to a resource and providing for the transfer of those rights. Property and contract, however, perform different roles. The most important difference between property rights and contractual rights is that property rights exclude all of the world, whereas a contract binds only the parties. In other words, property rights are *rights in rem*, whereas contractual rights are *rights in personam.*

In the absence of rights to exclude a large and indefinite class of persons, enforceable personal contracts alone would not promote the efficient use of a resource.[65] For example, a contract that transfers a right to use land under which the seller promises not to use the land would not reduce overuse of the resource, as it would not exclude users other than the seller. Moreover, if a purchaser cannot exclude users other than the seller, there will be no incentive to use the resource efficiently, thereby undermining dynamic efficiency. Provided the costs of negotiating private agreements to exclude others from using the resource are prohibitive, and provided the costs to the owner of maintaining and enforcing exclusivity through self-help are equally prohibitive, it is necessary for the law to establish rights enforceable against the world.

The distinction between *rights in rem* and *rights in personam* explains a further important difference between contract and property. Contract law permits a high degree of customisation of the rights and obligations of the parties *inter se*, whereas property rights must conform to a limited number of fixed, standard forms.[66] In other words, contract rules are generally default rules that may be modified by the parties, while property law generally establishes mandatory rules that cannot be modified by agreement.[67] The economic explanation for the standardisation of property rights is that, as property rights are good against the world, allowing the creation of unlimited new forms of property would impose unreasonably high information burdens on third parties wishing to deal with the resource. As Merrill and Smith point out:

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64 There is considerable debate concerning the comparative merits of property rules and liability rules: see, for example, Ian Ayres and Eric Talley, 'Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasian Trade' (1995) 104 *Yale Law Journal* 1027; Louis Kaplow and Steven Shavell, 'Property Rules and Liability Rules: An Economic Analysis' (1996) 109 *Harvard Law Review* 713.

65 See Posner (1998) p 74.

66 See Thomas W Merrill and Henry E Smith, 'Optimal Standardization in the Law of Property: the Numerus Clausus Principle' (2000) 110 *Yale Law Journal* 1; Thomas W Merrill and Henry E Smith, 'What Happened to Property in Law and Economics?' (2001a); Thomas W Merrill and Henry E Smith, 'The Property/Contract Interface' (2001b) 101 *Columbia Law Review* 773.

67 See Merrill and Smith (2001b) p 776.

> If in rem rights were freely customizable – in the way in personam contract rights are – then the information-cost burden would quickly become intolerable. Each dutyholder would either incur great costs in informing herself, or would be forced to violate property rights wholesale, defeating the benefits of security, investment, and planning that these rights were meant to secure.[68]

Although the establishment of *rights in rem* reduces the information costs of third parties, the standardisation of rights also involves costs. The main cost is that it prevents private parties from tailoring agreements in relation to the use of a resource which would, for instance, allow for greater precision or complexity in the definition of use rights.[69]

In general, the state has a monopoly over the creation of property rights and there is a reluctance to recognise novel forms of property.[70] Although, in principle, there would seem to be nothing against the development of standardised rights by private parties, or by social norms, it is likely to be more efficient for standardisation to be centralised. First, while network effects might result in a degree of standardisation, this does not address the information costs associated with a small number of people departing from standard forms.[71] Second, any system of private standardisation would likely require a system of legal enforcement to be effective.[72] Third, standardisation of property rights is likely characterised by significant economies of scale and scope.[73] The reluctance to recognise novel forms of property is readily explained by the extent to which an unlimited proliferation of *rights in rem* would impose information costs on third parties.[74] On the other hand, as the literature on public choice makes clear, there are considerable disadvantages associated with centralised, legislative decision-making, including the potential influence of homogeneous interest groups.[75]

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68 Merrill and Smith (2001a) p 387. Posner makes a similar point when he explains that 'having too many sticks in the bundle of rights that is property increases the cost of transferring property': Posner (1998) p 76. Likewise, as Merges points out, 'If the system allows too many bundles of rights that have been modified in idiosyncratic ways, both the speed and certainty of exchange will be diminished. The basic idea is that well functioning markets for land require fairly standardized bundles of rights to work efficiently': Merges (1997) p 122.

69 See Thomas W Merrill and Henry E Smith, 'The Property/Contract Interface' (2001b) pp 790–799.

70 The courts, in particular, are reluctant to recognise new forms of property absent legislative intervention: see, for example, *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor* (1937) 58 CLR 479 (no property in a 'spectacle'); *Moorgate Tobacco v Philip Morris* (1984) 56 ALR 193 (no general tort of 'unfair competition' under Australian law).

71 See Merrill and Smith (2000) pp 45–49. Network effects are explained further in Chapter 7 below.

72 *Ibid.* p 50.

73 *Ibid.* p 51.

74 See Merrill and Smith (2001b) pp 795–6.

75 See, for example, George J Stigler, 'The Economic Theory of Regulation' (1971) 2(1) *Bell Journal of Economics* 3; Mancur Olson, *The Logic of Collective Action* (Harvard University Press, Cambridge, MA, 1965); Gary S Becker, 'A Theory of Competition Among Pressure Groups for Political Influence' (1983) 98 *Quarterly Journal of Economics* 371.

## Chapter 3 – The Economics of Copyright

As explained in Chapter 2, all systems of property rights involve trade-offs between economic costs and benefits. The trade-offs involved with the copyright system are especially complex because of special features that characterise information, such as copyright material, as an economic resource. This chapter explains, in general terms, the differences between the trade-offs involved in establishing property rights in tangible resources and those involved in establishing property rights in intangibles, specifically information. At a certain level of generality, an understanding of the economics of intellectual property rights, such as copyright and patents, depends on understanding the economics of information as a commodity. Analysis of the economics of intellectual property rights at this level is derived largely from the work of a number of influential economists who explored the economic implications of differences between information as a commodity and tangible goods as commodities.[76] It is in this sense that copyright law can be said to be a system of property rights in information, the material protected by copyright being a sub-set of the more general category of information goods. This chapter focuses on the economics of copyright at the relatively abstract level of the economics of property rights in information; the next chapter deals more narrowly with the economics of copyright law as a system of property rights in particular kinds of information goods, namely copyright material.

### 3.1 Copyright as Property

Under Australian law, copyright is a set of statutory exclusive rights established by the *Copyright Act 1968* (Cth) (the 'Copyright Act').[77] The Copyright Act provides that copyright is a form of personal property that is transferable, in whole or in part.[78] More precisely, copyright is a form of incorporeal, or intangible property. As Windeyer J pointed out in *Pacific Film Laboratories v Federal Commission of Taxation,* copyright '... is not a right in an existing thing. It is a negative right, as it has been called, a power to

[76] See, especially, Kenneth J Arrow, 'Economic Welfare and the Allocation of Resources for Invention' in NBER, *The Rate and Direction of Inventive Activity* (Princeton University Press, Princeton, NJ, 1962); George J Stigler, 'The Economics of Information' (1961) 69 *Journal of Political Economy* 213. For a critical discussion of the discipline of information economics by an American legal academic, see: James Boyle, *Shamans, Software, and Spleens* (Harvard University Press, Cambridge, MA, 1996).

[77] There is no scope for common law copyright, or State or Territory copyright laws: see *Copyright Act 1968* (Cth) s 8.

[78] *Copyright Act 1968* (Cth) ss 196(1), (2). An assignment of copyright must be in writing: *Copyright Act 1968* (Cth) s 196(3).

prevent the making of a physical thing by copying'.[79] As a matter of Australian law, then, copyright is properly characterised as a form of property.[80]

As copyright consists of exclusive rights over valuable resources, namely creative material, copyright also falls within the broad economic concept of property explained at paragraph [2.5] above. Sometimes, however, copyright and other intellectual property rights are referred to as 'monopolies'.[81] As intellectual property laws confer exclusive rights, it may be possible to refer to intellectual property rights as legal monopolies. Nevertheless, this terminology is misleading. As Fritz Machlup famously pointed out in relation to the patent system:

> A confusion which might encumber economic analysis if it were widespread is that between "property" and "monopoly". There is the idea that "property" and "monopoly" are one and the same thing from the economic point of view, and that the "owner" of an invention has a monopoly of its use just as the owner of a house has a "monopoly" of the use of the house.[82]

Intellectual property rights generally present little more concern for competition policy than other forms of property.[83] As the report of the Intellectual Property and Competition Review Committee pointed out, 'most intellectual property rights do not confer monopoly power'.[84] As a general rule, it is only when intellectual property rights are

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79 (1970) 121 CLR 154 at 170. See also *Re Dickens; Dickens v Hawksley* [1935] 1 Ch 267. In the United States, Justice Holmes made a similar point to Windeyer J when he stated that copyright 'restrains the spontaneity of men where but for it there would be nothing of any kind to hinder their doing as they saw fit': *White-Smith Music Publishing Co v Apollo Co.* 209 US 1 at 19 per Holmes J.

80 Copyright is also usually regarded as a 'chose in action': see John W Carter et al., *Helmore Commercial Law and Personal Property in New South Wales* (Law Book Company, Sydney, 1992) pp 3–5.

81 See, for example, The Hon Justice Laddie, 'Copyright: Over-strength, Over-regulated, Over-rated?' [1996] 5 *European Intellectual Property Review* 253.

82 Fritz Machlup, *An Economic Review of the Patent System* (United States Senate Subcommittee on Patents, Trademarks, and Copyrights of the Senate Committee on the Judiciary, 1958) p 53. In a footnote, Machlup went on to observe that 'From an economic point of view, "property" and "monopoly" have almost nothing to do with each other. A seller who owns his wares has property but no monopoly if many other people independently sell similar things in the same market. A seller who can control the price of what he sells, because no one seriously competes with him in the market, has a monopoly but not property if he does not own what he sells': p 54, fn 238.

83 As Epstein explains, 'The ownership of land, like the ownership of a patent, creates a monopoly of sorts. In both cases no one else is allowed to use the land or the invention without the consent of the owner. But it would be too hasty to assume that all such ownership creates the distortions in resource allocation that are normally attributed to monopoly. The key point here is that a legal monopoly will not necessarily create an economic monopoly if some close substitutes are available': Richard A Epstein, 'Intellectual Property: Old Boundaries and New Frontiers. Addison C Harris Lecture' (2001) 76 *Indiana Law Journal* 803 at 817.

84 IPCRC (2000) p 6. The same point is made by Lemley: '... while some intellectual property rights may in fact give their owner power in an economically relevant product market, most do not; they merely prevent others from competing to sell copies of a particular product, not from selling different products that compete with the original': Mark A Lemley, 'The Economics of Improvement in Intellectual Property Law' (1997) 75 *Texas Law Review* 989 at 996, fn 26. See also Joshua Gans, Philip Williams and David Briggs, *Clarifying the Relationship between Intellectual Property Rights and Competition,* Report prepared on behalf of the National Copyright Industry Alliance for submission to the Review of Intellectual Property and Competition (April 2000).

combined with other barriers to entry, such as strong network effects, that concerns are likely to arise in relation to 'monopoly', or market power.[85] Edmund Kitch has explained how the tendency to mistakenly label intellectual property rights as monopolies can distort economic analysis:

> It is ... important to make a distinction between the issue of whether intellectual property rights confer an economic monopoly, and thus impose the social welfare cost associated with monopoly, and the fact that intellectual property rights systems have costs as does any system of property rights. Any system of property rights involves costs in defining the scope of the rights, detecting and preventing trespass, and in foreclosing particular productive opportunities that might be possible if the property system did not exist. Any system of property rights is appropriately subject to examination as to whether the benefits of the property system outweigh these costs, but that examination has nothing to do with the social welfare loss caused by economic monopolies. Unfortunately, the monopoly issue has served to distract attention from this conceptually simpler, yet important, issue.[86]

In other words, the focus of economic analysis should be on the overall benefits and costs of the copyright system.

## 3.2 The Benefits of Copyright

Copyright, like other forms of property, promotes economic efficiency. Nevertheless, the relationship between copyright and efficiency differs, in some respects, from the relationship between tangible property rights and efficiency. This is because copyright is a system of property rights in information. Information, such as copyright material, differs from tangible resources because it exhibits some of the features of a public good.

A public good is characterised by non-excludability, meaning that it is difficult to exclude others from the resource, and by non-rivalry in consumption, meaning that use of the resource does not deplete the amount of the resource available for others.[87] Information exhibits features of a public good because once information is made public it is difficult to prevent others from copying the information, and because the use of information by one person does not result in less of the information for others.

As explained at [2.7] above, property rights promote static efficiency by internalising the costs and benefits of using a resource, thus ensuring that the resource is not overused. To the extent that information is non-rivalrous, overuse of the resource is not a problem – the widest possible use of the information is to be encouraged. As further explained

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[85] See, for example, Catherine Fazio and Scott Stern, 'Innovation Incentives, Compatibility, and Expropriation as an Antitrust Remedy: the Legacy of the Borland/Ashton-Tate Consent Decree' (2000) 68 *Antitrust Law Journal* 45.

[86] Edmund W Kitch, 'Elementary and Persistent Errors in the Economic Analysis of Intellectual Property' (2000) 53 *Vanderbilt Law Review* 1727 at 1731–1732.

[87] See Richard Cornes and Todd Sandler, *The Theory of Externalities, Public Goods and Club Goods* (Cambridge University Press, Cambridge, 1986); Patrick McNutt, 'Public Goods and Private Goods', *Encyclopedia of Law and Economics* (1998) available at http://encyclo.findlaw.com/lit/0750art.html.

above, property rights promote dynamic efficiency by creating incentives for the efficient use of a resource. Dynamic efficiency is especially important in economies characterised by high rates of change, and particularly in industries where intellectual property rights play a significant role. As the report of the Intellectual Property and Competition Review Committee pointed out:

> ... firms do not only compete in the prices they set but also in their ability to develop new processes and to design and market new products. This dynamic competition is of special importance ... An effective system to define and enforce intellectual property rights is critical for this type of dynamic competition to occur on a material scale.[88]

Absent copyright protection there would be insufficient incentives for an efficient level of production of copyright material. The problem derives from the cost structure of information goods. Information goods have high fixed costs of production and relatively low marginal costs of reproduction and distribution. In the absence of an ability to exclude copying, competitors would be free to copy an information good at marginal cost. This would force the price of the good towards the marginal cost of reproduction. To the extent that an information producer is unable to recover the costs of production, incentives for the production of information goods, such as copyright material, are undermined. Although there exist other incentives for the production of copyright material, including the 'first-in' advantage,[89] without copyright protection there is unlikely to be an economically optimal level of production.[90]

Like property rights in tangibles, then, property rights in information are necessary to ensure efficient levels of investment in producing resources. Moreover, establishing transferable exclusive rights in information ensures that copyright can be traded to the highest value user.

## 3.3 The Costs of Copyright

Although all systems of property rights have costs, the costs of property rights in information, such as copyright material, differ from the costs of property rights in tangible resources. The costs of property rights in information are different because of the particular cost structure of information goods.

As information goods have relatively high fixed costs of production, to recover the costs of production an information producer, such as a copyright owner, must charge more

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88 IPCRC (2000) p 5.

89 See Stephen Breyer, 'The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs' (1970) 84 *Harvard Law Review* 281; Robert M Hurt and Robert M Schuchman, 'The Economic Rationale of Copyright' (1966) 56 *American Economic Review* 421.

90 As Richardson et al. point out, 'That some innovation may take place without apparent reference to the material incentives that copyright provides does not mean that an efficient level of innovation can occur without [exclusive rights]': Richardson et al., (2000) p 8. On the other hand, in industries characterised by strong network effects, 'first-in' advantages may well result in 'winner-take-all' competition and overinvestment in intellectual products: see Gans, Williams and Briggs (2000) p 15.

than the marginal cost of reproduction. If a single price is set above marginal cost, consumers who value the good at more than marginal cost but less than the price will not be able to purchase the product. According to conventional micro-economic theory, a good should be supplied to all consumers prepared to pay more than marginal cost. Thus to the extent that the price for an information good is set above marginal cost there is said to be a net social cost, which is known as the deadweight loss.[91]

The degree to which consumers willing to pay more than marginal cost are unable to purchase an information good explains why intellectual property regimes are commonly regarded as establishing a balance between the creation of incentives for the production of information goods and the need to ensure public access to such goods.[92] In other words, an optimal level of copyright protection must trade off the benefits in terms of dynamic efficiency of creating incentives to supply information goods against the costs in terms of the allocative efficiency of restricted access. Ordover and Baumol have explained the trade-off in the following terms:

> Knowledge (information) is quite unlike any other productive asset because of its public goods character, with all the well-known problems of such goods. Low diffusion costs for the knowledge asset suggest that public policy should encourage its widespread use, and hence suggest that there should be a minimal amount of property right in the asset. But if the owner of the knowledge asset has only minimal property rights, she may not be able to appropriate the initial investment costs. As a result, the initial investment may not be undertaken. This argues for public policies that make exclusion cheap, to the detriment of diffusion.[93]

In a sense, there can never be a complete solution to the problem of preventing underinvestment in the production of information while, at the same time, maximising the use of that information. The dilemma was explained by Nobel laureate Kenneth Arrow in his well-known comments on the patent system:

> Information is a commodity with peculiar attributes, particularly embarrassing for the achievement of optimal allocation. In the first place, any information obtained, say a new method of production, should, from the welfare point of view, be available free of charge (apart from the cost of transmitting information). This insures optimal utilization of the information but of course provides no incentive for investment in research ... In a free enterprise economy, inventive activity is supported by using the invention to create property rights; precisely to the extent that it is successful, there is an underutilization of the information.[94]

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[91] See, for example, Otto A Davis and Andrew B Whinston, 'On the Distinction Between Public and Private Goods' (1967) 57 *American Economic Review: Papers and Proceedings* 360.

[92] This is known as the incentives/access paradigm: see, for example, Glynn S Luney, 'Reexamining Copyright's Incentives-Access Paradigm' (1996) 49 *Vanderbilt Law Review* 483.

[93] J Ordover and W Baumol, 'Antitrust Policy and High-Technology Industries' (1988) 4 *Oxford Review of Economic Policy* 13 at 14. To similar effect, see Sanford J Grossman and Joseph E Stiglitz, 'On the Impossibility of Informationally Efficient Markets' (1980) 70 *American Economic Review* 393; IPCRC (2000) p 6.

[94] Arrow (1962) pp 616–617.

## 3.4 Price Discrimination

There is considerable debate concerning the extent to which the deadweight loss consequent upon setting price above marginal cost must be addressed by establishing limits to property rights in information, such as copyright material, and the extent to which it can be addressed by the market. The debate centres around the possibility of copyright owners differentiating among consumers on the basis of willingness to pay; in other words, engaging in price discrimination.

As Demsetz first pointed out, the deadweight loss may be minimised if a supplier is able to price discriminate on the basis of user preferences.[95] Assuming perfect price discrimination is possible, a copyright owner will be able to recover from all consumers willing to pay more than marginal cost, thus eliminating the deadweight loss and transferring the total surplus to the owner. Perfect price discrimination, however, requires the satisfaction of extremely stringent conditions, including perfect information concerning individual consumer preferences and restrictions on arbitrage.[96] For all practical purposes, it is unachievable.

Perfect price discrimination, which is also known as first-degree price discrimination, must be distinguished from both second-degree and third-degree price discrimination.[97] In second-degree price discrimination, a seller establishes a schedule of prices and consumers pay different average prices according to differences in demand. In third-degree price discrimination, on the other hand, a seller separates consumers into groups based on a characteristic of the consumers, such as age or time of payment. The welfare effects of second- and third-degree price discrimination are complex. Economists tend to be divided into price discrimination optimists and price discrimination pessimists.[98]

Price discrimination optimists argue that copyright owners have an incentive to maximise the distribution of copyright material by differentiating between high-value and low-value users, and that less than perfect price discrimination will usually reduce,

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[95] See Harold Demsetz, 'The Private Production of Public Goods' (1970) 13 *Journal of Law and Economics* 293. For a recent popularisation of the argument, see Carl Shapiro and Hal R Varian, *Information Rules* (Harvard Business School Press, Boston, 1999).

[96] See, for example, Hal R Varian, 'Price Discrimination and Social Welfare' (1985) 75 *American Economic Review* 870.

[97] See, for example, W Kip Viscusi, John M Vernon, Joseph E Harrington, *Economics of Regulation and Antitrust* (2nd ed., The MIT Press, Cambridge, MA, 1995) pp 290–295; FM Scherer and David Ross, *Industrial Market Structure and Economic Performance* (3rd ed., Houghton Mifflin Company, Boston, 1990) pp 489–516.

[98] See Michael J Meurer, 'Copyright Law and Price Discrimination' (2001) *Boston University School of Law Working paper No 01-06,* available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id+274729, pp 7–9, 34–36. Richardson et al. are generally optimistic about the possibilities for price discrimination, arguing that '... it is feasible to construct a model which can distinguish between high and low value users and price accordingly': Richardson et al. (2000) p 14. The Intellectual Property and Competition Review Committee, on the other hand, are generally pessimistic about price discrimination, concluding that 'The mere fact that in economic theory, perfect or close to perfect price discrimination *could* materially negate the allocative efficiency losses that the exercise of market power would otherwise create, does not show that in any specific case it actually does so; and the Committee has not seen any evidence that would allow it to conclude that losses in allocative efficiency are *not* being imposed': Intellectual Property and Competition Review Committee (2000) p 64.

even if not eliminate, the deadweight loss.[99] Price discrimination pessimists, on the other hand, point out that less than perfect price discrimination can sometimes lead to less output than would result from setting a single price,[100] or that an increase in total output can be more than offset by differences in the marginal rate of substitution between favoured and disfavoured purchasers.[101]

This paper cannot resolve the question of the extent to which allocative losses associated with property rights in information, such as copyright material, require limits on the property rights or the extent to which such losses can feasibly be addressed by price discrimination. To a certain extent it is impossible to resolve the issue in the abstract, as the effects of price discrimination depend, to a large extent, upon the characteristics of individual markets, including consumer demand for particular products. What can be said is that price discrimination has the potential to increase welfare, but only if it results in an increase in total output relative to the setting of a single price. Insofar as the welfare effects of second- and third-degree price discrimination are equivocal, there remain good economic arguments, in terms of allocative efficiency, for establishing limits on exclusive rights in information. Determining the optimal limits on exclusivity, however, involves more than simply balancing incentives and access. As explained in the next chapter, economic analysis of the limits of copyright protection must take into account the full benefits and costs of the copyright system.

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99 See, for example, Gans, Williams and Briggs (2000).

100 For example, where high valuation purchasers place a high value on the first unit of a good but a much lower value on second or subsequent units: see Meurer (2001), pp 34–36.

101 See, for example, Viscusi et al. (1995) p 293.

## Chapter 4 – The Limits of Copyright

As explained in Chapter 2, all property rights have limits. The optimal limits of property rights depend upon balancing the benefits of a property rights system against the costs.[102] At the extreme, if the costs of establishing and enforcing a system of property rights are prohibitive, then it is not efficient to establish property rights. Assuming that a system of property rights has been established, the costs and benefits of exclusivity must be taken into account in determining the optimal scope and duration of the property rights.

Two distinct kinds of cost are particularly significant in a system of property rights in information, such as the copyright system. First, as explained in Chapter 3, there is the deadweight loss associated with pricing information goods at more than marginal cost. This gives rise to arguments for limits that promote the widespread dissemination of information goods, such as copyright material. Second, innovation involving information goods is necessarily cumulative, meaning that new material inevitably builds on past creations.[103] Thus if first generation intellectual property rights are too high, derivative innovation may be deterred.[104] This gives rise to arguments for limits that promote transformative uses.

The need to take into account the costs of property rights means that not all resources are subject to property rights, property rights do not confer complete exclusivity and proprietary interests are commonly limited in duration. This gives rise to limits on the property right (meaning whether or not a resource falls within the property right), limits on the degree of exclusivity conferred by the property right and limits on the duration of the property right.[105]

This chapter examines the limits of copyright protection under Australian law in each of these three dimensions. The legal limits of the property right (which establish the subject matter of copyright), the limits of exclusivity conferred by copyright law and the limits

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102 A previous report commissioned by the Centre for Copyright Studies examined the costs and benefits of copyright in more detail than is possible in this study: see Megan Richardson et al. (2000).

103 As Landes and Posner point out, 'Creating a new work typically involves borrowing or building on material from a prior body of works, as well as adding original expression to it ... The less extensive copyright protection is, the more an author, composer, or other creator can borrow from previous works without infringing copyright and the lower, therefore, the costs of creating a new work': William M Landes and Richard A Posner, 'An Economic Analysis of Copyright Law' (1989) 18 *Journal of Legal Studies* 325 at 332.

104 For an analysis of cumulative innovation in the context of the patent system, see: Suzanne Scotchmer, 'Standing on the Shoulders of Giants: Cumulative Research and Patent Law' (1991) 5 *Journal of Economic Perspectives* 29. As Boyle has pointed out, '... information products are frequently made out of fragments of other information products; your information output is someone else's information input': James Boyle, 'The Second Enclosure Movement and the Construction of the Public Domain', paper presented to the Conference on the Public Domain, Duke Law School, 9–11 November 2001, p 10.

105 The three kinds of limits may be compared with the typology adopted by Epstein in a paper exploring analogies between the law of tangible property and intellectual property law. Epstein points out that all property systems contain three kinds of rules: rules of acquisition, rules of exclusion and rules of duration: see Epstein (2001).

on the duration of copyright protection are explained. In each case, the explanation of the law is followed by an examination of the economics of the limits of protection. The chapter then compares copyright-specific restrictions on contracting around the limits of copyright protection under Australian law and United States law. The chapter also includes an assessment of the extent to which the limits established under Australian copyright law are likely to be optimal, taking into account non-economic as well as economic objectives of copyright policy. Finally, the chapter concludes with a consideration of the implications of the analysis presented for the extent to which parties should be free to contract around the limits of copyright protection.

## 4.1 Limits on the Property Right

### 4.1.1 Legal Limits on the Property Right

Although copyright protection does not depend upon the completion of legal formalities, such as registration, certain legal criteria must be satisfied before material will be protected by copyright.

First, material must fit within a category recognised by copyright law. The focus of Australian copyright law is 'works', which are protected under Part III of the Copyright Act. The Copyright Act protects only particular types of works, namely, literary, dramatic, musical and artistic works.[106] The Copyright Act also protects 'subject matter other than works', meaning sound recordings, films, broadcasts and published editions of works. 'Subject matter other than works' is protected under Part IV of the Copyright Act. The 'subject matter' is, however, generally derived from works, and the protection is more restricted than that applying to works.[107]

Second, copyright does not protect disembodied ideas or facts, but only the form in which ideas or facts are expressed. As Prichard J expressed the principle:

> Anyone is free to use the basic idea – unless, of course, it is a novel invention which is protected by the grant of patent. But no one can appropriate the forms or shapes evolved by the author in the process of giving expression to the basic idea.[108]

These principles are known as the idea/expression and fact/expression dichotomies.[109]

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[106] *Copyright Act 1968* (Cth) s 32.

[107] Being generally confined to making a 'copy' of the subject matter and communicating the subject matter to the public: see *Copyright Act 1968* (Cth) ss 85, 86.

[108] *Plix Products v Frank M Winstone* (1985) 3 IPR 390 at 419 per Prichard J.

[109] The practical application of the idea/expression dichotomy is one of the most difficult areas of copyright law: see, for example, RY Libbott, 'The Idea Expression Fallacy' (1968) 16 *Copyright Law Symposium (ASCAP)* 30.

Third, the idea/expression dichotomy is closely linked to the requirement that 'works' must be fixated in a 'material form'.[110] This requirement has recently been explained by Finkelstein J in the following terms:

> The nature of copyright is such that there must be an embodiment of the work the subject of copyright. It is not sufficient that the work be in the mind of its creator.[111]

Fourth, copyright protection in relation to 'works' must satisfy an innovation threshold, known as 'originality'.[112] The standard for originality under Anglo-Australian law is low, requiring only a minimal expenditure of labour or work,[113] as opposed to North American and many European copyright systems, which require a minimum of 'creativity'.[114] Despite the low threshold of originality under Australian law, some 'works', such as some computer-generated databases, may not be sufficiently original to qualify for protection.[115]

Material that does not satisfy the minimum legal requirements for copyright protection is not necessarily unprotected. The material may be protected under an alternative intellectual property regime, such as patent law or the equitable doctrine of breach of confidence. Parties seeking to protect ideas will rely on regimes specifically designed to protect ideas, especially patent and confidentiality law. Furthermore, there is nothing to prevent parties entering into contracts restricting the use of non-copyright material, whether or not this gives rise to an action for breach of confidence. It is important to understand, however, that alternative forms of protection, such as confidentiality law, have their own benefits and costs. The role of the action for breach of confidence in protecting non-copyright material, and the benefits and costs of confidentiality law, are considered further in Chapter 5 of this paper.

### 4.1.2 The Economics of Limits on the Property Right

The economic function of copyright law is to establish incentives for the production of copyright material, which would be underproduced absent legal protection. If the costs

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110 'Material form', in relation to a 'work' or 'adaptation of a work' is defined to include, '... any form (whether visible or not) of storage from which the work or adaptation, or a substantial part of the work or adaptation, can be reproduced': *Copyright Act 1968* (Cth) s 10(1). For a comparative analysis of the requirement of fixation under English and United States copyright laws, see: David J Brennan and Andrew F Christie, 'Spoken Words and Copyright Subsistence in Anglo-American Law' [2000] *Intellectual Property Quarterly* 309.

111 *Telstra Corporation Ltd v Desktop Marketing Systems Pty Ltd* (2001) 181 ALR 134 at 144.

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

113 *Telstra Corporation Ltd v Desktop Marketing Systems Pty Ltd* (2001) 181 ALR 134. See also *Football League Ltd v Littlewoods Pools Ltd* [1959] 1 Ch 637; *Ladbroke (Football) Ltd v William Hill (Football) Ltd* [1964] 1 WLR 273.

114 See, for example, *Feist Publications, Inc. v Rural Telephone Service Co, Inc.* 499 US 340 (1991); *Tele-Direct (Publications) Inc. v American Business Information Inc* (1997) 154 DLR 4th 328.

115 See, for example, Copyright Law Review Committee, *Computer Software Protection* (CLRC, Canberra, 1995) para 14.74, pp 276–277.

of protecting some material under copyright law outweigh the benefits, then it is preferable that the material not be protected by copyright.

