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The Software Licensing Dilemma

Nancy Kim
California Western School of Law, nsk@cwsl.edu

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*Nancy S. Kim**

Is software licensed or sold? Software licensing occupies a unique position at the intersection of contracts, intellectual property, and commercial law doctrines. The difficulty in analyzing software licensing issues directly results from the *sui generis* nature of software that leads to the construct of what I refer to as the "software licensing dilemma"—if software is sold and not licensed, the licensor's ability to control unauthorized uses of its product is significantly curtailed; on the other hand, if software is licensed and not sold, the licensee's rights under the agreement are unduly restricted.

Currently, the use of contract law to evaluate software license agreements is problematic not because the doctrine is inadequate but because those who use the rhetoric of contracts have tended to impose an artificially static view of what contract law demands—a view that wholly ignores the philosophical objectives underlying contract law. In this Article, I propose adopting a "dynamic contracts" approach to resolving the software licensing dilemma. A dynamic contracts approach aims to effectuate the intent of the parties while balancing their intent against policy considerations. A determination of the parties' intent would include examining both the nature of the transaction and the terms of the written document or license agreement. This Article argues that the validity of a license grant should not be inextricably tied to the validity of the contract. Contrary to what is suggested by the first sentence of this Article—is software licensed or sold?—software transactions are not a binary

* Associate Professor, California Western School of Law and Visiting Associate Professor, Rady School of Management, University of California, San Diego. Earlier versions of this Article were presented at the Fifth Annual Works-in-Progress Intellectual Property Colloquium at American University, Washington College of Law and the Southern California Junior Faculty Workshop at Southwestern School of Law, and the author thanks participants at both presentations for their helpful comments and observations. Special thanks to Seth Burns, Tom Barton, Deven Desai, Michael Dorff, and Gary Rowe for their comments on earlier drafts of this Article. The editors of the BYU Law Review were exceptionally well-organized and professional. In particular, I would like to thank Natalie Banta, Kenneth Pike, and Josh McLane for their excellent editorial assistance.

proposition. While some transactions can clearly be identified as either licensing or sales deals, most entail both. The recognition of the independence of license grant provisions exposes the binary proposition of license versus sale as a false dichotomy. In applying a dynamic contracts approach, this Article also addresses several policy considerations relevant to interpreting two often disputed license provisions—the restriction on transferability and the restriction on commercial use.

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I. INTRODUCTION

On several occasions, Tim Vernor listed Autodesk software products for sale on eBay, the Internet auction site.[1] Each time, Autodesk sent a Digital Millennium Copyright Act ("DMCA") notice to eBay, claiming that a sale of the Autodesk product would infringe its copyright. In response, eBay suspended the auction and Vernor, in turn, filed a DMCA counter-notice to Autodesk claiming that the sale was lawful.[2] Vernor, wishing to sell additional Autodesk software, eventually sought a declaration that his resale of Autodesk software was lawful.[3]

Vernor had obtained copies of the Autodesk software products from a third party, "CTA."[4] Autodesk, in turn, had transferred the software products to CTA pursuant to a settlement agreement that required CTA to adhere to the terms of Autodesk's end-user license agreement. Autodesk claimed that its end-user license agreement stated that the product could not be resold or transferred.[5]

The court in *Vernor* faced an important question regarding software transactions—is software licensed or sold? The court acknowledged that the cases addressing the license versus sale issue, even within the Ninth Circuit, were in "unavoidable" and "irreconcilable conflict."[6] The federal district court ultimately concluded that the transaction between Autodesk and CTA was a "sale with restrictions on use," which fell under the first sale

1. Vernor v. Autodesk, Inc., 555 F. Supp. 2d 1164, 1165–66 (W.D. Wash. 2008); *see also* Complaint C07-1189 (on file with the author); Jacqui Cheng, *Autodesk Sued for $10 Million After Invoking DMCA to Stop eBay Resales*, Sept. 13, 2007, http://arstechnica.com/news.ars/post/20070913-autodesk-sued-for-10-million-after-invoking-dmca-to-stop-ebay-resales.html.

