730–119 — ADVANCED LEGAL RESEARCH (COMBINED)

RECOGNISING CONSIDERATION IN OPEN SOURCE SOFTWARE LICENCES

Will Hardy

June 2009

10124 WORDS

Contents

I Introduction

An astonishing amount of today's software is freely available under an open source software licence.[1] Developers of open source software provide their software along with its source code, allowing users more freedom to use, copy, customise, upgrade and extend it.[2] It is generally assumed by the wider public to be a permanent, irrevocable dedication to the public, but at the same time the Australian legal community works under the opposing assumption that it is in fact merely a revocable bare licence. This 'best kept secret of the open source movement'[3] rests primarily on the premise that when we download open source software from the internet, no consideration is given in return for the licensor's promise not to sue for copyright infringement. That is, we downloaded it for free, so we gave no consideration. But the doctrine of consideration is by no means straightforward enough for this to be assumed.

In essence, consideration merely serves to determine which promises are enforceable under contract law, and which are not.[4] The key question for this paper is: *is an open source software licence supported by consideration?* A number of writers have addressed this issue in different ways, but few have provided a detailed analysis of the doctrine of consideration in this context and even fewer Australian legal writers have accounted for the benefits that a licensor enjoys through open source software. I will therefore address this key question with a very narrow scope, leaving aside what has already been discussed elsewhere;[5] I will not evaluate the policy or even the merits of recognising sufficient consideration (or not), and I will also disregard other aspects of contract formation and enforcement.[6] This paper will not provide a complete assessment of the

[1] For simplicity, I will use the term 'open source software' to refer to software released under a licence approved by the Open Source Initiative: Michael Tiemann, *Open Source Licences* (2009) Open Source Initiative < http://www.opensource.org/licenses > at 8 June 2009 or the Free Software Foundation: *Licenses* (). However, much of what will be discussed in this essay may be applicable to any software provided free of charge.

[2] Otherwise software developers would enjoy a monopoly on upgrades, enforceable by copyright law. A user has no implied right to access the source code: *Centrestage Management v Riedle* (2008) 77 IPR 550, 566.

[3] Jeremy Malcolm, 'Problems in Open Source Licensing' (Paper presented at the Linux.conf.au Conference, Perth, 24 January 2003).

[4] This may be an illusion: there are many other doctrines which serve to distinguish enforceable promises from the unenforceable and to assert that consideration is jurisdictional in function grossly inflates the importance given to consideration: M P Ellinghaus, 'Consideration Reconsidered Considered' (1975) 10 *Melbourne University Law Review* 267, 269.

[5] Robert Hillman and Maureen O'Rourke, 'Rethinking Consideration in the Electronic Age' (Working Paper No 48, Cornell Law School, 2009); Malcolm, above n 3 ; Ben Giles, 'Consideration' and the open source agreement' (2002) 49 *NSW Society for Computers and the Law*; Jason Wacha, 'Taking the Case: Is the GPL Enforceable?' (2005) 21 *Santa Clara Computer & High Tech Law Journal* 451.

[6] Such as notice and assent to terms, intention to create legal relations, privity and the enforceability of 'clickwrap' and 'shrinkwrap' agreements.

colourful history of the doctrine of consideration;[7] only the aspects, which are most relevant to establishing consideration in open source software licences.

So why is this key question relevant? As alluded to earlier, dealing with software is an exclusive right under the *Copyright Act 1968* (Cth),[8] and so it may be copyright infringement to copy,[9] compile,[10] distribute,[11] make changes[12] backup, or even use[13] software without a licence from the copyright owner. This licence can be either a bare licence or a contractual licence,[14] depending on whether or not the licence is an enforceable promise under contract law. Consideration is essential for an enforceable promise in Australia,[15] and so a finding of consideration may have a number of ramifications.

Our key question has two important implications. Firstly, a contractual licence cannot be revoked or redrafted.[16] Secondly, the wider range of remedies that contract law provides will be available to the promisee,[17] possibly including specific performance.[18] Furthermore, there are a number of other, more subtle differences: A court is more likely to grant an injunction based on copyright law,[19] and damages are simpler to calculate and probably more substantial under copyright law[20] — but an action in copyright will of course be available

[7] See eg Kenneth Sutton, *Consideration Reconsidered* (1974); Patrick Atiyah, 'Consideration: A Restatement' in *Essays on Contract* (1986); . John Twyford, *The Doctrine of Consideration* (SJD Thesis, University of Technology Sydney, 2002).

[8] Some licences also cover other intellectual property areas such as patents. This essay will only deal with Copyright.

[9] Exclusive right to reproduce in material form: *Copyright Act 1968* (Cth) s 31(1)(a)(i).

[10] Ibid s 21(5)(a).

[11] Exclusive right to communicate to the public: Ibid s 31(1)(a)(iv).

[12] Ibid s 31(1)(a)(vi).

[13] Software is typically copied internally when used, this inadvertent copying does not normally constitute copying: Ibid s 47B, but it does when an infringing copy is used, or the software licence imposes restrictions on use: Ibid 47B(2).

[14] *Computermate Products (Aust) Pty Ltd v Ozi-Soft Pty Ltd* (1988) 83 ALR 492, 495.

[15] See *Beaton v McDivitt* (1987) 13 NSWLR 162, 168 (Kirby P).

[16] Unless it can be done under the contract's terms: see Phillip Johnson, 'Dedicating' Copyright to the Public Domain' (2008) 71(4) *Modern Law Review* 587, 605. A bare licence can be revoked, with sufficient notice: *R v Horndon-on-the-Hill Inhabitants* (1816) 4 M & S 562. Note that a bare licence may be irrevocable if acted upon: See *Hounslow LBC v Twickenham Garden Developmets Ltd* [1971] Ch 233, 255, and is likely to be irrevocable if acted upon to the licensee's detriment: *Computermate Products (Aust) Pty Ltd v Ozi-Soft Pty Ltd* (1988) 83 ALR 492, 49.

[17] Sapna Kumar, 'Enforcing the GNU GPL' (2006) 1 *Journal of Law, Technology and Policy* 1, 24.

[18] Breach of conditions of a licence would only allow the licensor to sue for breach of copyright.

[19] Under *Copyright Act 1968* (Cth) s 115(2); Copyright Law Review Committee, *Copyright and Contract* (2002) 161. Although equitable defences are available where an account of profits or an injunction is sought under the **:** *Acohs v Bashford* (1997) 144 ALR 528, 553. Michael Bennett and Katherine Ivers, *Open Source Software: Your Company's Legal Risks* (2008) Linux Insider < http://www.linuxinsider.com/story/64378.html > at 7 June 2009 See also.

[20] Ibid.

in any case. Some conditions such as warranty and tort disclaimers may not be enforceable without a contract.[21] Contract law is not as internationally uniform as copyright law, contracts are more likely to be governed by foreign law, especially United States law.[22] Assessing and comparing these differences is out of the scope of this essay, but it is interesting to note that the global charity for open source software development, the Free Software Foundation has strongly preferred using copyright law over contract law for protecting their interest in open source software.[23]

To date almost no cases have addressed this issue directly in Australia. This my be due to the fact that the distinction between bare licence and contractual licence is yet to be relevant, but this could change in the very near future. For example, Oracle Corporation recently bought the rights to an open source software product (MySQL) that competes with their own flagship product. If the open source software licence for MySQL were revocable, the consequences would be extremely problematic.[24] If a low-level open source software project revoked or modified their open source licence, the effects would be far more drastic, as all software in the chain of derivation would be impacted. Such an example is very unlikely, given the public relations pressure on a sponsoring company, and the establishment of organisations and foundations to protect the source. A more likely scenario would be where a small scale open source software developer revokes permission for a company to deal with their software in a way they had not anticipated. This is what happened in *Trumpet Software v Ozemail*,[25] where internet provider OzEmail distributed another company's 'shareware' software *en masse*, after the developer had revoked permission for them to do so.[26] Federal Court Justice Heerey's analysis of the issue of consideration was limited to a single sentence: 'There was no consideration moving from OzEmail'.[27] Seven words written 13 years ago do not give us a reliable indication how a court will decide the issue today. This essay will provide a more detailed assessment by taking modern software engineering principles and examples into account, as well as a more diverse body of precedent, including recent develops in Australia and overseas.

This paper will be structured as follows:

---

[21] Malcolm, above n 3.

[22] Copyright Law Review Committee, above n 19, 141.

[23] Richard Stallman, *Don't Let 'Intellectual Property' Twist Your Ethos* (2006) The GNU Project <http://www.gnu.org/philosophy/no-ip-ethos.html> at 13 June 2009. See also below, Part III(E)(3) for discussion of *Jacobsen v Katzer* (2008) 535 F.3d 1373.

[24] Approximately 65 000 downloaders per day would no longer have access to the product and 25% of database installations in the world would need to rely on estoppel to avoid copyright infringement: Sun Microsystems, *MySQL Market Share* (2009) MySQL <http://mysql.com/why-mysql/marketshare/> at 13 June 2009.

[25] (1996) 34 IPR 481.

[26] 'Shareware' is software provided free of charge for a trial period, after which the licence expires unless payment is received.

[27] *Trumpet Software v Ozemail* (1996) 34 IPR 481, 498.

Part II: I will outline the range of benefits developers of open source software can receive under various factual scenarios.

Part III: Here I deal with a class of open source licences: permissive licences. The inherent transaction in permissive open source software licences may provide sufficient consideration. This is supported by established precedent,[28] Australian jurisprudence,[29] recent developments[30] and international developments.[31] However, inconsistent precedent contributes an element of uncertainty.

Part IV: A second class of open source licence is the 'copyleft' licence. Copyleft licences have a greater chance of providing sufficient consideration because they impose a number of more onerous conditions in addition to the inherent properties mentioned in Part III. In particular, copyleft licences impose conditions on the distribution of some of the licensee's own software code.

The answer this paper provides to our key question is a qualified 'maybe': where there is clear factual benefit to the open source licensor, it seems likely that a court would find consideration, but such a decision would require overturning or distinguishing *Trumpet Software v Ozemail*.[32]

II Benefits to the Licensor

Despite having its roots in political ideology, the open source software movement 'has been transformed into a commercial enterprise'.[33] Large multinational corporations such as IBM, Apple and even Microsoft exploit the open source approach for economic benefit, as do hundreds of thousands of individual developers. Not all projects will benefit in the same way — the particular benefit sought by the licensor will vary depending on the facts of the case — but most projects will provide some form of benefit for the developer; even political ideology can be regarded as an economic endeavour.[34] This section will explore

[28] See eg *De La Bere v Pearson* [1908] 1 KB 280 ('*De La Bere*').