To qualify for protection under Australian copyright law material must first fall within the legal pigeonholes of 'works' or 'subject matter other than works'. As explained at [2.9] above, all property rights must fit within a limited number of fixed, standard forms.[116] The economic explanation for the standardisation of property rights is that it minimises the information costs of third parties, including successors in title, in determining the nature of the interest created. Although this explains the need for legal pigeonholes, it does not explain why one form of classification should be preferred over another. If a substantial amount of material were found to fall outside the existing categories of protection, the copyright system may not be maximising the benefits of property rights. There would then be a need to reassess the categories.[117]

Second, copyright protection applies only to the form of expression, not to ideas or facts in themselves. A number of economic explanations may be given for limiting copyright to expressions. First, the limitation promotes the distribution of ideas or facts, thus reducing the deadweight loss resulting from copyright protection. Second, the administrative and enforcement costs of protecting ideas would be high. For example, without a system of registration, it would be difficult to define an idea and to determine when an idea is copied. Third, protecting ideas would impose significant transaction costs on second-generation innovators wishing to use an idea in their own creations. The costs would include those incurred in identifying and defining the idea, identifying the owner and negotiating a licence to use the idea. Furthermore, second-generation innovators wishing to avoid infringement would incur substantial costs in 'creating around' protected ideas. Thus, the protection of ideas would undermine incentives for innovation, resulting, overall, in the production of less copyright material.[118]

Third, the requirement that a 'work' be fixated in a 'material form' raises a different balance of costs and benefits from the idea/expression and fact/expression dichotomies. On the one hand, the requirement of 'material form' reduces the costs incurred in identifying the subject matter of copyright protection. On the other hand, however, the requirement excludes some forms of expression from protection, including *ex tempore* speeches and improvisations. An economic assessment of the 'material form' requirement therefore involves balancing any underproduction of works that are not fixated against the transaction costs of identifying and enforcing property rights in 'non-fixated' creations. The balance may well vary with the kind of material under consideration.

Fourth, the Anglo-Australian standard of originality requires only a minimum level of skill and labour, and does not require any degree of creativity. From an economic perspective, the advantage of a comparatively low innovation threshold is that it protects material that adds to overall social welfare, regardless of the degree of novelty. Moreover,

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116 In civil law systems this is known as the *numerus clausus* principle: see Merrill and Smith (2000).

117 This is arguably what occurred when, in 1984, it was decided to include computer programs within the definition of a 'literary work': see *Copyright Act 1968* (Cth) s 10(1) (definition of 'literary work').

118 See Landes and Posner (1989) pp 347–353.

as Richardson et al. suggest, a higher threshold would impose transaction costs in determining whether material satisfies a relatively subjective 'creativity' standard.[119] There is, nevertheless, a good economic reason for imposing a minimum threshold of originality. The reason is that material that does not result from a minimum investment of effort is likely to have negligible social value. Extending property rights to such material would impose costs, in terms of restricting the distribution of the material, that outweigh the social value of the material.

## 4.2 Limits on Exclusivity

### 4.2.1 Legal Limits on Exclusivity

Copyright law does not confer complete exclusivity. Copyright consists of a limited set of exclusive, negative rights that prevent others from engaging in uses of copyright material.[120] The exclusive rights comprised in the copyright extend only to particular specified uses of copyright material. Copyright law establishes significant exceptions to copyright protection that excuse particular uses of copyright material.

*Limited Range of Exclusive Rights*

In relation to 'works', copyright consists of the exclusive rights of reproduction, first publication and public communication.[121] The main right comprised in the copyright, the reproduction right, extends beyond literal copying to protect against imitations that have a 'substantial' degree of similarity to the original. Copyright in literary, dramatic and musical works includes an exclusive right to perform the work in public.[122] Apart from traditional copyright, recent amendments to copyright law have granted additional protection to copyright owners to supplement technological measures developed to protect copyright material. The new type of protection is sometimes known as 'para-copyright'. The most important form of para-copyright prohibits making, selling, or commercially dealing with technologies for circumventing technological measures for protecting copyright material.[123] By conferring protection against circumvention technologies, the new provisions approach a *de facto* right to control access to material protected by technological measures.

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119 Richardson et al. (2000) pp 18–19.

120 The exclusive rights are necessarily negative (ie they restrict what others can do with copyright material) because of the non-rivalrous nature of information.

121 *Copyright Act 1968* (Cth) s 31(1).

122 *Copyright Act 1968* (Cth) s 31(1)(a)(iii).

123 *Copyright Act 1968* (Cth) s 116A.

All uses of copyright material that do not fall within a right comprised in the copyright are permitted. For example, copyright in a literary work does not prevent someone other than the copyright owner from reading the work, or performing the work in private. Moreover, the publication right is not a distribution right, in that it does not prevent a person other than the copyright owner from selling an object embodying copyright material, such as a book or magazine, or from lending the book or magazine to another person.

### *Exceptions to Infringement of Exclusive Rights*

A use of copyright material that otherwise would infringe copyright is permitted to the extent that it falls within a statutory exception to copyright infringement. The Copyright Act sets out a range of exceptions to infringement, which exempt particular uses, or uses by particular persons.[124]

International copyright law has long recognised the ability of nation states to establish exceptions to the exclusive rights of copyright owners. In relation to permissible exceptions, the most important international instruments establish what is known as the 'three-step' test.[125] This test essentially requires that national exceptions to copyright infringement: be confined to certain special cases; not conflict with a normal exploitation of the work; and not unreasonably prejudice the legitimate interests of the author.[126]

The most important Australian exceptions claimed to fall within the 'three-step' test are the defences of fair dealing.[127] The Australian defences of fair dealing are statutory defences that, in relation to 'works', are established by sections 40 to 43 of the Copyright Act. The defences permit fair dealings with copyright material for the purposes of research or study, criticism or review, and reporting news.[128] Other significant exceptions include provisions permitting certain uses by libraries and archives[129] and exceptions relating to computer programs.[130] In addition to exceptions to infringement, the Copyright Act establishes a number of statutory licence schemes, in areas such as

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[124] For exceptions relating to 'works' see *Copyright Act 1968* (Cth) Part III, Divisions 3–7.

[125] See Article 9(2) of the *Berne Convention* and Article 13 of the Agreement on *Trade-Related Aspects of Intellectual Property Rights* ('TRIPS').

[126] For analysis of the 'three-step' test, see Sam Ricketson, *The Berne Convention for the Protection of Literary and Artistic Works* (Centre for Commercial Law Studies, University of London, 1987) para 9.6, p 482.

[127] For discussion of the origins of the Australian defences of fair dealing, see David Lindsay, *The Future of the Fair Dealing Defence to Copyright Infringement* (Centre for Media, Communications and Information Technology Law, Research Paper No 12, November 2000).

[128] Similar exceptions are established for dealings with 'audio-visual items' (sound recordings, films and broadcasts) by sections 103A to 104 of the Copyright Act.

[129] See *Copyright Act 1968* (Cth) Part III, Division 5.

[130] *Copyright Act 1968* (Cth) Part III, Division 4A.

educational copying, [131] where an otherwise prohibited use is permitted in exchange for a fee payable to the copyright owner.

### 4.2.2 The Economics of Limits on Exclusivity

From an economic perspective, optimal legal limits on exclusivity must balance the benefits of exclusivity against the costs.

*Economic Analysis of Limited Range of Exclusive Rights*

Copyright protection is confined to a limited number of exclusive uses of copyright material.

First, unlike patent law, copyright does not give the owner the right to prevent independent creation of the same material. There are good economic reasons for not extending copyright protection to include independent creation. Most copyright material is so distinctive that independent creation is rare. Extending copyright to independent creation would significantly increase the costs of second-generation innovators in avoiding infringement. Given the rarity of independent creation, these increased costs would not be balanced by a significant increase in revenue for the copyright owner.[132]

Second, the rights comprised in the copyright are essentially rights over copying and over the public distribution of copyright material. At its core, copyright is a right to prevent copying. The economic explanation for restricting copying is that copying is cheaper than creating. As explained in Chapter 3, unrestricted copying would reduce the price of copyright material to the marginal cost of copying, thereby undermining incentives.

Over time, the rights comprised in copyright have expanded to include public distribution rights, such as the right to first publication and the public communication right.[133] As explained at [2.7] above, the costs and benefits of a property rights system change over time, with changes in technologies and/or markets. The expansion of exclusive rights has generally been associated with technological changes that have reduced the costs of copying and increased the costs of detecting and enforcing prohibitions on copying. Given these developments, extending rights to the public distribution of copyright material is desirable to the extent that it reduces the costs of detecting infringements and enforcing copyright protection. Furthermore, the development of communications networks, and especially the Internet, has blurred

[131] See *Copyright Act 1968* (Cth) Part VB.

[132] See Landes and Posner (1989) pp 344–346; Wendy J Gordon and Robert G Bone, 'Copyright' in *Encyclopedia of Law and Economics* (1999) available at http://encyclo.findlaw.com/lit/, pp 1610–1611.

[133] See *Copyright Act 1968* (Cth) ss 31(1)(a)(ii), (iv), 31(1)(b)(ii), (iii).

distinctions between copying and distribution.[134] The introduction of digital technologies has further increased the ease and reduced the costs of copying, while increasing the costs of detecting and enforcing prohibitions on copying.[135] Prohibitions on the circumvention of copyright protection technologies may be explained, to an extent, as an attempt to reduce the otherwise significant costs of detecting and enforcing infringements of copyright in digital material.[136]

### *The Economics of Exceptions to Copyright Infringement*

The exceptions to copyright infringement may be explained, to a significant extent, by the use of Coasian analysis and the Calabresi and Melamed distinction between property rules and liability rules.

Chapter 2 of this paper explained how exclusive property rights promote the efficient use of resources by enabling the operation of markets. Following Coase, it further explained how transaction costs might mean that some value-maximising exchanges would not occur, thereby impairing the efficient operation of markets. Chapter 3 of the paper explained how copyright protection addresses the problem of the underproduction of copyright material by allowing the owner to prevent copying otherwise than by voluntary, market-based transactions. Under the Copyright Act, the copyright owner can prevent involuntary transactions by means of an injunction, for example.[137] Thus, in terms of the distinction between property rules and liability rules, copyright is protected by a property rule.

### *Compulsory Licences as Conventional Liability Rules*

The copyright owner has no control over uses that fall within the exceptions to copyright infringement. As explained at [2.8] above, in the presence of high transaction costs it is preferable for entitlements to be protected by a liability rule, which allows involuntary transactions subject to payment of compensation. The compulsory licence schemes established under the Copyright Act are examples of liability rules. In circumstances where the costs of bargains between copyright owners and individual users are

[134] As Boyle points out, ‘In a networked society copying is not only easy, it is a sine qua non of transmission, storage, caching and some would claim, even reading’: Boyle (2001) pp 6–7.

[135] Technologies are being developed to facilitate the detection of copyright infringements, but these technologies have costs and are likely to be difficult to implement.

[136] Anti-circumvention laws may also act to restrict socially wasteful expenditure on technologies for protecting digital material and in technologies for circumventing technological protection measures. In this sense, the economic justification for anti-circumvention laws parallels the reasons for conferring protection on secret information explained in Chapter 5 below.

[137] *Copyright Act 1968* (Cth) s 115.

prohibitive, such as the large amount of copying that takes place in educational institutions, it may be more efficient to protect copyright by a liability rule.[138]

### *Economic Analysis of 'Uncompensated Use' Exceptions*

The Copyright Act includes important exceptions, such as the fair dealing defences, that allow involuntary transactions without any payment to the copyright owner. As these exceptions provide for uncompensated use of copyright material, they differ from conventional liability rules.

In a seminal article on the economics of copyright, Wendy Gordon first formulated a cohesive economic explanation for 'uncompensated use' exceptions to copyright infringement, in the context of the United States doctrine of fair use.[139] Gordon extended the Calabresi and Melamed analysis to conclude that an uncompensated use was permissible under two conditions: if market failure would prevent consensual exchanges that maximise social value and if the use would not undermine copyright incentives.[140] Whereas Calabresi and Melamed had contended that the law should substitute involuntary transactions for consensual market-based transactions in the presence of high transaction costs, Gordon argued that involuntary transactions were permissible in the presence of market failure, broadly defined.[141]

Two distinct kinds of market failure are especially significant to the analysis of 'uncompensated use' exceptions, such as the Australian defences of fair dealing. First, standard Coasian analysis explains that where transaction costs outweigh the benefits of a bargain, there will be no bargain. For example, the costs of negotiating to quote a small passage in a review of a novel might prevent an exchange, even if there is a clear benefit to the user and no harm to the copyright owner. In this sense, the economic justification for an exception to copyright infringement tracks the case for preferring a liability rule over a property rule except that, in this instance, the owner remains uncompensated.

Second, an otherwise infringing use of copyright material may result in social benefits (positive externalities) that are not taken into account in a market transaction between a

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[138] If bargaining costs are reduced by technological changes, for example, it may be desirable to replace a liability rule with a property rule.

[139] Wendy J Gordon, 'Fair Use as Market Failure: A Structural and Economic Analysis of the *Betamax* Case and its Predecessors' (1982) 82 *Columbia Law Review* 1600.

[140] Gordon advocated a three-part test under which fair use would be awarded when '(1) market failure is present; (2) transfer of the use to defendant is socially desirable; and (3) an award of fair use would not cause substantial injury to the incentives of the plaintiff copyright owner': *ibid.* p 1614.

[141] The relationship between the Calabresi and Malemed framework and Gordon's analysis is made more explicit in Gordon's recent work, which revisits the economics of fair use: see Wendy J Gordon, 'Excuse and Justification in the Law of Fair Use: Commodification and Market Perspectives' in Neil Netanel and Niva Elkin-Koren (eds) *The Commodification of Information: Social, Political, and Cultural Ramifications* (Kluwer International, forthcoming, 2002). Gordon's broad concept of market failure includes the extent to which the market cannot promote social values (such as free speech) that are difficult to assign a monetary value to, and instances where a sale is impossible because of a copyright owner's 'anti-dissemination motives': Gordon (1982) pp 1630–1635.

copyright owner and a user.[142] For example, consider a negative review of a recently released novel. The reviewer may need to include extracts from the novel to effectively illustrate his or her points. The copyright owner may be willing to license the use of extracts, but at a price commensurate with the amount he or she is likely to lose from a negative review. The amount the reviewer is willing to pay depends upon the maximum amount he or she will earn from the review. Consequently, the parties are unlikely to agree on a price. Nevertheless, publication of the review will provide valuable information to the public, who are likely to shift their preferences to a more desirable product, thereby increasing social value. As the reviewer is unable to capture the full social benefits of the review, the result is less than optimal.

In both cases, the issue arises as to why, unlike a conventional liability rule, the law should prefer an uncompensated use over a compensated use. After all, a compensated use, such as a compulsory licence, would seem to both preserve the incentives established by the copyright system and ensure that socially valuable uses take place. In her 1982 article, Gordon dealt with this by proposing a rule that an uncompensated use be allowed only if the use would not cause 'substantial injury' to the incentives facing the copyright owner.[143]

Recently, however, Gordon has argued that an uncompensated use should be permitted, even in cases of 'substantial injury' to the owner's incentives, where the use would promote important non-economic values.[144] In other words, Gordon argues that not allowing uncompensated uses may result in significant non-economic costs.[145] Leaving aside non-economic values, however, there are some important economic considerations that must be taken into account in considering the comparative merits of compensated as opposed to uncompensated uses of copyright material. First, the non-rivalrous nature of information goods means that, unlike tangible products, use of copyright material does not deprive the owner of use the material. Second, and more importantly, there are costs in establishing systems for paying compensation, such as compulsory licence schemes, including the costs of determining the amount of compensation. This suggests that in determining whether or not a permitted use should be uncompensated, the costs of paying compensation must be balanced against the effects on the incentives of the copyright owner. If the costs of a system of compensation outweigh any negative effects on the incentives of the copyright owner the use should be uncompensated, but if the negative effects on the incentives facing the owner are greater than the costs of a compensation system there is an economic case for compensated use.

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[142] As Gordon explains, 'The costs and benefits of the parties contracting for the uses often differ from the social costs and benefits at stake, so that transactions leading to an increase in social benefit may not occur: Gordon (1982) p 1630. In an important article, Loren also points out that copyright protection and licensing 'do not cure the market failure that exists when there are diffuse external benefits that cannot be efficiently internalized in any bargained-for exchange': Lydia Pallas Loren, 'Redefining the Market Failure Approach to Fair Use in an Era of Copyright Permission Systems' (1997) 5 *Journal of Intellectual Property Law* 1.

[143] Gordon (1982) pp 1614, 1618–1622.

[144] Gordon (2002).

[145] The relationship between economic and non-economic objectives of uncompensated use is explored further at [4.5] below.

The economic explanation for exceptions that permit uncompensated use of copyright material, then, is essentially that the law should substitute for the market where market-based transactions are impossible, or otherwise incapable of maximising social value. The 'market failure' approach to exceptions to copyright infringement implies, however, that if the failure is cured an exception is no longer warranted. What was previously a market failure may cease to exist because of changes in technologies or market conditions. For example, transaction costs may be reduced by administrative mechanisms, such as collective licensing arrangements, or technological mechanisms, such as online contracting.

Furthermore, there are good economic reasons for exercising care in permitting uncompensated uses. First, uncompensated exceptions to copyright infringement entail imposing a bargain on the parties and setting a price for the notional exchange at zero. As the parties themselves are in the best position to decide whether a transaction is, or is not, to their mutual advantage, the law should be cautious in second-guessing the parties.[146] In other words, as no market is 'perfect', intervention in the market in the form of forced bargains should be targeted at the clearest cases of market failure.[147] Second, as Landes and Posner point out, a broad exception for uncompensated use would remove incentives for developing mechanisms to reduce transaction costs, thus dealing with an important source of market failure.[148]

## 4.3 Limits on Duration

### 4.3.1 Legal Limits on Duration

Property rights in copyright material, like other intellectual property rights, are limited in duration. Article 7 of the *Berne Convention* establishes the minimum duration of protection for most copyright material as the life of the author plus 50 years. In relation to published works, except for photographs, this period of protection is adopted by section 33(2) of the Copyright Act. The term of protection for published photographs, sound recordings and films is set at 50 years following first publication.[149] The duration of copyright in a published edition of a work is set at 25 years following first publication.[150] Following the expiry of the term of protection, all private rights over the material cease, and the material enters the 'public domain'.

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146 Gordon explains the difficulties of second-guessing a decision not to license copyright material as follows: 'If the proper way to look at ... [issues relating to fair use and parody] ... were economic, then ... the principles of consumer sovereignty would seem to dictate that governmental decision-makers should not question why someone refuses to sell or license' Gordon (1982) p 30.

147 As Gordon pointed out, 'It is important that a market failure approach to fair use not be expanded into a justification for allowing court intervention whenever the market fails to reach "perfect" results, for no market is ever perfect': Gordon (1982) p 1657.

148 Landes and Posner (1989) p358.

149 *Copyright Act 1968* (Cth) ss 33(6), 93, 94.

150 *Copyright Act 1968* (Cth) s 96.

### 4.3.2 The Economics of Limits on Duration

The economic explanation of limitations on the duration of copyright protection is related to the need for copyright to balance the benefits of incentives against the costs of reduced dissemination.

The benefits and costs of copyright protection vary with the length of protection. First, the marginal benefit of protection declines as the term of protection increases. As Gordon and Bone have explained, because authors have a declining marginal utility for money, an increase in the length of copyright protection will have a decreasing effect on author incentives.[151] In other words, the prospects of income from copyright protection at some distant time in the future is unlikely to have much of an impact on current incentives. Second, the costs of copyright protection, in terms of less than optimal distribution of copyright material, do not diminish over time. Third, the costs of protection appear likely to increase over time, especially in the form of costs of tracing the owner of copyright.[152] Finally, the question of the duration of property rights in information differs considerably from the duration of property rights in tangibles, such as land. As land is rivalrous, if ownership of land returned to the common after a limited duration, there would still be a need to determine who should have exclusive rights in order to prevent overuse.[153] As information is non-rivalrous, however, copyright material can safely enter the public domain without any of the costs associated with overexploitation of a resource.

Theoretically, the optimal duration of copyright protection depends on when the declining marginal benefit of protection meets the increasing marginal costs of protection. In practical terms, however, there is a sense in which any fixed term of protection is arbitrary. For example, it seems difficult to say that a term of protection for the life of the author plus 70 years is likely to be significantly better than the life of the author plus 50 years. Moreover, as with patent protection, there are complex trade-offs between the scope and duration of intellectual property protection.[154]

## 4.4 Copyright Law Restrictions on Contracting Around the Limits of Copyright

Under Australian copyright law, there is only one express legal restriction on the ability of private parties to enter contracts that govern the relationship between the parties in ways that do not correspond to the limits established by copyright law. The exception is section 47H of the Copyright Act, which prohibits agreements from excluding or limiting

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[151] Gordon and Bone (1999) p 198.

[152] See Landes and Posner (1989) p 361.

[153] This is known as the 'congestion externality': see *ibid.* p 362. See also Epstein (2001) pp 821–824.

[154] See, for example, Richard Gilbert and Carl Shapiro, 'Optimal Patent Length and Breadth' (1990) 21(1) *RAND Journal of Economics* 106; T O'Donoghue, Suzanne Scotchmer and J-F Thisse, 'Patent Breadth, Patent Life and the Pace of Technological Progress' (1998) *Journal of Economics and Management Strategy* 1.

most of the computer program exceptions established under Division 4A of Part III of the Act. This section of the chapter compares the legal restrictions under Australian copyright law with the relevant restrictions under United States law.

### 4.4.1 Ability to Contract Out of Exceptions to Copyright Infringement Under Australian Copyright Law

Perhaps surprisingly, there is uncertainty concerning the extent to which contracts that purport to exclude or modify exceptions to copyright infringement are legally enforceable as a matter of copyright law.[155]

With one exception, the Copyright Act is silent on the ability of private parties to enter agreements that exclude or modify the statutory exceptions to copyright infringement. The exception, found in section 47H of the Copyright Act, prohibits agreements that have the effect of excluding or limiting some exceptions to copyright infringement that allow for the reproduction of computer programs for particular purposes. Specifically, section 47H prohibits the exclusion of those exceptions that allow the reproduction of a program for the purposes of decompilation for studying the program; for making a backup copy; for making interoperable products; for error correction; or for security testing.[156]

The prohibition on contracting out of the relevant computer program exceptions derived from recommendations made in the Copyright Law Review Committee's *Report on Computer Software Protection*[157] which, in turn, were influenced by Article 9 of the *EC Directive on Computer Programs*.[158] Section 47H was introduced, along with the computer program exceptions to copyright infringement, by the *Copyright Amendment (Computer Programs) Act 1999* (Cth). The explanatory material accompanying the introduction of section 47H did not explain the reasons for prohibiting contracting out of the computer program exceptions. Neither did it deal with the implications of the prohibition for other exceptions to copyright infringement.

Whether or not it is possible, as a matter of copyright law, to contractually exclude or modify statutory exceptions to infringement not dealt with under section 47H depends

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155 Thus, the terms of reference for the Copyright Law Review Committee's reference on *Copyright and Contract* requires the Committee to report on 'the ability of owners or users of copyright to enforce agreements which exclude or modify exceptions to the exclusive rights of copyright owners': CLRC (2001) Appendix A – Terms of Reference, p 35, Term of Reference 1 (c). To a degree, the legal uncertainty reflects the extent to which the policy objectives of the exceptions to infringement have yet to be clearly identified.

156 See *Copyright Act 1968* (Cth) ss 47B(3), 47C, 47D, 47E, 47F.

157 The Committee maintained that its recommendations 'regarding interoperability, back-up copying and decompilation of locked programs would be of little practical effect if parties could rely on contractual provisions to prevent these acts': Copyright Law Review Committee, *Report on Computer Software Protection* (Attorney-General's Department, Canberra, 1995) para 10.106, p 179.

158 Article 9 of the *EC Directive on Computer Programs* provides, in relevant part: 'Any contractual provisions contrary to Article 6 [*decompilation*] or to the exceptions provided for in Article 5(2) [*back-up copying*] and (3) [*observation and study*] shall be null and void': *The Council of the European Communities Directive on the Legal Protection of Computer Programs* (91/250/EEC).

on how the legislative silence on the issue is to be interpreted. As a matter of statutory interpretation, it could be argued that the perceived need to include a provision expressly excluding the ability of parties to contract out of the computer program exceptions means that contracting out of other copyright exceptions is implicitly permitted. The courts are, nevertheless, extremely cautious in applying the principle of statutory interpretation known as *expressio unius est exclusio alterius*, meaning that an express reference to one matter indicates that other matters are excluded.[159] This cautious approach suggests that the application of the *expressio unius* principle might, at most, be limited to the one computer program exception that is not specifically referred to in section 47H, namely section 47B(1), which applies to incidental and automatic reproductions of programs made in the normal process of running a copy of the program.

Although it is open for legislation to prohibit the making of contracts, or the inclusion of certain terms in contracts, apart from section 47H the Copyright Act does not do so. As a general principle, in the absence of legal restrictions, private parties may enter agreements to order their affairs as the parties see fit. In the absence of any legislative prohibition, or any policy guidance, private parties appear to be able to enter into agreements that exclude or modify exceptions to copyright infringement other than those agreements specifically prohibited under section 47H.

### 4.4.2 Copyright-specific Legal Restrictions Under United States Law

The absence of restrictions under Australian copyright law may be compared with the position under United States law, where there are potentially significant copyright-based restraints on the freedom of parties to contract around the limits of copyright protection.

First, if a contract entered into under state contract law is inconsistent with federal copyright law, the contract may be found to contravene the United States' preemption doctrine.[160] There are essentially two forms of copyright preemption, both ultimately referable to the Supremacy Clause in the United States Constitution. The first form arises under section 301(a) of the United States Copyright Act, which provides that 'all legal or

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159 See DC Pearce and RS Geddes, *Statutory Interpretation in Australia* (4th ed., Butterworths, Sydney, 1996) pp 105–108, referring to numerous cases, including *Carr v Finance Corporation of Australia Ltd* (1982) 42 ALR 29; *Riley v Commonwealth* (1985) 62 ALR 497. See also Law Council of Australia, *Submission to the Copyright Law Review Committee 'Copyright and Contract' Reference* (2001); Australian Copyright Council, *Second Submission to Copyright Law Review Committee on Copyright and Contracts* (October 2001).

160 The literature on copyright preemption is extensive. Articles that deal with copyright preemption of contracts include Wendy J Gordon, 'On Owning Information: Intellectual Property and the Restitutionary Impulse' (1992) 78 *Virginia Law Review* 149; David A Rice, 'Public Goods, Private Contract, and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering' (1992) 53 *University of Pittsburgh Law Review* 543; Dennis S Karjala, 'Federal Preemption of Shrinkwrap and On-Line Licenses' (1997) 22 *University of Dayton Law Review* 511; Maureen A O'Rourke, 'Copyright Preemption After the *ProCD* Case: A Market-Based Approach' (1997) 12 *Berkeley Technology Law Journal* 53; David Nimmer et al., 'The Metamorphosis of Contract into Expand' (1999) 87 *California Law Review* 17; Mark A Lemley, 'Beyond Preemption: The Law and Policy of Intellectual Property Licensing' (1999) 87 *California Law Review* 111.

equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright ... are governed exclusively by this title'.[161] In applying this provision, the United States courts must determine whether a state law creates rights 'equivalent' to copyright, which has been interpreted to mean that rights created under state laws will not be preempted if they contain an 'extra element' over and above the rights comprised in the copyright.[162] The courts have usually held that private contracts are not preempted under section 301(a) because they contain an 'extra element' not found in copyright law, such as the agreement of the parties.[163] In the Court of Appeals decision in *ProCD, Inc. v Zeidenberg*,[164] for example, Easterbrook J explained that rights created by contract were not 'equivalent' to the exclusive rights comprised in the copyright because contractual rights bind only the parties to the contract. As Easterbrook J put it:

> Rights "equivalent to any of the exclusive rights within the general scope of copyright" are rights established by law – rights that restrict the options of persons who are strangers to the author ... A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create "exclusive rights".[165]

The second form of copyright preemption arises directly under the Supremacy Clause.[166] Under this form of preemption, a contract may be preempted if there is a conflict between state enforcement of a contract and federal copyright law or policy.[167] The United States courts, however, have failed to develop consistent criteria for determining whether contract terms are 'constitutionally' preempted by federal copyright law or policy, as opposed to being preempted under section 301(a).[168] For example, the Court of Appeals in the *ProCD* decision did not consider the 'constitutional' form of preemption, focusing solely on preemption under section 301(a). While the possibility of copyright preemption of attempts to contract around the limits of United States copyright law remains, the extent to which this is likely is quite uncertain under current United States law.[169] There is no Australian equivalent to the United States preemption doctrine.

The second potentially significant copyright-specific restriction under United States law arises under the doctrine of copyright misuse, which appears to be unique to the United

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161 17 USC s 301(a) (1994).

162 See, for example, *Trandes Corp. v Guy F Atkinson Co* 996 F 2d 655 (1993).

163 See Lemley (1999) p 140.

164 86 F 3d 1447 (1996).

165 86 F 3d 1447 (1996) at 1454.

166 See Gordon (1992) p 155, fn 22; O'Rourke (1997) p 73, fn 108; Lemley (1999) pp 141–144. See also *Goldstein v California* 412 US 546 (1973).

167 See Lemley (1999) p 141. As Lemley explains: 'Strictly speaking, federal law preempts stare law, not particular private contracts. However, because private contracts are enforced through state law, federal law can and does preempt the enforcement of contracts in appropriate circumstances': p 137, fn 108.

168 *Ibid.* p 143.

169 Lemley has stated that 'What one can discern ... is that there are several different approaches to federal intellectual property preemption, and that the law of preemption is a mess': *ibid.* p 115. The uncertainty concerning the law relating to copyright preemption explains, in large measure, the extensive academic literature on this topic.

States. Under this relatively recent doctrine,[170] some United States courts have refused to enforce agreements that attempt to extend protection of copyright material beyond the limits set by copyright law, including limits on the duration of copyright protection.[171] For example, in *Lasercomb America, Inc. v Reynolds*,[172] the court refused to enforce a licence agreement that purported to prohibit the licensee from developing competing software for a period of 99 years. Although there is no doctrine of copyright misuse under Australian law, it is possible that some licences that attempt to impose restrictions on licensees over and above the restrictions established in copyright legislation may be found to contravene the common law doctrine of unreasonable restraint of trade.[173]

### 4.4.3 The Need to Assess Copyright Policy

The almost complete absence of restrictions on the ability to contract around the limits of copyright protection within Australian copyright law suggests either that such contracts have not been thought to present a problem or that the legislature has not, to date, turned its attention to the issue. The extent to which private contracts are able to alter the limits of copyright protection as between the parties has arisen under the United States doctrines of preemption and copyright misuse. The decisions of the United States courts, however, indicate a considerable degree of uncertainty regarding both the relevant legal principles and the appropriate policy. Consequently, there is a need to fundamentally reassess copyright policy relating to the extent to which private parties should be able to contractually alter the limits of copyright protection. The logical starting point is an assessment of the extent to which the existing limits of copyright protection approach optimality.