2. *Vernor*, 555 F. Supp. 2d at 1165–66.

3. *Id.* In addition, Vernor sought damages based upon a claim of unfair competition.

4. *Id.* at 1166–67.

5. *Id.*

6. *Id.* at 1172–73.

doctrine.[7] The court based its ruling upon the earliest Ninth Circuit case addressing the issue of license versus sale, even though that case did not involve software products.[8] Unfortunately, the court's decision is inconsistent with the leading Ninth Circuit cases that specifically address the license versus sale issue as it pertains to *software*.[9] In fact, the court noted that if it were to apply recent case precedent to the matter at hand, "it would conclude that Autodesk did not sell AutoCAD copies to CTA."[10]

Scholarship addressing the license versus sale issue in the context of software can be broadly categorized in two ways. One type of analysis focuses on the *policy* implications of software product licensing.[11] This approach seeks to answer the normative question of whether software products should be licensed (rather than sold) and, consequently, delves into the *nature* of software and how best to characterize it.[12] The second type of software licensing analysis examines the *form* of the transaction.[13] This approach generally contemplates only non-negotiated licenses[14] and is primarily concerned with the answer to a doctrinal contracts question: was the purported license agreed to by the parties?

These two approaches stem from the *sui generis* nature of software licensing. Software licensing stands at the crossroads of contracts and intellectual property doctrine and consumer and digital

7. *Id.* at 1170–71 (quoting United States v. Wise, 550 F.2d 1180, 1192 (9th Cir. 1997)).

8. *Id.* The case that the court cited was *Wise*, 550 F.2d 1180. In *Wise*, the Ninth Circuit found that the transfer of a movie print was a sale with restrictions on use. *Id.* at 1192–94.

9. The trio of Ninth Circuit cases cited by the court in *Autodesk* and referred to as the "MAI trio" were *Wall Data, Inc. v. Los Angeles County Sheriff's Department*, 447 F.3d 769, 784–85 (9th Cir. 2006) (holding that § 117 of the Copyright Act does not apply where a software developer retains ownership of every copy of software and merely licenses the use of those copies), *Triad Systems Corp. v. S.E. Express Co.*, 64 F.3d 1330 (9th Cir. 1995) (finding a license and not a sale where the contract banned duplication of software by customers and prohibited software use by third parties), and *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518 n.5 (9th Cir. 1993) (finding a software license agreement valid and the software product not sold).

10. *Vernor*, 555 F. Supp. 2d at 1172 ("[If] restrictions like those in the *MAI* trio are sufficient to warrant a 'no sale' finding, then the transfer of AutoCAD copies from Autodesk to CTA was not a sale.").

11. *See infra* Part III.A.

12. *See infra* Part III.A.

13. *See infra* Part III.B.

14. *See infra* Part III.B.

information policy. The licensing of software is different from the licensing of intellectual property rights alone because it encompasses not only the underlying technology but the program or "product."[15] Furthermore, as explained in Part IV, the characteristics of software make it different from other types of consumer products that are sold outright rather than licensed.

The answer to the license versus sale issue has significant ramifications. Classifying a transaction as a license or a sale determines which regulatory regime governs, which default rules apply, and what rights and remedies are available to each party. In addition, the characterization of the transaction affects third parties such as resellers, distributors, and subsequent transferees. Finally, the resolution of the licensing dilemma will affect other products and industries. There is already an increase in the number and types of "licensing" transactions that were formerly classified as "sales."[16]

In this Article, I suggest reframing the issue of software licensing as contractual, requiring a dynamic approach that takes into account both public and private interests. The mechanism by which software is licensed is a contract; accordingly, the enforceability of that contract should depend on an analysis under contract law.[17] Currently, using contract law to evaluate software licenses is problematic, not because the doctrine is not up to the challenge, but because courts and commentators who employ the rhetoric of contracts tend to impose an artificially static view of what contract law demands. In reaction to such a narrow construction of contract doctrine, the temptation on the part of many scholars and commentators has been either to jettison contract law altogether in favor of policy arguments[18] or, alternatively, to mask such a policy

15. *See* David A. Rice, *Licensing the Use of Computer Program Copies and the Copyright Act First Sale Doctrine*, 30 JURIMETRICS J. 157, 166–72 (1990) (discussing how the inapposite nature of software licensing differs from other established forms of copyright-related licensing).