[29] See eg *Australian Woollen Mills v Commonwealth* (1954) 92 CLR 424 ('*Australian Woollen Mills*'); *Beaton v McDivitt* (1987) 13 NSWLR 162.

[30] See eg *Williams v Roffey* [1990] 1 All ER 512 ('*Williams*'); *Musumeci v Winadell* (1994) 34 NSWLR 723 ('*Musumeci*').

[31] See eg *Jacobsen v Katzer* (2008) 535 F.3d 1373.

[32] (1996) 34 IPR 481.

[33] Ieuan Mahony and Edward Naughton, 'Open Source Software Monetized: Out of the Bazaar and into Big Business' (2004) 21(10) *The Computer & Internet Lawyer* 1, 1.

[34] *Jacobsen v Katzer* (2008) 535 F.3d 1373, 1382.

the benefits that fuel open source participation, which should prove helpful in understanding the nature of open source software licencing agreements.

The open source software movement grew out of a culture of sharing in academic circles, where most of the world's software was being written and used.[35] Even when first commercialised, software was not seen as a revenue source in itself, and was simply provided to increase sales of associated hardware[36] — incidentally, this is already recognition of the commercial value of sharing software source code. As software became increasingly complex, sophisticated and specialist, it was commodified and source code was decreasingly shared. More recently, we have begun to see strong mainstream recognition of the commercial benefits in dealing with open source software. Illustrating this eloquently while launching a new product a few weeks ago, Google Vice-President of Engineering Vic Gundotra explained: 'it's open sourced for many reasons; not only do we want to contribute to the internet, but frankly, we need developers to help us complete this product.'[37]

Copyright owners make software available like this almost always for a reason.[38] Primarily, it allows and encourages and bargains for feedback and contributions from the public. This includes reports of bugs, source code improvements, feature suggestions, plugins and other integrated software, derivative software, and community support. Copyleft licences also help expand the public domain by encouraging derivative software under the same licence. Much of this would not be readily available for proprietary software because transparency and openness increases the user base and its ability to contribute, in addition to that, many members of the open source community would not choose to participate like this unless the developer supported the open source movement. Another benefit is the increased number of distributors and distribution avenues, akin to viral advertising, where the end users themselves are encouraged to be a decentralised distribution vector by simply copying the software and giving to their friends, colleagues and family.[39] This greatly reduces the cost of distribution, as the developer does not need to pay for internet bandwidth or manufacturing and delivering portable media. There are also a number of more direct financial benefits. These include public donations of money or resources[40] and increased

[35] Chris DiBona, Danese Cooper and Mark Stone (eds), *Open Sources 2.0 : the continuing evolution* (2005).

[36] Hillman, above n 5, 13; DiBona, above n 35.

[37] Vic Gundotra, 'Google Wave Developer Preview' (Speech delivered at the Google I/O, San Francisco, 27 May 2009).

[38] David Brennan, 'Terms of a Copyright Licence in Shareware' (1997) 11 *Journal of Copyright Law* 241, 243.

[39] This can also be done automatically through peer-to-peer distribution systems. A point of interest here is that each individual download in such a system provides a direct benefit, being the increased capability of the distribution system.

[40] For example Sourceforge and Google Code offer free bandwidth, hosting and support software for open source projects.

sales of related software, consulting, support, commercial versions[41] and website advertising space.

A number of distinct business models can be identified from these various benefits, these include:

Cost sharing Where opening the source enables a higher quality product at the same price, or same quality product at lower cost. The open source development model is well known for producing high quality software;[42] 'some of the most widely used, important and complex programs are open source'.[43] An example of the scale of some software written by developers on their own time is the Linux kernel, the redevelopment of which is estimated to cost AUD $1.5 billion.[44] These developers would not have contributed if it were not an open source project.

Risk reduction Where (possibly internal) software is maintained by a small number of employees, a company runs the risk of being unable to maintain it if these employees are lost. Opening the source reduces this risk, or at the very least, the risk of higher software maintenance costs.

Market Positioner Opening its source can allow a product to gain significant market share. An example of this is the browser Mozilla Firefox. Born out of the marginalised Netscape browser (having lost the 'browser wars' of the 1990s), the open source incarnation has been able to attract 270 million active users, more than 20% of web browser users worldwide.[45] Mozilla have recently started exploiting this enormous user base by selling advertising directly in their browser to search engines and websites for significant sums of money.[46]

Widget frosting This is where a company sees no value in competing with certain software and cannot justify the cost of developing and maintaining it themselves. An example of this is a hardware company like Apple Inc,

---

[41] For example under dual licencing, where the open source version is available of non-commercial uses, and a commercial version is available for a price, eg MySQL.

[42] Hillman, above n 5, 14; Jose Gonzalez de Alaiza Cardona, 'Open Source, Free Software, and Contractual Issues' (2007) 15 *Texas Intellectual Property Law Journal* 157, 160; Greg Vetter, ''Infectious' Open Source Software: Spreading Incentives Or Promoting Resistance?' (2004) 36 *Rutgers Law Journal* 53, 79.

[43] Hillman, above n 5, 14.

[44] €882 million, based on the Constructive Cost Model (COCOMO): Rishab Aiyer Ghosh (ed), *Economic impact of open source software on innovation and the competitiveness of the Information and Communication Technologies (ICT) sector in the EU* (2006) 50.

[45] Asa Dotzler, *firefox at 270 million users* (2009) Firefox and more < http://weblogs.mozillazine.org/asa/archives/2009/05/firefox_at_270.html > at 14 June 2009.

[46] Mitchell Baker, *Sustainability in Uncertain Times* (2008) Mitchell's blog < http://blog.lizardwrangler.com/2008/08/26/firefox-summit-reflections/ > at 14 June 2009 See.

who use open source software in their operating system and drivers for security, stability and lower costs.

Publicity Give away a recipe to advertise your restaurant. Companies that do this include IBM, Red Hat, Canonical, Zope and Novell. Individual developers also release open source software free of charge to increase their exposure to potential employers or consulting customers.

Ideology Finally, some companies have ideological reasons for opening their source. This may or may not provide direct financial benefit,[47] but could be considered an economic endeavour worthy of protection under contract law.[48]

A project may seek and receive benefits under any number of these models,[49] although it is theoretically possible that none of the above are applicable. Thus, if these benefits do in fact lead to consideration, then consideration will be entirely dependent on the facts of the case at hand. Moreover, the licensor only has access to these benefits because of the open source licence; in the *cost sharing*, *market positioner*, *publicity* and *ideology* models, the open source licence wholly induces the beneficial behaviour from the user. For a number of years, the benefits to open source software developers have been overlooked, as has the bargaining nature of the relationship between the developer and user. Yet these prove to be extremely important and influential details in determining whether open source software licences are supported by consideration.

III Consideration in a Permissive Licence

Permissive licences are a useful starting point because if consideration can be found in a permissive licence, then all open source licences will provide *prima facie* consideration. The reason for this is that permissive licences are provided subject to few or no conditions; it is a 'gift' licence granting the user permission to do what they like with it. For example, the Massachusetts Institute of Technology ('MIT') Licence consists of the following text:

[47] Open source software can be considered to be a better product for its users because of the flexibility it gives them, which may increase sales.

[48] *Jacobsen v Katzer* (2008) 535 F.3d 1373, 1382.

[49] As an anecdotal illustration, the bibliographic citations in this very essay were formatted using software I have written for this purpose. After releasing the code I very quickly received feedback, bug reports and modifications which helped improve the quality of the software in ways that would not otherwise be possible, given that writing legal citation software is not my primary business. I was very pleased to enjoy these benefits, which fall under the business models of 'cost sharing' and 'publicity'. The code can be downloaded at `http://willhardy.com.au/aglc-and-latex/`.

> Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so ...[50]

This broad permission is qualified only by a warranty and liability disclaimer and the condition that the licence text is reproduced in future copies. It is similar to a number of other popular permissive licences, for example the Berkeley Software Distribution ('BSD') Licence and the Apache Licence. Larger software companies and framework software tend to favour permissive licences.[51]

So what could be the consideration in a permissive licence? It cannot be an act or promise directly providing the benefits discussed earlier, because the licensee has the discretion to not provide these benefits. This would be illusory consideration and cannot be used to enforce a promise,[52] even if it is bargained for.[53] As the user makes no promises of their own in a purely permissive licence, the consideration needs to be executed consideration, for example downloading or redistributing the software.

In light of this, I will look to find consideration in a unilateral contract, accepted when the software is downloaded, copied or used for first time.[54] The promise not to sue is given by the promisor in return for consideration of acquiring the software. The acquisition of the software (through downloading or copying) provides the licensor with an opportunity to receive the material benefits listed in Part II to the detriment of the licensee, who risks reliance costs and costs in investing time and resources in assessing, using or modifying. The benefits or detriment involved can be in some cases seen as the 'price' for the permission to use the software.

---

[50] Russell Nelson, *The MIT License* (2009) Open Source Initiative < http://www.opensource.org/licenses/mit-license.php > at 25 June 2009.

[51] Rod Dixon, *Open Source Software Law* (2004) 51.

[52] *Placer Development v The Commonwealth* (1969) 121 CLR 353, 356; *Meehan v Jones* (1982) 149 CLR 571, 581; *Biotechnology Australia v Pace* (1988) 15 NSWLR 130, 137,150.

[53] See eg Hope JA's dissenting judgment in *Biotechnology Australia v Pace* (1988) 15 NSWLR 130, 147.

[54] Sometimes acceptance of the terms of the licence is required online before the software can be downloaded, sometimes it is required on installation or first use and sometimes the terms of the licence is simply provided with the software and acceptance is necessary to avoid copyright infringement. In the second and third instances, the act of using the software may need to be considered the relevant act for consideration, as a past act cannot be good consideration: *Eastwood v Kenyon* [1840] 113 ER 482. In any case, this may or may not be necessary as courts are not required to apply a strictly chronological test. If unpacking, archiving or using the software can be in substance considered as part of the same 'transaction', then the act of downloading will not be regarded as 'past consideration': *Breusch v Watts Development Division* (1987) 10 NSWLR 311, 317.

A *Orthodox approach to consideration*

It is difficult to determine the exact state of the doctrine of consideration as it stands in Australia today. It is the product of hundreds of years of turbulent precedent, which has failed to recede as the modern form of the doctrine has been refined. It is therefore useful to review the persistent traditions that continue to influence legal minds today. These traditions reflect a classical conception of the doctrine of consideration — an 'orthodox' conception of the doctrine of consideration.