## 4.5 Optimal Limits of Copyright Protection

The limits of copyright protection are commonly regarded as necessary to ensure a balance between incentives for the production of copyright material and the widespread dissemination of that material.[174] As explained in Chapter 3, absent perfect price discrimination, the copyright system must balance incentives for the production of copyright material against the deadweight loss involved with setting price above marginal cost. As explained in this chapter, however, it is more accurate to regard the

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170 The defence of copyright misuse appears generally to have been denied prior to the decision in *Lasercomb America, Inc. v Reynolds* 911 F 2d 970 (1990): see Lemley (1999) pp 151–158.

171 See, for example, Merges (1997) pp 124–5.

172 911 F 2d 970 (1990).

173 See Copyright Law Review Committee (2001) p 20. The High Court has recently considered contractual restrictions in restraint of trade in the context of a confidentiality agreement: *MaggburyPty Ltd v Hafele Australia Pty Ltd* [2001] HCA 70 (13 December 2001).

174 For example, the Copyright Law Reform Committee's *Issues Paper* states that 'Copyright is all about striking an appropriate balance between the need to provide incentives for innovation and creativity and the need to encourage the dissemination of information and ideas': Copyright Law Reform Committee (June 2001) p 6.

limits of copyright protection as balancing the benefits of property rights in copyright material against the costs of the copyright system broadly conceived, including the costs of establishing and enforcing property rights.

### 4.5.1 Optimality of Limits on the Property Right

As explained at [4.1] above, there are good economic reasons for the rules established under Australian copyright law for determining whether material qualifies for copyright protection.[175] For example, the Anglo-Australian originality threshold denies protection to material that does not result from a minimum investment of effort. Material that does not satisfy the originality threshold is likely to be of such low value that the costs of protection outweigh the benefits.

Nevertheless, merely because there is an economic justification for refusing protection under copyright law does not mean that all legal protection should be denied. For example, at [2.7] above it was explained that exclusive property rights are efficient because they remove the high transaction costs that would otherwise be involved with obtaining agreements concerning the use of a resource among a large indefinite class of potential users. If the costs of effectively excluding others by contract were to be reduced, then, provided the benefits outweigh the costs, such agreements should be encouraged.

Moreover, other forms of legal protection may be less costly than copyright protection. For example, it is undesirable to extend copyright protection to ideas, in part because of the high costs of defining an idea and enforcing property rights in the idea. In the absence of property rights, those wishing to protect ideas, such as an idea for a film script, must rely on confidentiality agreements. The costs of protecting an idea by means of confidentiality law are less than the costs of protecting the idea by means of copyright, in part because the protected idea will be defined by the confidentiality agreement. Thus while there may be an economic case for refusing copyright protection for some material, such as ideas, there is little to be said for imposing legal restrictions on the ability of parties to enter private agreements in relation to such material.

### 4.5.2 Optimality (Economic and Non-economic) of Limits on Exclusivity

If the costs of exclusivity are greater than the benefits of exclusivity, there should be limits on the degree of exclusivity conferred by property rights. Australian copyright law establishes exceptions to the exclusive rights comprised in the copyright in the form of compensated use of copyright material under compulsory licences, and in the form of ‘uncompensated use’ exceptions, such as the defences of fair dealing and the computer program exceptions.

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175 Although there is room for debate about the precise formulation of the rules.

### *Economic Justification for Copyright Exceptions*

The economic explanation for exceptions to copyright infringement is that, under certain conditions, the unaided market will not produce value-maximising voluntary transactions.[176] Thus, compensated use may be desirable in the presence of high transaction costs. In such circumstances, social welfare may be maximised by the law mandating a notional transaction in return for the payment of compensation to the copyright owner. The main danger of a compulsory licence, however, is that it may entrench market failure that is otherwise curable. For example, bargaining costs may be reduced by the development of collection and enforcement mechanisms, such as collective administration arrangements or technological measures. This suggests that no legal restrictions should be placed on the ability of parties to enter into agreements that bypass statutory licence schemes.[177]

The economic case for 'uncompensated use' exceptions, such as uses falling within the Australian defences of fair dealing, is that in circumstances where the market fails to maximise social welfare, a system for compensating owners may cost more than the reduction in incentives resulting from an uncompensated transfer of copyright material.[178] The 'market failure' explanation of 'uncompensated use' exceptions implies that if the failure is cured, the exception should be replaced with a market-based transaction.

### *'Market Malfunction' and 'Market Limitation'*

In her recent work, Wendy Gordon constructs an analytical framework based on the distinction between circumstances in which market failure, very broadly defined, is curable and circumstances in which it is not.[179] She draws a distinction between 'market malfunction', on the one hand, and 'market limitation', on the other.[180] According to Gordon, a 'market malfunction' occurs where the market diverges from what is economically optimal because of the absence of conditions required for perfect competition. 'Market limitation', on the other hand, occurs where the market alone

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[176] As Gordon puts it, 'Though the copyright law has provided a means for excluding nonpurchasers and thus has attempted to cure the public goods problem, and though it has provided mechanisms to facilitate consensual transfers, at times bargaining may be exceedingly expensive or it may be impractical to obtain enforcement against nonpurchasers, or other market flaws might preclude achievement of desirable consensual exchanges': Gordon (1982) p 1613.

[177] See, for example, *Copyright Act 1968* (Cth) ss 135Z, 135ZZH, 135ZZZC and 109(2), which preserve the ability of copyright owners to grant licences in relation to activities covered by statutory licences relating to educational use, retransmission and broadcasting.

[178] Gordon seems to make a similar point when she argues that 'From the point of view of copyright owners (and thus from the point of view of society's need to maintain overall incentives), a system that permitted certain limited uncompensated takings to occur, as long as they did not cause substantial injury, might be preferable to a system in which compensation was guaranteed but only after the fact': Gordon (1982) p 1623.

[179] Gordon (2002).

[180] *Ibid.* p 2.

cannot deliver optimal results because the relevant policy objectives are non-economic values, rather than market norms.[181]

Gordon argues that the appropriate legal response differs according to whether the market failure is a 'market malfunction' or a 'market limitation'. In the event of a 'market malfunction', the appropriate response is similar to the common law concept of 'excuse', essentially meaning that an uncompensated use is permissible unless the conditions resulting in the market failure cease to exist. The reason for this is that, assuming the policy objectives are economic, it is preferable to have the parties proceed through the market in the absence of market failure. Thus if changes in technologies or market conditions significantly reduce transaction costs, and there is no other significant source of market failure, then uncompensated use is not desirable.

In the event of 'market limitation', on the other hand, the appropriate response is similar to the common law concept of 'justification', whereby an uncompensated use should always be permitted. The reason for this approach is that where the policy objectives are non-economic, the market cannot be relied upon to ensure that the objectives are met.

Gordon uses the terms 'excuse' and 'justification' deliberately, and in a sense quite differently from the distinction between 'mandatory' and 'permissive' copyright exceptions.[182] An exception is 'mandatory' if it cannot be modified by contract, and an exception is 'permissive' if there are no legal restrictions on contracting out of the exception. The purpose of Gordon's analysis seems purely to distinguish the circumstances in which it is possible for copyright objectives to be achieved through the market from circumstances in which the objectives cannot be achieved through the market.[183] The purpose of the mandatory/permissive distinction, however, is to distinguish exceptions which cannot be contracted out of from those which can. Gordon's distinction, however, is relevant to determining whether exceptions should be mandatory or permissive.

As explained at [2.1] above, some scholars working within the law and economics tradition have adopted a pluralistic approach, eschewing the view that legal policy should be informed solely by economic objectives.[184] Gordon's broad concept of market failure, including failure to achieve non-economic objectives, places her firmly within this

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[181] As Gordon explains 'In instances of market malfunction, facts fail to correspond to perfect-market facts. The decision-maker will face an initial normative inquiry – namely, whether a market norm should govern – but if she finds the market norm applicable, she will focus most of her efforts on the subsequent question of what empirical facts are presented by the given situation. In the case of market limitation, the decision-maker sees the perfect-market norm as itself inadequate. She will focus most of her efforts on identifying and clarifying alternative norms and deciding which one(s) should govern the presented situation': *ibid.* p 15, fn 37.

[182] For the distinction between 'mandatory' and 'permissive' exceptions see, for example, Thomas Heide, 'The Approach to Innovation under the Proposed Copyright Directive: Time for Mandatory Exceptions?' [2000] *Intellectual Property Quarterly* 215.

[183] As Gordon explains '... the whole point of singling out "justifications" is to help us see the occasions on which judges give fair use because economics is not the proper metric ...': Gordon (2002) p42.

[184] See, generally, Richardson and Hadfield (eds) (1999)*;* Trebilcock (1993).

branch of law and economics.[185] Although it is possible, and sometimes useful, to conceive of essentially non-economic concepts, such as freedom of speech, in purely economic terms,[186] it seems artificial to analyse such objectives solely in economic terms. Moreover, as further explained at [2.1], while economic analysis is good at elucidating the effects of particular policies in terms of economic efficiency, it is not so useful for determining which of a range of competing social values should guide public policy-making. From this perspective, Gordon's distinction between exceptions that serve economic objectives and exceptions that serve non-economic objectives is persuasive.

### *Non-economic Justifications for Copyright Exceptions*

What, then, does the distinction between economic and non-economic objectives mean for the ability of parties to contract out of 'uncompensated use' exceptions? To begin with, a private agreement that overrides such an exception is only likely to present difficulties if the agreement is somehow unilaterally imposed on a user. As explained in Chapter 7 below, concerns relating to this problem are best dealt with under principles of contract law and competition law.

Nevertheless, as essentially non-economic objectives cannot readily be achieved through the market, there would seem to be a case for making an 'uncompensated use' exception to copyright infringement mandatory insofar as it promotes non-economic social objectives. The policy issue then becomes identifying the relevant objectives and ensuring that the exception will further the objective. Identifying non-economic objectives of copyright policy is, however, far from easy. In her recent work, Gordon is not explicit in specifying the particular non-economic values that may justify exceptions for uncompensated use, referring generally to circumstances in which the public interest cannot be assessed solely in monetary terms.[187]

Some non-economic values that may be important to copyright law may be derived from constitutional norms. For instance, under United States law, freedom of speech is constitutionally protected under the First Amendment. It would appear that, at least to an extent, the United States fair use exception to copyright infringement is based on the First Amendment.[188] Although legal protection of free speech is much weaker under

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[185] For example, Gordon contends that '... our pluralistic legal culture demands that we admit that markets can also fail when ... the criteria that perfect markets maximize are simply not the criteria of most importance. Therefore it makes sense to use the term "market failure" broadly, whenever we have grounds to believe that bad results will follow from adhering to the rule of owner deference': Gordon (2002) p 15.

[186] See, for example, Richard A Posner, 'Free Speech in an Economic Perspective' (1986) 20 *Suffolk University Law Review* 1; Ronald H Coase, 'Advertising and Free Speech' (1977) 6 *Journal of Legal Studies* 1; Posner (1998) Chapter 27.

[187] In addition to free speech, Gordon refers variously to the values of 'fairness', 'privacy' and maintaining 'a feeling of community'.

[188] On the relationship between the United States fair use exception and the First Amendment, see *Harper & Row* 471 US 539 (1985); Melville B Nimmer, 'Does Copyright Abridge the First Amendment Guarantees of Free Speech and Press?' (1970) 17 *UCLA Law Review* 1180.

Australian law, it has been suggested that a public interest exception to copyright infringement may be based, in part, on the implied constitutional protection of freedom of political discussion.[189] Free speech considerations obviously come into play in circumstances where a bargain is not possible because the copyright owner wishes to prevent unfavourable uses of his or her work including, for example, material critical of the work, satire and parody. Nevertheless, the relationship between free speech and copyright is complex. For example, copyright protection promotes free speech to the extent that it creates incentives for the production of copyright material. Furthermore, copyright protection does not extend to ideas.[190]

Apart from free speech considerations, it has been argued that 'uncompensated use' exceptions serve to redistribute wealth from copyright owners to second-generation creators.[191] As with free speech justifications, the argument that exceptions to copyright infringement should be used as a mechanism for redistributing wealth from owners to certain users is complex. As a general principle, most economists argue that redistribution is best achieved through direct taxes and subsidies, not through the structure of property rights.[192]

### *Non-economic Objectives and Mandatory Exceptions*

This paper cannot definitively resolve questions relating to the ultimate non-economic objectives of copyright policy. Nor can it hope to adequately deal with complex issues such as the relationship between free speech and copyright protection. What can be said, however, is that if it is accepted that the principal objective of copyright policy is to ensure an efficient level of creation of copyright material, then to minimise market distortions, any non-economic objectives must be clearly specified and exceptions directed at achieving such objectives narrowly targeted.[193] Insofar as non-economic

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[189] Megan Richardson, 'Freedom of Political Discussion and Intellectual Property Law: Australia' (1997) 3 *European Intellectual Property Review* 4. For the Australian doctrine of implied constitutional freedom of political discussion, see *Lange v Australian Broadcasting Corporation* (1997) 189 CLR 520.

[190] As Bell has pointed out in relation to the First Amendment to the United States Constitution 'The First Amendment does not require the owners of expressive works to abandon their private rights in the name of public access ... awarding the public forced access to expressive works, even in response to a clearly unconstitutional Copyright Act, would arguably violate the First Amendment rights of the owners of expressive works': Tom W Bell, 'Escape From Copyright: Market Success vs Statutory Failure in the Protection of Expressive Works' (2001) 69 *University of Cincinnati Law Review* 741 at 776-777.

[191] See Merges (1997) pp 134–135.

[192] See, for example, Louis Kaplow and Steven Shavell, 'Why the Legal System is Less Efficient than the Income Tax in Redistributing Income' (1994) 23 *Journal of Legal Studies* 667; Herbert Hovenkamp, Private Property and the State' in Nicholas Mercuro and Warren J Samuels (eds) *The Fundamental Interrelationships Between Government and Property* (JAI Press Inc., Stamford, CT, 1999). Furthermore, as Friedman points out in relation to arguments that the copyright system should be used to redress distributional concerns 'Most intellectual property transactions occur between firms; it is hard to see how rules that favor firms that consume intellectual property over firms that produce it ... are likely, on average, to make rich people poorer and poor people richer ...': David Friedman, 'In Defense of Private Orderings: Comments on Julie Cohen's "Copyright and the Jurisprudence of Self-Help" '(1998) 13 *Berkeley Technology Law Journal* 1151 at 1170.

[193] At the same time, the impossibility of constructing ideal legislative schemes should be acknowledged.

objectives are clearly identified and exceptions are restricted to those necessary to promote such objectives, there may be a case for making the exceptions mandatory. Nevertheless, given that the precise policy objectives of 'uncompensated use' exceptions under Australian law, such as the defences of fair dealing, have never been clearly identified, it would, at present, be premature to prevent parties entering agreements that override the current exceptions.

*Economic Objectives and Permissive Exceptions*

Insofar as exceptions to copyright infringement are based on an absence of 'perfect' competition, copyright policy should be directed at promoting consensual market-based transactions. This is because economic objectives are more likely to be achieved through the market than by laws designed to substitute for market transactions. In other words, 'uncompensated use' exceptions should not undermine incentives for removing market failure, such as incentives for introducing mechanisms to reduce transaction costs. This suggests that insofar as the exceptions are designed to achieve economic objectives, they should be permissive and not mandatory. For example, if the parties are able to reach a private agreement in relation to a use that falls within an exception to infringement, there has clearly been no market failure attributable to transaction costs. Similarly, the inability of the parties to a transaction to fully capture the external benefits of a use of copyright material is only likely to present a problem in the event of complete bargaining breakdown.

### 4.5.3 Optimality of Limits on Duration

The optimal duration of copyright protection is determined by balancing the benefits in terms of incentives for the creation of copyright material against the costs involved with reduced dissemination. As explained at [4.3] above, determining where the declining marginal benefit of protection meets the increasing marginal costs is difficult. Given this difficulty, there would appear to be little merit in establishing rules that second-guess private agreements based on consensual bargains over the length of protection of copyright material.[194]

[194] Merges puts the issue in the following terms: 'Most cases of temporal extension are relatively benign. If a licensee wants to give up its future right to use information in exchange for the present right to use it, why not permit such action? Unless third parties are harmed, this tradeoff seems reasonable': Merges (1997) p 126.

## 4.6 Summary: Contracting Around the Limits of Copyright

### 4.6.1 Should the Limits of Copyright Protection Be Mandatory or Permissive?

The extent to which private parties should be free to enter contracts that exclude or modify the limits of copyright protection must be related to the fundamental objectives of copyright policy. Determining whether the limits of copyright protection should be mandatory or permissive depends, first of all, upon clearly identifying the objectives of copyright policy.

Insofar as copyright protection is designed to ensure an efficient level of creation of copyright material, copyright-specific restrictions on the freedom of contract should be avoided. If, however, copyright policy is designed, in part, to promote non-economic objectives, such as free speech, there is a case for preventing parties from entering contracts that undermine such objectives. In particular, if 'uncompensated use' exceptions are intended to promote a particular non-economic objective, provided the objective is clearly specified and the exception narrowly directed at achieving the objective, there may be a case for preventing parties from entering agreements that override the exception. On the other hand, if the policy objective of an exception to infringement is not clearly understood, there would appear to be little merit in making the exception mandatory.

### 4.6.2 Is Legislation Better Than Private Agreements?

An important consideration in determining whether to impose copyright-specific restrictions on the ability of private parties to enter into contracts is the extent to which the legislature, as opposed to agreements between private parties, is capable of setting optimal limits to protection.

As Merrill and Smith argue, there are benefits in having the structure of property rights determined by the legislature rather than the courts.[195] The main advantages of legislation over court-made rules are that legislated rules are clearer, more universal in their application, more comprehensive and more stable.[196]

This does not mean, however, that legislatures are capable of devising anything like an optimal structure for property rights. Although copyright law, like other systems of property rights, must balance the benefits and costs of the system, it is impossible to conclude that current copyright law approaches optimality, or that the current limits to copyright protection should be immutable.[197] First, given the complex series of trade-offs

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[195] Merrill and Smith (2000).

[196] *Ibid.* pp 58–68. Merrill and Smith also point out that legislated changes to property rules are prospective and can establish means for compensating those adversely affected by changes.

[197] This sort of argument represents the worst form of legal positivism.

between the costs and benefits of copyright protection explained in this chapter, it is highly unlikely that legislatures will have sufficient information to be able to strike balances that are anywhere near optimal.[198] Second, as public choice theory suggests, legislation is more likely to favour the interests of small, well-organised, relatively homogeneous interest groups over larger, less organised and more heterogeneous groups.[199] Thus copyright law is more likely to reflect a series of political balances between organised interest groups than an attempt to arrive at an optimal balance of private and public interests.[200] It is now generally accepted that public choice theory cannot provide a full explanation of policy-making.[201] Nevertheless, the extent to which changes to copyright law have responded to the interests of copyright owners, on the one hand, and the extent to which exceptions to copyright infringement favour particular interest groups, on the other hand, support the general view that copyright policy is largely a compromise between the agendas of organised interest groups. Accordingly, we need to be not only sceptical of claims that the balances struck by current copyright law should be immutable, but equally pessimistic about the ability of the legislature to ever set balances that represent more than compromises between organised interest groups. In short, the inherent imperfection of collective decision-making is a powerful argument for preferring the private decisions of individuals through the market over regulation or legislation, wherever possible.

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198 Bell, for example, maintains that '... no amount of open, sincere, and disinterested discourse would set copyright law into delicate balance. Political authorities cannot measure even the economic factors that would have to go into such a calculation, much less the myriad fluctuating and intangible ones. Even if they could measure all the relevant economic, legal, technological, and cultural factors, moreover, politicians could not balance such incommensurable values: Bell (2001) p 787.

199 This is essentially because of the information and organisational costs faced by individuals coordinating to influence decisions. For classic statements of public choice theory, see George J Stigler, 'The Theory of Economic Regulation' (1971) 2 *Bell Journal of Economics and Management Science* 3; Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Harvard University Press, Cambridge, MA, 1965).

200 In relation to copyright policy-making in the United States, Olson has argued that: 'Congress is generally not in the business of satisfying abstract concerns about "good copyright policy". Rather, Congress is an intensely political body, loath to impose one-sided losses on legitimate interest groups. Since "good copyright policy" would often require precisely such one-sided losses, copyright reforms may languish for decades before being enacted, or may simply be abandoned': Thomas P Olson, 'The Iron Law of Consensus: Congressional Responses to Proposed Copyright Reforms Since the 1909 Act' (1989) 36 *Journal of the Copyright Society of the USA* 109 at 111. See also Jessica Litman, 'Copyright, Compromise, and Legislative History' (1987) 72 *Cornell Law Review* 857; Jessica Litman, 'Copyright and Information Policy' (1992) 55 *Law and Contemporary Problems* 185.

201 See, for example, Douglass North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press, Cambridge, 1990).

## Chapter 5 – Confidentiality Law and the Economics of Secrets

Legal protection of material that falls outside copyright protection is not solely reliant on contract law. In particular, under Anglo-Australian law, such material may be protected by the action for breach of confidence.[202] Thus the owner of material that consists solely of disembodied ideas, material that is not fixated in a material form, or material that is non-original, may be entitled to bring an action for breach of confidence. The action for breach of confidence has a different legal nature from copyright. The action is subject to quite different legal limitations and, consequently, the benefits and costs of the action differ from the benefits and costs of copyright protection. The benefits and costs of confidentiality law are bound up with the economics of secret information. To the extent that confidentiality law protects information only so long as it retains a relative degree of secrecy, the relevance of the action for breach of confidence to copyright law is confined largely to unpublished material.

Nevertheless, the relationship between copyright and contract cannot be fully understood without taking into account the role of the action for breach of confidence in protecting non-copyright material.[203] First, the need to consider confidentiality law is illustrated by the early development of shrinkwrap licences.[204] Given the initial uncertainty about the application of copyright and patent law to computer software, software owners were forced to rely on the United States law of trade secrets to prevent users from copying computer programs. Shrinkwrap licences were originally developed as a means of establishing that secrecy was not lost by the sale of copies of the software.[205] The development of shrinkwrap licences was therefore a result of an initial inadequate specification of property rights in software, meaning that software owners were forced to devise other forms of protection. Second, it has been argued that relying on a combination of private contracts and confidentiality law is less efficient than a system of property rights in information, such as the copyright system. For example, the report of the Intellectual Property and Competition Review Committee maintained that:

[202] Under United States law, such material may be protected by the law of trade secrets.

[203] For a comprehensive analysis of the relationship between trade secrecy, contract and licences under United States law, see Rochelle Cooper Dreyfus, 'Do You Want to Know a Trade Secret? How Article 2B Will Make Licensing Trade Secrets Easier (But Innovation More Difficult)' (1999) 87 *California Law Review* 191.

[204] The relevance of confidentiality law (or trade secrets law) is also evidenced by comments of Easterbrook J in the influential United States decision, *ProCD, Inc. v Zeidenberg* 86 F 3d 1447 (1996). Although the database at issue in the case was, strictly speaking, protected by a contractual licence and not under trade secrecy law, Easterbrook J observed that 'To the extent licenses facilitate distribution of object code while concealing the source code (the point of a clause forbidding disassembly), they serve the same procompetitive functions as does the law of trade secrets' at 1455.

[205] As Lemley points out, 'Software vendors needed proof that they were not in fact disclosing their trade secrets by selling copies to whomever wanted them. To provide such proof, they created the legal fiction that they were really licensing rather than selling their software. Because the "license" contained provisions that required customers to keep the software confidential, the trade secrets contained therein could be protected': Mark A Lemley, 'Intellectual Property and Shrinkwrap Licenses' (1995) 68 *Southern California Law Review* 1239 at 1244–1245. See also David Bender, 'Trade Secret Protection of Software' (1970) 38 *George Washington Law Review* 909; David A Rice, 'Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering' (1992) 53 *University of Pittsburgh Law Review* 543. The historical development of shrinkwrap licences is explained further at [6.1] below.

> ... a system that relies on contract and on the duty of confidence sharply reduces the incentives for disclosure, as disclosure can lead to invalidity of any property right granted. This absence of disclosure results in economic and social costs.[206]

The Committee also suggested that reliance on contract and confidentiality law would give rise to competition policy concerns, as firms with market power would be better placed to keep information secret than smaller competitors.[207]

This chapter examines the relationship between copyright, confidentiality law and contract law, including the economic benefits and costs of protection under confidentiality law. It concludes with an analysis of contractual agreements, or licensing arrangements, as an alternative to confidentiality law.

## 5.1 Legal Protection of Confidential Information

Whereas copyright protects the form of expression of ideas from unauthorised reproduction and public distribution, the action for breach of confidence protects secret information from unauthorised use. The legal nature of the action is not entirely clear, largely because of controversy concerning its proper juridical basis. In the past, the courts have variously classified the doctrine as equitable, proprietary and contractual.[208] Following the leading English decision in *Coco v AN Clark (Engineers)*,[209] it is now generally accepted that the action is founded in equity. In Australia, this legal characterisation was confirmed by Deane J in *Moorgate Tobacco Co Ltd v Philip Morris Ltd (No 2)*:

> Like most heads of exclusive equitable jurisdiction, its rational basis does not lie in proprietary right. It lies in the notion of an obligation of conscience arising from the circumstances in or through which the information was communicated or obtained.[210]

As a matter of law, then, the action for breach of confidence does not, strictly speaking, confer property rights.[211]

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206 IPCRC (2000) p 25.

207 *Ibid.* p 26.

208 See Megan Richardson 'Breach of Confidence' in P Parkinson (ed.), *Principles of Equity* (forthcoming, 2nd ed., LBC Information Services, 2002) citing *Pope v Curl* (1741) 2 Atk 342, 26 ER 608; *Abernathy v Hutchinson* (1824) 1 H&Tw 28; 47 ER 1313; *Prince Albert v Strange* (1849) 1 H&Tw 1; 47 ER 1302; *Morison v Moat* (1851) 9 Hare 241, 68 ER 492; *Pollard v Photographic Company* (1888) 40 Ch 345; *Ansell Rubber Co Pty Ltd v Allied Rubber Industries Pty Ltd* [1967] VR 37.

209 [1969] RPC 41.

210 (1984) 156 CLR 414 at 438.

211 In *Smith, Kline & French Laboratories (Australia) Ltd v Secretary, Department of Community Services & Health* (1990) 17 IPR 545 at 592, Gummow J concluded that confidential information might be regarded as 'property' for the purpose of section 51(xxxi) of the *Constitution,* but added, somewhat cryptically, that this 'was only a *consequence* of equity's intervention to protect against abuses of confidence ... not an explanation for that intervention'.

In addition to the equitable obligation of confidence, it has long been accepted that there can be a separate contractual obligation.[212] Moreover, there is nothing to prevent the parties from displacing the equitable obligation through a contractual agreement. In most cases, however, the equitable obligation will operate alongside the contractual obligation, possibly assisting in the construction placed on a contractual obligation.[213]

Consistent with its mixed legal character, the action for breach of confidence protects a diverse range of information, including trade secrets, confidential ideas, personal and private information, and government information. Under the *Agreement on Trade Related Aspects of Intellectual Property Rights* (TRIPS), Australia is under an international obligation to protect a subcategory of secret information. The obligation is specified by Article 39 of TRIPS, which provides that member states are to protect 'undisclosed information' that has a commercial value because it is secret.[214]

The elements of the equitable action for breach of confidence under Anglo-Australian law were definitively set out by Megarry J in *Coco v AN Clark (Engineers) Ltd*.[215] In order to constitute an action for breach of confidence, the plaintiff must establish the following three elements:

1. the information must have the 'necessary quality of confidence';

2. the information must have been 'imparted in circumstances importing an obligation of confidence'; and

3. there must have been an 'unauthorised use' of the information.

Taken together, the elements of the action establish the legal limits of the protection of information under the action. First, the information will only be protected if it is sufficiently secret, meaning that the information is not 'public property and public knowledge'.[216] This means that the duration of protection covers the period in which the information remains secret. Second, it is usually accepted that the action is not directed at protecting the information, but at the obligation of confidentiality that exists in relation to the information. Thus, Gurry has pointed out that:

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212 Richardson (forthcoming, 2002) citing *Moorgate Tobacco Co Ltd v Philip Morris Ltd (No 2)* (1984) 156 CLR 414 per Deane J at 438; *Saltman Engineering Co Ltd v Campbell Engineering Co Ltd* (1948) 65 RPC 203; *Ansell Rubber Co Pty Ltd v Allied Rubber Industries Pty Ltd* [1967] VR 37; *Coco v AN Clark (Engineers) Ltd* [1969] RPC 41; *Alfa Laval Cheese Systems Ltd v Wincaton Engineering Ltd* [1990] FSR 583.

213 *Ibid.* citing *Silvercrest Sales Pty Ltd v Gainsborough Printing Co Ltd* (1985) 5 IPR 123; *Deta Nominees Pty Ltd v Viscount Plastic Products Pty Ltd* [1979] VR 167.

214 General Agreement on Tariffs and Trade (1994), *Agreement on Trade-Related Aspects of Intellectual Property Rights*, Appendix 1B, Article 39; see Andrew Stewart, 'Protecting Trade Secrets Under the TRIPS Agreement: How Useful are the Remedies for Breach of Confidence?' (1996) 9 *IPLB* 8 at 25.

215 [1969] RPC 41 at 47.

216 *Saltman Engineering Co Ltd v Campbell Engineering Co Ltd* (1948) 56 RPC 203 at 215 per Lord Greene MR. 'Relative secrecy' is sufficient: *Franchi v Franchi* [1967] RPC 149; *G v Day* [1982] 1 NSWLR 24.

> ... it is not information per se, nor any intrinsic qualities of *confidential* information, which the courts are protecting. Rather, it is the intangible notion of a confidence, which is formed by the communication of confidential information for a limited purpose, and which therefore exists *in relation to* information.[217]

The obligation will usually arise where the information is communicated in confidence and for a limited purpose.[218] In practical terms, what is important is whether the recipient had notice of the obligation of confidentiality, whether actual or constructive.