16. *See infra* Part V.

17. *See* ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1450 (7th Cir. 1996) (treating "licenses as ordinary contracts accompanying the sale of products, and therefore as governed by the common law of contracts and the Uniform Commercial Code," but leaving open the issue of "[w]hether there are legal differences between 'contracts' and 'licenses' (which may matter under the copyright doctrine of first sale)" (citing Microsoft Corp. v. Harmony Computers & Elecs., Inc., 846 F. Supp. 208 (E.D.N.Y. 1994))).

18. *See* Glen O. Robinson, *Personal Property Servitudes*, 71 U. CHI. L. REV. 1449, 1453 (2004). Robinson argues that "whether one should be able to contract around limitations on

agenda under the guise of adhering to contract law while violating existing contract doctrine. While policy arguments are important and relevant, trying to unearth a distinct "law of software licensing" is like trying to capture shadows—the shadows will shift with time. Because the nature (and uses) of software and digital information are constantly evolving, attempts to contain software and digital information in doctrinal boxes are unsuccessful.[19]

Furthermore, there is a fundamental flaw in the standard analysis of software licenses—software licensing, contrary to recent court cases, is not a binary proposition. While some transactions can clearly be identified as either licensing or sales deals, most entail both.[20] The delineation of license and sale portions of a transaction, as well as violations of scope of license and other contractual terms, is imperative in addressing the rights and obligations of each party.

This Article makes two arguments. First, the dilemma posed by software transactions—sales or licenses?—should be answered by dynamic contract law. Dynamic contract law has as its objective effectuating the intent of the parties but weighs that objective against policy considerations. Second, the validity of a license grant should not be inextricably tied to the validity of the contract as a whole. The problem with relying on contract doctrine in the context of software

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copyrighted or patented property should depend not on some formalistic distinction between contract rights and property rights, but on the policies at stake." *Id.* at 1453.

19. Frank H. Easterbrook made this observation when he famously compared cyberlaw to "the law of the horse" and noted that "[b]eliefs lawyers hold about computers, and predictions they make about new technologies, are highly likely to be false. This should make us hesitate to prescribe legal adaptations for cyberspace. The blind are not good trailblazers." Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 207. *But see* Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. Rev. 501, 502 (1999) (arguing that "there is an important general point that comes from thinking in particular about how law and cyberspace connect"); Pamela Samuelson, Randall Davis, Mitchell D. Kapor & J.H. Reichman, *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2308 (1994) (explaining why there is a need for a *sui generis* approach to legal protection of computer programs).

20. Lothar Determann & Aaron Xavier Fellmeth, *Don't Judge a Sale by Its License: Software Transfers Under the First Sale Doctrine in the United States and the European Community*, 36 U.S.F. L. REV. 1, 7 (2001) (stating the "common judicial dichotomization" of a "license" and a "sale" of software is labeled as misleading because the "gravamen of a software transfer is the license itself and therefore such a transfer can involve either a sale or a lease of a software copy, but it must always involve a license in some form. Alternatively, a sale or a lease of a software copy can be accompanied by a sale or a lease of a copyright itself, but under most circumstances, the term 'license' indicates only if and to what extent the copyright owners wishes to dispose of some or all of its exclusive rights to a computer program.").

licensing is that, too often, the *application* of that doctrine is static and formalistic. A new doctrine is not necessary to address software licensing issues; rather, the old doctrine needs to be reinvigorated to address changes in the marketplace. A license grant is not solely and exclusively a contractual term, the validity of which depends on the validity of the contract in its entirety; rather, in the event that a software license fails as a contract, the license grant may be considered—separate from the contract as a whole—as a promise made by the licensor that is contingent on the licensee's performance and adherence to its terms.