The most widely accepted definition is found in the words of Sir Frederick Pollock,[55] as adopted by Lord Dunedin in 1915 in *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd*:[56]

> An act or forbearance of one party, or the promise thereof, is the price for which the promise of the other is bought, and the promise thus given for value is enforceable.[57]

With 'for value' Pollock referred to the requirement of benefit to the promisor or detriment to the promisee, as described seventy years earlier in *Thomas v Thomas*:[58]

> Consideration means something which is of some value in the eye of the law, moving from the plaintiff: it may be some benefit to the plaintiff, or some detriment to the defendant; but at all events it must be moving from the plaintiff.[59]

and then in *Currie v Misa*:[60]

> A valuable consideration, in the sense of the law, may consist either in some right, interest, profit, or benefit accruing to the one party, or some forbearance, detriment, loss or responsibility given, suffered, or undertaken by the other. . . .[61]

From and alongside these three influential statements, a number of orthodox rules have been adopted by courts.

---

[55] See Sir Frederick Pollock, *Pollock's principles of contract* (13^{th} ed, 1950).

[56] See eg *Beaton v McDivitt* (1987) 13 NSWLR 162, 168 (Kirby P), 181 (McHugh JA); *Boothey v Boothey* [1997] (Unreported, Supreme Court of Western Australia, Full Court, Malcolm CJ, Ipp, Murray JJ, 13 March 1997).

[57] *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd* [1915] AC 847, 855.

[58] (1842) 114 ER 330. Referred to in *Beaton v McDivitt* (1987) 13 NSWLR 162, 181 (McHugh JA).

[59] *Thomas v Thomas* (1842) 114 ER 330, 859.

[60] (1875) LR 10 Ex 153. Referred to in *Beaton v McDivitt* (1987) 13 NSWLR 162, 181 (McHugh JA).

[61] *Currie v Misa* (1875) LR 10 Ex 153, 162.

1 *Orthodox rules*

Although it is impossible to accurately reduce the doctrine of consideration to a set of absolute rules, orthodox analysis attempts to do so. None of these 'rules' can be regarded as absolute; a determined court can manage to avoid a given rule's operation. The following orthodox rules are relevant to our discussion:

1. The law only enforces bargains, not gratuitous promises:[62] consideration must have 'some value in the eye of the law'[63] but need not be adequate.
2. Consideration must move from the promisee.[64]
3. The consideration may provide some form of benefit to the promisor or detriment to the promisee.[65]
4. Consideration must be provided in response to the promise,[66] it must be the price of the promise.[67]
5. Past consideration is no consideration.[68]
6. Consideration must not be illusory.[69]
7. A preexisting duty is not consideration.[70]

Some of these rules have enjoyed more acceptance historically than they might in a modern, Australian court. Other rules are not clear at all, for example the third rule: courts have sometimes held consideration to require detriment regardless of benefit. [71]

---

[62] *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd* [1915] AC 847; *Australian Woollen Mills* (1954) 92 CLR 424; *Beaton v McDivitt* (1987) 13 NSWLR 162, 168 (Kirby P). The truth of this is however debateable, eg nominal consideration. Atiyah, above n 7, 213.

[63] *Thomas v Thomas* (1842) 114 ER 330. Cf a gratuitous (conditional) promise: *Re Hudson* (1885) 54 LJ Ch 811.

[64] *Tweddle v Atkinson* (1861) 121 ER 762; *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd* [1915] AC 847; *Trident v McNiece* (1988) 165 CLR 107; Atiyah, above n 7, 219; *Thomas v Thomas* (1842) 114 ER 330; See H Beale (ed), *Chitty on Contract* (30^{th} ed, 2006) 3-036.

[65] The authorities suggest that a benefit or detriment is neither sufficient nor necessary: Atiyah, above n 7, 188.

[66] *Port Jackson Stevedoring v Salmond* (1978) 139 CLR 231.

[67] *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd* [1915] AC 847, 855; *Beaton v McDivitt* (1987) 13 NSWLR 162, 168,181; *Boothey v Boothey* [1997] (Unreported, Supreme Court of Western Australia, Full Court, Malcolm CJ, Ipp, Murray JJ, 13 March 1997).

[68] *Eastwood v Kenyon* [1840] 113 ER 482.

[69] *Placer Development v The Commonwealth* (1969) 121 CLR 353; *Biotechnology Australia v Pace* (1988) 15 NSWLR 130.

[70] Preexisting contractual duty is not consideration: *Stilk v Myrick* (1809) 2 Camp 317 ('*Stilk*'); *Williams* [1990] 1 All ER 512, Cf; *Musumeci* (1994) 34 NSWLR 723, preexisting legal duty is not consideration*Collins v Godefroy* (1831) 109 ER 140

[71] Atiyah, above n 7, 188; *Bolton v Madden* (1873) LR 9 QB 55; *Williams* [1990] 1 All ER 512, 527; See Beale, above n 64, 3-037. This issue is discussed below, Part III(C)(1).

Australian courts have very clearly adopted the approach taken in *Australian Woollen Mills v Commonwealth*[72] ('*Australian Woollen Mills*'): A relation of *quid pro quo* is required between the offer and the executing act in an unilateral contract for there to be executed consideration.[73] In addressing this, the Court provided a number of other questions could be asked: was there a request or an implied request?[74] was the price for the promise stated?[75] are the benefits defined?[76] was the offer made to induce the act?[77] *Australian Woollen Mills* provided some clarity as to the approach in Australia, but did not upset the continued operation of the orthodox rules of consideration. The operation of the first rule mentioned above, sufficiency, is particularly relevant for open source software licences.

2 *Some value in the (orthodox) eye of the law*

The idea of sufficiency is somewhat ambiguous. The problem is that 'value' can be interpreted a number of ways, ranging from 'economic' value to 'financial' value to 'legal' value. In orthodoxy this principle has often been interpreted so narrowly so as to include nothing more than a 'legal' value.[78] For example refraining from complaint has been held to be without 'value',[79] as has a bank's deferment of their right to enforce a debt, despite its commercial value.[80] This rule would be fatal to finding consideration in a permissive open source software licence; following the narrowest interpretation, any benefit or detriment involved would not have legal value. Neither would the broader interpretation be satisfied, as only direct financial benefit would suffice, and an opportunity for financial and economic benefit provides no such thing. If the orthodox understanding of sufficiency were still an official feature of Australian courts, this essay could end here: there would be no consideration in a permissive licence.

But despite the falling relevance of orthodox sufficiency, it lives on implicitly. Characteristic of the orthodox line of cases is the refusal to find consideration where the benefit or detriment is not obvious, contract modification cases following *Stilk v Myrick*[81] ('*Stilk*') provide a good example of this. And so despite the recent expansion of sufficiency, courts may still fail to recognise the benefit or detriment in open source software. Such was the case in *Trumpet*

[72] (1954) 92 CLR 424.

[73] *Australian Woollen Mills* (1954) 92 CLR 424, 456.

[74] Ibid 458.

[75] Ibid 458.

[76] Ibid 463.

[77] Ibid 458.

[78] Sutton, above n 7, 19.

[79] *White v Bluett* (1853) 23 LJ Ex 36; But see *Ward v Byham* [1956] 1 WLR 496.

[80] See eg *Commonwealth Bank of Australia v Poynten* (1996) Aust Contract R ¶90-065, 90,384.

[81] (1809) 2 Camp 317.

Software v Ozemail,[82] where the Court in a short sentence dismissed the notion that consideration could be found in a shareware licence.[83] That is, the benefits that a software developer (in this case Trumpet) gains from releasing try-before-you-buy software to a wider audience were not obvious enough for Heerey J of the Federal Court of Australia. The benefits are very similar to those for open source software,[84] but they should have been more obvious because the developer looks to sell each user a copy once the trial period is over. One explanation for this might be that the concept of shareware was not widely understood in 1996, and the judge may not have been adequately prepared to evaluate the decisions 'made by people of different ... backgrounds in entering into bargains'.[85] This is however doubtful, as the Heerey J explicitly recognised Trumpet's 'commercial interests'[86] and even that the widespread distribution of the shareware program 'will obviously be to the benefit of software owners'.[87] A more likely explanation is that Heerey J held onto the pervasive orthodox belief that consideration must be tangible, financial or legal and not merely economic,[88] an idea that is not unanimously supported by case law, especially in recent years.

3 *The orthodox approach in context*

Applied inconsistently, the orthodox understanding of the doctrine of consideration is not able to coherently explain all the decisions made in its name. '[A] rigorous application of the bargain theory ... would result in many decisions being found to be outside it.'[89] One important point of difference is the recognition of factual benefit as sufficient value. Consideration for permissive open source software licences cannot be found through the orthodox eye of the law, but a number of decisions lie outside these orthodox rules. Each of these apparently defiant decisions can be seen to be the result of either a less rigid interpretation of the doctrine or an attempt to avoid the unjust results of orthodoxy.[90]

---

[82] (1996) 34 IPR 481.

[83] *Trumpet Software v Ozemail* (1996) 34 IPR 481, 498.

[84] That is, providing the software as a trial for free gives the developer an opportunity to increase sales that they would not have otherwise had: Brennan, above n 38, 243.

[85] *Woolworths v Kelly* (1991) 22 NSWLR 189, 193 (Kirby P).

[86] *Trumpet Software v Ozemail* (1996) 34 IPR 481, 500.

[87] Ibid 500. In addition to this, the Court's use of a contract law principle from *BP Refinery (Westernport) v Shire of Hastings* 'underscores the likelihood of the contractual nature of the licence in the first place': Brennan, above n 38, 246.

[88] See eg *Commonwealth Bank of Australia v Poynten* (1996) Aust Contract R ¶90-065, 90,384.

[89] Sutton, above n 7, 16.

[90] Rembert Meyer-Rochow, 'The Requirement of Consideration' (1997) 71 *The Australian Law Journal* 532.

Additionally, a number of judges have emphasised the continual development of common law, and the doctrine of consideration in particular. Windeyer J's comments are especially illustrative:

> 'Statements made by courts hundreds of years ago about the doctrine of consideration ought not I think to be taken as pronouncements of the law today, ignoring all that has been said in the meantime, ignoring all changes in social conditions and men's ways.'[91]

Through both recent developments and established, unorthodox precedent, it is clear that sufficient consideration is possible for factual, as opposed to legal, benefit. The following discussion will use this to establish that the factual benefit and detriment in using open source software can provide sufficient consideration, despite the orthodox assertion to the contrary.