The extent to which an obligation arises in the absence of a communication in confidence is controversial. In particular, the status of information obtained surreptitiously, such as by eavesdropping or theft, or accidentally, is uncertain. In Australia, it may be that a surreptitious taking gives rise to an obligation of confidence on the basis that it would be unconscionable for the person taking the information to use it for his or her benefit.[219] The state of authority is, if anything, less clear in relation to information that is disclosed by accident.[220] The central difficulty in both cases arises because the action for breach of confidence deals with duties *in personam*, and not with rights *in rem*.[221] In other words, it is difficult to establish that there is a relationship between the owner of confidential information and a surreptitious taker or someone who accidentally obtains the information.

Third, the exclusivity conferred in relation to the information extends to any unauthorised use of the information, including unauthorised exploitation or disclosure to third parties. Clearly, however, the action does not prevent the use of information that has been independently developed. Moreover, the action does not prevent reverse engineering a product to discover secret information embodied in the product.[222]

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217 Francis Gurry, 'Breach of Confidence' in Paul Finn (ed.), *Essays in Equity* (1985) p 116 (emphasis in original).

218 *Saltman Engineering Co Ltd v Campbell Engineering Co Ltd* (1948) 65 RPC 203; *Smith, Kline & French Laboratories (Australia) Ltd v Secretary, Department of Community Services & Health* (1990) 17 IPR 545. The test is objective, being based on whether the recipient had reasonable grounds to believe that the information was disclosed in confidence: *Coco v AN Clark (Engineers) Ltd* [1969] RPC 41 at 48 per Megarry J.

219 *Franklin v Giddens* [1978] Qd R 72 at 80 per Dunn J; Megan Richardson, 'Breach of Confidence: Surreptitiously or Accidentally Obtained Information and Privacy: Theory versus Law' (1994) 19 *Melbourne University Law Review* 673.

220 The scant authority includes *obiter* statements of Lord Goff in *Attorney-General v Guardian Newspapers Ltd* [1990] 1 AC 109 at 281, suggesting that an obligation may arise where information is obtained with notice of confidence so that 'it would be just in all the circumstances'. See also *Shaw v Harris (No 1)* (1991) 3 TasR 153.

221 Robert Dean, *The Law of Trade Secrets* (The Law Book Company, Sydney, 1990) p 12; Andrew Mitchell, 'The Jurisdictional Basis of Trade Secret Actions: Economic and Doctrinal Considerations' (1997) 8 *Australian Intellectual Property Journal* 134 at p 140.

222 *Saltman Engineering Co Ltd v Campbell Engineering Co Ltd* (1948) 65 RPC 203; *Mars UK Ltd v Teknowledge Ltd* [2000] FSR 138.

Finally, the equitable basis of the action is reflected in the extent to which third parties may be bound by an obligation of confidentiality.[223] Thus, a third party who obtains confidential information has an obligation of confidence if he or she had actual or constructive notice that the information was confidential.[224] Moreover, a third party who is initially unaware of the confidential nature of the information will be under an obligation upon having actual or constructive notice of the breach.[225]

## 5.2 Confidentiality, Copyright and Contract

The claim that copyright law is in danger of being supplanted by private contracts that effectively extend the protection available to copyright owners almost always ignores the extent to which non-copyright material is protected by the action for breach of confidence.[226] In a sense, confidentiality law stands between property rights and personal contractual rights.[227]

Although both copyright and the action for breach of confidence protect information, the nature and scope of protection differs considerably under the two legal regimes. The main differences are as follows:

1. Copyright protects expressions, not ideas; the action for breach of confidence may protect ideas, provided the ideas are sufficiently secret.

2. Copyright consists of exclusive rights to reproduce and publicly disseminate copyright material; the action for breach of confidence prohibits all unauthorised uses of confidential information.

3. Copyright does not prevent the independent creation of copyright material, but generally prohibits reverse engineering where this involves a reproduction;[228] the

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[223] See Jennifer Stuckey, 'The Liability of Innocent Third Parties Implicated in Another's Breach of Confidence' (1981) 4 *University of New South Wales Law Journal* 73.

[224] *Commonwealth v John Fairfax & Sons Limited* (1980) 147 CLR 39; *Attorney-General (United Kingdom) v Heinemann Publishers Australia Pty Ltd* (1988) 165 CLR 30.

[225] *Fraser v Evans* [1969] 1 QB 349; *Malone v Commissioner of Police of the Metropolis [No 2]* [1979] 1 Ch 344; *Wheatley v Bell* [1982] 2 NSWLR 544.

[226] As Reichman points out, 'Legal theorists have particularly underestimated the important role of trade secret laws (or equivalent laws of confidentiality) in mediating between formal intellectual property regimes and free competition': JH Reichman, 'Legal Hybrids Between the Patent and Copyright Paradigms' (1994) 94 *Columbia Law Review* 2432.

[227] Bone makes a similar point in connection with United States trade secret law: 'The relational focus of trade secret's liability rules aligns trade secret law more closely with the law of contract than with the law of property. Yet courts treat trade secret law as distinct from contract ... Moreover, courts are willing to impose confidentiality duties as a matter of law in the absence of a contract, and they sometimes hold strangers liable without any basis for a relational duty at all': Robert G Bone, 'A New Look at Trade Secret Law: Doctrine in Search of Justification' (1998) 86 *California Law Review* 241.

[228] Except to the extent that reverse engineering of computer programs is excepted from infringement: see *Copyright Act 1968* (Cth) ss 47B–47F.

action for breach of confidence prevents neither independent creation nor reverse engineering.

4. Copyright confers exclusive rights that are good against the world, including intentional and accidental infringers; the action for breach of confidence is available only against those under an obligation of confidence, and its application to information that has been surreptitiously or accidentally obtained is uncertain. Moreover, a third party is only bound by an obligation of confidence if he or she has actual or constructive notice.

5. There are established statutory exceptions to the exclusive rights comprised in the copyright, including the fair dealing exceptions; the main exception to the action for breach of confidence is the exception for disclosure in the 'public interest', the extent of which remains uncertain under Australian law.[229]

6. Copyright has a fixed duration; confidentiality has no fixed duration, expiring only once information loses its relative secrecy.

Quite apart from copyright and confidentiality law, information may, to a certain extent, be protected by contractual or licensing arrangements. There are two main differences between protection that depends solely upon contract and protection under confidentiality law. First, a contract binds only the contractual parties, whereas confidentiality law may protect information from appropriation by persons who are not in a contractual relationship with the information owner. Second, the duration of a purely contractual form of protection is a matter for agreement between the parties, whereas confidentiality protection depends upon the information remaining relatively secret.

## 5.3 The Economics of Secrecy

The economic justification for confidentiality law, like that for other forms of intellectual property, is essentially that it establishes incentives for the creation of informational material that would otherwise be underproduced.[230] Confidentiality law establishes incentives for the production of information insofar as it confers exclusivity. Provided the information remains confidential, and unless it is independently discovered or reverse engineered, it cannot be used without the agreement of the information owner, thus allowing the owner to internalise the benefits of investing in the information. As it is difficult to keep information secret, however, the degree of exclusivity conferred by

[229] See Megan Richardson, 'Freedom of Political Discussion and Intellectual Property Law in Australia' [1997] 11 *European Intellectual Property Review* 631. For Australian approaches to the 'public interest' defence, see *Commonwealth v John Fairfax & Sons Ltd* (1980) 147 CLR 39 at 57 per Mason J; *Castrol Australia Pty Ltd v Emtech Associates Pty Ltd* (1980) 33 ALR 31 at 56 per Rath J; *Corrs Pavey Whiting & Byrne v Collector of Customs (Vic)* (1987) 74 ALR 428; *Smith Kline & French Laboratories (Australia) Ltd v Secretary, Department of Community Services and Health* (1990) 17 IPR 545 at 583 per Gummow J; *Esso Australia Resources Ltd v Plowman* (1995) 128 ALR 391.

[230] See David D Friedman, William M Landes and Richard A Posner, 'Some Economics of Trade Secret Law' (1991) 5 *Journal of Economic Perspectives* 61; Bone (1998).

confidentiality law is weak, meaning that the rights protected by confidentiality law sit uneasily within the economic concept of property rights.[231]

Although material may be protected under both copyright and confidentiality law, the main economic significance of confidentiality law is that it protects non-copyright, unpatentable material.[232] As explained at [4.1] above, it would be inefficient for copyright to extend to material where the costs of protection outweigh the benefits. For example, the benefits of encouraging the creation of non-original material are likely to be outweighed by the costs of copyright protection, including the social costs of restricted distribution. Confidentiality law, however, provides a legal safety net for socially valuable material that falls beneath the threshold of copyright protection. Insofar as material is not protected by copyright law, confidentiality law will provide an efficient form of protection if the benefits of protection outweigh the costs.

The benefits and costs of confidentiality law are inextricably linked to the economics of secrecy. As is the case with all legal rights that confer exclusivity on information, confidentiality law must balance incentives for the production of information against the costs of restricted distribution of the information, together with the relevant administrative and enforcement costs.[233] Confidentiality law establishes this balance by the extent to which it protects secrecy: incentives are protected provided the information remains secret, but immediately the material loses its relative secrecy it enters the public domain. Secrecy is, however, inherently vulnerable, or 'leaky'. The vulnerability of secret information means that maintaining the relative secrecy of information can be costly. In the absence of legal protection of secret information, there is likely to be an inefficient level of investment expended by the secret holder in keeping valuable secrets,[234] and by others in attempting to discover the secrets.[235] As Friedman et al. point out, legal protection of secrecy is not merely about balancing incentives and access; an optimal trade secrets law must balance the relative social costs of keeping and discovering

[231] Friedman et al. maintain that 'A trade secret is not property in the usual sense – the sense it bears in the law of real and personal property or even in such areas of intellectual property law as copyright – because it is not something that the possessor has the exclusive right to use or enjoy': Friedman et al. (1998) p 61. Cheung argues that to the extent that secret information is an 'unknown' resource – similar to a tangible resource that is known about by only one person – trade secrets may not be eligible to be called property: see Steven NS Cheung, 'Property Rights in Trade Secrets' (1982) 20 *Economic Inquiry* 40.

[232] As Friedman et al. explain, however, under certain conditions it will be more efficient for some patentable material to be protected by trade secrets law rather than patent law: see Friedman et al. (1991).

[233] As Bone points out, 'In addition to monopoly prices and the enhanced cost of future creation, exclusive legal rights also generate administrative and enforcement costs': Bone (1998) p 264.

[234] For example, to protect a valuable secret a firm might organise its workforce inefficiently, perhaps by segregating employees: see Friedman et al. (1991) p 67.

[235] Bone observes that this explanation of trade secrets law is similar to the economic justification for outlawing theft: if theft were not unlawful there would be socially wasteful expenditures on securing property and on attempts to circumvent security arrangements: Bone (1998) p273; see also Richard L Hasen and Richard H McAdams, 'The Surprisingly Complex Case Against Theft' (1997) 17 *International Review of Law and Economics* 225.

secrets, on the one hand, with the costs of a legal system for protecting secrets, on the other.[236]

The extent to which existing confidentiality laws minimise costs and maximise benefits is complex. Bone, for example, argues that trade secret law may add more to enforcement costs than it saves on the costs of protecting and discovering secrets.[237] The additional enforcement costs arise as a result of difficulties in detecting the unlawful misappropriation of secret information. On this analysis, the possibility of legal action to protect secret information creates incentives for the information owner to make wasteful investments in detecting misappropriation, and to competitors wastefully attempting to avoid detection.

Nevertheless, the need to balance the costs of keeping and discovering secrets with the costs of legal protection of secret information helps explain some of the limits of protection under confidentiality law. The limits of protection define the conditions under which secret information may be lawfully acquired. Information protected under Australian confidentiality law may be lawfully acquired by independent discovery, reverse engineering or by licensing the information.[238] The extent to which confidential information can be lawfully acquired by accident, or surreptitiously, remains uncertain.

A confidentiality law that prohibited independent discovery of secret information would clearly entail high costs. It would, in effect, confer protection equivalent to unlimited patent protection without the necessity of registration or an obligation of public disclosure. The costs of protecting against independent discovery, including enforcement costs and reduced dissemination of information (including costs borne by second-generation innovators) would outweigh any benefits, in terms of reduced duplication of expenditure in discovering the secret information.

The analysis of the economics of reverse engineering is complex.[239] In general terms, like a prohibition on independent discovery, the social costs of prohibiting reverse engineering of confidential information, including enforcement costs and costs to second-generation innovators, are likely to outweigh the benefits. As Friedman et al. point out, enforcement costs would include costs involved with distinguishing reverse engineering from independent discovery.[240] Moreover, permitting reverse engineering is likely to promote innovation, for example, by revealing formerly unknown features of a

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236 Bone explains this point in the following terms: ‘Since litigation is costly, trade secret law is efficient only if the total indirect and enforcement costs with trade secret law are less than the indirect costs without trade secret law: Bone (1998) p 273.

237 *Ibid.* pp 273-279.

238 Reichman argues that, to the extent that a party has the option of obtaining the trade secret with the consent of the owner or reverse engineering, trade secret law is a modified liability rule or ‘quasi-liability’ rule: Reichman (1994) pp 2439–2440, fn 29. The weak exclusivity conferred by confidentiality law means that it is difficult to apply Calabresi and Melamed’s distinction between property rules and liability rules to this form of protection.

239 The optimal extent of reverse engineering under copyright and confidentiality laws raises difficult questions that cannot be resolved in this study.

240 Friedman et al. (1991). Under copyright law, on the other hand, all that needs to be established is that there has been a substantial reproduction.

product.[241] The benefits therefore seem likely to outweigh socially wasteful expenditure on reverse engineering, or on developing products that are difficult to reverse engineer.[242] At the same time, it must be acknowledged that permitting reverse engineering is likely to skew investment in favour of knowledge that is difficult to reverse engineer. As Reichman has argued, this may create difficulties for most information-intensive products, which are comparatively easy to reverse engineer.[243]

Those wishing to lawfully acquire secret information have the option of investing in discovering or reverse engineering the information, on the one hand, or licensing the information, on the other. In this sense, confidentiality law allows the market to determine whether independent development is less costly than a consensual transaction.[244] Although parties are free to enter market-based transactions, the extent to which confidentiality law protects only secret information means that transaction costs will be high. In other words, while exclusive property rights promote market-based transactions, the weak protection conferred by secrecy does not.

The difficulties of bargaining over secret information were first comprehensively explained by Kenneth Arrow.[245] Arrow pointed to the difficulties of valuing secret information without the information being revealed. This leads to a kind of Mexican stand-off: a trade secret owner will not reveal the information without an agreement not to use the information, but a potential licensee is unlikely to agree to this condition without the information being revealed.[246] The transaction costs involved with bargaining

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241 *Ibid.* As Reichman points out, permitting reverse engineering 'entitles fair followers ... to compete on advantageous terms with the innovator by exploiting the cost reductions, technical improvements, and new applications that reverse engineering reveals. The technical community as a whole thus benefits from self-help diffusion of unpatentable skills and knowledge...': Reichman (1994) pp 2521-2522.

242 Bone, however, concludes that the costs of trade secret protection are likely to outweigh the benefits, arguing that 'It is precisely the fact that trade secret law confers limited rights that encourages firms to make wasteful investments in reverse engineering and in continuing the invention race': Bone (1998) p 269.

243 For example, Reichman argues that confidentiality laws '... tend to fail in their essential purpose whenever the would-be imitator's costs of reverse engineering an innovator's innovative product or process approach zero, a phenomenon that often occurs without respect to the technical complexity or relative social value of the innovation in question': Reichman (1994) p 2507. Note that if reverse engineering is impossible, there is less need for legal protection.

244 Reichman explains that the position is complicated by the option of reverse engineering. For instance, he argues that confidentiality laws '... invite all second comers to choose whether to reverse engineer or to seek licenses based on their own cost-benefit analyses ... In either case, as long as the task of reverse engineering proves neither too hard nor too easy, investment strategies affecting the pace and direction of innovation ... are as procompetitive as the free-market permits': p 2530.

245 See Kenneth J Arrow, 'Economic Welfare and the Allocation of Resources for Invention' in Kenneth J Arrow, *The Rate and Direction of Inventive Activity* (Princeton University Press, Princeton, NJ 1962) pp 609-625.

246 The stand-off is known as 'Arrow's information paradox'. For an explanation of the difficulties of contracting over information, see Gillian K Hadfield, 'An Incomplete Contracting Perspective on Fiduciary Duty' (1997) 28 *Canadian Business Law Journal* 140 at 149–150; Cheung (1982) pp 51–52; Bone (1998) pp 280–281.

over secret information are such that many agreements that would otherwise enhance social welfare will not take place.[247]

In any case, licensing or reverse engineering of secret information are clearly superior to surreptitious taking. Permitting surreptitious taking would create uneconomic incentives for investment in keeping and discovering secrets. Although diffusion and use of the information may result in social benefits, incentives for the production of secret information will be undermined.[248] Moreover, as Friedman et al. point out, a decisive consideration is that a rule imposing liability on a surreptitious taker makes the party who is best positioned to avoid the behaviour bear the costs.[249] Friedman et al. also apply the standard economic approach of imposing liability on the least cost avoider to their analysis of liability for accidental disclosure. In this case, it is more costly for a person who acquires secret information to determine whether it has been accidentally acquired, than for the information owner to take precautions against accidental disclosure.[250] This analysis suggests that Australian confidentiality law could be improved by clearly outlawing surreptitious taking, while excusing liability for accidentally obtaining secret information.[251]

## 5.4 Contracting Around Confidentiality Law

Analysis of the relationship between copyright and contract law requires that consideration be given to the role of confidentiality law, largely because the protection conferred by confidentiality law falls between the protection conferred by property rights and the protection provided by private contracts. Although confidentiality law protects non-copyright material, the degree of protection is weak. Confidentiality law confers weaker protection than a system of property rights because the degree of exclusivity depends upon retaining secrecy, and secret information is vulnerable.

Ideally, confidentiality law should maximise the benefits and minimise the costs of protecting secret information. In particular, confidentiality law can be seen as a means for reducing socially wasteful expenditure on keeping secrets and discovering secrets, while not imposing prohibitive administrative and enforcement costs. The need to contain enforcement costs, together with the desirability of encouraging innovation, helps explain why confidentiality law does not prohibit reverse engineering. Moreover, allowing second comers to reverse engineer secret information provides an important alternative to licensing arrangements, which, in relation to secret information, entail

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247 This has led some to argue for the superiority of patent law over confidentiality law: see Cheung (1982) p 52; Bone (1998) p 280.

248 At the same time, protection of 'secret' information skews investment in favour of information that can be kept secret. As Reichman points out '... there is no necessary or logical correlation between the social value of the innovation that benefits from secrecy and that which does not': Reichman (1994) p 2532.

249 Friedman et al. (1991).

250 *Ibid.*

251 There are, of course, costs in distinguishing surreptitious taking from accidental obtained information.

high transaction costs. Nevertheless, the extent to which the current rules approach optimality is contentious.

Furthermore, whether the current overall structure of intellectual property law – divided as it is between copyright, patent, confidentiality law, and other forms of protection – is an efficient means for channelling innovation, is extremely difficult to assess. At the same time, as confidentiality law protects information only so long as it is relatively secret, it is difficult to see how legal protection of confidential information can conflict with stronger forms of protection, such as copyright and patent law.[252] Australian copyright law reflects an understanding of the extent to which confidentiality law complements copyright protection by expressly providing that the Copyright Act does not affect the operation of the action for breach of confidence.[253]

Reichman has suggested that confidentiality law can be usefully seen as a set of default rules governing the relationship between the originators of secret information and others, in the absence of express contractual agreements.[254] The extent to which any set of default rules may be said to be efficient depends, in large measure, on the extent to which the defaults reduce transaction costs.[255] Given the analysis of the economics of secrecy at [5.3] above, the default rules should minimise wasteful expenditure on keeping and discovering secrets, as well as costs in bargaining over secrets. If parties enter into voluntary agreements in relation to confidential information, the difficulties of bargaining over secret information can be seen to have been overcome and, as between the parties, the costs of keeping and discovering the information removed. Moreover, a licensing agreement indicates that the licensee has opted for a market-based transaction over independent discovery or reverse engineering.[256] Under these conditions, licensing is likely to be more efficient than investment in either independent development or reverse engineering. As always, however, an important exception to the efficiency of private agreements applies if there is a market failure, such as the imposition of agreements on licensees by a firm with substantial market power.

This suggests that we should not generally be concerned with private arrangements for licensing confidential information that impose greater restrictions on licensees than are imposed on third parties under confidentiality law – for example, an agreement that

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[252] See, for example, the decision of the United States Supreme Court in *Kewanee Oil Co v Bicron Oil Corp.* 416 US 470 (1974), holding that state-based confidentiality law was consistent with federal patent protection. Dreyfuss appears to argue that trade secrets protection should not be regarded as conflicting with copyright and patent protection to the extent to which it remains a 'leaky' form of protection subject, for example, to independent discovery and reverse engineering: see Dreyfuss (1999) pp 238–249. Her argument is essentially that the weak form of protection accorded by confidentiality law does not unduly restrict access to the information by subsequent innovators.

[253] *Copyright Act 1968* (Cth) s 9(3).

[254] Thus Reichman suggests that trade secret law can be conceptualised as 'a loosely codified, reciprocally beneficial set of default rules governing relations between originators and borrowers or users of unpatented, nondisclosed information that applies when the parties themselves have not entered any contractual agreement': Reichman (1994) p 2521.

[255] For further discussion of the efficiency of default rules, see Jay M Feinman, 'Relational Contract and Default Rules' (1993) 3 *Southern California Interdisciplinary Law Journal* 43.

[256] Presumably on the basis that licensing the information is more cost-effective.

prohibits the licensee from using or disclosing information obtained from reverse engineering – unless the agreement is in breach of competition law.[257] Where such market-based arrangements are possible, they are more likely to maximise social benefits and minimise costs than is a relatively imperfect set of imposed default rules.

Finally, as pointed out by the Intellectual Property and Competition Review Committee, a system that relied purely on private contracts and confidentiality law would likely be less efficient than a system that included other forms of protection, such as copyright and patent protection. Under a system without copyright protection, incentives would be skewed in favour of material that could more easily be kept secret, and there would be an inefficient dissemination of material. It is, nevertheless, misleading to formulate the choice as being solely between a system with copyright protection and a system in which protection is completely reliant on private contracts and confidentiality law. First, this ignores the extent to which the effectiveness of private contracts may be supported by technological protection measures. Insofar as technological protection measures are effective, copyright and non-copyright material may be disseminated widely, without the need for keeping the information secret. Second, it is important that the system of intellectual property rights and contractual restrictions be seen as a whole. Merely because material is protected by contractual restrictions does not mean that it loses copyright protection. In other words, the choice may be between a system in which contractual restrictions are combined with copyright protection (and perhaps supplemented by technological protection) as opposed to a system in which copyright owners are reliant purely on the copyright system. From a policy perspective, then, the relevant comparison may be between the net benefits of a system that includes copyright, contractual restrictions and technological protection and the net benefits of stand-alone copyright protection.

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[257] On the treatment of restrictions imposed by know-how licensing agreements under European competition law, see Guillermo Cabanellas and Jose Massaguer, *Know-how Agreements and EEC Competition Law* (IIC Studies in Industrial Property and Copyright Law, Vol. 12, Max Planck Institute, Munich, 1991). In addition to breaching competition law, a confidentiality agreement may amount to an unenforceable restraint of trade. For example, in *Maggbury Pty Ltd v Hafele Australia Pty Ltd* [2001] HCA 70 (13 December 2001), the High Court held that a confidentiality agreement that purported to restrict the use of information following the publication of the information in a patent application was an unenforceable restraint of trade. This suggests that other agreements that attempt to impose restrictions on the use of information that has ceased to be confidential may also be held to be unenforceable as restraints on trade. Unfortunately, the majority of the High Court did not turn their attention to the economic implications of overruling a private agreement, merely remarking that '(t)he fact that the restraint can be said to have freely been bargained for by the parties to the contract provides no sufficient reason for concluding that the doctrine should not apply' (para 56).

## Chapter 6 – Copyright, Contract and Mass Market Agreements

Copyright is not an end in itself, but a means to an end. From an economic perspective, copyright law must essentially solve the market failure which, absent a legal exclusion mechanism, would result in an underinvestment in creative material and must, at the same time, minimise the costs of the solution. Likewise, property and contract law are not ends in themselves, but are the means to an end. From an economic perspective, in broad terms, property and contract should promote an optimal level of production, allocation and use of economic resources.

Copyright law must balance the benefits and costs of establishing property rights in copyright material; an optimal copyright law should maximise the benefits and minimise the costs. As explained in Chapter 4, however, comparing the benefits and costs of copyright law is complex. Furthermore, it is highly unlikely that current copyright law establishes anything like an optimal level of protection. That the limits established by copyright law may be far from optimal, however, is not the end of the matter – even if a state-backed copyright system includes significant elements that are difficult to justify from an economic perspective, it might be possible to argue that copyright is more efficient than a system based on private contracts. This chapter therefore investigates the relative merits of copyright and contract in protecting material in the context of mass market agreements. It explains the legal relationship between copyright, contract and mass market agreements. Most importantly, it explains how economic analysis of the relationship between copyright and contract, and between copyright and mass market agreements, ultimately depends upon understanding the trade-offs between contract and property rights.

First, the chapter re-states the economic benefits of freedom of contract. Second, the chapter explains that freedom of contract is not absolute and outlines the main legal limits to freedom of contract under contract law and under competition law. Third, the chapter briefly sets out the traditional legal relationship between copyright and contract, including the limits on freedom of contract established under Australian copyright law. Fourth, the chapter examines an important element of the traditional relationship between copyright and contract – the copyright licence – and distinguishes copyright licences from other agreements relating to copyright material. Fifth, the chapter introduces mass market agreements relating to copyright material and explains how such agreements threaten to alter the traditional relationship between copyright and contract. This section of the chapter introduces the difficulties of defining the legal nature of a mass market agreement. It further explains how such agreements can only be understood in the context of the historical evolution of shrinkwrap licences under United States law (as initially applied to transactions involving computer software, and as later extended to transfers of other digital products). Sixth, the chapter explains the contemporary functions of mass markets agreements and outlines the main terms commonly found in software licences. Seventh, the chapter examines whether there is any conflict between the protection of material by means of mass market agreements and copyright protection. It approaches this in two stages. First, it examines the decision of

Easterbrook J in *ProCD, Inc. v Zeidenberg*[258] which, to date, is the most extensive analysis attempted by the courts of the legal relationship between mass market agreements and copyright under United States law. The economic basis for the decision is explained. Second, the section concludes with an explanation of why protection of material by private agreements may, in certain circumstances, be more efficient than protection under the copyright system. It further examines the circumstances in which it may be efficient for rights defined by private agreements to be found binding on third parties. In relation to both issues, the section explains how economic analysis depends on understanding the economic trade-offs between contract and property rights.

## 6.1 The Benefits of Freedom of Contract

Since Adam Smith, economists have emphasised the extent to which the pursuit of individual self-interest in the marketplace results in overall social gains.[259] Economists generally assume that rational individuals will enter an agreement provided the agreement benefits both parties, and that such agreements will result in net benefits to society.[260] For example, underlying the Coase theorem, explained at [2.6] above, is the conviction that in the absence of transaction costs, rational individuals will continue to bargain until there are no more benefits to be had from bargaining. As explained at [2.7] above, given that entitlements to a resource are adequately defined, a resource will end with the user that places the highest value on the resource. By definition, the highest value user will make the most efficient use of that resource.

As markets are generally not perfect, however, private agreements will not always enhance welfare, as measured by Kaldor-Hicks efficiency. In other words, private agreements will not be welfare-enhancing in the presence of market failure, such as substantial market power, externalities, transaction costs or information asymmetries. This is why Milton Friedman, in the quote extracted at [2.7] above, emphasised that for private coordination to be welfare-enhancing, transactions must be both voluntary and informed.

## 6.2 The Legal Limits of Freedom of Contract

An important function of contract law is to establish limits concerning which agreements, or purported agreements, will be regarded as legally binding. From an

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[258] 86 F 3d 1447 (1996).

[259] As Trebilcock puts it, 'On this view, the public interest, in terms of resource allocation, economic growth, and income distribution, is furthered as a mere by-product of countless, self-serving individual decisions to engage in trade or exchange': Trebilcock (1993) p 241.

[260] Strictly speaking, the social benefits derived from voluntary agreements are the benefits of freedom of exchange, not freedom of contract. The economic benefits of contracts, meaning binding promises, are usually explained in terms of the *ex ante* efficiency gains derived from incentives to rely on promises: see, for example, Charles J Goetz and Robert E Scott, 'Enforcing Promises: An Examination of the Basis of Contract' (1980) 89 *Yale Law Journal* 1261.

economic perspective, such limits should promote welfare-enhancing transactions and deter transactions that reduce overall welfare. The circumstances in which an apparent agreement will not be enforced are, nevertheless, diverse and complex, and cannot be dealt with comprehensively in this paper. This section of the paper concentrates on the legal restrictions on the enforcement of private agreements that are most relevant to the analysis of the relationship between copyright and contract law.

First, there is no binding agreement if the legal requirements for contract formation are not met. In order for an enforceable contract to exist there must be a legally recognised agreement and the agreement must involve a reciprocal exchange, in the sense that the agreement is supported by valuable consideration.[261] Under conventional analysis, a legally recognised agreement is reached once there is an offer and an acceptance. An offer is essentially a clear expression of the terms under which a person is willing to enter a contract, while an acceptance is a clear expression of consent to the terms offered. In general, an offer matched by an acceptance of the offer by the offeree amounts to an enforceable agreement once the acceptance is communicated to the offeror. The artificiality of reducing the great diversity of agreements, often involving complex negotiations, to a simple 'offer and acceptance' model is generally acknowledged.[262] In practice, the conventional model is not rigidly adhered to, and the courts look at whether, having regard to the totality of dealings between the parties, there was an objective intention to enter a binding agreement.[263] Even where there is a legally recognised agreement, there is no binding contract unless the agreement is backed by an exchange of something of value. In simple terms, 'consideration' may be regarded as some benefit conferred on the promisee or a detriment incurred by the promisor. As a concomitant of the doctrine that a contract is only binding on a party to the agreement, consideration must move from the promisee, which essentially means that there must be some payment for a legally binding promise.[264]

Second, assuming the requirements for contract formation have been met, the courts and legislatures have developed rules for determining whether or not an apparent agreement will result in legal liability. In particular, an apparent agreement will not be legally enforceable if it is the result of:

- misrepresentation or misleading conduct;[265]

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[261] See, for example, *Dunlop Pneumatic Tyre Co Ltd v Selfridge & Co Ltd* [1915] AC 847. There must also be an intention to create legal relations: *Balfour v Balfour* [1919] 2 KB 571.