Part II discusses the implications of the licensing dilemma and the ramifications that flow from a determination of the transaction as either a license or a sale. Part III summarizes existing approaches to the software licensing dilemma and proposes a "dynamic contracts" approach to examining software transactions. A dynamic contracts approach identifies the nature of the transaction as relevant to determining the intent of the parties. Part III also proposes several criteria for distinguishing a "sales" transaction from a "licensing" transaction and acknowledges that most software transactions contain aspects of both.[21] In addition, Part III discusses the effect of written terms that accompany a product in both a licensing and a sales transaction. Because software license agreements are contracts, their validity and enforceability should depend first and foremost on their validity and enforceability as contracts; however, rather than examining the written agreement in order to characterize the transaction, we should look to the transaction to determine how to interpret the written terms. In a sales transaction, the license grant is effective as a promise independent from the other terms contained in the "contract." Recognizing the independence of license grant provisions exposes the binary proposition of license versus sale as a false dichotomy.

Part IV examines two common license restrictions and discusses how each should be interpreted using a dynamic contracts approach. Part V discusses and responds to anticipated objections to this approach. This Article concludes that the software licensing dilemma is a red herring. Technology has created challenges for software producers, but those challenges are not unique to the software industry. Before we distort existing legal doctrine in an effort to

21. *Id.* at 12–15, 19–22.

accommodate the perceived needs of a specific market segment, we should carefully consider the impact of doing so on other market segments. It would be much wiser to take the long view to address technological changes than to create exceptions that morph into rules with regrettable implications.

II. THE IMPORTANCE OF RESOLVING THE LICENSE VERSUS SALE DEBATE

The ramifications of characterizing software transactions as either licenses or sales are manifold. As previously mentioned, the license or sale determination has a domino effect on the applicable regulatory regime, default rules, and available remedies. Furthermore, how the license versus sale issue plays out in the context of software transactions affects not only the software industry but many other commercial markets.

A. The Applicable Regulatory Regime and Default Rules

While software is protected by copyright law, licenses of the software are contracts and thus governed by contract law. If software products are "sold" and if they are "goods,"[22] the transaction is governed by commercial law.[23] The analysis of software transactions

22. The pre-2003 Article 2-105 of the Uniform Commercial Code defines "goods" as "all things . . . which are movable at the time of identification to the contract for sale other than the money in which the price is to be paid, investment securities . . . and things in action." U.C.C. § 2-105 (2002). The 2003 amendments added "information" to the list of things that are *not* considered goods, but left unresolved whether software products are "goods" or "information." *See* U.C.C. § 2-103(1)(k) (2007). Comment 7 to the amended § 2-103(k) states that "an electronic transfer of information" is not a good but expressly acknowledges that "transactions often include both goods and information: some are transactions in goods . . . and some are not." *Id.* at cmt. 7. The lack of clarity appears to be intentional:

> When a transaction includes both the sale of goods and the transfer of rights in information, it is up to the courts to determine whether the transaction is entirely within or outside of this article; or whether or to what extent this article should be applied to a portion of the transaction. While this article may apply to a transaction including information, nothing in this article alters, creates, or diminishes intellectual property rights.

Id.

23. *See infra* Part II.A.2. Efforts to create a uniform commercial code governing contracts for computer information have been unsuccessful. The Uniform Computer Information Transactions Act (UCITA), a joint effort of the American Bar Association and the American Law Institute, was ultimately rejected by both organizations amidst opposition that the Act was biased against consumers. *See* Daniel A. DeMarco & Christopher B. Wick, *Now*

thus requires an awareness of the domino-like effect of characterizing the transaction as either a license or a sale.