B *Factual benefit as consideration*

The act of downloading or using the software may constitute good consideration, in being an act done in exchange for the promise of a licence,[92] which confers a factual benefit or a 'benefit in fact',[93] such as those mentioned earlier.[94]

Despite the orthodox view to the contrary, there are a number of established decisions which suggest that mere factual benefit can constitute sufficient consideration. Additionally, recent decisions both in Australia and internationally have begun to explicitly recognise 'practical benefit' as being sufficient consideration, but the scope of this is currently uncertain.[95]

1 *Precedent supporting factual benefit*

The doctrine of consideration is not as coherent as the orthodox approach would advertise. A number of cases cannot be easily reconciled with the orthodox line of precedent, giving rise to a very 'peculiar branch of the law'.[96]

Three such cases are very relevant: *Carlill v Carbolic Smoke Ball Co*,[97] ('*Carlill*')

[91] *Coulls v Bagot's Executor and Trustee* (1962) 119 CLR 460, 496.

[92] 'The price can be in the form of an act, forbearance or promise': *Beaton v McDivitt* (1987) 13 NSWLR 162, 168 (Kirby P). (See also *Australian Woollen Mills* (1954) 92 CLR 424, 456; *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd* [1915] AC 847, 855).

[93] Meyer-Rochow, above n 90, 540.

[94] See above, Part II.

[95] See below, Part III(E) for a discussion of this uncertainty.

[96] *Ballantyne v Phillot* (1961) 105 CLR 379, 390 (Dixon CJ).

[97] [1893] 1 QB 256.

De La Bere v Pearson[98] ('*De La Bere*') and *Chappell v Nestlé*.[99] ('*Chappell*') In all of these cases the likely benefit of increased sales was sufficient for consideration.[100] These formative cases in contract law have unquestionable value alongside orthodox views. In *Carlill*, The Carbolic Smoke Ball Company offered £100 to anyone who used their influenza remedy for two weeks and still caught the virus. Lindley LJ noted that consideration was satisfied by public use of the remedy, as it would help 'produce a sale which is directly beneficial to them',[101] this was irrespective of whether or not the user had paid for the remedy.[102] If simply using the Carbolic Smoke Ball provides a sufficient benefit to the Carbolic smoke Ball Company, then it is not hard to imagine that simply using open source software can be sufficiently beneficial to the software developer. A recent Australian case confirms this, where the simple act of entering a supermarket was beneficial enough to the supermarket to give rise to a contract.[103] Similarly, in *De La Bere*, the free financial advice provided by a newspaper to its readers was supported by good consideration. This consideration resulted from the benefit of the 'tendency to increase the sale of the ... newspaper'.[104] Both *De La Bere* and *Carlill* are not without criticism: they are both particularly old decisions, made in a different era. Furthermore they are the result of a desperate action by the Court to provide an acceptable remedy for an unjust situation, as evidenced by the Court's willingness to invent what some call a 'fictional substitute' for benefit.[105] Nevertheless, the reasoning in both cases is perfectly sound: the increased sales formed both the motive and the bargaining force behind the promises made — it could hardly be said that this benefit was fictional. More importantly, both decisions are unequivocally well established precedent. In *Chappell*, the transfer of empty chocolate bar wrappers was held to be supported by consideration being the 'indirect sale' they represent.[106] Despite an absence of orthodox detriment or benefit,[107] the Court was willing to recognise indirect value.

The benefits on show in these three cases are identical to the benefits in the *publicity* business model,[108] but they are also clearly factual benefits, provided

[98] [1908] 1 KB 280.

[99] [1959] 2 All ER 701.

[100] *Carlill v Carbolic Smoke Ball Co* [1893] 1 QB 256 ('*Carlill*'), 264; *De La Bere* [1908] 1 KB 280, 287; *Chappell v Nestlé* [1959] 2 All ER 701 ('*Chappell*'), 108.

[101] *Carlill* [1893] 1 QB 256, 264. Detriment was also present, but the benefit was offered as the primary reason for consideration being found: Ibid 265–6.

[102] Recognising this was necessary as the action was brought against the manufacturer: Patrick Atiyah and Stephen Smith, *Atiyah's Introduction to the Law of Contract* (6^{th} ed, 2005) 123.

[103] *Cottee v Franklins Self-Serve* [1997] 1 Qd R 469, 475.

[104] *De La Bere* [1908] 1 KB 280, 287.

[105] Twyford, above n 7, 63.

[106] *Chappell* [1959] 2 All ER 701, 108.

[107] Atiyah, above n 7, 193.

[108] See above, Part II.

without obligation. Lord Reid made his case for this point eloquently:

> There may have been cases where the acquisition of the wrappers conferred no direct benefit on the respondents Nestlé but there must have been many cases where it did. I do not see why the possibility that, in some cases, the acquisition of the wrappers did not directly benefit the respondents Nestlé should require us to exclude from consideration the cases where it did; and even where there was no direct benefit from the acquisition of the wrappers there may have been an indirect benefit by way of advertisement.[109]

Just as not every promisee would have purchased a chocolate bar from Nestlé, not every open source software user will provide the benefits outlined in Part II, and this is not fatal to a finding of consideration.

Even the advancement of ideological aspirations may be sufficiently beneficial, as in the *ideological* open source software business model. In *Bolton v Madden*,[110] two subscribers to a charity made a deal to pool their votes for each of their respective causes, alternating over two years. The forbearance of the right to vote for their desired ideological goals was sufficient consideration,[111] suggesting that the furtherance of the open source ideology might also be a benefit worthy of consideration.

Another example of courts willing to enforce agreements on the basis of subjective practical benefits rather than objective legal benefits is compromise agreements.[112] Courts have long held that the practical benefit in not proceeding with litigation is sufficient (except for frivolous claims, despite also being a potential nuisance). This may however be viewed as an exception to the rule, or as a rule in itself, based on public policy to encourage compromise as an alternative to litigation.

2 *Practical benefit*

The doctrine of consideration has always undergone persistent development, and will no doubt continue to evolve.[113] Almost twenty years ago the doctrine of consideration was hit by the sweeping English Court of Appeal decision in *Williams v Roffey*,[114] ('*Williams*') which explicitly declared 'practical benefit' to be sufficient consideration.[115] This judgment has been adopted in Australia,[116] and internationally, but the scope of this decision is still unclear.

[109] *Chappell* [1959] 2 All ER 701, 709.

[110] (1873) LR 9 QB 55.

[111] *Bolton v Madden* (1873) LR 9 QB 55, 57.

[112] Atiyah, above n 102, 117.

[113] Sutton, above n 7, 8.

[114] [1990] 1 All ER 512.

[115] *Williams* [1990] 1 All ER 512, 522.

[116] *Musumeci* (1994) 34 NSWLR 723, 747.

In *Williams*, a subcontracting carpenter (Mr Williams) promised to do the same work as he had previously promised for more money. The original building contractor (Roffey Bros) recognised that Mr Williams would have financial difficulties in fulfilling his existing contractual duty for the original price, and offered more money in a structured fashion to ensure that the job was completed quickly. Doing this provided a substantial benefit to Roffey Bros because of the existence of a penalty clause in the main contract. The Court of Appeal found consideration in this arrangement, despite there being no legal benefit to Roffey Bros.

And so we have another case where the court declined to recognise a distinction between factual benefit and legal benefit (unless fraud or duress is involved),[117] holding that a benefit in practice 'is capable of being consideration' in cases of contact modification.[118] Russell LJ considered a pragmatic approach to be more in tune with the true relationship between the parties,[119] and even went so far as to say that if a party gains 'an advantage arising out the continuing relationship with the promisee', the relevant promise is supported by consideration.[120] This last comment is particularly relevant where software is released as open source to initiate a continuing relationship with the licensor and collect financial benefit through consulting or support fees; this is the *publicity* business model mentioned earlier.[121]

This case has of course attracted lively criticism from orthodox corners of the legal world, but what some commentators fail to recognise is that the promise of additional payment in *Williams* was not bought with a repeat promise to complete the work. It was bought with the practical benefit that the additional payment itself will bring to the promisor.

In any case, this was not a new concept.[122] The idea of 'practical benefit' is similar to what the Court casually identified in *Carlill*, *De La Bere* and *Chappell*, and can be found in the Denning LJ's judgments in *Ward v Byham*[123] (Adopted in Australia in *Popiw v Popiw*[124]) and *Williams v Williams*.[125] Traces of such thinking can even be found in the almost dissenting judgment of Blackburn LJ in a cornerstone case in orthodoxy, *Foakes v Beer*:[126]

---

[117] Brian Coote, 'Consideration and Benefit in Fact and in Law' [1990] *Journal of Contract Law* 23, 24.

[118] *Williams* [1990] 1 All ER 512, 522 (Glidewell LJ).

[119] Ibid 524.

[120] Ibid 524.

[121] See above, Part II.

[122] Karen Scott, 'From Sailors to Fisherman: Contractual Variation and the Abolition of the Pre-Existing Duty Rule in New Zealand' (2005) 11 *Canterbury Law Review* 201, 205; Twyford, above n 7.

[123] [1956] 1 WLR 496.

[124] [1959] VR 197.

[125] [1957] 1 WLR 148.

[126] (1884) 9 App Cas 605.

> I think it is not the fact that to accept prompt payment of a part only of a liquidated demand, can never be more beneficial than to insist on payment of the whole.[127]

The Australian legal system adopted *Williams* in *Musumeci v Winadell*,[128] ('*Musumeci*') with some minor modifications. In that case, Winadell agreed to a rent reduction for Musumeci's shop in their shopping centre after they leased a store to a larger competitor of Musumeci's. Santow J found practical benefit to Winadell in agreeing to a rent reduction. Santow J's test was summed up as being where there is 'a sufficient practical benefit to B, so as to take the situation beyond a wholly gratuitous promise by B'. That is to say, that not all practical benefit will suffice, but the test does appear to be very inclusive. Santow J cited an employment case, *Ajax Cooke v Nugent*[129] where additional redundancy benefits could have been supported by consideration arising from the practical benefits of securing employee retention and decreased workplace disruption.[130]

This case would appear to open the door for practical benefit to be universally recognised, but that may not be the case. *Williams* and *Musumeci* were both contract modification cases. Theoretically, the requirement of consideration is identical in both contract formation and contract modification, meaning that practical benefit analysis would also apply to open source software licences. But that may not be the case in practice, where the doctrine of consideration appears to be weaker in contract modification cases.[131] Internationally, contract modification cases do not have the same consideration requirements as new contracts. In the United States, consideration is not required for contract modification under the *Uniform Commercial Code*.[132] In New Zealand, a recent case *Antons Trawling Co Ltd v Smith*[133] has also removed the requirement of consideration in contract modification cases.[134] So too did the Canadian case *Greater Fredericton Airport Authority Inc v NAV Canada*,[135] consideration is no longer necessary to vary an agreement in Canada, except in cases of duress.[136] Although these jurisdictions have managed to weaken the doctrine of consideration, the consideration requirement in contract modification may be distinguishable from that in new contracts. If that is the case, then *Williams*

---

[127] *Foakes v Beer* (1884) 9 App Cas 605, 618 (Blackburn LJ).