[262] See, for example, *New Zealand Shipping Co Ltd v AM Satterthwaite & Co Ltd* [1975] AC 154 at 167 per Lord Wilberforce.

[263] See *Gibson v Manchester City Council* [1978] 1 WLR 512 at 523–4 per Lord Denning; *ABC v XIVth Commonwealth Games Ltd* (1988) 18 NSWLR 540. A particular area of difficulty, known as the 'battle of the forms', arises in negotiations between businesses that both use standard form contracts. In such cases, where the standard terms used by the parties differ, it may be difficult to determine the terms of the contract: see, for example, *Butler Machine Tool Co Ltd v Ex-Cell-O Corp (England) Ltd* [1979] 1 WLR 401.

[264] See *Dunlop Pneumatic Tyre Co Ltd v Selfridge & Co Ltd* [1915] AC 847.

[265] Section 52 of the *Trade Practices Act 1974* (Cth), and comparable provisions of state and territory fair trading laws, prohibit misleading or deceptive conduct in 'trade or commerce'.

- mistake;
- duress; or
- undue influence.

Furthermore, the equitable doctrine of unconscionability has emerged as a general legal standard for safeguarding weaker parties, especially consumers, against the 'unfair' behaviour of a stronger party. To a certain extent, the concept of unconscionability may be seen as underlying other equitable doctrines directed at preventing abuses of an unequal bargaining position, such as duress and undue influence. For the present, however, the doctrines remain formally distinct under Australian law. Australian courts have emphasised the impossibility of defining the circumstances in which behaviour will be held to be unconscionable. Nevertheless, in the principal Australian authority, *Commercial Bank of Australia v Amadio*, Mason J provided a general statement of the doctrine, concluding that a contract may be set aside for unconscionability:

> ... whenever one party by reason of some condition or circumstance is placed at a special disadvantage vis-a-vis another and unfair or unconscientious advantage is then taken of the opportunity thereby created ...[266]

In addition to the equitable doctrine, Commonwealth legislation, and comparable state and territory fair trading laws, have established statutory provisions that prohibit 'unconscionable conduct' in relation to the supply of consumer goods and services,[267] and to protect small business.[268] The provisions do not attempt to define 'unconscionable' conduct, but include a non-exclusive list of factors to be taken into account in determining whether the statutory provisions have been breached.[269]

Third, in certain circumstances, the law prohibits the making of legally binding agreements. A contract may be illegal because it is prohibited by legislation or because it is contrary to public policy. An example of a legislative provision that prohibits certain agreements is section 47H of the Copyright Act, dealt with at [4.2] above, which prohibits agreements that have the effect of excluding or limiting statutory exceptions to copyright infringement established in relation to computer programs. An important form of agreement that is illegal on the basis of public policy is a contract (or terms of a contract) which undermines competition. Such agreements are dealt with separately under the common law doctrine of restraint of trade and under the restrictive trade practices provisions contained in Part IV of the *Trade Practices Act 1974* (Cth) (the TPA).

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[266] (1983) 151 CLR 447 at 462.

[267] See *Trade Practices Act 1974* (Cth) s 51AB.

[268] See *Trade Practices Act 1974* (Cth) s 51AC.

[269] The factors include the relative strengths of the bargaining positions of the parties. In addition to the 'unconscionability' provisions, in New South Wales a variety of remedies is available if a contract is found to be 'unjust': see *Contracts Review Act 1980* (NSW).

The common law has prohibited 'unreasonable' restraints of trade since at least the seventeenth century.[270] The prohibition was long confined to agreements by a purchaser of a business not to compete with the vendor, and to agreements by an employee not to compete with an employer after termination of the employment. In the last half of the twentieth century, however, the doctrine was widened to include restraints such as those contained in exclusive dealing agreements.[271] In practice, the prohibition has continued to be confined mainly to restraints attempting to restrict the activities of former employees, former partners and purchasers of a business.[272] Nevertheless, the High Court has recently held that a confidentiality agreement that purported to prevent the use of information following public disclosure of the information in a patent application was an unenforceable restraint of trade.[273]

Agreements that restrict competition are prohibited under Part IV of the TPA, which generally regulates conduct that is likely to lessen competition.[274] Section 51(3) of the TPA, however, exempts intellectual property assignments and licences from many of the restrictive trade practices provisions. In particular, section 51(3) provides that the provisions of Part IV, other than those applying to the misuse of market power and resale price maintenance, are not contravened by a condition in an assignment or licence of copyright.[275] There is considerable uncertainty concerning the scope of the exception established by section 51(3). On one view, all possible conditions in an intellectual property assignment or licence may be exempted; on another view, the provision may exempt only those conditions that would otherwise not contravene Part IV.[276] The absence of a clear policy rationale for the section 51(3) exemption, combined with drafting ambiguities, led the Intellectual Property and Competition Review Committee to recommend amendments to the exemption. In essence, the Committee recommended exempting licence or contractual conditions relating to intellectual property from Part IV only if the conditions do not result, or are not likely to result, in a substantial lessening of competition.[277] The Commonwealth government has announced that it supports a modified version of the Committee's recommendation, which would involve removing the exception in relation to intellectual property licensing, but amending the application of the per se restrictions in Part IV of the TPA so that, insofar as they apply to intellectual

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[270] See, for example, *Colgate v Bachelor* (1602) 78 ER 1097. The first recorded case appears to have been decided in the early fifteenth century: see *Dyer's Case* (1414) YB 2 Hen V, vol. 5.

[271] *Esso Petroleum Co Ltd v Harper's Garage (Stourport) Ltd* [1968] AC 269; *Amoco Australia Pty Ltd v Rocca Bros Motor Engineering Co Pty Ltd* (1973) 133 CLR 288.

[272] The limitation of the doctrine to these traditional areas has been reinforced by provisions of the *Trade Practices Act 1974* (Cth): see ss 4M, 51(2).

[273] *Maggbury Pty Ltd v Hafele Australia Pty Ltd* [2001] HCA 70 (13 December 2001).

[274] In particular, Part IV prohibits anti-competitive agreements (s 45), including price fixing (s 45A), exclusive dealing (s 47) and resale price maintenance (s 48).

[275] *Trade Practices Act 1974* (Cth) s 51(3)(a).

[276] See Intellectual Property and Competition Review Committee (2000) p207.

[277] *Ibid.* pp 213–5. The Committee also recommended that the Australian Competition and Consumer Commission (ACCC) be required to issue guidelines regarding the operation of a revised exemption, including identifying behaviour that is likely to result in a substantial lessening of competition.

property licensing agreements, they apply only to agreements that substantially lessen competition.[278]

## 6.3 Copyright Law Limits on Freedom of Contract

The traditional relationship between copyright and contract law is essentially complementary. In simple terms, copyright law defines property rights in copyright material, and the transfer of the property rights is governed by contract law.[279] The general freedom to deal with copyright material is confirmed by the Copyright Act, which provides that copyright may be assigned or transferred much like other forms of personal property.[280] In addition to the legal limits on the transfer of copyright material established under contract law and competition law, however, the Copyright Act establishes a number of copyright-specific rules that apply to the ownership, transfer and exploitation of copyright material.

First, the Copyright Act establishes a general default rule whereby initial ownership of copyright in a work is allocated to the author.[281] Second, copyright may be distinguished from other forms of property in that the exclusive rights comprised in the copyright are divisible.[282] This means that rights to exploit copyright material may be split in a number of ways. For example, paperback rights in a book may be dealt with separately from the hardback rights, the reproduction right may be assigned to one person and the adaptation right to another, or the copyright may be divided geographically. Third, to be effective, an assignment of copyright, in part or in whole, must be in writing, signed by or on behalf of the assignor.[283] Fourth, in addition to the transfer of ownership, copyright may be exploited by licensing the use of copyright material.

[278] See *Government Response to Intellectual Property and Competition Review Recommendations: Information Pack* (28 August 2001), available at http://www.law.gov.au/infopack/.

[279] As Nimmer et al. point out, '... ownership and exploitation of copyright are structured at every turn by contract': Nimmer et al. (1999) p 24.

[280] *Copyright Act 1968* (Cth) s 196(1).

[281] *Copyright Act 1968* (Cth) s 35(2). The author is the person who first produces the work in material form by, for example, reducing an idea to writing: see *Walter v Lane* [1900] AC 539; *Donoghue v Allied Newspapers Ltd* [1939] 1 Ch 106. The default rule is subject to a number of exceptions: see ss 35(4), (5), (6).

[282] *Copyright Act 1968* (Cth) s 196(2).

[283] *Copyright Act 1968* (Cth) s 196(3). In the absence of writing, an enforceable agreement to assign copyright for value will give rise to an equitable interest in the copyright vested in the assignee: see *Acorn Computers Ltd v MCS Microcomputer Systems* (1984) AIPC 90–146. Section 196(1) provides that copyright is also transmissible by will and by devolution by operation of law. Furthermore, under section 197, an assignment of 'future copyright' must be in writing, signed by or on behalf of the copyright owner.

## 6.4 Copyright Licences

An understanding of the law relating to copyright licences is essential to an understanding of the traditional role of contract in copyright law.

The legal effect of a copyright licence is that property rights in the copyright remain with the copyright owner, while the licensee is given permission to do an act, or acts, that would otherwise infringe copyright. While property rights in the copyright material are defined by the Copyright Act, the rights of the licensee in the copyright material are defined by the contract with the copyright owner. An important distinction between an assignment of copyright and a copyright licence concerns the effect of an agreement on third parties. In an assignment of copyright, the assignor has no control over the copyright material other than as provided for in the contract of assignment. Any terms in favour of the assignor in a contract assigning copyright are not binding on third parties and, in particular, are not binding on subsequent assignees. A licensor, on the other hand, retains rights in relation to the copyright that are good against everyone, except for the rights of the licensee conferred under the licence.

A copyright licence may restrict the exercise of the rights comprised in the copyright in any way, including restrictions on sub-licensing. Furthermore, the Copyright Act provides that a licence granted by the copyright owner is binding on successors in title of the licensor.[284] Thus, each assignee of copyright is subject to any copyright licences granted by previous owners of the copyright.[285]

It is important to distinguish a copyright licence from other sorts of agreements that relate to the use of copyright material. A copyright licence may confer rights on a licensee only in relation to the exclusive rights comprised in the copyright. This means that agreements that relate to uses of copyright material over and above the uses comprised in the copyright, including agreements that restrict the use of copyright material, are not, strictly speaking, copyright licences. As explained in Chapter 4 above, in general terms, copyright owners are free to enter into agreements that contract around the limits to copyright protection set by the Copyright Act. Nevertheless, if an agreement includes provisions that contract beyond the limits of copyright, those provisions are not part of a copyright licence.

## 6.5 The Evolution of Shrinkwrap, Clickwrap and Browsewrap Licences

The traditional relationship between copyright and contract law has been affected by the development of mass market agreements, commonly known as licences, in relation to copyright material. Mass market licences of copyright material were originally introduced in connection with the marketing of computer software in the United States, and were later extended to other digital products. The legal form of mass market licences

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[284] *Copyright Act 1968* (Cth) s 196(4).

[285] Similarly, each assignee of future copyright is bound by copyright licences granted by previous prospective owners of the copyright: *Copyright Act 1968* (Cth) s 197(3).

cannot be understood without an appreciation of the reasons for the introduction of such licences under United States law.[286]

As explained in Chapter 5 above, initial uncertainty concerning the degree to which protection of software was available under copyright and patent law resulted in software owners relying on United States trade secrets law. Under United States trade secrets law, information will remain a trade secret, even if it is disclosed to a considerable number of people, provided those to whom the information is disclosed are subject to a non-disclosure agreement.[287] Moreover, confidentiality law could be relied upon to protect computer software because of the distinctive nature of software as a product. Software can be expressed in human-readable source code, but is sold to consumers in machine-readable object code. The value in computer software essentially consists of information concerning the arrangement of the sequence of instructions embodied in the software. A feature that distinguishes software from most other information products is that the valuable component of the product is not readily apparent on the face of the product. Thus, provided disassembling, or decompiling, object code into source code remained difficult, software could be sold in object code and the value in the software could be protected by trade secrets law.

As further explained in Chapter 5, confidentiality laws, including United States trade secrets law, do not prohibit reverse engineering. As a result, when technologies were developed for reverse engineering computer software, protection under trade secrets law alone became inadequate. Consequently, contract law was called upon to supplement the weaknesses of trade secrecy protection. Rice has described the process that led to the widespread use of software licences in the following terms:

> Software distributors minimized risk by making program copies available in object code form under license agreements that contained confidentiality, nondisclosure and use restrictions. Almost all such contracts prohibit the unauthorized adaptation, disassembly or decompiling of software object code, and bar the disclosure of trade secrets entrusted to the user in confidence by the program supplier. This approach survived legal recognition that computer programs are copyrightable subject matter. Although it was established early on that both human and machine readable versions of a computer program were protected expression, uncertainty about the scope of copyright protection made it desirable to shield human readable code from competitor scrutiny. Distribution of program copies only in executable object code form, subject to a contract prohibition against reconstruction of source code

[286] Hemnes has emphasised the importance of understanding the historical development of mass market licences: 'A discussion of computer software licensing appropriately begins with the question of why a license is needed at all ... A book contains every bit as much "intellectual property" as a computer program, yet the purchase of a book is not conditioned on a "shrink wrap" license agreement ... why should computer programs be any different? The answer to this question is largely historical': Thomas MS Hemnes, 'Restraints on Alienation, Equitable Servitudes, and the Feudal Nature of Computer Software Licensing' (1994) 71 *Denver University Law Review* 577 at 577.

[287] See, for example, *Management Science of America v Cyborg* 6 Comp. L. Serv. Rep. 921 (1978); *Data Gen. Corp. v Digital Controls Corp.* 297 A 2d 433 (1971). As Hemnes points out, 'This principle has the absurd implication that something can be a secret even if everyone knows it, much like in the story of the Emperor's New Clothes': Hemnes (1994) p 579.

> equivalent through disassembly or decompiling, provided a ready means for accomplishing that end.[288]

The need to protect the secrecy of information embedded in computer software is not a complete explanation for the development of software licences. Software developers could have potentially sold the software and relied upon contractual agreements requiring purchasers not to disclose the information and not to re-sell copies of the software to third parties who would not be bound by the purchase agreement. There were, however, fears that such agreements would amount to 'restraints on alienation', which are unenforceable under United States law.[289] The software licence was invented to avoid this possibility. The software licence is intended to ensure that ownership of the information and the tangible embodiment of the information, such as a compact disc or DVD, is not transferred to the user. All that the purchaser acquires is a licence to use the software, restricted by the terms of the licence agreement. Assuming that a licence agreement permits the purchaser to transfer the software, then, all that can be transferred are the use rights permitted by the licence subject to the restrictions imposed by the licence agreement. Although the original software licences drew upon the concept of intellectual property licensing, they were not copyright licences.[290]

Once it became clear that software, whether in the form of source code or object code, was protected under copyright law, the characterisation of a software transaction as a 'licence' was retained. Whereas previously software licences had been used to ensure protection in the face of legal uncertainty, however, the use of the 'licence' form was then adapted to bolster copyright protection. In particular, it enabled software owners to impose restrictions on the transfer of copies of the software that would not otherwise be permitted under the United States' 'first sale' doctrine.[291]

Under United States copyright law, the copyright owner has an exclusive right of distribution that extends to the sale and distribution of tangible embodiments of the copyright material. The 'first sale' doctrine, which restricts the distribution right to the first sale of copyright material, was developed to limit the control of copyright owners over the resale and distribution of tangible copies. As a recent report of the United States Register of Copyrights explains, the doctrine was introduced to give effect to the common law rule against restraints on alienation of tangible property and, in part,

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[288] Rice (1992) pp 553–554.

[289] Hemnes (1994) pp 579–580.

[290] See David A Rice, 'Digital Information As Property and Product: UCC Article 2B' (1997) 22 *University of Dayton Law Review* 621 at 624.

[291] The 'first sale' doctrine, originally developed by the courts, is now codified in section 109 of the *Copyright Act* (US): 17 USC s 109. As Rice explains, 'Making a program copy transferee a "licensee" put licence-as-label to use as a means for side-stepping copyright law's antipathy toward copyright owner imposition of post-sale restraints on further transfer of individual copies of protected works. This attempted avoidance [of] the "first sale" doctrine and its explicit invalidation of attempted control over subsequent transfer of a sold copy offered a means for implementing contract-created restrictions on copy use. The underlying reasoning was that a copy use license containing use restrictions is not a sale because it does not convey title to a copy, and the license use restrictions were permissible as being lesser than, and included within, the exercise of rights reserved by retention of copy ownership: the statutory exclusive rights to reproduce and distribute copies of a work': *Ibid.* p 625.

because of concerns relating to competition in resale markets.[292] As the report further explains, the doctrine 'upholds the distinction between ownership of the copyright and ownership of the material object by confining the effect of the distribution right's encroachment on that distinction'.[293] In *Step-Saver Data Systems Inc v Wyse Technology,* the Third Circuit reviewed the concerns that led to the development of 'shrinkwrap' licences:

> When these form licenses were first developed for software, it was, in large part, to avoid the federal copyright law first sale doctrine ... Under this doctrine, one could purchase a copy of a computer program, and then lease it or lend it to another without infringing the copyright on the program ... Consumers, instead of purchasing their own copy of the program, would simply rent a copy of the program, and duplicate it ... The first sale doctrine, though, stood as a substantial barrier to successful suit against ... software rental companies, even under a theory of contributory infringement. By characterizing the original transaction between the software producer and the software rental company as a license, rather than a sale, and by making the license personal and non-transferable, software producers hoped to avoid the reach of the first sale doctrine and to establish a basis in state contract law for suing the software rental companies directly.[294]

The United States' 'first sale' doctrine has no analogy under Anglo-Australian law because it is not needed. Although the exclusive rights comprised in the copyright in works include a publication right,[295] it is a right of first publication only, and not a distribution right.[296] Nevertheless, framing a software agreement as a licence rather than a sale has the same broad effect under Australian law as under United States law. Assuming the agreement is valid, it allows software developers to impose restrictions on the resale and distribution of tangible software products.

The final element in the development of the contemporary software licence was the introduction of mass market licences. Computer contracts originally consisted of agreements relating to customised software for mainframe computers. With the introduction of personal computers in the 1970s and 1980s, however, software became a consumer product. The development of a mass market for software led to the replacement of negotiated licence agreements with standardised, mass market licences.[297]

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[292] United States Copyright Office, *DMCA Section 104 Report, A Report of the Register of Copyrights Pursuant to s 104 of the Digital Millenium Copyright Act* (US Copyright Office, August 2001) p 86.

[293] *Ibid.* p 87.

[294] 939 F 2d 91, 96 (1991).

[295] *Copyright Act 1968* (Cth) ss 31(1)(a)(ii), (b)(ii).

[296] See *Avel Pty Ltd v Multicoin Amusements Pty Ltd* (1990) 18 IPR 443, in which the High Court held that s 29(1)(a) did not define 'publish' for the purposes of s 31(1), thus essentially following the decision of the House of Lords in *Infabrics Ltd v Jaytex Shirts Co Ltd* [1982] AC 1.

[297] As Goodman points out, 'The mass marketing of computer software precluded computer software publishers from negotiating express contracts with each purchaser ... The increase in the usage of these agreements paralleled the software industry's transition from one that dealt primarily in customized software packages and agreements to one employing a mass-market mode of software delivery': Batya Goodman, 'Honey, I Shrink-Wrapped the Consumer: The Shrink-Wrap Agreement as an Adhesion Contract' (1999) 21 *Cardozo Law Review* 319.

As there was no direct contact between software developers and individual customers, some mechanism needed to be established for the purchaser to indicate agreement to the licence terms. The mechanism developed by the industry was the 'shrinkwrap' licence. The shrinkwrap licence typically consisted of a paper copy of licence terms within the 'shrinkwrap' plastic covering the software, which were accepted by the user opening the 'shrinkwrap' packaging. The term 'shrinkwrap licence' was generically applied to a number of mechanisms developed by the software industry for indicating consumer consent to software licence agreements. As Lemley has explained:

> Shrink-wrap licenses take many forms. The prototypical example is a single piece of paper containing license terms which has been wrapped in transparent plastic along with one or more computer disks. In theory, purchasers of a computer program will read the license terms before tearing open the plastic wrap and using the computer disks. Other examples of the genre include licenses printed on the outside of boxes containing software, licenses simply included somewhere within the box, or licenses shrink-wrapped with the owner's manual accompanying the software.[298]

The various forms of shrinkwrap licence obviously could not apply to software that was sold pre-installed on a computer hard disk. This method of selling software explained, in part, the development of a new form of manifested assent, whereby a licence agreement is displayed on a computer screen and the user is required to 'click' on an icon or 'button', or take some other action, to indicate agreement.[299] By analogy with shrinkwrap licences, these agreements became known as 'clickwrap' licences. In *Specht v Netscape Communications Corp*, Hellerstein, USDJ described a clickwrap licence as follows:

> A click-wrap license presents the user with a message on his or her computer screen, requiring that the user manifest his or her assent to the terms of the license agreement by clicking on an icon. The product cannot be obtained or used unless and until the icon is clicked.[300]

Clickwrap licences are not confined to computer software, but can be applied to any information product that must be displayed on a computer screen before it can be used, whether the information is delivered in some tangible embodiment, such as a DVD, or electronically. In this way, the shrinkwrap model developed for software sales became generalised to other information products.

A clickwrap licence can be distinguished from a further form of mass-market licence known as a 'browsewrap licence'. Browsewrap licences developed with the distribution of

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298 Lemley (1995) p 1240.

299 Gomulkiewicz and Williamson explain that 'Software publishers began to experiment with presenting EULAs via media other than paper to make the license agreement more conspicuous to the software user. One popular method displays the EULA on the computer screen the first time a user operates the software. The user can then accept the EULA's terms by pressing a certain key, clicking on a "yes" button icon, or taking some other specified action': Robert W Gomulkiewicz and Mary L Williamson, 'A Brief Defense of Mass Market Software License Agreements' (1996) 22 *Rutgers Computer and Technology Law Journal* 335 at 341.

300 *Specht v Netscape Communications Corp. and America Online, Inc.* 150 F Supp 2d 585 (2001) per Hellerstein USDJ at 593–594. See also Robert A Hillman and Jeffrey J Rachlinski, 'Standard-Form Contracting in the Electronic Age' (2001) *Cornell Law School Working Paper*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract id=287819#PaperDownload. pp 36-37.

software and other information goods by means of the Internet. A browsewrap licence consists of terms and conditions relating to the sale of material by means of the Internet, which are accessed by means of a hyperlink displayed on the web page.[301] A browsewrap licence can be distinguished from a clickwrap licence in that a transfer subject to a browsewrap licence is commonly possible without the transferee being required to manifest consent to the licence terms.[302]

Regardless of the specific form of the agreement – whether shrinkwrap, clickwrap or browsewrap – in the software industry such agreements are known generically as end user license agreements (EULAs). The historical development of EULAs has resulted in such agreements including a diversity of terms and conditions. It has also resulted in a degree of ambiguity concerning the proper legal characterisation of mass market licence agreements. Nevertheless, as Rice maintains, in transactions involving software and other digital products it is important to distinguish between three categories of transaction.[303]

The first category is the traditional intellectual property licence, whether exclusive or non-exclusive, which involves a licence to exercise the rights comprised in the intellectual property right, such as the rights comprised in the copyright. As mass market licences of software or other digital products often do not involve the licensing of copyright or other intellectual property rights, the use of the term 'licence' in agreements such as EULAs has the potential to cause confusion.[304]

The second category is the transfer of an object embodying intellectual property. There is considerable controversy concerning the correct way to characterise agreements that involve a transfer of a tangible object embodying intellectual property subject to restraints in favour of the transferor. In particular, there is a debate concerning whether such agreements are properly termed licences, leases or sales. For example, in a recent Californian decision, *Softman Products Company v Adobe Systems Inc.*,[305] the court held that, properly construed, the EULA at issue was a sale and not a licence. In reaching this conclusion, Pregerson J listed the indicia pointing to the transaction being a sale:

> ... the following factors require a finding that distributing software under licenses transfers individual copy ownership: temporally unlimited possession, absence of time limits on copy possession, pricing and payment schemes that are unitary not serial, licenses under which subsequent transfer is neither prohibited nor conditioned on obtaining the licensor's prior approval (only subject to a prohibition against rental and a requirement that any transfer be of the entity), and licenses

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301 See Hillman and Rachlinski (2001) p 36.

302 See *Specht v Netscape Communications Corp. and America Online, Inc.*, 150 F Supp 2d 585 (2001).

303 Rice (1997) pp 629–630.

304 Rice argues that 'The use of "license" and related terminology ... has fostered a tendency to make the label a pointer toward the body of law to which it historically refers as the substantive law applicable to transfer of computer program and information copies as market-distributed products, not just the transfer of rights or interests in intellectual property embodied therein. At the very least, this is confusing and will cause uncertainty of a kind that can be avoided': *ibid.* p 629.

305 171 F Supp 2d 1075 (2001) .

> under which the use restrictions' principal purpose is to protect intangible copyrightable subject matter, and not to preserve property interests in individual program copies.[306]

The importance of determining whether an agreement to transfer a tangible object is, in substance, a licence or a sale is that if the agreement is a licence, then the licensee can transfer no more rights than he or she acquires under the licence. If, on the other hand, the agreement is a sale, then a subsequent transfer of the tangible object will confer property rights free of any restrictions contained in the original transfer agreement, unless there is a binding contract with the subsequent transferee. In other words, if an agreement can be characterised as a licence, the owner of computer software or other digital product does not need to rely on contractual restrictions to bind third party transferees. If, on the other hand, the agreement is a sale and there is no binding contract between the copyright owner and a third party transferee, the only remedy available to the owner for a breach of a restriction contained in the transfer agreement lies in contract against the initial transferee.

Apart from a licence or a sale, it has been argued that some transfer agreements should be construed as leases. For example, Determann and Fellmeth distinguish a lease of software from a sale on the following basis:

> A "rental" or "lease" of a copy of software is different from a sale for three reasons. First, the lessee must return or destroy the rented copy of software … after a period of time determined by contract, while the purchaser of a copy of software owns the copy in perpetuity. Second, the lessor retains title to the rented "copy" of software throughout the period of the lessee's possession of it … Third, payment for a sale of a software copy is almost always in the form of a one-time fee, while payment for the lease of software usually corresponds in magnitude to the duration of the lease.[307]

Although Australian courts have not considered the criteria for distinguishing a licence from a lease in relation to agreements for the transfer of software, there has been considerable attention given to the distinction in cases dealing with the occupation of land. The essential distinction drawn under Australian law is that a lease confers exclusive possession, whereas a licence does not.[308] In determining whether an agreement is a lease or a licence, it is the effect in law of the agreement and not what the parties intend,[309] or how the agreement is labelled.[310]

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[306] 171 F Supp 2d 1075, 1086 (2001).

[307] Lothar Determann and Aaron Xavier Fellmeth, 'Don't Judge a Sale by its License: Software Transfers under the First Sale Doctrine in the United States and the European Community' (2001) 36 *University of San Francisco Law Review* 1 at 21. See also David A Rice, 'Licensing the Use of Computer Program Copies and the Copyright Act First Sale Doctrine' (1990) 30 *Jurimetrics Journal* 157.

[308] The principal Australian authority is *Radaich v Smith* (1959) 101 CLR 209. This decision rejected the approach adopted in *Errington v Errington* [1952] 1 KB 290, in which Lord Denning had based his decision on whether the parties intended to create a lease. The House of Lords essentially preferred the Australian approach in *Street v Mountford* [1985] AC 809.

[309] See *AG Securities v Vaughan* [1988] 2 WLR 689.

[310] See *Chaka Holdings Pty Ltd v Sunsim Pty Ltd* (1987) NSW Conv R 55–367.

The third category of agreement is a combination of a transfer of intellectual property rights and of rights in an object in which the intellectual property is embodied.

From a legal perspective, the correct construction of an agreement to transfer software or another digital product is of the utmost importance. As with any contract, the construction of the agreement must depend on an objective analysis of the terms of the particular agreement, it being impossible to draw general conclusions in the abstract. From an economic perspective the legal construction of the agreement is not terribly significant, at least as far as policy is concerned. Whether an agreement involves the transfer of intellectual property rights, an object embodying intellectual property, or both – or whether the agreement is characterised as a sale, a licence or a lease – the policy issue is the same. Regardless of the form of the agreement, the underlying question that must be asked concerns the extent to which the copyright owner should be able to control the use of copies embodying copyright material by third party transferees. As explained at [6.8] below, the economic analysis of this issue does not depend on a technical legal characterisation of the transfer agreement, but on understanding the fundamental trade-off between property rights and contract.

## 6.6 Contemporary Functions of Mass Market Agreements and Common Terms Found in EULAs

Defining a transfer of software or other digital products as a licence, rather than a sale, allows for the imposition of restrictions on the use and subsequent alienation of the product. Such restrictions may perform a number of functions, which are reflected in the terms commonly incorporated in EULAs. This section of the chapter briefly reviews the terms commonly found in software EULAs and outlines the functions performed by such terms.

First, EULAs will usually include a ‘title retention’ clause that will provide for the software developer to retain legal ownership of the software. This clause is an attempt to ensure that the agreement is characterised as a licence and not a sale. The clause will not be conclusive, as courts will look to the substance of the agreement to determine its legal effect.

Second, as explained in *Step-Saver*, an initial reason for imposing restrictions on alienation was to deal with the problem of rental arrangements which resulted in the unrestricted copying of computer software. Although the owner of copyright in the software could take action against individual users who copied the software, the enforcement costs would be prohibitive.[311] Copyright owners were therefore anxious to take action against those engaged in renting the software. The liability of those renting software, whether under the United States doctrine of contributory infringement or the

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[311] See Rice (1997) p 632. See also Gary W Hamilton and Jeffrey C Hood, ‘The Shrink-Wrap License – Is it Really Necessary?’ (1993) 10 *Computer Lawyer* 16 at 17; Jerry David Monroe, ‘ProCD, Inc v Zeidenberg: An Emerging Trend in Shrinkwrap Licensing?’ (1997) 1 *Marquette Intellectual Property Law Review* 143 at 146.

Anglo-Australian doctrine of authorisation liability, was uncertain.[312] Both United States and Australian copyright laws have, however, subsequently been amended to deal with the problem of copying rented software by extending the rights of the copyright owner to include control over the rental of computer programs.[313] Although end user licence agreements continue to impose restraints on the rental of computer software, this is no longer a significant function of licence agreements.