1. The first sale doctrine and its consequences

If a software transaction is characterized as a "sale," then the first sale doctrine governs that transaction. Under Section 106 of the 1976 Copyright Act,[24] the owner of a copyright has the following exclusive rights: the right to reproduce her work;[25] the right to prepare derivative works based upon her creation;[26] and the right to distribute copies of her work.[27] The first sale doctrine,[28] however, imposes a significant limitation on the exclusive right to distribute. Under the first sale doctrine, the owner of a particular copy of a work is entitled, without the permission of the copyright owner, to sell or otherwise dispose of that copy.[29] In other words, the purchaser of a copy of a work protected by copyright cannot reproduce or prepare derivative works of that copyrighted work,[30] but the purchaser *may* resell or transfer that copy.[31]

The effects of the first sale doctrine extend beyond the express right to transfer a copy of the software. Under the computer "fair use" provision,[32] an owner of a copy of a computer program may make or authorize the creation of another copy or adaptation of the program as an "essential step in the utilization of the computer

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UCITA, Now You Don't: A Bankruptcy Practitioner's Observations on the Proposed Uniform Computer Information Transactions Act, AM. BANKR. INST. J., May 2004, at 34.

24. 17 U.S.C. § 106 (1982).

25. *Id.* § 106(1).

26. *Id.* § 106(2).

27. *Id.* § 106(3).

28. *Id.* § 109(a).

29. *Id.*

30. *See* Vernor v. Autodesk, Inc., 555 F. Supp. 2d. 1164, 1168 (W.D. Wash. 2008). Of course, some copying may fall under the fair use exception. *See* 17 U.S.C.A. § 107 (2000). Under this section, four criteria are to be used in determining whether a defendant's use constitutes "fair use":

> (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.

31. *See also* Determann & Fellmeth, *supra* note 20, at 22–27 (explaining the first sale doctrine).

32. 17 U.S.C. § 117 (1982).

program" or for "archival purposes."[33] The right granted under this provision directly limits the copyright owner's exclusive rights to prepare a derivative work.[34] Software programs are usually distributed in machine-readable object code only.[35] Adaptation requires knowledge of the software program, which typically requires decompilation or reverse engineering of the object code.[36] Because decompilation requires copying the program into the computer memory and translating and copying the resultant translation, it would seem to infringe the copyright owner's exclusive rights under section 106.[37] Nevertheless, such copying is an "essential step" in the analysis of how the software works.[38] It is ownership of a copy of the copyrighted product that triggers the statutory privilege.[39] If software is sold and not licensed, the purchaser of that copy of the software product has first sale and fair use rights under copyright law; if software is licensed instead of sold, the purchaser is merely a "licensee" and not an owner of the copy of the software product and, thus, not privileged with first sale and associated rights.

2. Contract law implications of license versus sale

Because written terms accompany a software transaction, an analysis of that transaction also has contract law implications. A standard contract law analysis would evaluate the terms of the "license agreement" according to contract rules of formation and enforcement. Contract formation is the usual starting point in cases involving software transactions.[40] The characterization of the transaction as either a license or sale affects how a particular provision may be interpreted as well as the legal effect of the written terms, including available remedies for breach.

33. *Id.* at § 117(1)–(2).

34. Rice, *supra* note 15, at 163.

35. *See* Jessica Litman, *Copyright and Information Policy*, 55 LAW & CONTEMP. PROBS. 185, 197 (1992) (citations omitted).

36. *Id.*

37. *Id.* at 198.

38. *Id.*

39. Rice, *supra* note 15, at 163. For a discussion of fair use and computer software, see generally Litman, *supra* note 35, at 196–204.

40. *See infra* Part III.B.