[128] (1994) 34 NSWLR 723.

[129] [1993] (Unreported, Supreme Court of Victoria, Phillips J, 20 November 1993).

[130] *Ajax Cooke v Nugent* [1993] (Unreported, Supreme Court of Victoria, Phillips J, 20 November 1993), 12.

[131] Barry Hough and Ann Spowart-Taylor, 'The Doctrine of Consideration: Dead or Alive in English Employment Contracts?' (2001) 17 *JCL* 193.

[132] *Uniform Commercial Code 1952* (US) §2-209.

[133] [2003] 2 NZLR 23.

[134] *Antons Trawling Co Ltd v Smith* [2003] 2 NZLR 23, 46; See also Scott, above n 122, 201.

[135] [2008] NBCA 28.

[136] *Greater Fredericton Airport Authority Inc v NAV Canada* [2008] NBCA 28, [31].

is only relevant for contract modification cases. The decision in *Re Selectmove Ltd*[137] also provides fuel for this proposition, where the Court distinguished *Williams*, refusing to overturn the much older, orthodox case *Foakes v Beer*.[138] But a couple of recent cases suggest that this may not be the case. In *Tinyow v Lee*,[139] Santow JA reapplied the practical benefit approach to consideration to a case without contract variation.[140] In *Silver v Dome Resources*,[141] Hamilton J agreed, and did the same.[142]

Even if *Williams* and *Musumeci* were to be considered to be wrongly decided, the 'practical benefit' approach appears to have been accepted by Australian courts,[143] including the High Court.[144] It has quite simply become law. The only current uncertainty is its application beyond contract modification cases.[145]

3 *Is this unilateral promise a conditional gift?*

Ultimately the recognition of consideration based on factual benefit relies on the distinction between a conditional gift and a unilateral contract. This distinction is a particularly delicate one,[146] and is a question of fact.[147]

One notable difference that unilateral promises import, is that it may be necessary to establish benefit to the promisor to prove it is not a conditional gift.[148] This means, that regardless of any detriment that may be found in the open source transaction,[149] it may be essential to establish that open source software is beneficial to the licensor. The High Court of Australia in *Australian Woollen Mills* presented a number of other tests to help distinguish a conditional gift from a bargain, or a 'relation of *quid pro quo*'.[150] The tests were: was there an expressed or implied request to do the act? Was the price of the promise stated? Was the offer made to induce the act? For open source software, the

[137] [1995] 1 WLR 474.

[138] (1884) 9 App Cas 605.

[139] [2006] NSWCA 80.

[140] *Tinyow v Lee* [2006] NSWCA 80, [61].

[141] (2007) 62 ACSR 539.

[142] *Silver v Dome Resources* (2007) 62 ACSR 539, 571.

[143] *Mitchell v Pacific Dawn Pty Ltd* [2003] QSC 086, [37]; *Figjam v Pedrini* [2005] NSWSC 221; *Tinyow v Lee* [2006] NSWCA 80; *Silver v Dome Resources* (2007) 62 ACSR 539, 572; *Vella v Ayshan* [2008] NSWSC 84, [18].

[144] *DPP (Vic) v Le* (2007) 232 CLR 562, 577.

[145] See analytical discussion to supplement this uncertainty, below Part III(E).

[146] Atiyah, above n 7, 210.

[147] *Derbyshire Building Co v Becker* (1961) 107 CLR 633, as cited by Macrossan CJ in *Cottee v Franklins Self-Serve* [1997] 1 Qd R 469, 475.

[148] K Shatwell, 'The Doctrine of Consideration in the Modern Law' (1954) 1 *Sydney Law Review* 289, 306.

[149] See below, Part III(C).

[150] *Australian Woollen Mills* (1954) 92 CLR 424, 457.

first and third questions should be clear in most cases. If we take the price of the licence to be the act of downloading or otherwise acquiring the software, then this should also be clear in most factual scenarios.

Although legal analysis of adequacy has no place in the doctrine of consideration,[151] an extremely unbalanced transaction is evidence of a lack of bargain or *quid pro quo*.[152] In *Beaton v McDivitt*,[153] Kirby J did not find consideration in the exchange of land for the benefit of a useful and congenial neighbour because the 'bargain' was found to be so illusory or one sided that a *quid pro quo* will not be found'.[154] It could be argued that this is the case for open source licences; the licensee receives potentially expensive software for free, while the licensor merely receives a small percentage of the accumulated benefits discussed earlier.[155] But this does not accurately describe the open source software transaction. When giving away real property, the promisor loses exactly what they give, and that is most often something of significant value. But despite the potentially enormous benefit an open source software user receives, the developer may lose nothing for each copy made. At most, it is an economic opportunity loss, a potential paying customer. As most open source software users are not potential customers, each transaction cannot generally be described as being so one sided as to be an illusory bargain.

4 *Recognising the practical benefit*

There appear to be few requirements with regard to explicitly recognising practical benefit. Importantly, benefit need not be explicitly stated in the instrument. It is possible for a court to imply consideration,[156] and it may even be possible for a court to 'invent' consideration,[157] although this practice is controversial, uncertain and not universal.[158] This operates so long as the additional consideration is not inconsistent with the terms of the written agreement.[159]

---

[151] *Woolworths v Kelly* (1991) 22 NSWLR 189.

[152] See eg *Beaton v McDivitt* (1987) 13 NSWLR 162, 169 (Kirby P); *Woolworths v Kelly* (1991) 22 NSWLR 189, 222.

[153] (1987) 13 NSWLR 162.

[154] *Beaton v McDivitt* (1987) 13 NSWLR 162, 170.

[155] See above, Part II.

[156] See eg *De La Bere* [1908] 1 KB 280; *North Ocean Shipping Co Ltd v Hyundai Construction Co Ltd (The Atlantic Baron)* [1978] 3 All ER 1170; *Beaton v McDivitt* (1987) 13 NSWLR 162, 181; *Musumeci* (1994) 34 NSWLR 723, 738.

[157] Beale, above n 64, 3-010; G Treitel, 'Consideration: A Critical Analysis of Professor Atiyah's Fundamental Restatement' (1976) 50 *Australian Law Journal* 439, 440.

[158] This is not the case in the US, where 'nothing is consideration that is not regarded as such by the parties.': *Philpot v Gruninger* (1872) 14 Wall. 570, 577. This is compensated for by a broad doctrine of promissory estoppel: Beale, above n 64, 3-010.

[159] *Pao On v Lau Yiu Long* [1980] AC 614, 631; *Silver v Dome Resources* (2007) 62 ACSR 539, 574.

Importantly, where no benefit can be found or implied, the mere (honest) belief in it suffices.[160] This means that software developers need not prove that the benefit they sought ever eventuated.

C *Detriment in using the software*

So far I have concentrated on the benefit that the licensor receives in open source transactions. Consideration can instead be found in a detriment to the open source licensee, although as mentioned earlier, this might not apply to unilateral promises. This is not to say that detriment is not required regardless. If detriment really is essential in all cases, it can be found in the use, modification and distribution of all software, including open source software.

1 *Is detriment necessary?*

The notion that detriment is necessary for consideration was widespread at the beginning of the twentieth century.[161] But this does not account for *Shadwell v Shadwell*[162] style cases (where a promisor has already made the same promise to a third party), which do not exhibit any meaningful detriment to the promisor.

The orthodox approach has favoured detriment as a necessary element for consideration, despite a number of decisions suggesting otherwise,[163] leading to *Williams*, which emphatically declared detriment to be unnecessary where a benefit has been established.[164] Once again we witness the pervasive tension in the doctrine of consideration, but if it was thought that this tension was released with *Williams*, and its subsequent Australian adoption in *Musumeci*, such optimism was quickly extinguished with *Commonwealth Bank of Australia v Poynten*.[165] Making no mention of *Williams*, *Musumeci* or 'practical benefit,' Young J relied on a case preceding all of that, *Beaton v McDivitt*,[166] and interpreted it to mean that detriment was a necessary condition of consideration.[167] Furthermore, the detriment suffered must be a legal detriment, not an economic detriment.[168] A year later the Supreme Court of Western Australia went the

[160] *Wigan v Edwards* (1973) 47 ALJR 586; *Shadwell v Shadwell* (1860) 142 ER 62, 174; *Musumeci* (1994) 34 NSWLR 723, 737.

[161] Sutton, above n 7, 18.

[162] (1860) 142 ER 62.

[163] See eg *Lucas v Mok* (1983) 9 Fam LR 180, 184.

[164] *Williams* [1990] 1 All ER 512, 522; Scott, above n 122, 207; See also Beale, above n 64, 3-037.

[165] (1996) Aust Contract R ¶90-065.

[166] (1987) 13 NSWLR 162.

[167] *Commonwealth Bank of Australia v Poynten* (1996) Aust Contract R ¶90-065, 90,385.

[168] Ibid 90,384.

other way again, requiring '*either* some benefit accruing to the promisee ... *or* some detriment being sustained by the promisee'[169] (emphasis added).

Given the acceptance of *Williams*, and *Musumeci*, it is hard to imagine that detriment can still be considered to be essential. But even if it were essential, it can nevertheless be found in open source software transactions.

2 *What is the detriment?*

Detriment is most clear when direct redistribution costs are quantifiable, for example data storage, bandwidth or portable media. The benefit of reduced distribution costs mentioned earlier is made possible by externalising these costs and essentially having the licensee pay. Even on the individual scale, a user may personally deliver a colleague with the software at no cost to the licensor.