Third, a EULA may include an 'anti-modification' clause, which restricts the extent to which a purchaser may modify, improve or adapt a software product. This clause is designed to prevent the purchaser from making minor changes to the program and reselling it. As such activities will amount to a reproduction of the program, they do not add to the protection available under copyright law. Of more significance are clauses which attempt to prevent purchasers from reverse engineering the software. The extent to which reverse engineering of software should be permissible without the authorisation of the copyright owner has been one of the most contentious issues in the legal protection of computer software. Under the computer program exceptions in the Copyright Act, certain forms of reverse engineering are permitted for certain purposes.[314] The Australian reverse engineering exceptions derived from the final report of the Copyright Law Review Committee on computer software protection.[315] As explained at [4.2] above, section 47H of the Copyright Act restricts the extent to which the exceptions permitting reverse engineering can be excluded by contract. The economic analysis of reverse engineering depends, to a significant extent, on the purpose for which reverse engineering is undertaken. For example, decompilation and study of a computer program for the purpose of producing an interoperable program clearly has quite different economic effects to reverse engineering for the purpose of producing a program that competes directly with the original software.[316] A full analysis of the economics of reverse engineering computer software is beyond the scope of this paper.[317]

Fourth, EULAs may include other limitations on the use and transfer of computer software. For example, a term may restrict the purchaser from using the software for other than non-commercial uses, or on more than one computer at the same time. The

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312 As Rice points out in relation to United States law 'Even after Sony, the limits the Supreme Court set on liability for contributory infringement left justifiable doubt about whether those engaged in renting copies to others could be successfully sued for contributory infringement. This uncertainty encouraged continued use of contract to combat rental-to-copy': Rice (1997) p 633.

313 See *Computer Software Rental Amendments Act of 1990* (US) (Pub L No 101-650, 104 Stat. 5089); *Copyright Act 1968* (Cth) s 31(1)(d) (giving the owner of copyright in a computer program the exclusive right to enter into a commercial rental arrangement in respect of the program).

314 For a discussion of the Australian provisions exempting reverse engineering from copyright infringement see Anne Fitzgerald and Cristina Cifuentes, 'Pegging Out the Boundaries of Computer Software Copyright: the Computer Programs Act and the Digital Agenda Bill' in Anne Fitzgerald et al. (eds) *Going Digital 2000* (2nd ed., Prospect Media Pty Ltd, St Leonards, 2000) pp 37–70.

315 See CLRC (1995).

316 For an economic analysis that generally favours permitting reverse engineering, see Lawrence D Graham and Richard O Zerbe, Jr, 'Economically Efficient Treatment of Computer Software: Reverse Engineering, Protection, and Disclosure' (1996) 22 *Rutgers Computer and Technology Law Journal* 61.

317 For a limited discussion of the economics of reverse engineering in the context of confidentiality law, see paragraph [5.3] above.

purpose of such restrictions is to allow the copyright owner to segment the market in order to charge different prices to different classes of users, depending on willingness to pay. For example, it may enable the owner to charge a lower price for non-commercial users than that charged for commercial users. Attempts at contractual price discrimination face the practical difficulty that purchasers may engage in arbitrage by purchasing the software at the lower cost then reselling to higher-value users at a price less than that set by the copyright owner. Contractual use restrictions designed to facilitate price discrimination must therefore be combined with restrictions on the subsequent transfer of the product.

Finally, EULAs commonly include limitations on warranties accompanying the transfer of a software product, such as warranties of merchantable quality. As with other terms included in software licences, warranty disclaimers can be explained, at least in part, by special features that characterise software as a product. Unlike other products, computer programs have always been sold with imperfections, known as 'bugs'. Software developers do not attempt to eliminate all 'bugs' from programs because the costs of doing so would far outweigh any benefits delivered in terms of improved functionality. Moreover, to a certain extent, the complexity of computer programs means that it may be difficult to predict damage the software may cause, especially when it is used in conjunction with other software.[318] Limitations on warranty in software licences are therefore designed, to a significant extent, to reflect industry practices.

## 6.7 Do Mass Market Agreements Conflict with Copyright?

Mass market agreements, such as EULAs, commonly include restrictions on the use and transfer of copyright material that differ from the restrictions established by copyright law. This section of the chapter examines whether such differences mean that there is a conflict between mass market agreements and the economic objectives of copyright law. The section first explains the most important United States decision to deal with policy issues relating to differences in protection conferred under licensing agreements and copyright protection, the decision of the Seventh Circuit Court of Appeals in *ProCD, Inc. v Zeidenberg*.[319] The analysis of Easterbrook J (with whom Coffey and Flaum JJ agreed) in that case is a textbook example of the application of an economically oriented approach to a particular fact situation involving an apparent conflict between a mass market licence and copyright policy. The section then explains how economic analysis of the relationship between mass market agreements and copyright must be based on an understanding of the trade-offs between property rights and contracts.

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[318] For an argument that the software industry's practices shift the costs of quality assurance to consumers, see 'A Lemon Law for Software' *The Economist*, 14 March 2002, available at http://www.economist.com.

[319] 86 F 3d 1447 (1996).

### *6.7.1 ProCD, Inc. v Zeidenberg*

The extent to which restrictions in a mass market contract may conflict with the limits set by copyright law has not arisen under Anglo-Australian law, but was expressly addressed by Easterbrook J in *ProCD*.

In that case, the plaintiff, ProCD, produced and maintained a large computer database of information compiled from telephone directories. The courts accepted, with limited discussion, that the database would not satisfy the threshold required for originality under United States copyright law. Purchasers of the database were presented with a EULA which, among other things, restricted the use and transfer of the database.[320] The use and transfer restrictions were designed to facilitate price discrimination. The restrictions allowed ProCD to sell the database at a higher price to commercial users, who could use the database for marketing, than the price set for the general public, who would use the database mainly to locate telephone numbers and other contact details. Zeidenberg purchased a copy of the database for the lower price available to non-commercial users, but ignored the licence restrictions. A company that he controlled made the database available on the Internet for less than the price ProCD charged commercial users, thus undermining ProCD's pricing strategy. ProCD brought an action for an injunction to prevent Zeidenberg from reselling the information in breach of the licence conditions.

At first instance, the United States District Court for the Western District of Wisconsin declined to award an injunction, essentially on the basis that there was no binding agreement between ProCD and Zeidenberg because Zeidenberg did not expressly assent to the terms.[321] On appeal, the Seventh Circuit was required to consider two issues: whether there was an enforceable agreement between the parties and whether, assuming an enforceable agreement, the contract was preempted by United States federal copyright law.

Easterbrook J commenced his analysis by describing how the restrictions contained in the EULA were designed to allow ProCD to engage in price discrimination. He gave a conventional justification of the economic benefits of price discrimination, explaining that:

> If because of high elasticity of demand in the consumer segment of the market the only way to make a profit turned out to be a price attractive to commercial users alone, then all consumers would lose out – and so would the commercial clients, who would have to pay more for the listings because ProCD could not obtain any contribution toward costs from the consumer market.[322]

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[320] In *Feist Publications Inc. v Rural Telephone Service Co* 499 US 340 (1991), the United States Supreme Court denied protection to a white pages telephone directory on the basis that the arrangement of data was not original and lacked the degree of creativity required for protection under United States copyright law.

[321] See *ProCD, Inc. v Zeidenberg* 908 F Supp 640 (1996).

[322] 86 F 3d 1447 (1996).

Easterbrook J then turned to the enforceability of the agreement. He found it unnecessary to rule on whether the agreement to transfer the software constituted a 'licence' or a 'sale', observing merely that this was 'a subject for another day'.[323] He held that the terms included in the licence were part of a contract binding on Zeidenberg. In reaching this conclusion, he explained the benefits of standardised consumer contracts in which the terms are revealed only after the purchase, including that such agreements facilitate electronic transfers of mass market software. Easterbrook J held that under United States contract law there had been an acceptance of the terms of the agreement by conduct. In other words, Zeidenberg had assented to the agreement by using the product after having an opportunity to read the agreement and to return the product, something expressly allowed by the terms of the licence. Easterbrook J further explained how the terms included in such contracts can be seen as features of the product. Provided there is sufficient competition among vendors, the terms are likely to promote the interests of both sellers and consumers.[324] The policy issues associated with the enforceability of mass market agreements are taken up further in Chapter 7 of this paper.

Easterbrook J finally examined whether there was a conflict between the terms of the EULA and United States federal copyright law such that the agreement was preempted. He held that the agreement was not preempted under United States law because it did not confer rights equivalent to the exclusive rights comprised in the copyright. Easterbrook J concluded that the rights conferred by the EULA differed from the rights conferred under copyright law because they were not exclusive, in the sense that the licence bound only parties to the agreement, and was not good against the world. Thus he stated that:

> A copyright is a right against the world. Contracts, by contrast, generally affect only their parties; strangers may do as they please, so contracts do not create "exclusive rights".[325]

In reaching this conclusion, Easterbrook J emphasised the extent to which contractual restrictions may enhance overall social welfare. For example, to the extent that the restrictions promote price discrimination, they are likely to result in a wider distribution of a product than would be possible if the vendor was limited to charging a single price. Moreover, Easterbrook J specifically pointed out that contractual restrictions on reverse engineering software products performed 'the same procompetitive functions' as confidentiality law.[326] Presumably, these statements referred to the economic benefits of the restrictions in terms of the widespread diffusion of software in object code without undermining incentives for the creation of software likely to result from unrestricted access to source code. Although Easterbrook J distinguished between restrictions contained in the EULA and exclusivity conferred by copyright protection on the basis of the essential distinction between contractual rights and property rights, he did not

[323] 86 F 3d 1447 (1996).

[324] Thus Easterbrook J stated that 'Terms of use are no less a part of "the product" than are the size of the database and the speed with which the software compiles listings. Competition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy': 86 F 3d 1447 (1996).

[325] 86 F 3d 1447 (1996).

[326] 86 F 3d 1447 (1996).

expressly deal with the economic trade-offs between contracts and property. A complete economic explanation of the relationship between contract and copyright law in the context of mass market licences must, nevertheless, address this issue.

### 6.7.2 Economic Trade-Offs Between Property and Contract

From an economic perspective, the basis for comparing protection of material by private contractual arrangements with protection of material under the copyright system would seem to be clear cut: protecting material by private contract should be preferred to copyright protection if the extent to which the benefits of contractual protection outweigh the costs is greater than the extent to which the benefits of the copyright system outweigh the costs. As further explained in Chapter 7 of this paper, however, it needs to be borne in mind that material will only be protected by private agreements if such agreements are legally enforceable, for example, under the principles of contract law and competition law. Furthermore, as referred to in Chapter 5 above, the relationship between copyright and contract is not a simple matter of comparing protection under the copyright system with contractual protection, but consideration must also be given to the potential combination of contractual restrictions, technological protection measures and copyright protection.

The decision of Easterbrook J in *ProCD* is clearly based on the assumption that the enforceability of restrictions contained in mass market agreements should be determined primarily under contract law and is not a matter of superficial inconsistencies between contractual protection and copyright protection. This section of the chapter explains why, assuming that a private agreement is enforceable under contract law, and that it complies with competition law principles, contractual restrictions may be more efficient than copyright protection. If contractual restrictions are a more efficient means of fulfilling the objectives of copyright protection than is the copyright system, then assertions that contract is in conflict with copyright have no foundation. This section then goes on to explain the circumstances in which it might be desirable for agreements, such as EULAs, to be enforceable against third parties.

Determining the relative merits of contractual restrictions, on the one hand, and copyright law, on the other, depends on understanding the trade-off between contract and property rights in establishing exclusivity in relation to a resource. Given a choice between rules set collectively by the state and private ordering through voluntary agreements, most economists have a preference for private ordering, as between the parties, voluntary agreements will maximise the mutual benefits to be derived from a transaction. In the absence of market failure, such agreements will improve social welfare. In a sense, state-backed property rights can be seen as a response to a form of market failure that renders private efforts at enforcing exclusivity costly.

As explained in Chapter 2, the establishment of property rights promotes dynamic efficiency by allowing the property owner to recover the benefits of investing in a resource. Thus, by establishing exclusive rights in copyright material, copyright law seeks to solve the economic problem of underinvestment in such material. The reason that standardised property rights are regarded as an efficient solution to the underinvestment problem is essentially because they confer exclusivity on the property owner at less cost than other forms of protection. A resource holder could attempt to establish exclusive control over a resource by entering into private agreements with all potential users. Contracting with a large, indeterminate class of potential users would, however, impose significant transaction costs. Another way for a resource holder to establish exclusivity would be to engage in self-help, for example, by building high fences and policing the boundaries. The enforcement of self-help measures would also entail high transaction costs. Standardised property rights that are good against the world are therefore preferred to private agreements or self-help measures because they avoid the high transaction costs entailed by the alternatives.

In the sense that a system of property rights is preferred to private agreements, property rights may be seen as a standardised set of 'default' rules that operate as a hypothetical multi-party contract.[327] This suggests that if transaction costs are lowered to the point where the costs of contracting are less than the costs of a property rights system, then private contracts should be preferred over property rights as a means of conferring exclusivity. Similarly, if the costs of technological protection measures are lowered, for example by the widespread use of encryption, then self-help may be more efficient than property rights. In examining the relative merits of mechanisms for establishing exclusivity, it is important to understand that there are costs involved with a system of standardised property rights. In other words, the relative advantages of property rights, as opposed to contract, as a means of ensuring exclusivity may change if the costs of entering private contracts decrease relative to the costs of the property rights system. We therefore need to look more closely at the contract/property rights trade-off.

Property rights confer standardised exclusivity, but at the expense of flexibility. To the extent that property rights prevent parties to a transaction customising the rights to be transferred, there are limits to the mutual benefits the parties can derive from the transaction. As Friedman explains, if parties were able to flexibly manipulate property rights, the copyright owner would be able to recover more of the benefits of investing in creating copyright material, resulting in greater incentives:

> ... the more flexible regime allows the producer to capture more of the benefit from what he produces – that, after all, is why sellers of intellectual property would choose to use contract and self-enforcement instead of relying entirely on copyright. The higher the return to producing intellectual property the more intellectual property will be produced. Hence, to the extent that the creation of intellectual property is a purpose of copyright law, it is a purpose better served by permitting other options as well.[328]

Overall then, the contract/property trade-off may be stated in the following terms. Contractual rights have the benefits of flexibility, but defining exclusive rights to resources solely by means of private contracts would entail high transaction costs. Standardised property rights minimise the transaction costs that would be involved with every resource holder contracting with every potential user, but at a cost in terms of the

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[327] Merges, for example, describes property rights as 'creating a pre-determined, "off-the-shelf" legal relationship': Merges (1997) p 119.

[328] David Friedman, 'In Defense of Private Orderings: Comments on Julie Cohen's "Copyright and the Jurisprudence of Self-Help" ' (1998) 13 *Berkeley Technology Law Journal* 1151 at 1169.

mutual benefits to be derived from customised agreements. If transaction costs are lowered so as to enable resource holders to contract with all potential users, then there is no reason for property rights to be preferred over private contracts as a means for ensuring exclusivity. Provided standard form mass market agreements are enforceable under contract law, then such agreements are a means of reducing transaction costs. Moreover, the possibilities of electronic contract formation by means of the Internet will lower, although not entirely eliminate, transaction costs.[329] Finally, the combination of private agreements together with self-help in the form of technological protection measures may be a more efficient means of establishing exclusivity than a property rights system.

A potential difficulty with this analysis lies in the extent to which copyright law is designed to minimise the particular costs involved in establishing property rights in copyright material. As explained in Chapter 3 of this paper, the copyright system entails allocative costs that result from setting prices above marginal cost. It could be argued that relying on contractual arrangements to confer exclusivity has the potential to increase allocative costs by overriding the limits to exclusivity established by copyright law. Unless the copyright owner has substantial market power, however, this reasoning would seem misplaced. Copyright owners have incentives to maximise their returns from copyright products. At [3.4] above, it was explained how price discrimination can be used to achieve this objective. As illustrated by the facts under consideration in *ProCD*, customised contracts can be used to segment the market and facilitate price discrimination. As Friedman explains, contractual price discrimination is likely to result in greater dissemination of copyright material than the statutory limits set by copyright law:

> The more flexible the pricing options, the easier it is for the seller to charge a high price to the high-volume, high-value user, and a low price to the low-volume, low-value user, capturing revenue from the former without losing sales to the latter. The seller of a database designed to charge by the query can and will make it available both to the casual user, who uses a few dollars' worth of queries a month, and to the commercial user, who uses a few thousand dollars' worth a month. The same seller, restricted to the terms of copyright, including the doctrine of first sale, finds that he must charge a single price to all users for unlimited use – and sets that price at a level that eliminates the casual user.[330]

Analysis of the extent to which EULAs should be enforceable against third parties requires that consideration be given to a different trade-off between contract and property rights. From the point of view of the copyright owner, relying purely on contractual protection has the disadvantage that the agreement cannot be enforced against third party transferees. If the agreement is not enforceable against a third party, then restrictions in a EULA have no effect in relation to that third party, meaning that the copyright owner must resort to protection conferred under copyright law.

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329 As Merges points out, 'Cyberspace does not eliminate all ... sources of transaction costs': Merges (1997) p 116. Thus, while the Internet may reduce the costs of identifying buyers and sellers, and technological protection measures may lower enforcement costs, online transactions do not significantly reduce the costs of negotiating deals or measuring performance.

330 Friedman (1998) pp 1169–1170.

The economic understanding of why contractual rights are not binding on third parties was explained in the analysis of the economic basis for the distinction between *rights in personam* and *rights in rem* at [2.9] above. As emphasised in the recent work of Merrill and Smith, if property rights were not standardised and restricted in number, third parties dealing with the property would face high information costs in determining the nature of the rights. Merges makes essentially the same point when he explains that:

> If the system allows too many bundles of rights that have been modified in idiosyncratic ways, both the speed and certainty of exchange will be diminished. The basic idea is that well functioning markets ... require fairly standardized bundles of rights to work efficiently.[331]

In determining the desirability of restrictions, such as those included in EULAs, binding third parties, the copyright/property trade-off involves balancing the economic benefits of flexible private agreements against the information costs imposed on third parties dealing with non-standardised rights. This suggests that in certain circumstances there may be a case for rights defined by private agreements to be regarded as binding on third parties. In other words, if there is a cost-effective mechanism for notifying third parties of the rights being transferred, this may reduce the information burden to the extent that the benefits obtained from private agreements outweigh the costs of non-standardised rights. In such circumstances, a case may be made for mass market agreements to be construed as licences and not sales. In relation to transactions involving digital information, it may be that mechanisms for informing third parties of the rights defined by licence agreements significantly reduce information burdens. A potential difficulty with the application of this analysis to electronic transactions, however, may result from the ease with which information may be stripped from digital products, leaving third parties unaware of restrictions that may run with the product. A further difficulty, referred to in Chapter 7 below, is that users may remain rationally ignorant of the terms included in a mass market agreement, including terms establishing non-standardised rights.

From the point of view of the economic objectives of the copyright system, then, there may be circumstances in which contractual restrictions are more efficient than copyright. Private agreements may be more efficient than standardised property rights in conferring exclusivity if the transaction costs of entering such agreements are significantly lowered. Furthermore, there may be an economic case for enforcing rights defined by private agreements against third parties if the information costs entailed in dealing with non-standard rights are significantly lowered. Whether or not electronic transactions involving the transfer of digital material are likely to result in sufficiently lowered transaction and/or information costs so as to lead to the wholesale replacement of copyright by contract, or by a combination of contractual licences and technological measures, is still too early to assess – we must wait for developments in emerging technologies and markets. The above analysis, however, suggests that as a matter of principle, there is no inherent conflict between the objectives of the copyright system and the protection of material by contract or, indeed, by mass market licences. In short, the legal and policy issues raised by mass market agreements do not concern the relationship between copyright and contract law. As explained in Chapter 7, the most

[331] Merges (1997) p 122.

important legal and policy issues relating to mass market agreements concern the enforceability of such agreements, which are properly matters for contract law and competition law.

## Chapter 7 – Enforceability of Mass Market Agreements

The economic objective of copyright protection is to promote a socially optimal level of investment in creative material. The previous chapter of this paper explained how, given certain circumstances, private contracts, or a combination of private contracts and technological forms of self-help, may be more efficient than copyright law in achieving this objective. This is not to suggest that the replacement, or supplementation, of copyright by private agreements is entirely unproblematic

The concern usually expressed in relation to this prospect is that the combination of enforceable mass market agreements and technological protection measures will allow suppliers of copyright material to unilaterally force onerous restrictions on users. The fear is that copyright users will be able to access copyright material only on terms dictated by suppliers. A common response to this fear is to argue that legal limits should be placed on the ability of suppliers to impose restrictions on users over and above the degree of control vested in copyright owners under copyright law. This chapter explains that concerns relating to the extent to which suppliers may impose terms on users are appropriately addressed by principles of contract law and competition law, not copyright law and policy.

There are both economic and legal limitations on the ability of suppliers of copyright and non-copyright material to impose terms on users. First, in respect of the economic limitations, the behaviour of suppliers is constrained by the market. Provided there is no concentration of market power, suppliers will compete on the terms and conditions of access offered to consumers, just as much as they compete on price. In a competitive market, consumers may be faced with a variety of product packages, which include price and non-price features of a product. In other words, if a consumer is unhappy with the terms and conditions attached to one product, then he or she will take this into account in deciding whether to a buy a competitive product. Moreover, as Merges points out, the Internet may well improve the ability of users to locate and compare terms and conditions:

> Unless serious third-party harm or constitutional rights are implicated, intellectual property holders should be free to craft contracts as they see fit. Per se rules in this area ... simply do not make much sense. While this is true for all intellectual property to some extent, it seems doubly so for rights in digital content. The low transaction costs in this market make search and negotiation quite easy, which means an alternative source for a given piece of content will almost always exist, thus reducing the chance that a party will have to accept onerous terms.[332]

Nevertheless, the market does not invariably produce an efficient package of price and non-price product features. In the event of market failure, the terms included in a mass market agreement will be less than optimal. Two sources of market failure may lead to less than optimal standard terms in mass market agreements. First, a concentration of market power, or anti-competitive practices such as collusion, may allow suppliers to

[332] *Ibid* pp 126–127.

restrict consumer choice by imposing inefficient terms. Second, to the extent that a consumer has less information in relation to standard terms than suppliers have, there is a tendency for standard terms to inefficiently disadvantage the consumer.

In addition to the constraints of operating in a competitive market, there are legal constraints on the enforceability of mass market agreements outside any restrictions imposed under copyright law. The most important legal restraints are imposed under contract law. The enforceability of mass market agreements is largely a matter of contract law. A mass market agreement is usually only enforceable against an end user if there is a binding contract between the supplier and the end user. At present, there is considerable uncertainty in relation to the legal enforceability of mass market agreements, especially where a user purchases a product from an intermediary, such as a wholesaler or retailer. Furthermore, even if there is a binding contract, the terms of a mass market agreement will not be enforced if they offend against a substantive principle of contract law. In particular, contractual terms will not be enforced if they are unconscionable, under either the equitable doctrine of unconscionability, or its statutory embodiments in the *Trade Practices Act 1974* (Cth) and cognate state and territory fair trading laws. Finally, a mass market agreement is unenforceable to the extent that it breaches competition law, as embodied in Part IV of the *Trade Practices Act 1974* (Cth). Taken together, legal restrictions imposed under contract law and competition law should be capable of dealing with inefficiencies resulting from a failure in markets for standard terms in mass market agreements. This paper therefore argues that the central policy issue relating to the development of mass market agreements for distributing copyright material is not whether restrictions on freedom to contract should be imposed under copyright law. Rather, attention should be focused on whether existing principles of contract law and competition law are adequate to deal with less than optimal standard terms that may be included in mass market agreements.

This chapter examines the enforceability of mass market agreements for the distribution of copyright material. The first section deals with problems relating to the legal enforceability of mass market agreements under both United States and Australian contract law. It explains the significant continuing areas of uncertainty relating to the enforceability of such agreements against end users under current contract law. The second section deals with the economics of standard terms in mass market agreements. It explains the economic benefits of mass market agreements and the circumstances in which standard terms may inefficiently disadvantage consumers. The third section explains the economic function of the contractual doctrine of unconscionability in dealing with standard terms. It examines the extent to which the doctrine of unconscionability can be used to address market failure that results in inefficient standard terms. The final section of the chapter explains the application of competition law to mass market agreements for the distribution of copyright material. It further examines some specific difficulties in the application of competition law principles to information products, such as computer software.

## 7.1 Legal Enforceability of Mass Market Agreements: Formation of Contracts

Mass market agreements raise considerable difficulties in relation to the application of traditional principles of contract law. The legal enforceability of mass market agreements has been the subject of a number of decisions under United States law, but there has been a dearth of decisions under Anglo-Australian law. There are significant areas of continuing uncertainty in relation to the legal enforceability of mass market agreements under both United States and Australian contract law. To an extent, the legal uncertainties are related to the complex nature of software products, which commonly include two components: a tangible medium that carries an intangible set of instructions for operating a computer. The hybrid nature of the product creates confusion in characterising attempts by software developers to establish binding licence agreements with end users. The confusion concerns whether the attempted agreement relates to the tangible medium, the intangible information (which may be protected by copyright), or the product as a whole.

This section of the paper deals with the difficulties raised by the application of traditional principles of contract law to mass market agreements. It explains how the analysis of the application of contract law depends largely on the nature of the agreement under consideration, including whether the agreement is an attempted shrinkwrap, clickwrap or browsewrap licence. It further explains how the legal analysis depends on whether there is a direct relationship between the copyright owner and the end user, or whether the copyright product is sold through an intermediary, such as a wholesaler or retailer. The section first deals with the main decisions on enforceability under United States law. It then examines the legal issues arising from the application of Australian contract law to mass market agreements.

### 7.1.1 The United States Decisions

Decisions on the enforceability of mass market agreements under United States law must be treated with a degree of caution in Australia because they are decided under the United States Uniform Commercial Code (UCC), which establishes principles that differ from Australian contract law. Nevertheless, as the great majority of cases on enforceability have arisen under United States law, and as the general legal principles bear some similarity to Australian contract law, the United States decisions shed some light on the legal issues that arise in determining whether a mass market agreement is enforceable.

The first decisions of the United States courts dealt with traditional shrinkwrap licences that accompanied the sale of software products. The legal issue considered by the courts was whether the terms of a shrinkwrap licence were part of a binding contract between the software developer and a reseller or user. In particular, the courts were required to decide whether the reseller or user had agreed to the terms of the licence. The issue of whether a transfer of software is properly characterised as a sale of a product or a licence is a fundamental tension underlying most of the decisions, but a tension that the United States courts have rarely explicitly addressed. A rather obvious point to emerge from the decisions, however, is that if there is no objective agreement between the parties as to the nature of the agreement – that is, that the transfer is a licence agreement – the agreement cannot be construed as a licence rather than a sale.

In *Step-Saver Data Systems Inc. v Wyse Technology*,[333] Step-Saver sold a suite of software that included programs produced by other developers. Step-Saver placed telephone orders for the software products, which were then delivered packaged in a shrinkwrap licence. The licence included a broad disclaimer of warranty. When problems emerged with the software, Step-Saver sought recourse against a developer, who relied on the disclaimer. The Third Circuit Court of Appeals held that the terms in the shrinkwrap licence did not form part of the contract between the developer and Step-Saver. It held that a contract for sale of the software was concluded by the delivery of the product, the terms of the contract essentially being those agreed over the telephone. On this analysis, the central issue in the case was whether or not the initial sale agreement had been modified or replaced by the terms of the shrinkwrap licence, the question being resolved by the application of principles designed to deal with the so-called 'battle of the forms'. Under United States law, a special provision of the UCC modifies the common law principles developed for resolving the 'battle of the forms'. The provision, found in section 2-207 of the UCC, essentially establishes that a proposal to modify the terms of an agreement by, for example, a conditional acceptance, is not effective in the absence of express assent. In this case, the court held that Step-Saver did not assent to the terms of the shrinkwrap licence, mainly because there was insufficient notice for the acceptance to be made conditional on agreement to the licence terms. In reaching this conclusion, the court appeared to be influenced by the extent to which the licence attempted to introduce a disclaimer following formation of the contract and without sufficient notice of the term. In such circumstances, opening a shrinkwrap licence did not amount to express assent to the terms of the licence.

A similar fact situation arose in *Arizona Retail Systems Inc. v The Software Link Inc.*[334] In that case, Arizona Retail Systems (ARS) placed telephone orders for software and, in a dispute concerning the performance of the product, the software developer sought to rely on a disclaimer in the shrinkwrap licence. The facts differed slightly from those before the court in *Step-Saver*, in that ARS initially ordered an evaluation version of the software, and agreed to purchase the copy of the software accompanying the evaluation version only after evaluating the software. Thereafter, ARS proceeded by ordering copies of the software over the telephone. The distinction between the purchase of the copy accompanying the evaluation version following use of the software and the subsequent telephone purchases indicates the importance of the time at which a contract is formed. The court held that, in relation to the evaluation copy, the contract was not formed until after ARS had opened the shrinkwrap licence. In other words, the contract was not formed until ARS communicated its decision to purchase the copy accompanying the evaluation version to the developer. In relation to this copy, the court held that there was sufficient notice for the terms of the shrinkwrap to be included in the contract. In relation to the subsequent purchases, however, the court essentially adopted the reasoning in the *Step-Saver* decision. It therefore held that a contract of sale was entered into upon delivery of the product pursuant to a telephone order, and that there was no

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[333] 939 F 2d 91 (1991).

[334] 831 F Supp 759 (1993).

express assent to the terms of the contract being modified by the shrinkwrap licence. The effect of the decisions in *Step-Saver* and *Arizona Retail Systems* was that the terms of a shrinkwrap agreement were likely to be unenforceable unless the agreement was expressly drawn to the attention of a purchaser.

In the *ProCD* decision, referred to at [6.7] above, Easterbrook J adopted a quite different legal analysis from the courts in *Step-Saver* and *Arizona Retail Systems*. There were, nevertheless, potentially significant differences between the factual circumstances in *ProCD* and those before the courts in the previous two decisions. First, in *ProCD* the database was purchased from a retail outlet, and not by means of a telephone order. Second, in addition to the shrinkwrap licence in which the database was packaged, once the database was loaded onto a user's computer, a screen was displayed requiring the user to indicate agreement to the terms of the licence agreement by 'clicking', before the program could be operated. In other words, *ProCD* concerned a clickwrap licence, as well as a shrinkwrap licence. Third, the licence provision at issue in *ProCD* was a restriction on resale, not a disclaimer of warranty.