III. A SUMMARY OF THE PRIMARY APPROACHES TO THE LICENSING DILEMMA

Software licensing raises many complex issues related to both the nature of software and the manner in which it is distributed. Software does not fit neatly into preexisting legal categories because it is both tangible and intangible, and both privately owned and publicly distributable. Although the intellectual property constituting the underlying software code is legally "owned" by the software producer, the medium upon which the software is contained can be readily transferred by others (i.e., non-owners of the software code).[41] Furthermore, unlike tangible property, the code itself is subject to manipulation and distribution without the owner's knowledge or consent. Yet, unlike other types of intangible property—such as trade secrets or trademarks—software is often readily available for purchase and can be impersonally bought or sold to anyone willing to pay the price.

The license versus sale question is both a factual or descriptive one and a normative one. In other words, the license versus sale debate usually involves two distinct but closely related issues. The first is whether software should be licensed or sold. The second is whether software is in fact licensed or sold. The former requires a policy analysis; the latter primarily involves issues of contract formation.

A. Policy-Based Approaches to the License/Sale Issue

In order to address the question of whether software should, or must, be licensed, a subordinate question must be asked and answered regarding whether the issues raised by software licensing are capable of being adequately addressed by existing law. For many, a useful starting point is the subject matter of the inquiry itself.[42] As explained in this section, the characterization of the software often determines the characterization of the transaction—which in turn determines the applicable substantive law. Thus a discussion of the

41. The distribution of movies and music in digital format also raises many of the issues discussed in this Article.

42. The problems related to defining software have been discussed elsewhere. *See* Andrew Chin, *Antitrust Analysis in Software Product Markets: A First Principles Approach*, 18 HARV. J.L. & TECH. 1, 5–6 (2004) (discussing the "fallacious premise" that software products consist of code).

struggle to define and characterize software usually accompanies, and may sometimes overshadow, any doctrinal analysis of contract issues.

The analysis of software licensing often begins with an assumption of what software is. Generally, there are two ways to categorize software. The first is what I refer to as the "software as property" view; the second is referred to as "the software as goods" view. These two views are typically set in opposition to one another. Each categorization is more often the result of policy considerations than the inevitable result of a descriptive analysis based upon the characteristics of software.

1. Is software property?

One way to categorize software is by focusing on the legal rights of the licensor. Some commentators adopt the view that since software code is the (intellectual) property of the licensor, the licensor may, within legal boundaries, do what it wishes.[43] In accordance with this view, which I will refer to as the "software as property" view,[44] the software industry has long maintained that it has the right to control the use of software through the use of contracts, just as other property owners can manage the use of their property with written agreements.[45] Since the software code is the

43. *See, e.g.*, Frank H. Easterbrook, *Intellectual Property Is Still Property*, 13 HARV. J.L. & PUB. POL'Y 108, 113–14 (1990) [hereinafter Easterbrook, *Intellectual Property Is Still Property*]. As Hohfeld notes, however, the use of legal terms borrowed from the physical world is often problematic when applied to metaphysical or non-physical concepts. Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16, 24 (1913) ("Much of the difficulty, as regards legal terminology, arises from the fact that many of our words were originally applicable only to physical things; so that their use in connection with legal relations is, strictly speaking, figurative or fictional.").

44. *See* Michael A. Carrier, *Cabining Intellectual Property Through a Property Paradigm*, 54 DUKE L.J. 1, 4–5 (2004) (noting that IP "has increasingly come to resemble property. The essentially unlimited duration and scope of the initial IP right today more closely resemble the unlimited duration and scope of property than the finite regime of protection that the Framers carved out from a general common law of copying . . . . Many courts and companies today unquestioningly view property as justifying absolute rights of exclusion and a total lack of limits on IP holders").