There is also detriment in using the software, despite the benefits it could provide. Time and resources will most likely be spent configuring and learning to use the software. Likewise, time may also be spent understanding the code to make changes. Cost estimates for maintaining a high load open source Linux server over three years range from $74 475[170] to $881 455.[171] In any case, there is substantial cost involved in choosing a software system (in addition to the licence costs). Even if this loss never materialises, it is certainly a material risk.[172] These potentially expensive investments could have been made in competing (proprietary) software. The difference in cost, if any, is termed 'opportunity loss' by economists. This form of detriment has been held to be consideration; for example, where an employee accepts a salary much less than what they could have been paid on the open market.[173]

In another sense, opportunity loss can be seen as detrimental reliance on a promise,[174] and it could be argued that this reliance amounts to good consid-

[169] *Boothey v Boothey* [1997] (Unreported, Supreme Court of Western Australia, Full Court, Malcolm CJ, Ipp, Murray JJ, 13 March 1997).

[170] Robert Frances Group, *Total Cost of Ownership for Linux Web Servers in the Enterprise* (2002).

[171] John Rymer and Bob Cormier, *The total economic impact of developing and deploying applications on Microsoft and J2EE/Linux Platforms* (2003) 23.

[172] Microsoft even claimed that the total cost of ownership for their software was cheaper than that for open source alternatives. But it should be said, the advertising campaign ('Get the Facts') was considered to be misleading and based on flawed research which the company funded itself. See `http://news.bbc.co.uk/1/hi/technology/3600724.stm`; `http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2907876,00.html`; Ibid; Robert Frances Group, above n 170

[173] *Ipex Software Services Pty Ltd v Hosking* [2000] VSCA 239, [52] (Eames AJA).

[174] See Michael Trebilcock, 'Chapter 8: Consideration' in *The Limits of Freedom to Contract* (1993) 167.

eration.[175] However, doing this would be to revive the *Dillwyn v Llewelyn*[176] style consideration that the Supreme Court of New South Wales emphatically rejected in *Beaton v McDivitt*.[177]

D *Other conditions in the licence*

Many permissive licences contain a small number of other, simple provisions, preventing passing-off, disclaiming liability or a number of other conditions, whilst maintaining the broad freedom associated with a permissive licence. These conditions may in themselves provide consideration being a promise of an act, or a forbearance.[178] The nature of the conditions may help determine whether this is a licence with conditions or a contract.[179]

1 *Including the conditions*

The agreement must be so constructed as to include the conditions, with notice,[180] yet avoid any problems with past consideration. Even if formation takes place after the software is acquired, the act of acquiring the software may not fall foul of the past-consideration rule:

> an act done before the giving of a promise to make a payment or confer some other benefit can sometimes be consideration for the promise. The act must have been done at the promisor's request: the parties must have understood that the act was to be remunerated either by a payment or the conferment of some other benefit: and payment, or the conferment of a benefit, must have been legally enforceable had it been promised in advance.[181]

2 *Attribution clause*

Australian copyright law already provides an author with a small set of moral rights, including the right to attribution.[182] This may mean that an attribution clause in a licence would not be sufficient to change the nature of the licence from conditional gift to unilateral promise.

---

[175] Atiyah, above n 7, 233; *Dillwyn v Llewelyn* (1862) 45 ER 1285; **Jorden**.

[176] (1862) 45 ER 1285.

[177] (1987) 13 NSWLR 162.

[178] *Beaton v McDivitt* (1987) 13 NSWLR 162, 168 (Kirby J); *Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd* [1915] AC 847, 855.

[179] See above, Part III(B)(3).

[180] See eg Brennan, above n 38, 244.

[181] *Pao On v Lau Yiu Long* [1980] AC 614, 629.

[182] *Copyright Act 1968* (Cth) s 193.

3 *Liability and warranty disclaimer*

Can a liability or warranty disclaimer constitute consideration? Almost all mainstream open source licences contain liability and implied warranty disclaimers, primarily written for United States law, conspicuously in uppercase. For example, the following disclaimer appears in the MIT open source licence:

> THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.[183]

At first instance, such a forbearance would appear to be valuable to the licensor. In *Gore v Van der Lann*,[184] the Court found sufficient consideration in a promise to be bound by the conditions (including liability disclaimers) of a free travel pass. [185]

But this is not clear. In *Boothey v Boothey*[186], the Court held that '[i]t is no consideration to refrain from a course of action which it was never intended to pursue'[187]

Warranty disclaimers may be illusory in Australia. Even if the implied warranties under the *Trade Practices Act 1974* (Cth) apply to open source software, they cannot be disclaimed.[188] The implied warranties in any case apply only to corporations, if they do not apply to the given developer, then the warranty disclaimer has no benefit and would also be illusory.

E *Analytical approach*

Given the colourful history of the doctrine of consideration and the recent movement towards 'practical benefit', there is a genuine uncertainty as to how a court

[183] Nelson, above n 50.

[184] [1967] 2 QB 31.

[185] *Gore v Van der Lann* [1967] 2 QB 31, 42. Although *Wilkie v London Passenger Transport Board* [1947] 1 All ER 258 had previously held such a pass to be a mere licence with conditions, the Court distinguished *Wilkie* because the free pass in that case was given as a fringe benefit, not to a stranger: *Gore v Van der Lann* [1967] 2 QB 31, 41. Open source software is typically a new relationship, not provided as a fringe benefit.

[186] [1997] (Unreported, Supreme Court of Western Australia, Full Court, Malcolm CJ, Ipp, Murray JJ, 13 March 1997).

[187] *Boothey v Boothey* [1997] (Unreported, Supreme Court of Western Australia, Full Court, Malcolm CJ, Ipp, Murray JJ, 13 March 1997).

[188] *Trade Practices Act 1974* (Cth) s 66(2).

would actually treat each of the issues mentioned in this paper. To compensate for this uncertainty, I will consider an analytic approach. Firstly I will provide some context to the various approaches, showing that although the orthodox approach is losing relevance in light of a new emphasis on bargain and practical benefit, the doctrine's erratic history continues to haunt general interpretation. Following that I will investigate the claim that consideration is simply a name for a different legal device, namely the incorporation of social policy into the enforceability of contracts. Finally, I will refer to some international cases on this very subject matter, which are likely to be influential if such a case came before an Australian court.

1 *Orthodoxy in context*

The doctrine of consideration has gone through a number of different phases, changing emphasis between motive, promise, benefit or detriment, *legal* benefit or detriment, bargain, *quid pro quo*, and social policy.[189] As new areas of law, such as duress, have evolved to deal with the doctrine's former policy roles, courts have relied on the doctrine of consideration less and less to deny agreements,[190] especially where it was ineffective in that role.[191] Implicit in this change has been an apparent expansion of the definitions of legal benefit and detriment to include factual or practical benefit and detriment.

The importance of *Williams* cannot be underestimated. Even though there has always been precedent available to support the notion of practical benefit providing sufficient consideration, *Williams* was necessary to overcome the stubborn precedent in the *Stilk* decision. With adequate laws elsewhere protecting against economic duress, the court was free to remove the orthodox approach in *Stilk* from modern law.

But the orthodox approach to consideration has survived enormous criticism and reform attempts.[192] It seems unlikely that its pervasive residue will disappear as practical benefit moves in.[193]

Evidence of this can be found in *Trumpet Software v Ozemail*,[194] a case decided a number of years after *Williams* and *Musumeci*.

[189] Sutton, above n 7.

[190] See eg Hough, above n 131.

[191] For example, Santow J makes note of the fact that consideration is very poor at preventing duress, saying: 'Consideration expressed in formalistic terms of one dollar can indeed actually cloak duress rather than expose it': *Musumeci* (1994) 34 NSWLR 723, 742.

[192] Scott, above n 122, 201; Atiyah, above n 7.

[193] See eg *South Caribbean Trading v Trafigura Beheer BV* [2004] EWHC 2676, 149 (Coleman J): 'But for the fact that *Williams v Roffey Bros* was a decision of the Court of Appeal, I would not have followed it.'

[194] (1996) 34 IPR 481.

2 *Social policy*

It has been argued that courts do not actually follow consideration precedent as rigidly as it seems. In reality a court asks the question: 'should this promise be enforced?',[195] or is there sufficient 'reason' for this promise to be enforced?[196] Corbin, a legal realist, described this phenomenon in 1952:

> "[W]hen a court holds that a certain factor justifies the enforcement of a promise, it calls it 'sufficient consideration'; and when it holds that it does not justify enforcement, it calls it either no consideration or an insufficient one"[197]

The material benefits that a developer receives are induced by the free licence and the implicit promise not to revoke that licence. Having received those benefits, this could be seen as reason enough for a court to enforce those promises. Such a line of reasoning can also be observed in practice, for example, in one of the repetitions of Lord Hailsham LC's sentiment that '[b]usinessmen know their own business best even when they appear to grant an indulgence'.[198] This rationalisation is similar to that of legal commentators.[199] More evidence of this can be seen where courts 'find' or 'invent' consideration, especially when that consideration facilitates a fair outcome.[200]

Professor Kenneth Sutton argues that in cases where orthodox consideration cannot be found, the court should not 'mechanically and dogmatically' apply the rule, but instead determine if a reason exists to refuse to enforce the promise, this being a decision based in social policy.[201] If a promise is 'an appeal to sanction',[202] and open source software licences make it very explicit that the licences are enforceable and irrevocable, then under this approach, social policy does not appear provide a reason to refuse to enforce open source software licences under contract law.

---

[195] Meyer-Rochow, above n 90, 533, citing Corbin, *Corbin on Contracts* (1952) 493.

[196] Atiyah, above n 7, 182.

[197] Corbin, above n 195.

[198] *Woodhouse AC Israel Cocoa SA v Nigerian Produce Marketing* [1972] AC 741, 757 (Lord Hailsham LC).

[199] For example 'concessions made by one part which appear to be quite gratuitous are usually made for good commercial reasons': Patrick Atiyah, *An introduction to the Law of Contract* (4^{th} ed, 1989); 'Invariably, good commercial or practical reasons underlie most decisions to vary the terms of an otherwise binding agreement and, consequently, such contractual variations should be *prima facie* enforceable.': Scott, above n 122, 218.

[200] See eg *De La Bere* [1908] 1 KB 280; *Ward v Byham* [1956] 1 WLR 496.

[201] Sutton, above n 7, 33.

[202] Ellinghaus, above n 4, 280.