As explained at [6.7], Easterbrook J expressly refrained from determining whether the transfer amounted to a licence or a sale. For the purposes of the decision, however, he regarded the transaction as a conventional sale of goods. He distinguished *Step-Saver* on the basis that whereas there was a series of proposals and counter-proposals in that case – a 'battle of the forms' – on the facts before him there was only one transaction, a sale of software. Easterbrook J characterised the transaction as an offer made conditional upon acceptance of the terms of the licence, which was accepted by Zeidenberg retaining the software after having the opportunity to read the terms. The shrinkwrap licence at issue, like most mass market agreements, preserved the ability of a purchaser to return the product if he or she rejected the terms. Easterbrook J regarded this as significant maintaining that:

> Notice on the outside, terms on the inside, and a right to return the software for a refund if the terms are unacceptable (a right that the license expressly extends), may be a means of doing business valuable to buyers and sellers alike.[335]

In other words, Easterbrook J held that an opportunity to inspect the terms, followed by retaining the product after having a chance to return it, was sufficient to indicate consent to the terms. Furthermore, he expressed a general preference for terms to be determined by competition in the marketplace rather than by intervention by the courts:

> Terms of use are no less a part of "the product" than are the size of the database and the speed with which the software compiles listings. Competition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy.[336]

Easterbrook J therefore concluded that the fact that a purchaser was not made aware of the terms of the agreement at the point of sale did not vitiate consent to the licence terms. Following this analysis, then, most shrinkwrap and clickwrap licences which

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335 86 F 3d 1447, 1451 (1996).

336 86 F 3d 1447, 1453 (1996).

involve consumer purchases, rather than commercial negotiations relating to contractual terms, will be enforceable.

The most recent development in mass market licensing has been the use of browsewrap licences. In *Specht v Netscape Communications Corp.*,[337] Netscape made free Internet software available for downloading from its website. The web page from which the software was available included a hyperlink to a page containing the terms of the Netscape software licence agreement. There was no need to indicate acceptance of the agreement, for example, by clicking on a button, before downloading the software. A number of plaintiffs brought proceedings alleging that the software collected user information concerning Internet activities in breach of United States federal privacy laws. The licence agreement included an arbitration clause. Netscape sought to rely upon the agreement to compel arbitration in accordance with the clause. The District Court for the Southern District of New York was therefore required to determine whether the licence agreement was a binding contract.

The court held that although the software was made available free of charge, the same principles should be applied for determining whether the terms of the agreement were binding as for any standard sale of goods. In determining the issue, the court distinguished between shrinkwrap and clickwrap licences, on the one hand, which require a purchaser to take some affirmative action manifesting assent before using the product, from the browsewrap licence before the court, which did not require any action before downloading the software. The court rejected the argument that the act of downloading the software indicated consent, observing that the main purpose of downloading was to obtain the product. Moreover, there was no clear wording on the website requiring a user to agree to the licence agreement before downloading the software. The court therefore concluded that, on the facts before it, there was no binding agreement between the parties as there was no meaningful consent.

As explained at [6.5] above, whether a EULA should be characterised as a sale or a licence arose directly in *Softman Products Company v Adobe Systems Inc.*[338] In that case, Softman distributed Adobe software to the public by means of a website. In doing so, Softman distributed individual pieces of software that were originally sold by Adobe as part of a bundled suite. The Adobe software was accompanied by a EULA, in the form of a clickwrap licence, which included a term that prohibited the transfer of unbundled copies of the software. Adobe sought an interlocutory injunction to prevent the unbundled distribution of the software, claiming copyright infringement and breach of the EULA. The District Court for the Central District of California held that there was no copyright infringement and no binding licence agreement between Adobe and Softman. In reaching this conclusion, the court held that the transfer of a software product was, properly construed, a sale of goods, in the form of the copy of the software, and not a licence.[339] On this analysis, the distribution of unbundled software did not infringe

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[337] 150 F Supp 2d 585 (2001).

[338] 171 F Supp 2d 1075 (2001) .

[339] The decision of the court in *Softman* on this issue is far from conclusive, as other courts in the United States have held that a software transaction is a licence, not a sale: see, especially, *Adobe Systems Inc. v One Stop Micro, Inc.* 84 F Supp 2d 1086 (2000).

copyright as, under the United States first sale doctrine, the exclusive rights of the copyright owner extend only to the first sale or distribution of a copyright product. Furthermore, the court held that the terms of the EULA could not transform the transaction into a licence because there was no binding contract between Adobe and Softman. It concluded that there was no contract because Softman did not assent to the terms of the EULA. The Adobe software was distributed in boxes with a notice indicating that the product was subject to a licence agreement, but no hard copy of the agreement was included in the box. Instead, the end user was required to indicate consent to the EULA only during installation of the software. As Softman merely distributed the software, and had never installed the product, the court held that it had not assented to the terms of the EULA. In other words, the court concluded that the notice on the outside of the box, without an opportunity to read the terms of the EULA, could not, without more, bind an end user. The decision therefore does not deal with the position of an end user who has an opportunity to inspect the written terms of a EULA included with the product or who indicates acceptance to a clickwrap licence during installation, both of which had been held sufficient to indicate assent by Easterbrook J in *ProCD*.

### 7.1.2 Australian Contract Law

Similar issues arise in determining the enforceability of mass market agreements under Australian law as arise under United States law. The two underlying legal issues are whether the terms of a mass market agreement are part of a contract between a copyright owner and an end user and, where the product is purchased from an intermediary, whether there is a binding contract between a copyright owner, such as a software developer, and the end user. In the absence of Australian case law directly addressing the enforceability of EULAs, reliance must be placed upon analogies drawn from decisions dealing with comparable fact situations. It must always be borne in mind that, given the variety of mass market licences and of the circumstances in which copyright products are transferred, the legal outcomes will, in large measure, depend upon the particular facts of individual cases.

In determining whether the terms of a EULA, such as a shrinkwrap licence, are part of a contract between a copyright owner and an end user, arguably, the most relevant line of authority is the so-called ‘ticket’ cases. The conventional analysis of contract formation in the ‘ticket’ cases is that the issue of the ticket constitutes an offer that is accepted by the purchaser not objecting to the terms after having a reasonable opportunity to consider them. For example, an offer may be made by an automatic car-parking machine, which is accepted by conduct, such as entering the car park,[340] or by taking the ticket without objecting to the terms.[341] Difficulties may arise as a result of attempts to incorporate terms into the contract by referring to additional terms on the ticket, which are then set out in full in a separate document. The courts have generally held that the

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[340] See, for example, *Thornton v Shoe Lane Parking Ltd* [1971] 2 QB 163.

[341] See, for example, *MacRobertson Miller Airline Services v Commissioner of State Taxation (WA)* (1975) 133 CLR 125; *Oceanic Sun Line Special Shipping Co Inc v Fay* (1988) 165 CLR 197. Under an alternative analysis, an offer may be made by the customer, which is then accepted by the issue of a ticket: see, for example, *Parker v South Eastern Railway Co* (1877) 2 CPD 416; *Causer v Browne* [1952] VLR 1.

detailed terms are enforceable provided reasonable notice of the terms has been given prior to contract formation, or that the ticket is not returned following an opportunity to read the terms.[342] The central legal issue has been whether notice of the terms has been sufficient for them to be incorporated prior to formation of the contract. The degree of notice depends, to an extent, upon the nature of the term sought to be enforced. In particular, the courts are reluctant to enforce broad limitations on liability without sufficient notice.[343] For example, the terms limiting liability must usually be supplied, it being insufficient that the terms are merely made available on request.[344] Furthermore, notice of terms must be given prior to formation of the contract, not after performance.[345] On the other hand, there is no requirement for the terms to actually have been read or understood by the purchaser.[346]

Applying these principles to common forms of EULAs, it would seem that there should be little difficulty in enforcing the terms of a licence where, for example, software is made available online and the purchaser must indicate acceptance of the terms by taking some positive action, such as clicking approval before downloading. In such cases, the end user has been given an opportunity to review the terms prior to contract formation. The enforceability of terms included in a shrinkwrap or clickwrap licence where the detailed terms are available only after purchase – for example, where copies are purchased from a retail outlet is less certain. In such cases, the terms are more likely to be enforceable if they are clearly brought to the attention of the purchaser by a notice on the packaging and the purchaser has the opportunity to return the product after reading the detailed terms. In the case of a browsewrap licence, where there is no necessity to view the terms prior to downloading, there must be considerable doubts in relation to the enforceability of the terms, especially if notification of the terms on the web page from which the product is available is not especially clear or prominent.

No English or Australian decisions directly address the issue of whether a mass market agreement constitutes a sale of goods or a licence. The issue did, however, arise before the Scottish High Court in *Beta Computers (Europe) Ltd v Adobe Systems (Europe) Ltd*.[347] In that case, Informix produced software which was sold by Beta to Adobe, following a telephone order. The software was shrinkwrapped with a notice stating that opening the package constituted agreement to the licence terms. Adobe returned the software without opening the package, whereupon Beta refused to accept the software and brought an action for payment of the price. The court held that Adobe could return the product, as the contract to supply the software did not become enforceable until the end user accepted the licence terms.

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342 See, for example, *Parker v South Eastern Railway Co.* (1877) 2 CPD 416.

343 See, for example, *Balmain New Ferry Co. Ltd v Robertson* (1906) 4 CLR 379; *Thornton v Shoe Lane Parking Ltd* [1971] 2 QB 163; *Sydney City Council v West* (1965) 114 CLR 481.

344 *Oceanic Sun Line Special Shipping Co. Inc. v Fay* (1988) 165 CLR 197.

345 See, for example, *DJ Hill & Co. Pty Ltd v Walter H Wright Pty Ltd* [1971] VR 749; *Eggleston v Marley Engineers Pty Ltd* (1979) 21 SASR 51.

346 See *China Ocean Shipping Co. Ltd v PS Chellaram Co. Ltd* (1990) 28 NSWLR 354 at 394–5 per Kirby P.

347 (1996) 35 IPR 147.

In his reasoning, Lord Penrose directly addressed the issue of the proper characterisation of a software licence. In doing so, he was concerned to identify the subject matter of a sale of software. He concluded that the subject matter was not the tangible medium, nor the information carried by the medium, but 'a complex product comprising the medium and the manifestation within it or on it of the intellectual property of the author ... in the form of the program material contained'.[348] Lord Penrose therefore rejected the suggestion that a sale of software involved two separate contracts, consisting of a contract to supply the tangible medium and a separate licence to use the software. Instead, he held that there was a single *sui generis* contract for the supply of software that included elements of a contract for sale of the tangible medium and of a licence to use the software. This analysis would, however, seem to defeat the purpose of a shrinkwrap licence, which is essentially designed to establish a contractual relationship between the copyright owner and an end user. In other words, Lord Penrose needed to explain how the terms of a mass market licence could be incorporated into a contract for the supply of software. He dealt with this issue by concluding that the contract was not formed, and therefore not legally enforceable, until the user accepted the licence terms. An important factor leading to this conclusion seemed to be the extent to which the parties could be said to be aware of the common practice of copyright owners seeking to impose conditions on end users by means of software licences. The construction of the transaction as a contract for supply of software, however, left the court with the issue of the extent to which the copyright owner could enforce the terms of a contract between the supplier and an end user. This does not present a problem under Scottish law, where the doctrine of *jus quaesitum tertio* allows a third party to directly enforce a contractual provision in its favour.

The 'single contract' theory advanced by Lord Penrose provides little assistance to the copyright owner under English or Australian contract law, however, as there is no general common law doctrine that allows for third party enforcement of terms included in a contract between two other parties. Given that the transfer of the software from the copyright owner to an intermediary, such as a supplier, will not usually be subject to a EULA, a copyright owner can enforce the terms of a licence agreement against an end user only if there is a separate contract between the owner and the end user. The difficulty of establishing a contractual relationship between the copyright owner and an end user, where software is sold by a third party supplier, represents the most significant legal barrier to the enforceability of software licences under Australian law. The existence of a separate contract between a copyright owner and an end user is difficult to establish because the separate agreement does not appear to be supported by consideration.

The related doctrines of English contract law that a contract can only be enforced by a person who has given consideration (the doctrine of consideration) and that only a party to a contract can enforce it (the doctrine of privity) were authoritatively stated by Lord Haldane in *Dunlop Pneumatic Tyre Co. Ltd v Selfridge & Co. Ltd*.[349] The consideration supporting a contract between a retailer and an end user is the same as that supporting any sale of a product: the end user pays the purchase price in return for supply of the

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[348] (1996) 35 IPR 147 at 154.

[349] [1915] AC 847.

product. It is much more difficult to find consideration supporting a contract between the copyright owner and an end user. There have, nevertheless, been attempts to interpret the breaking of a shrinkwrap licence as involving an exchange, the copyright owner consenting to the use of software in return for the end user agreeing to comply with the licence terms.[350] The difficulty with this analysis is that it is hard to see how the copyright owner has any power to control the use of the software once the user has purchased the product under a contract of sale. In other words, it would seem that a user would have a right to use the software under the contract of supply. If there is no binding contract between the copyright owner and the end user, then the doctrine of privity of contract would seem to prevent the owner enforcing the terms of a software licence, even if such terms were incorporated into the supply contract. As with the analysis of consideration, there is a degree of artificiality in attempts to circumvent the doctrine of privity, such as interpreting the supplier as an agent of the copyright owner.[351]

Given that Australian courts have yet to definitively rule on the enforceability of mass market licences, legal analysis of the issues is necessarily speculative. This is because EULAs have features that set them apart from other contractual arrangements. Furthermore, as Lord Penrose pointed out in *Beta v Adobe*, the analysis of contract formation is heavily dependent upon the facts of the individual case.[352] The clearest example of circumstances in which there is likely to be a binding contract between the copyright owner and an end user is where the owner supplies the software directly to the user, for instance, in an online transaction, and the user is required to indicate assent to the EULA before the software can be downloaded. Where the software is supplied to the user by an intermediary, however, the ability of the copyright owner to enforce a software licence is quite uncertain. Moreover, if there is insufficient notice of the terms of a EULA, such as a browsewrap licence that does not require the user to indicate assent before downloading the software, then the terms of the licence are unlikely to form part of any contract with an end user.

## 7.2 Enforceability of Mass Market Agreements: Economics of Standard Form Contracts

Mass market agreements, such as EULAs, are examples of standard form contracts that are offered to consumers on a 'take-it-or-leave-it' basis. There is nothing novel about mass market standard form contracts. In an economy characterised by mass-produced goods and services, commerce could not take place without standardised mass market

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[350] See, for example, Henry Carr and Richard Arnold, *Computer Software: Legal Protection in the United Kingdom* (2nd ed., Sweet & Maxwell, London, 1992) p 159.

[351] Whether the immediate supplier of a product is the agent of the copyright owner depends, of course, on the nature of the agreement between the copyright owner and the supplier.

[352] Lord Penrose maintained that 'It would be misleading to generalise, and to deal with the arguments as if they extended to all forms of software and all forms of transaction which might be brought to the notice of the court': (1996) 35 IPR 147 at 153.

agreements.[353] Mass market agreements, in which the consumer purchases a product on terms offered by the manufacturer or supplier, and where the terms are often fully accessible to the consumer only following purchase, are ubiquitous. As Gomulkiewicz and Williamson point out:

> Parties seldom, if ever, negotiate the contracts they sign to rent a video, to acquire a credit card, or to borrow money to purchase a home. In reality, a negotiated contract is atypical in the mass market context; most transactions are "take it or leave it".[354]

The common objection to standard form contracts is that they are imposed on consumers. From an economic perspective, there are two aspects to this common complaint. First, it assumes that manufacturers or suppliers have the ability to unilaterally impose terms on consumers. But a manufacturer or supplier can usually only impose terms on consumers if it has market power. In practice, standard form contracts are just as prevalent in competitive markets as in markets characterised by a concentration of market power. To this extent, then, the mere fact that a product is offered on a 'take-it-or-leave-it' basis says nothing about underlying market structure.[355] Second, there is an assumption that the mutual benefits to be derived from freedom of contract are possible only if there is negotiation resulting in a voluntary exchange. This criticism misunderstands the economic justification for standard form agreements. Standard form agreements promote efficient contracting by reducing the transaction costs involved with negotiating individual bargains in the context of the mass supply of standardised products. As Goodman points out, standard form contracts can benefit both producers and consumers:

> Since the forms can be customized, operations are simplified and costs reduced to the advantage of all concerned. As the fruits of the labor of the skilled drafter become available throughout the business, customers and personnel are released from the details involved in drafting contract terms. Costly time and skill can then be devoted to a class of transactions, rather than being spent on individual transactions. Furthermore, since "judicial interpretation of one standard form serves as an interpretation of similar forms," standardization promotes the accumulation of judicial experience.[356]

Provided there is competition in relation to the terms included in standard form contracts, then, the adoption of standard terms on an industry-wide basis, such as in the software industry, may be explained by the same forces that result in the standardisation of products. In other words, competition should operate to force suppliers to choose the most efficient terms.[357] Thus, absent market failure, competitive pressures should lead to

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353 In 1971 Slawson maintained that standard form contracts account for more than 99% of all contracts: see W David Slawson, 'Standard Form Contracts and Democratic Control of Lawmaking Power' (1971) 84 *Harvard Law Review* 529 at 529.

354 Gomulkiewicz and Williamson (1996) pp 343–344.

355 See Trebilcock (1993) p 119.

356 Goodman (1999) p 325. As to the efficiency of standard form contracts, see further Richard L Hasen, 'Efficiency Under Informational Asymmetry: The Effect of Framing on Legal Rules (1990) 38 *UCLA Law Review* 391; Hillman and Rachlinski (2001).

357 As Schwartz and Wilde point out '... if enough consumers comparison shop to make it profitable for firms to compete on price and quality, firms are also likely to compete on terms': Alan Schwartz and Louis L

standard form terms that result in mutually beneficial exchanges, eliminating the need for voluntary negotiated exchanges. The problem, however, is that consumer transactions are characterised by persistent market failure in the form of information asymmetries between suppliers and consumers.

There are clear advantages for suppliers, in the form of reduced costs, in adopting standard terms. Standard terms may also allow consumers to economise on bargaining costs. Nevertheless, competition will force the adoption of efficient terms only if consumers have sufficient information to reject terms they do not wish to accept.[358] This is unlikely in most consumer transactions, as it is costly for consumers to acquire and process information about contractual terms. Rational consumers are therefore likely to agree to many contracts without investing in discovering and evaluating information about contractual terms, many of which may be difficult to understand in any case. In other words, in transactions involving the sale of software or other information products, consumers will often agree to the terms of a clickwrap licence without reading the terms.

Imperfect consumer information relating to standard terms may well result in standard form contracts inefficiently advantaging suppliers over consumers. As Hillman and Rachlinski explain:

> Businesses understand the true risks of contracts better than consumers, and hence can include terms in the form that are much more favorable to them than consumers know or appreciate. In effect, businesses have incentives and opportunities both to allocate the risks of the contract efficiently and to impose hidden risks on consumers.[359]

In some markets, the adoption of inefficient terms may be inhibited by a small group of informed consumers who aggressively negotiate over standard terms.[360] In most cases, however, this is unlikely to occur. First, consumers are faced with a collective action problem in that, for any given consumer, the costs of monitoring and negotiating over standard terms is likely to outweigh the benefits.[361] This means that each individual consumer has an incentive to free-ride off the activities of others, resulting in ineffective monitoring of standard terms. Second, if it is possible to separate aggressive consumers from the majority of consumers, the supplier can simply ‘contract term discriminate’, by offering better terms to bargain-seeking consumers.[362]

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Wilde, ‘Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis’ (1979) 127 *University of Pennsylvania Law Review* 630 at 660.

[358] As Clarke points out ‘... contracts will produce efficient results only if the form-taker has the information necessary to price each contract term by comparing the discounted present value of the future “service stream” it will receive from the product and the discounted present value of the sum of outlays over time for purchase, maintenance, repair, and rights enforcement’: Leo L Clarke, ‘Performance Risk, Form Contracts and UCITA’ (2001) 7 *Michigan Telecommunications and Technology Law Review* 1 at 23.

[359] Hillman and Rachlinski p 12.

[360] See Trebilcock (1993) p 120.

[361] *Ibid.*; Hillman and Rachlinski (2001) p 18.

[362] See Trebilcock (1993) *ibid;* Victor P Goldberg, ‘Institutional Change and the Quasi-Invisible Hand’ (1974) 17 *Journal of Law and Economics* 461.

Persistent information asymmetries between suppliers and consumers result in two main forms of inefficiency in standard term contracts. First, the inability of consumers to distinguish between beneficial terms and disadvantageous terms is likely to result in standardisation on terms unfavourable to consumers. This is an example of a general economic concept known as adverse selection. Second, information asymmetries in relation to product performance are likely to result in an inefficient allocation of performance risk between suppliers and consumers.

The problem of adverse selection, or hidden information, is also known as the 'lemon's problem' or 'lemon's equilibrium', after an influential article by Nobel prize-winner George Akerlof, in which the concept was first generalised to consumer transactions.[363] Akerlof's article pointed out how information asymmetries could result in high-quality products being driven out by poor-quality products. For example, in the used car market, consumers will usually have insufficient information to distinguish between high-quality cars and poor-quality cars, or 'lemons'. As it is impossible for a purchaser to know whether or not a car is a 'lemon', consumers will discount the price they are willing to pay to take into account the possibility of the car being a lemon. This will mean that sellers of good-quality cars will not be able to obtain the full value of the car, but that lemons will be able to be sold for the same price as quality cars. To the extent that the information asymmetry between sellers and buyers cannot be overcome, the used car market will become a market for lemons. Similarly, purchasers of products offered on standard terms are likely to base choices primarily on comparative prices, rather than the terms on which the product is offered.[364] This suggests that suppliers who offer a product on terms beneficial to consumers will be unlikely to obtain the full value of the product. As buyers will not pay full value to suppliers offering advantageous terms, such suppliers may be forced out of the market and consumer contracts are likely to be standardised on terms that inefficiently disadvantage consumers.[365] This tendency may be especially significant in the context of transactions in which the terms of a standard form contract serve to define the product, such as mass market licences that limit the use of a computer program or other information product. Furthermore, the tendency to favour suppliers may be exacerbated to the extent that standard terms are drafted by lawyers, with suppliers having less than perfect information about terms included in a standard form contract. The incentives facing a lawyer are likely to be quite different from those facing the supplier – they will essentially be to minimise the possibility of liability for the client as much as possible.

One important function of contracts is to allocate performance risks between the parties. An efficient allocation of performance risk would result in liability resting with the party that is best placed to avoid the risk. For example, the supplier of a consumer product is best placed to avoid the risk of inherent defects in the product, whereas the consumer is

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[363] George A Akerlof, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84 *Quarterly Journal of Economics* 488.

[364] See Victor Goldberg, 'Institutional Change and the Quasi-Invisible Hand' (1974) 17 *Journal of Law and Economics* 461.

[365] For the application of the 'lemon's' problem to standard form contracts, see Richard L Hasen, 'Efficiency Under Informational Asymmetry: The Effect of Framing on Legal Rules' (1990) 38 *UCLA Law Review* 391 at 428–429. See also Richard Craswell, 'Property Rules and Liability Rules in Unconscionability and Related Doctrines' (1993) 60 *University of Chicago Law Review* 1 at 49–50.

best placed to avoid risks associated with maintenance of the product.[366] Usually, however, suppliers will have more information than consumers concerning the performance characteristics of the product and the allocation of risk under the terms of a standard form contract. Moreover, the problems of assessing the performance risk associated with complex products such as computer software may be especially acute.[367] This suggests that asymmetrical information between suppliers and consumers concerning performance risk is likely to result in an inefficient allocation of risk in many standard form contracts.

The inefficient allocation of risk in many standard form contracts may also be explained, in part, by adverse selection.[368] Ideally, the allocation of risk between suppliers and consumers should depend on whether a consumer represents a high-risk or a low-risk, consumers in high-risk groups bearing more of the burden. A supplier may offer warranties to high-risk consumers, but this will be reflected in the price of the product. High-risk consumers may be willing to pay for the insurance provided by a warranty, but the increase in price may deter low-risk consumers from purchasing the product. As suppliers usually have insufficient information to distinguish high-risk from low-risk consumers, standard form contracts must establish a common base level of coverage. This will often be the minimum level of coverage demanded by low-risk consumers, so as not to drive such consumers from the market. Thus, Priest has explained the tendency for standard form contracts to exclude warranties in the following terms:

> Warranty exclusions are a form of product standardization. An exclusion of some element of loss is indistinguishable analytically from the exclusion of, say, magenta and acquamarine as product colors. If the number of consumers willing to purchase machines of unusual colors is very small, it may not be worth the cost for the manufacturer to introduce the colors into the product line. Similarly, if the incidence or magnitude of an element of loss differs greatly between consumers of a product, the market for insurance may not be sufficiently large to justify offering the insurance … In this respect, consumers of the product may be said to have demanded the exclusion.[369]

To the extent that information asymmetries may result in less than optimal standard terms, the law may play a role in protecting consumers from terms that inefficiently burden consumers. There are, nevertheless, considerable difficulties in distinguishing between an efficient level of standardisation and terms that exploit consumers or, in other words, between circumstances in which competitive pressures lead to mutually beneficial exchanges and circumstances characterised by significant market failure. As Hillman and Rachlinski frame the dilemma:

> Courts cannot easily distinguish between terms that create a reasonable arrangement of risks and terms that constitute exploitation of consumers. They lack the same incentives and experiences that induce businesses to identify and distinguish

[366] See, for example, Hillman and Rachlinski (2001) p 10.

[367] See Clarke (2001) p 31.

[368] For detailed consideration of this issue, see George L Priest, 'A Theory of the Consumer Product Warranty' (1981) 90 *Yale Law Journal* 1297.

[369] *Ibid.* pp 1318–1319.

> between sensible practices and opportunities to exploit consumers. Furthermore, courts will always see the issue framed as a dispute between a single consumer and a business, rather than as an aggregate policy that affects the vast majority of consumers and businesses that happily transact with each other. Courts are thus apt to misidentify terms quite frequently.[370]

Furthermore, as Trebilcock points out, it is extremely difficult to determine whether consumers will benefit more from standard contracts that include easy terms at a higher price than from contracts offered on unfavourable terms at a lower price.[371]

The underlying issue, then, is the extent to which market failures resulting in inefficient standard terms must be addressed by legal rules, or are able to be resolved either through the market or by technological developments. It is possible that market mechanisms may reduce the problems associated with some information asymmetries. Priest, for example, has explained how suppliers can adopt contractual provisions that separate high-risk from low-risk consumers. For instance, standard form contracts may extend warranties to low-volume domestic users, but exclude warranties for commercial use. It is also commonly argued that electronic contracting may reduce information disparities. For example, an online contract could include links to documents that explain the terms included in a mass market licence.[372] Moreover, the Internet makes it easier for consumers to locate and compare information concerning products, the reputation of suppliers and the terms of standard form contracts.[373] The potential increase in consumer information, together with the increased importance of reputation in Internet transactions, may restrain businesses from adopting standard terms that disadvantage consumers.[374] To the degree that consumers are able to compare the content of standard form contracts, and to choose between standard terms, there would seem to be less need for judicial scrutiny of consumer contracts. On the other hand, consumers face many of the same problems online as they face offline. Thus, as it is always costly to obtain information, online consumers are as likely to be rationally ignorant of standard terms as are offline consumers. Furthermore, the costs faced by consumers in understanding complex legal terms are hardly affected by the electronic environment. Finally, the ease of discovering information concerning the terms offered by competitors together with network effects are just as likely to result in standardisation of terms within industry sectors as in the proliferation of competitive terms.

The above analysis suggests that standard form consumer contracts are likely to include socially inefficient terms as a result of persistent information asymmetries, and that this form of market failure cannot be completely resolved by market mechanisms or electronic contracting. This means that there remains a role for the courts in refusing to enforce some terms of standard form contracts, or for legislative intervention. In relation to the central issues dealt with in this paper, however, the important point to understand

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370 Hillman and Rachlinski (2001) p 13.

371 Michael J Trebilcock, 'An Economic Approach to the Doctrine of Unconscionability' in Barry J Reiter and John Swan (eds) *Studies in Contract Law* (Butterworths, Toronto, 1980) pp 379–421 at 415.

372 See Clarke (2001) p 28.

373 See Hillman and Rachlinksi (2001) p 40.

374 *Ibid.* p 44.

is that the main problem faced by consumers is not a problem that is appropriately addressed within the framework of copyright law. Rather, the enforceability of mass market agreements dealing with the transfer of copyright material is properly a matter for contract law and, to an extent, competition law. In other words, the important policy issues do not concern the relationship between copyright and contract law, but whether existing contract and competition laws adequately protect consumers, especially in the online environment.

## 7.3 Enforceability of Mass Market Agreements: Application of the Doctrine of Unconscionability to Standard Form Contracts

The principal mechanism within contract law for dealing with unequal bargaining power is the equitable doctrine of unconscionability, now supplemented by provisions of the *Trade Practices Act 1974* (Cth) and state and territory fair trading laws. From an economic perspective, the terms offered in a mass market agreement are analytically identical to the features of a product. If the market for contract terms is performing well, then the standard terms will be efficient. The market for terms in standard form contracts will not work well, however, if there is a market failure in the form of either a concentration of market power or significant deficiencies in consumer information. The economic function of the law of unconscionability, in relation to standard form contracts, is therefore to ensure the efficient functioning of markets for contract terms.[375]

As explained above, a common misapprehension is that the use of standard form 'take-it-or-leave-it' contracts in consumer transactions is an indication that the supplier has market power.[376] As further explained above, standard form contracts are adopted to reduce transaction costs in mass market agreements,[377] and are just as consistent with competitive markets as with a concentration of market power. Whether or not the terms offered are uncompetitive depends upon the availability of alternative products. If, in a competitive market, suppliers compete on both price and non-price aspects of a product package, including contractual terms, then a supplier offering uncompetitive terms will be forced to offer a more competitive product package.[378] The difficulty facing a court required to examine this issue lies in determining whether standardisation is the result of competitive pressures, or a result of market power or collusion. In cases dealing with

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375 See Alan Schwartz, 'Unconscionability and Imperfect Information: A Research Agenda' (1991) 19 *Canadian Business Law Journal* 437 at 439.