45. *See* Frank H. Easterbrook, *Contract and Copyright*, 42 HOUS. L. REV. 953, 953 (2005) ("[W]hat copyright and other IP law does is create property rights in information, after which normal rules of contract and property law determine who uses that information."). Professor Glen Robinson notes that the "now ubiquitous use of restrictive licensing agreements has created the functional equivalent of personal property servitudes." Robinson, *supra* note 18, at 1452. Robinson adds that "the most important contemporary occasion for

licensor's intellectual property, protected by copyright law, the licensor may distribute all, some, or none of the rights attaching to the property.[46] If the licensor chooses to grant only some of the rights, the most straightforward approach is to use a contract that delineates which rights the licensee has and which rights it does not have.[47]

Included within a property owner's "bundle of rights" is the right to exclude others.[48] Typically, unauthorized access to personal property constitutes trespass to chattels, a common law tort.[49] Those who adopt a property-based conception of software argue that misuse of software would constitute a "trespass to chattels."[50] Such

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considering personal property restrictions arises in the field of intellectual property," and refers to intellectual property rights as a "special form of property rights." *Id.*

46. *See* Jeff C. Dodd, *Time and Assent in the Formation of Information Contracts: The Mischief of Applying Article 2 to Information Contracts*, 36 HOUS. L. REV. 195, 216–18 (1999) (noting that contractual use restrictions should be permitted to serve as substitutes for practical, physical barriers).

47. *See id. But see* Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. REV. 1047, 1092–93 (2005) (arguing that contract is not an adequate alternative to a theory of virtual property ownership).

48. 17 U.S.C. § 201(d) (2000); Stewart v. Abend, 495 U.S. 207, 220 (1990) (referring to the copyright owner's exclusive rights as a "bundle of exclusive rights").

49. RESTATEMENT (SECOND) OF TORTS § 217 (1965).

50. Several courts have applied the trespass to chattels doctrine to Web sites and/or computer servers. *See, e.g.*, Register.com, Inc. v. Verio, Inc., 126 F. Supp. 2d 238 (S.D.N.Y. 2000); eBay Inc. v. Bidder's Edge., Inc., 100 F. Supp. 2d 1058 (N.D. Cal. 2000). Other courts have expressly declined to do so. *See, e.g.*, Intel Corp. v. Hamidi, 71 P.3d 296 (Cal. 2003). For a discussion of the "trespass to chattels" doctrine applied to digital information, see Dan L. Burk, *The Trouble with Trespass*, 4 J. SMALL & EMERGING BUS. L. 27 (2000); Kevin Emerson Collins, *Cybertrespass and Trespass to Documents*, 54 CLEV. ST. L. REV. 41 (2006); Jacqueline Lipton, *Mixed Metaphors in Cyberspace: Property in Information and Information Systems*, 35 LOY. U. CHI. L.J. 235, 240–44 (2003) [hereinafter Lipton, *Mixed Metaphors*]; Michael J. Madison, *Rights of Access and the Shape of the Internet*, 44 B.C. L. REV. 433, 464–71 (2003). For a more general discussion of the property/intellectual property debate, see also Easterbrook, *Intellectual Property Is Still Property*, *supra* note 43 (stating that intellectual property should be treated as property); I. Trotter Hardy, *Not So Different: Tangible, Intangible, Digital and Analog Works and Their Comparison for Copyright Purposes*, 26 U. DAYTON L. REV. 211, 213 (2001) (arguing that for the "purposes of intellectual property rules and regimes, there are no differences between intangible and tangible property; nor are there any differences between digital and non-digital materials"). *But cf.* Michael J. Madison, *Reconstructing the Software License*, 35 LOY. U. CHI. L.J. 275, 302–08 (2003) (stating the need for caution in treating software as "chattel").

For alternatives to a "chattel theory" of property, see Burk, *supra*, at 27 (discussing the emergence of a new form of intellectual property with "only the most tenuous of antecedents in the law of chattels"); Fairfield, *supra* note 47 (introducing a theory of virtual property).

misuse would include using software beyond the scope of license granted.