3 *International context*

There is a growing worldwide acceptance of the factual benefits in open source software. A very recent US case before the United States Court of Appeals for the Federal Circuit, *Jacobsen v Katzer*[203] is a direct example of this. In this case, Robert Jacobsen's open source software for model railway hobbyists was found in a competing commercial product, which included Jacobsen's code and breached the conditions of the licence. The Court was able to recognise that '[t]here are substantial benefits, including economic benefits, to the creation and distribution of copyrighted works under public licenses that range far beyond traditional license royalties.'[204] This is certainly a very different observation to that of Heerey J in *Trumpet Software v Ozemail*.[205] In *Jacobsen v Katzer*[206] the Court was able to recognise the 'publicity',[207] 'cost sharing',[208] 'market share'[209] and even 'ideological'[210] benefits in open source software. Consequently, the Court was able to find consideration in the open source licence.[211] This was not the first time that such benefits in open source software had been recognised in the United States. Seven years earlier the Court in *Planetary Motion v Techsplosion*[212] gave a similar judgment:

> Competitive activity need not be fueled solely by a desire for direct monetary gain. [The developer] derived value from the distribution because he was able to improve his Software based on suggestions sent by end-users. ... It is logical that as the Software improved, more end-users used his Software, thereby increasing [the developer's] recognition in his profession and the likelihood that the Software would be improved even further.[213]

F *Permissive licence summary*

Given recent developments, it appears likely that consideration can be found in all permissive open source licences, if the facts at hand provide a clear factual benefit to the developer, or if the developer believes there are benefits involved (they usually do). Open source software provides a licensor with sufficient factual or practical benefit to give rise to consideration. Even if detriment is neces-

[203] (2008) 535 F.3d 1373.

[204] *Jacobsen v Katzer* (2008) 535 F.3d 1373, 1379.

[205] (1996) 34 IPR 481.

[206] (2008) 535 F.3d 1373.

[207] Ibid 1379.

[208] Ibid 1378.

[209] Ibid 1379.

[210] Ibid 1382.

[211] Ibid 1379.

[212] (1995) 261 F 3d 1188.

[213] *Planetary Motion v Techsplosion* (1995) 261 F 3d 1188, 1200.

sary for consideration, this could still be proven through economic opportunity loss and perhaps the presence of liability disclaimers.

But there is a strong body of orthodox precedent that suggest otherwise, meaning that there is a certain level of uncertainty in this area. Recent cases, social policy and overseas trends may overcome this uncertainty, leaning toward a finding of consideration in permissive open source licences.

IV Consideration in a 'Copyleft' Licence

I now turn to a second class of open source software licence, commonly called a 'copyleft' licence. Like the permissive open source software licence, a copyleft licence gives the software user the right to use, copy, modify and distribute. But the right to distribute comes with a catch. Copyleft software and derivative works must be distributed under the same copyleft licence. In essence, the copyleft licence functions the same as a permissive licence, but has extra conditions. This presumably means that if consideration can be found in a permissive open source licence, then it can be found in a copyleft licence. But even if no consideration is found in a permissive open source licence, the additional conditions in a copyleft licence may themselves provide consideration. This section will consider the possibility of these conditions providing consideration.

A *Forbearance as detriment*

The most onerous condition in a copyleft licence is the requirement that derivative software be released under the same licence. This means any new code that was written using the licensor's software, must also be released under a copyleft licence. In effect this is forbearance: the licensee gives up their right to release their own code under their own terms. This can still be considered forbearance, even if the user never intends to develop derivative code. This principle comes from *Hamer v Sidway*,[214] where an uncle paid his nephew not to smoke before turning 21, despite the fact that his nephew was not intending to.[215]

1 *Is this unilateral promise a conditional gift?*

As with the permissive open source licences,[216] forbearance in a copyleft licence fulfils the requirements from *Australian Woollen Mills*: there is an express re-

[214] (1891) 27 NE 256.

[215] This is assumed to be the case in English law too: Atiyah, above n 7, 195.

[216] See above, Part III(B)(3).

quest, it is clearly conveyed as the price of the licence and the licence is provided in order to induce the creation of more software under the same licence. Another determinant may be how onerous the condition is. The copyleft condition demands that the licensee's own software be licenced as open source software, which is no doubt sufficiently onerous to escape classification as a mere conditional gift.

It may however be necessary to show that the forbearance provides the licensor with a benefit. If this is the case, then the following section on the expanding public domain will become critically relevant.

2 *Is this illusory consideration?*

It is possible that this forbearance is actually illusory consideration. The restraint of trade only affects code that is a derivative of copyleft licenced code, but the licensee would never have been able to distribute this code without a licence. True this may be, but if the licensee did not have permission to distribute the licensor's code, they may well have used other, equivalent software or written it themselves in order to complete the task at hand. In the end, software will be distributed, but the licensee would be free to use a licence of their choosing. The effect of the copyleft licence is to induce the licensee to forego their right as copyright owner to licence the resulting software on their own terms. I do not believe that this can be considered illusory consideration.

B *The expanding public domain as benefit*

It is possible to recognise benefit to the licensor in copyleft clauses. If the 'practical benefit' approach of *Williams* is to be accepted in such a case, then the expanding public domain can be seen as both a direct benefit to the licensor and a satisfaction of an economic goal (being the political ideology behind open source software). If the licensee did not release their derived software under an open source licence, then the licensor would not have access to what is likely to be particularly relevant software. Much like the benefit in *De La Bere*, *Carlill* and *Chappell*, this is not a direct promise on behalf of the licensor. Instead it can be see as an opportunity for and increased likeliness of benefit.

C *Copyleft licence summary*

Given the onerous conditions placed on copyleft licences, it would appear to be very likely that consideration can be found in copyleft licences. This means, that even if factual benefit does not provide sufficient consideration in permissive licences, consideration could still be found in copyleft licences. Additionally,

whereas factual benefit would need to be proven in permissive licences, it need not be proven for copyleft licences.[217]

V Conclusion

On the whole, there is enough precedent to suggest that there is consideration in open source software licences. Consideration is even more likely in a copyleft licence, given its additional and more onerous conditions. These findings are supported by arguments in social policy and international developments, meaning it is very unlikely that a court would refuse to enforce the licence under contract law. But there is also a great deal of precedent that brings a strong element of uncertainty into this area. Most troublesome is the decision in *Trumpet Software v Ozemail*,[218] which does not appear to be in tune with the 'practical benefit' trend.

This uncertainly will only ever be solved by legislation (which is unlikely) or a case that requires the distinction between contract and copyright law. The likelihood of such a case arising any time soon is slim, given that copyright law generally provides adequate sanctions for breach of licence conditions. Until then, it remains to be seen whether or not an open source software licence is revocable.

[217] But this may not be a great issue, as there is usually factual benefit available.

[218] (1996) 34 IPR 481.

Bibliography

Articles/Books/Reports

Alaiza Cardona, Jose Gonzalez de, 'Open Source, Free Software, and Contractual Issues' (2007) 15 *Texas Intellectual Property Law Journal* 157

American Law Institute, *Restatement (Second) of Contracts* (1981)

Atiyah, Patrick, *An introduction to the Law of Contract* (4^{th} ed, 1989)

Atiyah, Patrick, 'Consideration: A Restatement' in *Essays on Contract* (1986)

Atiyah, Patrick and Stephen Smith, *Atiyah's Introduction to the Law of Contract* (6^{th} ed, 2005)

Beale, H (ed), *Chitty on Contract* (30^{th} ed, 2006)

Bennett, Michael and Katherine Ivers, *Open Source Software: Your Company's Legal Risks* (2008) Linux Insider <http://www.linuxinsider.com/story/64378.html> at 7 June 2009

Brennan, David, 'Terms of a Copyright Licence in Shareware' (1997) 11 *Journal of Copyright Law* 241

Carroll, 'Creative Commons and the New Intermediaries' [2006] *Michigan State Law Rev* 4

Carter, J W, 'The Renegotiation of Contracts' (1998) 13 *Journal of Contract Law* 185

Carter, J W, Andrew Phang and Jill Poole, 'Reactions to Williams v Roffey' (1995) 8 *JCL* 248

Carter, J, 'Chapter 6: Consideration' in *Carter on Contract* (2009)

Chen-Wishart, Mindy, 'Consideration: Practical Benefit and the Emperor's New Clothes" in J Beatson and D Friedmann (eds), Good Faith and Fault in Contract Law' in Beatson, J and D Friedmann (eds) (eds) *Good Faith and Fault in Contract Law* (1995)

Coote, 'Duress By Threatened Breach of Contract' [1980] *CLJ* 40

Coote, Brian, 'Common Forms, Consideration and Contract Doctrine' (1999) 14 *JCL* 116

Coote, Brian, 'Consideration and Benefit in Fact and in Law' [1990] *Journal of Contract Law* 23

Copyright Law Review Committee, *Computer Software Protection* (1995)

Copyright Law Review Committee, *Copyright and Contract* (2002)

Corbin, *Corbin on Contracts* (1952)

Determann, Lothar, Stuart Pixley and Gary Shapiro, 'Managing commercial risks in open source software licensing' (2007) 2 *Journal of Intellectual Property Law Practice* 770

DiBona, Chris, Danese Cooper and Mark Stone (eds), *Open Sources 2.0 : the continuing evolution* (2005)

Dixon, Rod, *Open Source Software Law* (2004)

Dotzler, Asa, *firefox at 270 million users* (2009) Firefox and more < http://weblogs.mozillazine.org/asa/archives/2009/05/firefox_at_270.html > at 14 June 2009

Ellinghaus, M P, 'Consideration Reconsidered Considered' (1975) 10 *Melbourne University Law Review* 267

Furmston M, P, 'Commentary on'The Renegotiation of Contracts'' (1998) 13 *JCL* 210

Gava, John and Peter Kincaid, 'Contract and Conventionalism: Professional Attitudes to Changes in Contract Law in Australia' (1996) 10 *Journal of Contract Law* 141

Ghosh, Rishab Aiyer (ed), *Economic impact of open source software on innovation and the competitiveness of the Information and Communication Technologies (ICT) sector in the EU* (2006)

Giles, Ben, 'Consideration' and the open source agreement' (2002) 49 *NSW Society for Computers and the Law*

Guadamuz-Gonzalez, Andres, 'The License/Contract Dichotomy in Open Licenses: A Comparative Analysis' (2009) 30(2) *University of La Verne Law Review* 101

Halyk, 'Consideration, Practical Benefits and Promissory Estoppel: Enforcement of Contract Modification in light of Williams v Roffey Brothers' (1991) 55 *Sask L Rev* 393

Holdsworth, Sir William, *History of English Law* (2^{nd} ed, 1937)