376 This common misunderstanding is often repeated by the courts. For example, in *Macauley v Schroeder Publishing Co. Ltd* [1974] 1 WLR 1308 at 1316, Lord Diplock stated that: 'The terms of this kind of standard form contract have not been the subject of negotiation between the parties to it, or approved by any organization representing the interests of the weaker party. They have been dictated by that party whose bargaining power, exercised alone or in conjunction with others providing similar goods and services, enables him to say "If you want these goods or services at all, these are the only terms on which they are obtainable".'

377 As standard terms may be justified over actual consent in the presence of high transaction costs, enforceability of standard terms may be analogised to determining an appropriate liability rule, as opposed to a property rule: see Richard Craswell, 'Property Rules and Liability Rules in Unconscionability and Related Doctrines' (1993) 60 *University of Chicago Law Review* 1.

378 See Trebilcock (1980) p 399.

unconscionability, the courts are generally not well placed to assess issues relating to overall market structure and the extent to which standard terms are the result of market concentration. In such cases, it would be rare for sufficient evidence to be available for a court to make an adequate assessment of issues relating to market structure. This suggests that the courts should exercise caution in deciding whether standard terms are unconscionable because they are the result of an abuse of market power or of collusion.

A much stronger case can be made for courts refusing to enforce standard terms that result from bargaining inequalities attributable to deficiencies in consumer information. The economic issues confronting courts in such cases are, nevertheless, complex. First, as explained above, standardisation on terms unfavourable to consumers may be constrained by a relatively small number of active consumers.[379] It is, however, difficult for a court to adequately assess issues relating to market structure, including issues such as whether a supplier is engaging in 'contract term discrimination', when the court is required to narrowly rule on whether an individual transaction is unconscionable. Nevertheless, it has been suggested that the courts should take into account the extent to which a supplier offers more favourable terms to other groups of consumers, such as consumers who are likely to be more active, in determining whether the terms offered to an individual consumer are unconscionable.[380] Second, even if standard terms are the result of market failure, refusing to enforce the terms is not necessarily an appropriate remedy. As Trebilcock points out, if unfavourable terms are offered as a package in return for a reduction in price, then refusing to enforce the terms may not sufficiently compensate the supplier.[381] In such cases, the court, in effect, is re-making the bargain between the supplier and the consumer. There is little to suggest that the bargain made by a court is likely to be any more efficient than the bargain embodied in a standard form contract.

In sum, then, the doctrine of unconscionability can be used to deal with inefficient standard terms resulting from deficient consumer information, such as terms resulting from adverse selection. The difficulties faced by the courts in determining whether standard terms result from market failure, however, suggest that the courts should exercise caution in refusing to enforce standard terms.[382] Thus it may be that in cases dealing with unconscionability, the courts would be best to focus on issues such as the legibility of standard terms, or whether the terms are likely to mislead consumers, than on difficult issues concerning whether the terms are somehow 'unfair'.[383]

It should also be borne in mind that, in practice, standard terms mean little unless they are enforced, and enforcement against individual consumers is costly. Enforcement may

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[379] *Ibid.* p 413.

[380] Trebilcock (1993) p 120. Such examination should, however, take into account the extent to which differences are cost-justified, which may indicate no more than efficient price discrimination: see Trebilcock (1980) pp 418–419.

[381] Trebilcock (1980) p 416.

[382] As Craswell points out in relation to unconscionability and standard terms 'If courts are likely to do worse than the admittedly imperfect market, [the purchaser's] consent in these cases should still be treated as valid, in spite of his inability to obtain better terms from another seller': Craswell (1993) p 50.

[383] Cf. Trebilcock (1989) pp 416–417.

be especially costly if consumers are located in another jurisdiction. Moreover, in a competitive market, a firm that enforces terms perceived to be unfavourable to consumers is likely to suffer damage to its reputation, which may cost the firm more than the benefits obtained from enforcing the contract. Finally, if there is evidence of systemic market failure, then it may be preferable for legislative action, such as the introduction of mandatory warranties in consumer transactions, than for the issue to be resolved by the courts on a case-by-case basis. At the same time, in determining whether intervention is desirable, it should be acknowledged that the legislature is likely to face similar difficulties to the courts in attempting to second-guess the market. In other words, to the extent that it is impossible to discover consumer preferences, decisions relating to overruling standard terms by, for example, imposing mandatory terms in consumer contracts, are necessarily based on imperfect information.

### 7.4 Enforceability of Mass Market Agreements: Competition Law

From an economic perspective, standard terms in mass market agreements should be enforced if they result in net improvements in social welfare and should not be enforced if they result in net welfare losses. Insofar as standard terms in mass market agreements result from a concentration of market power or collusion they may result in welfare losses. In such cases, given the importance of assessing market structure, and of whether standard terms are the result of the exercise of market power, it may be preferable to deal with the enforceability of standard terms under competition law principles, rather than under the contractual doctrine of unconscionability. This is because the evidence available in competition law proceedings, and the reasoning applied in such cases, is directed largely at examining matters relating to overall market structure and performance. Systemic aspects of market structure are simply unlikely to emerge clearly from cases required to focus on whether or not a court should refuse to enforce a particular contract, or contractual provision, on the basis of unconscionability. On the other hand, competition law cases are particularly expensive to run, and probably beyond the means of most consumers.

The objective of competition law, as set out in Part IV of the *Trade Practices Act 1974* (Cth), is essentially to maintain and enhance competition as a means of maximising social welfare.[384] In *Queensland Wire Industries Pty Ltd v Broken Hill Pty Co. Ltd,* Mason CJ and Wilson J explained the relationship between competition and consumer protection, stating that the:

> ... object of s 46 is to protect the interests of consumers, the operation of the section being predicated on the assumption that competition is a means to that end.[385]

In *QCMA* it was explained that competition occurs in a number of dimensions:

> In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent

[384] See, for example, IPCRC (2000) p 24.

[385] (1989) 167 CLR 177 at 191.

> rivalry in all dimensions of the price-product-service package offered to consumers and customers.[386]

As explained above, terms may become standard across an industry either as a result of competitive pressures leading to the adoption of an efficient package of terms and price, or as the result of an exercise of market power or collusion. In determining whether standard terms in mass market agreements improve or decrease social welfare, the courts must distinguish standardisation that results from competitive rivalry from standardisation resulting from the exercise of market power.

Whether the terms of a mass market agreement breach Part IV of the *Trade Practices Act 1974* (Cth) cannot be sensibly considered in the abstract, as it clearly depends upon the particular circumstances of the agreement, and of the transaction to which the agreement relates. For example, a standard term agreement that results from collusion, provided it has the effect of substantially lessening competition, may amount to an anti-competitive arrangement under section 45. Moreover, a standard term agreement that has an anti-competitive effect in a downstream market, such as an agreement that includes certain restrictions on resale, may amount to 'exclusive dealing' which is prohibited under section 47. Although there is no case law specifically on point, some mass market agreements may amount to a misuse of market power under section 46. In *Melway Publishing Pty Ltd v Robert Hicks Pty Ltd,* the majority of the High Court made it clear that a breach of section 46 depends upon establishing a causal connection between market power and the proscribed anti-competitive purposes, which depends primarily upon a process of economic analysis.[387] Thus establishing that a mass market agreement is in breach of section 46 means establishing that:

- the supplier has market power;
- the market power is exercised to eliminate or damage a competitor, prevent entry or deter or prevent competition; and
- there is a causal connection between the market power and the proscribed purpose.

In the present context, the general point to note is that an agreement will not necessarily breach competition law merely because it results from an exercise of market power, but the agreement must also have some anti-competitive purpose or effect. To a significant extent, the determination of the effect of an agreement on competition must depend upon the specific terms of the agreement under consideration. For example, it is likely to be easier to establish that a blanket prohibition on reverse engineering software will have the effect of deterring entry than that a term limiting liability or excluding warranties does.

Some features of information goods, such as products protected by copyright law, seem to create difficulties for the application of competition law. These difficulties arise irrespective of whether the issue is the relationship between copyright and competition law, on the one hand, or the enforceability of contractual arrangements for the

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386 *Re Queensland Co-operative Milling Association Ltd* (1976) 25 FLR 169 at 188–189.

387 (2001) 178 ALR 253 at 266.

protection of an information product under competition law principles, on the other. The difficulties concern two issues relating to the determination of market power in information industries. First, it is sometimes assumed that copyright products automatically confer a degree of market power because each product is unique. Second, particular care must be used in assessing market power in industries characterised by strong network effects, such as the software industries.

As explained at [3.1] above, intellectual property rights generally create no more concern for competition policy than other forms of property, and usually confer market power only in certain specific circumstances. Nevertheless, it is sometimes presumed that an information product confers market power insofar as it is unique, the reasoning seemingly being that it is impossible for consumers to find substitutes for a unique product.[388] This assumption is, nevertheless, based on a flawed understanding of the economic analysis underlying competition law. Merely because a product can be said to be somehow 'unique' does not mean that the supplier automatically has market power. In competition analysis the essential purpose of defining a market and determining market power is to establish the extent to which a firm has discretionary power, in the sense that it can act unconstrained by competition. As Professor Brunt explained the concept of market power:

> Market power is essentially the power of a firm to "administer" its production and selling policies (for example its prices, its service, its capacity, its techniques) somewhat independently of market pressures: it is the extent to which a firm can "give less and charge more" without its market being undermined by rivals' incursions.[389]

The process of market definition is predominantly instrumental, in the sense that it is directed at establishing the ability of a firm to act independently of market forces, by determining the extent to which there are actual or potential substitutes for the firm's product. The argument that there is a separate unique market for each copyright product, such as a book or computer program, usually defeats the purpose of market definition, in that it reveals nothing of the extent to which the firm is constrained by actual or potential competition. In this respect, it is of the utmost importance to understand that although demand for a particular copyright product, such as a popular film or computer game, may be highly inelastic at a given point in time – meaning that, in the minds of consumers, there are no good substitutes – this does not take into account the extent to which substitutes for the product may develop over time. Professor Brunt explained the importance of 'dynamic' constraints on a firm's behaviour in the following terms:

> Competition is a process rather than a situation. Dynamic processes of substitution are at work. Technological change in products and processes, whether small or large, is ongoing and there are changing tastes and shifting demographic and locational factors to which business firms respond … Such a vision tells us that effective

[388] See, for example, the decision of the United States Supreme Court in *United States v Loew's Inc* 371 US 38 (1962), in which it was held that 'the requisite economic power for per se condemnation of … [a] … tying arrangement is presumed when the tying product is patented or copyrighted' (at 45).

[389] Maureen Brunt, ' "Market Definition" Issues in Australian and New Zealand Trade Practices Litigation' (1990) 18 *Australian Business Law Review* 86 at 93.

> competition is fully compatible with the existence of strictly "limited monopolies" resting upon some short run advantage or upon distinctive characteristics of a product (including location). Where there is effective competition, it is the on-going substitution process that ensures that any achievement of market power will be transitory.[390]

Particularly in relation to products such as films, popular music and software, then, short run popularity should not be confused with market power. The issue is illustrated by the facts in the New Zealand decision, *Tru-Tone Ltd v Festival Records Retail Marketing Ltd*,[391] in which it was contended that a popular album constituted a separate and unique market.[392] In dismissing this argument, the New Zealand Court of Appeal emphasised the importance of taking into account the possibilities of substitution over time:

> Viewed in relation to product and time the single album definition of market ignores commercial realities. It focuses on short run phenomena. It presents a snapshot rather than a moving picture of continuing commercial activity ... Promotion is undertaken in accordance with normal competitive practice for the purpose of differentiating one album from a whole range of possible substitutes and the evidence of promotion of particular albums by retailers emphasising price concessions belies the argument that purchasers of albums are not price sensitive. The emphasis on product differentiation arises precisely because there is a range of products competing for the consumer's attention. And the movement of albums in and out of the charts and their constantly shifting positions are clear evidence of the manner in which, and the extent to which, substitution takes place.[393]

In sum, then, although an information product may be unique, in the sense that it is so well known or popular that it is difficult to find a substitute at a particular point in time, by itself, this indicates no more than that the product has been successful. From the point of view of competition analysis, what is important is whether there are any barriers to the development of competitive products.[394] Without more, the mere fact that a firm's information product is protected by copyright, or by a degree of contractual exclusivity, is not sufficient to establish that the firm is free from market constraints. On the other

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390 *Ibid.* p 96. The importance of taking a dynamic view of the competitive process was emphasised by Joseph Schumpeter: see Joseph A Schumpeter, *Capitalism and Democracy* (Harper and Brothers, London, 1942). Failure to adequately appreciate the dynamic nature of competition has often resulted in over-zealous enforcement of competition laws in intellectual property industries: see Michelle M Burtis and Bruce H Kobayashi, 'Intellectual Property and Antitrust Limitations on Contract' (2000) *George Mason University School of Law, Law and Economics Working Paper No 00-06*, January 2000, available at http://papers.ssrn.com/paper.taf?abstract-id=210088.

391 [1988] 2 NZLR 352.

392 See also *Broderbund Software Inc. v Computermate Products (Aust) Pty Ltd* (1992) ATPR 41-155, in which Beaumont J held that the relevant market was a national market for educational or entertainment software, rather than for the particular software product.

393 [1988] 2 NZLR 352 at 360 per Richardson J.

394 As the Intellectual Property and Competition Review Committee expressed it: 'To determine whether there was market power, the issue would be whether there were or could readily be given any sunk costs that might be involved in entry) a range of competing portfolios of substitutable products': IPCRC (2000), p 63, fn 107.

hand, the combination of copyright or contractual exclusivity with other restrictions, such as a tying arrangement, may well result in market power.[395]

Particular problems arise in the application of competition law principles to an information product where a degree of exclusivity, such as that provided by copyright protection, is combined with strong network effects.[396] A network effect essentially occurs where consumers are able to obtain more benefits from a product the greater the number of other consumers.[397] For example, the benefits available to a telephone user increase the greater the number of other users connected to the network. A network may be either a real network, such as a telecommunications network, or a virtual network, such as the network of users of a computer operating system.[398]

Competition in industries characterised by strong network effects, such as information industries like the software industry, differs in important respects from competition in more traditional industries. This is because once a network has a critical mass of consumers, a positive feedback effect may develop in which the more consumers who join the network, the greater the advantages, and so on, leading to an inexorable expansion of the network. Economists therefore say that markets characterised by strong network effects may be 'tippy', meaning that they can easily 'tip' in favour of one supplier. If a network has 'tipped' past a certain threshold, consumers may face high switching costs in moving to another product, including the lesser advantages available from smaller competing networks. Such consumers are said to be 'locked-in' to the larger network. The extent to which consumers are 'locked-in' to an established network may insulate an incumbent supplier from competition, in that it is difficult for competitors to overcome the switching costs faced by consumers.[399] The combination of exclusivity, whether by intellectual property protection or contractual exclusivity, with network effects, may create significant barriers to entry for competitors or suppliers of interoperable products. This suggests that, at a minimum, network effects as a source of

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[395] See J Dianne Brinson, 'Proof of Economic Power in a Sherman Act Tying Arrangement Case: Should Economic Power Be Presumed When the Tying Product is Patented or Copyrighted?' (1987) 48 *Louisiana Law Review* 29.

[396] As Rogers points out, 'The application of copyright and antitrust laws to computer hardware, software, and the Internet is particularly complex. Compatibility requirements and network effects may mean that there is a tendency for power to concentrate in the hands of one or a few companies, raising questions about the efficacy of antitrust law': Douglas L Rogers, 'Give the Smaller Players A Chance: Shaping the Digital Economy Through Antitrust and Copyright law' (2001) 5 *Marquette Intellectual Property Law Review* 13 at 17–18.

[397] If market participants are unable to internalise the benefits a network effect is known as a network externality. A network externality may be defined as 'a change in the benefit, or surplus, that an agent derives from a good when the number of other agents consuming the same kind of good changes': SJ Liebowitz and Stephen E Margolis, 'Network Externalities (Effects)', available at http://www.utdallas.edu/~liebowit/palgrave/network.html.

[398] For a good popularisation of the technical literature dealing with network effects, see Carl Shapiro and Hal R Varian, *Information Rules* (Harvard Business School Press, Boston, 1999).

[399] As Shapiro and Varian explain, 'In many information industries, collective switching costs are the biggest single force working in favor of incumbents. Worse yet for would-be entrants and innovators, switching costs work in a nonlinear way: convincing ten people connected in a network to switch to your incompatible network is *more* than ten times as hard as getting one customer to switch': *ibid.* pp 184–185.

market power should be taken into account in the application of competition law to mass market agreements relating to information products. The effect of standard terms that inhibit the development of interoperable products, such as terms restricting decompilation of software products, should be subject to particular scrutiny.[400] At the same time, it should be acknowledged that incumbent firms in markets with strong network effects may be particularly susceptible to competitive pressures over time as, if a competitive network reaches a certain threshold, the incumbent network may slip into a vicious cycle, with users progressively defecting to the competitor, and the market rapidly 'tipping' away from the incumbent.[401]

[400] As explained at [4.2] above, section 47H of the *Copyright Act 1968* (Cth) prohibits agreements that exclude decompilation for interoperability. The Intellectual Property and Competition Review Committee considered limiting this prohibition to firms with market power, which is conceptually attractive. As the Committee pointed out, however, such a restriction would significantly increase the uncertainty in the application of the prohibition: see IPCRC (2000), p 104.

[401] See Shapiro and Varian (1999) p 180.

## Conclusion

The development of, and increasing reliance on, mass market agreements for the distribution of copyright and non-copyright material requires that the relationship between copyright and contract law be reassessed. Traditionally, copyright law has defined the exclusive rights of copyright owners and the permitted uses of copyright material, while contract law has governed the transfer and exploitation of copyright material. The potential for private agreements to replace, or to supplement, copyright law as the means for defining the respective interests of copyright owners and users in copyright material has resulted in concerns that public policy objectives of copyright law will be undermined. In particular, there have been concerns that the balance between the interests of copyright owners and users, often thought to be an important objective of copyright policy, will be jeopardised by private agreements that confer greater rights on copyright owners than does copyright law. The potential for technological measures to effectively confer control over access to material in digital form has given rise to further concerns that the 'copyright balance' may be skewed in favour of copyright owners.

There is legal uncertainty in relation to the extent to which private agreements that exclude, or modify, the limits of copyright protection are permissible as a matter of copyright law. Under United States law, there is uncertainty concerning the extent to which contracting around the limits of copyright protection is permissible under the constitutional doctrine of copyright preemption or the doctrine of copyright misuse. Under Australian copyright law, given the silence of the Copyright Act on the matter, there is some uncertainty concerning the extent to which private agreements may exclude or modify statutory exceptions to copyright infringement. This paper suggests that the legal uncertainties should be resolved by reference to the extent to which restrictions on private agreements are likely to promote the objectives of copyright policy.

To date, there has been no consistent national or international policy response to whether copyright-specific restrictions should be imposed on private agreements. At present, the difficulty of determining whether such restrictions should be imposed is exacerbated by the extent to which it is difficult to predict future developments in markets for digital material and in technologies for protecting such material. The complexity of the policy issues, together with uncertainties relating to emerging markets and technologies, in large measure explains the reluctance of policy-makers to be too prescriptive. For example, in its recent report on the relationship between the United States' 'first sale' doctrine and technological protection measures, the United States Register of Copyrights briefly considered proposals for prohibiting contracts that override 'consumer privileges' in copyright law.[402] While noting that the issue of contract preemption was, strictly speaking, outside the scope of the report, the Register of Copyrights observed that:

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[402] The label 'consumer privileges', which evidently refers to exceptions to copyright infringement such as the United States fair use doctrine is, itself, controversial. As a matter of law, the uncompensated use exceptions are defences to copyright infringement, not 'privileges'.

> ... this issue is complex and of increasing practical importance, and thus legislative action appears to be premature.[403]

In short, it seems far too early to be able to predict whether a combination of market power and technological restrictions is likely to erode consumer choice.

This paper has attempted to clarify the policy issues relating to the relationship between copyright and contract law, in the context of mass market agreements for the distribution of digital material. On the understanding that copyright protection serves important economic objectives, it has presented an economic analysis of the policy issues. In doing so, it has attempted to relate the economic analysis to the fundamental objectives of copyright policy.

Chapter 2 set out the analytical framework used in this paper. It explained why property rights, including intellectual property rights, and freedom of contract, are generally regarded as efficient. It explained that well-defined property rights are generally necessary to ensure efficient levels of investment in productive resources. It further explained the function of freedom of contract in ensuring that mutual benefits are obtained from transactions, and that resources are traded until they reach the highest value user. The chapter outlined the general conditions under which property rights and freedom of contract may not be efficient. For example, property rights are not efficient if the costs of the property rights system, including establishment and enforcement costs, outweigh the benefits. Moreover, freedom of contract is not efficient in the presence of high transaction costs.

Chapter 3 explained that the system of copyright protection is designed to promote an efficient level of investment in the production of copyright material, while minimising the costs of protection. It identified the extent to which setting a single price above marginal cost is likely to result in a less than efficient level of distribution of copyright material. It further explained how price discrimination may, in certain circumstances, provide a partial market-based solution to the problem of minimising the costs of the copyright system.

Chapter 4 examined the benefits and costs of the copyright system in greater detail. It explained that the optimal limits of copyright protection involve complex trade-offs between the benefits and costs of copyright protection. In other words, the objective of the copyright system is not to establish a balance between the interests of copyright owners and users, but to balance the benefits of copyright protection against the costs of the copyright system, including the costs of establishing and enforcing property rights in copyright material. In this sense, the objective of copyright policy is no different from the objective of systems of property rights in tangible material.

Although there are good economic explanations for many of the existing legal limits on copyright protection, there is no basis for assuming that the current limits are optimal. There is even less basis for assuming that the limits should be immutable. Given the complexity of balancing the benefits and the costs of copyright protection, it is unlikely that the legislature has sufficient information to establish optimal balances. It is likely

[403] United States Copyright Office (2001) p 163.

that the balances established under current copyright law are a result of compromises between organised interest groups of copyright owners and users, rather than of a reasoned consideration of the benefits and costs of copyright protection. Furthermore, it is well understood that changes in markets and technologies alter the benefits and costs of systems of property rights, giving rise to a need to modify the relevant property rights over time.

Insofar as the copyright system is designed to further economic objectives, there seems no basis for imposing restrictions on private agreements that exclude or modify the limits of copyright protection. Private agreements are more likely to result in net social benefits than is a rigid adherence to legislatively imposed limits. In particular, insofar as exceptions to copyright infringement are a response to market failure, then private agreements are desirable to the extent that they indicate that a source of market failure, such as high transaction costs, has been removed. Prohibiting private agreements that exclude or modify exceptions to copyright infringement would seem to lower incentives for curing market failure, such as technologies or arrangements that reduce bargaining costs. On the other hand, to the extent that exceptions to copyright infringement serve non-economic policy objectives, there may be a case for imposing restrictions on the extent to which the exceptions can be excluded or modified. If exceptions to infringement are to be made mandatory, however, it is first necessary to identify the non-economic objectives of copyright policy, then confine exceptions to those strictly necessary to promote the objectives.

Chapter 5 explained that it is misleading to frame the policy options as a simple choice between the copyright system and private contractual arrangements. The legal protection of copyright and non-copyright material is much more complex than a focus on the relative merits of copyright protection and private contractual arrangements might suggest. An examination of the benefits and costs of protecting non-copyright material under confidentiality law helps illustrate the complex issues that arise in a system that involves a combination of sometimes interlocking intellectual property rights. In the absence of copyright protection, a system that relied solely on contracts and confidentiality law would result in investment favouring material that is relatively easy to keep secret, including material that is difficult to reverse engineer. The need to preserve relative secrecy would also result in an inefficient level of distribution of material. The policy choice is not, however, confined to the choice between a system that includes copyright protection and a system that relies solely on private contracts and confidentiality law. It is important to understand that the effectiveness of contractual arrangements may be enhanced by technological protection measures, which may promote the dissemination of material and eliminate the costs otherwise involved with retaining secrecy. Moreover, contractual arrangements can be supplemented by copyright protection. From a policy perspective, the relevant comparison is likely to be between the net benefits of a system that includes contractual restrictions, copyright protection and technological measures and a stand-alone copyright system.

Chapter 6 explained how the economic analysis of the relationship between copyright and contract law, in the context of mass market agreements, depends upon an understanding of fundamental economic trade-offs between property and contract. The starting point for the analysis is an understanding of the advantages of private market-based agreements. In the absence of market failure, a private agreement will result in benefits to the parties to the agreement and in net social benefits. In general terms, decentralised private agreements are more likely to promote social welfare than collective decisions embodied in legislation. Nevertheless, collectively determined property rights are generally necessary to ensure an efficient level of production of, and investment in, economic resources, including copyright material. Property rights are, however, welfare enhancing only to the extent that they are less costly than alternative means of establishing exclusivity. In the physical world, property rights will invariably be less costly than entering into contracts to exclude an indefinite class of potential resource users; this would entail prohibitively high transaction costs. Property rights will also be less costly than self-help measures, such as building and policing fences. If transaction costs are significantly lowered, however, private contracts may be a more efficient means of ensuring exclusivity than standardised property rights. Furthermore, the combination of private agreements and technological self-help measures may be more efficient than a property rights system.

The flexibility of private contractual arrangements, as opposed to standardised property rights, allows the parties to optimise the benefits available from a transaction. The effectiveness of contractual restrictions is, however, limited by the extent to which such arrangements are unable to be enforced against third parties. Contractual rights are not binding on third parties because this would amount to allowing private parties to create non-standardised property rights. A proliferation of non-standardised property rights would impose prohibitive information costs on third parties dealing with such rights. If an effective means is developed to minimise the information costs incurred by third parties, however, then there may well be a case for enforcing private agreements against third parties. Thus, if information concerning the rights of the copyright owner is effectively attached to digital material, there may be a case for enforcing mass market licences against third parties. On the other hand, it needs to be borne in mind that users may rationally decide to remain ignorant of rights defined in a mass market licence.

Chapter 7 dealt with the law and economics relating to the enforceability of mass market agreements, such as shrinkwrap and clickwrap licences. It explained that there are economic and legal restraints on the ability of suppliers of copyright and non-copyright material to impose terms on users. The terms attached to material, including terms defining permissible uses, should be seen as part of the product package offered to users. To the extent that there is competition in relation to the package of price and non-price terms offered to users, the ability of suppliers to impose terms on users is constrained. A user may simply choose a more desirable package of price and non-price terms offered by a competitor. Nevertheless, standard terms in mass market agreements will not be efficient in the event of market failure. It is commonly assumed that standard form contracts present a problem to the extent that they do not result from a voluntarily negotiated agreement between a supplier and a consumer. This is to misunderstand the economic advantages of standard form agreements, which offer significant savings in the form of reduced transaction costs in negotiating individual bargains for the supply of standardised products.

There is, nevertheless, likely to be a failure in the market for standard terms as a result of deficiencies in consumer information relating to the terms. As it is costly for consumers to acquire and process information concerning contractual terms, rational consumers are likely to agree to standard form contracts without acquiring information concerning the terms. Consumers are therefore likely to base decisions on whether to purchase a product on comparative prices, rather than on the standard terms attached to the product. This presents what is known as an adverse selection problem: as suppliers are unable to recover the full value of terms offered to consumers, standard form contracts are likely to become standardised on terms that inefficiently disadvantage consumers. To an extent, market failure resulting from deficient consumer information may be dealt with under established legal principles, specifically the contract law doctrine of unconscionability. The economic issues facing courts required to determine whether standard terms are attributable to deficiencies in consumer information are, however, complex. Moreover, refusing to enforce terms on the basis of unconscionability essentially amounts to the court re-making the bargain between the supplier and the consumer. To the extent that existing contract law is unable to deal with systemic market failure resulting from deficiencies in consumer information, there may be a role for legislative intervention in the form of consumer protection laws.

There may also be a failure in the market for standard terms insofar as mass market agreements result from a concentration of market power or collusion. Standard terms that result from market concentration may be found to breach established doctrines of contract law, especially the doctrine of unconscionability. In determining whether a specific standard form contract is unconscionable, however, the courts will have insufficient information relating to overall market structure to be able to distinguish standard terms that are the result of market concentration from standard terms that result from competition between suppliers. Failure in the market for standard terms resulting from market concentration or collusion is therefore more appropriately dealt with under principles of competition law.

In competition law cases, the courts are better placed to deal with systemic features of overall market structure. The extent to which standard form contracts may breach specific provisions of Part IV of the *Trade Practices Act 1974* (Cth) cannot be dealt with in the abstract. The application of competition law to mass market agreements relating to the distribution of copyright and non-copyright material raises issues that also arise in the context of the application of principles of competition law to material protected by intellectual property rights, including copyright material. First, it is misleading to regard information products, such as copyright material, as automatically conferring market power on a supplier merely because the product is regarded as somehow unique. Thus, in defining the market for an information product it is important to take into account the possibilities of substitution over time. The mere fact that a product is protected by copyright law, or by contractual exclusivity, does not automatically mean that the supplier has a degree of market power. Second, the combination of exclusive rights to an information product, such as copyright material, and other factors may well give rise to concerns for competition policy. There may be particular cause for concern in industries characterised by strong network effects. In such industries, exclusivity combined with network effects may create significant barriers to competitive entry, especially from suppliers of interoperable products. Courts applying competition law principles to information products, including copyright material, should be sensitive to the extent to which network effects may combine with exclusive rights to confer market power on an incumbent firm. This suggests that standard terms that may inhibit the development of interoperable products should be subject to particular scrutiny.

There are considerable uncertainties relating to the legal enforceability of standard terms in mass market agreements, such as shrinkwrap and clickwrap licences. Some uncertainties relate to the extent to which mass market agreements may exclude or modify the limits of copyright protection. The analysis presented in this paper suggests that the ability of parties to contract around the limits of copyright protection should not be restricted, especially by prohibitions imposed from within copyright law. Some uncertainties relate to the extent to which mass market licences are binding on parties to the agreement, and the extent to which such licences are binding on third parties. This paper suggests that provided there is sufficient notice of the terms included in mass market licences, the agreements should be binding on the parties. Moreover, to the extent that information regarding the terms of the agreement is communicated to third parties, there is a case for such agreements to be binding on third parties. Some uncertainties relate to the application of existing principles of contract law and competition law to mass market licences. This paper suggests that the contract law doctrine of unconscionability, and established principles of competition law, may, to a certain extent, deal with market failure that results in less than optimal standard terms. On the other hand, to the extent that existing contract law and competition law do not adequately deal with systemic market failure, there may be a need for consumer protection legislation that deals specifically with mass market licences for copyright and non-copyright material. In general terms, then, it would be preferable for policy-makers to focus attention on the adequacy of consumer protection laws in the online environment than on endeavours to legislatively entrench supposedly immutable 'balances' between copyright owners and users.

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