Hough, Barry and Ann Spowart-Taylor, 'The Doctrine of Consideration: Dead or Alive in English Employment Contracts?' (2001) 17 *JCL* 193

Jenks, Edward, *The history of the doctrine of consideration in English law* (1892)

Johnson, Phillip, 'Dedicating' Copyright to the Public Domain' (2008) 71(4) *Modern Law Review* 587

Jones, Pamela, *The GPL Is a License, not a Contract* (2003) Groklaw < http://www.groklaw.net/article.php?story=20031214210634851 > at 13 June 2009

Kumar, Sapna, 'Enforcing the GNU GPL' (2006) 1 *Journal of Law, Technology and Policy* 1

Madison, Michael, 'Reconstructing the Software License' (2003) 35 *Loyola University of Chicago Law Review* 275

Mahony, Ieuan and Edward Naughton, 'Open Source Software Monetized: Out of the Bazaar and into Big Business' (2004) 21(10) *The Computer & Internet Lawyer* 1

Mason, Malcolm, 'The Utility of Consideration–A Comparative View' (1941) 41(5) *Columbia Law Review* 825

Mcgowan, David, 'Legal Implications of Open Source Software' [2001] *University of Illinois Law Review* 241

McPherson, Amanda, Brian Proffitt and Ron Hale-Evans, *Estimating the Total Development Cost of a Linux Distribution* (2008)

Megarry, Sir Robert and Sir William Wade, *The Law of Real Property* (7^{th} ed, 2008)

Meyer-Rochow, Rembert, 'The Requirement of Consideration' (1997) 71 *The Australian Law Journal* 532

Nelson, Russell, *The MIT License* (2009) Open Source Initiative < http://www.opensource.org/licenses/mit-license.php > at 25 June 2009

Parens, Bruce, 'How Many Open Source Licenses Do You Need?' [2009] *Datamation online*

Plucknett, Theodore, *A Concise History of the Common Law* (5^{th} ed, 1956)

Ravicher, Daniel, 'Facilitating Collaborative Software Development: The Enforceability of Mass-Market Public Software Licenses' (2000) 5 *Virginia Journal of Law and Technology* 11

Robert Frances Group, *Total Cost of Ownership for Linux Web Servers in the Enterprise* (2002)

Rosen, Lawrence, *Open Source Licensing: Software Freedom and Intellectual Property Law* (2004)

Rymer, John and Bob Cormier, *The total economic impact of developing and deploying applications on Microsoft and J2EE/Linux Platforms* (2003)

Saunders, Cheryl and Anthony Mason, *Courts of final jurisdiction* (1996)

Scott, Karen, 'From Sailors to Fisherman: Contractual Variation and the Abolition of the Pre-Existing Duty Rule in New Zealand' (2005) 11 *Canterbury Law Review* 201

Shatwell, K, 'The Doctrine of Consideration in the Modern Law' (1954) 1 *Sydney Law Review* 289

Simpson, Alfred William, *A History of the Common Law of Contract* (1975)

Sutton, Kenneth, *Consideration Reconsidered* (1974)

Swanton J, P, 'Failure of Condition Precedent — Uncertainty and Illusory Consideration' (1991) 4 *Journal of Contract Law* 152

Trebilcock, Michael, 'Chapter 8: Consideration' in *The Limits of Freedom to Contract* (1993)

Treitel, G, 'Consideration: A Critical Analysis of Professor Atiyah's Fundamental Restatement' (1976) 50 *Australian Law Journal* 439

Twyford, John, *The Doctrine of Consideration* (SJD Thesis, University of Technology Sydney, 2002)

Wacha, Jason, 'Taking the Case: Is the GPL Enforceable?' (2005) 21 *Santa Clara Computer & High Tech Law Journal* 451

Waddams S, M, 'Commentary on'The Renegotiation of Contracts'' (1998) 13 *Journal of Contract Law* 199

Weber, Steve, *The success of open source* (2004)

Case Law

Acohs v Bashford (1997) 144 ALR 528

Ajax Cooke v Nugent [1993] (Unreported, Supreme Court of Victoria, Phillips J, 20 November 1993)

Anangel v IHI (No 2) [1990] 2 Lloyd's Rep 526

Antons Trawling Co Ltd v Smith [2003] 2 NZLR 23

Attorney-General for England and Wales v R [2002] 2 NZLR 91

Australian Woollen Mills v Commonwealth (1954) 92 CLR 424

Ballantyne v Phillot (1961) 105 CLR 379

Beaton v McDivitt (1987) 13 NSWLR 162

Biotechnology Australia v Pace (1988) 15 NSWLR 130

Bolton v Madden (1873) LR 9 QB 55

Boothey v Boothey [1997] (Unreported, Supreme Court of Western Australia, Full Court, Malcolm CJ, Ipp, Murray JJ, 13 March 1997)

BP Refinery (Westernport) v Shire of Hastings (1977) 180 CLR 266

Breusch v Watts Development Division (1987) 10 NSWLR 311

Brikom Investments Ltd v Carr [1979] 1 QB 467

British Empire Films v Oxford Theatres [1943] VLR 163

Carlill v Carbolic Smoke Ball Co [1893] 1 QB 256

Centrestage Management v Riedle (2008) 77 IPR 550

Chappell v Nestlé [1959] 2 All ER 701

Collins v Godefroy (1831) 109 ER 140

Commonwealth Bank of Australia v Poynten (1996) Aust Contract R ¶90-065

Computermate Products (Aust) Pty Ltd v Ozi-Soft Pty Ltd (1988) 83 ALR 492

Cook Islands Shipping Co Ltd v Colson [1975] 1 NZLR 422

Cosgrove v Horsfall (1945) 62 TLR 140

Cottee v Franklins Self-Serve [1997] 1 Qd R 469

Coulls v Bagot's Executor and Trustee (1962) 119 CLR 460

Crow v Rogers (1795) 93 ER 719

Currie v Misa (1875) LR 10 Ex 153

De La Bere v Pearson [1908] 1 KB 280

Dillwyn v Llewelyn (1862) 45 ER 1285

Downward Bricklaying Pty Ltd v Goulburn-Murray Rural Water Authority [2003] VSC 171

DPP (Vic) v Le (2007) 232 CLR 562

Dunlop Pneumatic Tyre Co Ltd v Selfridge Co Ltd [1915] AC 847

Dunton v Dunton (1892) 18 VLR 114

Eastwood v Kenyon [1840] 113 ER 482

Edmonds v Lawson [2000] QB 501

Errington v Errington [1952] 1 KB 290

Figjam v Pedrini [2005] NSWSC 221

Foakes v Beer (1884) 9 App Cas 605

Gippsreal v Registrar of Titles and Kurek Investments [2007] VSCA 279

Glasbrook v Glamorgan County Council (1813) ER 1415

Gore v Van der Lann [1967] 2 QB 31

Greater Fredericton Airport Authority Inc v NAV Canada [2008] NBCA 28

Gregory v MAB (1989) 1 WAR 1

Haigh v Brooks (1840) 113 ER 119

Hamer v Sidway (1891) 27 NE 256

Harris v Carter (1854) 118 ER 1251

Hounslow LBC v Twickenham Garden Developmets Ltd [1971] Ch 233

Ipex Software Services Pty Ltd v Hosking [2000] VSCA 239

J Kitchen & Sons Pty Ltd v Stewart's Cash & Carry Stores (1942) 66 CLR 116

Jacobsen v Katzer (2008) 535 F.3d 1373

Lucas v Mok (1983) 9 Fam LR 180

Meehan v Jones (1982) 149 CLR 571

Meyenberg v Pattison (1890) 3 QLJ 184

Mitchell v Pacific Dawn Pty Ltd [2003] QSC 086

Musumeci v Winadell (1994) 34 NSWLR 723

National Phonograph Co of Australia Ltd v Menck (1908) 7 CLR 481

National Trustees Executors & Agency v O'Hea (1904) 10 ALR 81

North Ocean Shipping Co Ltd v Hyundai Construction Co Ltd (The Atlantic Baron) [1978] 3 All ER 1170

Pao On v Lau Yiu Long [1980] AC 614

Placer Development v The Commonwealth (1969) 121 CLR 353

Planetary Motion v Techsplosion (1995) 261 F 3d 1188

Popiw v Popiw [1959] VR 197

Port Jackson Stevedoring v Salmond (1978) 139 CLR 231

Price v Easton (1833) 110 ER 518

Quickenden v Commissioner O'Conner of the Australian Industrial Relations Commission [2001] FCA 303

Re Hudson (1885) 54 LJ Ch 811

Re Selectmove Ltd [1995] 1 WLR 474

Sanderson v Workington Borough Council (1918) 34 TLR 386

Silver v Dome Resources (2007) 62 ACSR 539

South Caribbean Trading v Trafigura Beheer BV [2004] EWHC 2676

Stilk v Myrick (1809) 2 Camp 317

Stilk v Myrick (1809) 6 Esp 129

Swain v West (Butchers) Ltd [1936] 1 All ER 224

Syros Shipping Co SA v Elaghill Trading Co [1981] 3 All ER 189

Thomas v Thomas (1842) 114 ER 330

Tinyow v Lee [2006] NSWCA 80

Trident v McNiece (1988) 165 CLR 107

Trumpet Software v Ozemail (1996) 34 IPR 481

Tweddle v Atkinson (1861) 121 ER 762

Vella v Ayshan [2008] NSWSC 84

Waltons Stores (Interstate) v Maher (1988) 164 CLR 387

Ward v Byham [1956] 1 WLR 496

White v Bluett (1853) 23 LJ Ex 36

Wigan v Edwards (1973) 47 ALJR 586

Wilkie v London Passenger Transport Board [1947] 1 All ER 258

Williams v Roffey [1990] 1 All ER 512

Williams v Williams [1957] 1 WLR 148

Winterton Constructions v Hambros (1991) 101 ALR 363

Woodhouse AC Israel Cocoa SA v Nigerian Produce Marketing [1972] AC 741

Woolworths v Kelly (1991) 22 NSWLR 189

Legislation

Copyright Act 1968 (Cth)

Trade Practices Act 1974 (Cth)

Uniform Commercial Code 1952 (US)

Treaties

Agreement on Trade-Related Aspects of Intellectual Property Rights, opened for signature 15 April 1994 (entered into force 1 January 1995)

Berne Convention for the Protection of Literary and Artistic Works, opened for signature 09 September 1886, 1 BDIEL 715 (entered into force 5 December 1887)

World Intellectual Property Organization Copyright Treaty, opened for signature 20 December 1996 (entered into force 5 March 2002)