Several policy considerations underlie and explain the "software as property" viewpoint.[51] One is a libertarian view of property and ownership.[52] Another is a policy that puts faith in the markets,[53] favors business flexibility, and encourages innovative business models.[54] This view contends that in order to encourage innovation, a creator must capture the full social benefit of that innovation.[55] A third consideration worries about the reputational effects of a loss of creative or artistic control.[56]

Opponents of the "software as property" view challenge the notion that intellectual property is "just like" property.[57] It follows that if intellectual property is not the same as real or personal

51. For a discussion of the information costs associated with both property and intellectual property, see Henry E. Smith, *Intellectual Property as Property: Delineating Entitlements in Information*, 116 YALE L.J. 1742, 1744 (2007).

52. *See* Easterbrook, *Intellectual Property Is Still Property*, *supra* note 43.

53. *See generally* Robinson, *supra* note 18.

54. *But see* Dan Burk, *Muddy Rules for Cyberspace*, 21 CARDOZO L. REV. 121, 121 (1999) (arguing that efficiency justifications for clear property rights ignore the efficiency of unclear or "muddy" property rules).

55. Hardy, *supra* note 50; F. Scott Kieff, *Property Rights and Property Rules for Commercializing Inventions*, 85 MINN. L. REV. 697, 717–27 (2000). The economist Harold Demsetz is most often associated with the idea that property rights, and the right to exclude, are a way for an actor to fully capture the social benefit it provides or the "internalization" of "externalities," as it is often referred to among economist. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 347–49 (1967); *see also* Harold Demsetz, *The Private Production of Public Goods*, 13 J. L. & ECON. 293 (1970). *But see* Brett Frischmann & Mark A. Lemley, *Spillovers*, 107 COLUM. L. REV. 257, 274 (2007) (arguing that complete capture of social benefits or externalities is not necessary to optimize investment incentives). For discussion of the economic rationales underlying the treatment of intellectual property as property, see Smith, *supra* note 51. Smith explains that exclusion rights in information outputs may act as a way to establish property rights in rival inputs to invention and commercialization. *Id.* at 1746. *See also* Trotter Hardy, *Property (and Copyright) in Cyberspace*, 1996 U. CHI. LEGAL F. 217 (1996) (discussing economic theories that support a regime of private property in cyberspace).

56. *See* Jane C. Ginsburg, *Have Moral Rights Come of (Digital) Age in the United States?*, 19 CARDOZO ARTS & ENT. L.J. 9 (2001) (discussing artistic integrity concerns and how they may be affected by the DMCA).

57. *See* Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1032 (2004) (suggesting that the treatment of intellectual property "just like" real property is "a mistake as a practical matter"). *But see* Lipton, *Mixed Metaphors*, *supra* note 50, at 240–41 (arguing that incorporating notions of property into information and information systems is unavoidable and not as important as *how* we use such metaphors).

property,[58] then software code—which is protected by intellectual property law—is also not the same as property.[59] Even accepting the distinction between property and intellectual property does not necessarily invalidate licenses since the licensor and the licensee may nevertheless grant and relinquish rights as they freely choose under contract law.[60] An issue arises, however, where one of the rights that the licensee relinquishes under the contract is one that the licensee would otherwise have under the Copyright Act. While giving up an existing right under a contract may be the very essence of a bargained-for exchange, the idea of a contract regulating the same rights referred to under a federal law raises the specter of federal preemption.[61] While some scholars have argued that software licenses that seek to regulate the rights addressed under the Copyright Act

58. *See, e.g.*, Mark A. Lemley & Philip J. Weiser, *Should Property or Liability Rules Govern Information?*, 85 TEX. L. REV. 783, 790 (2007) ("Property rules designed with land in mind often do not translate well to the more fluid environment of the Internet, where they have the potential to impose significant transaction costs and prevent the efficient functioning of the Internet.").

59. Mark Lemley and Brett Frischmann, for example, argue that unlike real property, intellectual property or "IP" is much less clearly delineated, and therefore it is more difficult "to know whether one is 'trespassing' upon another's IP right." Frischmann & Lemley, *supra* note 55, at 274.

60. *But cf.* Robinson, *supra* note 18, at 1478 (noting that, as to the "conventional distinction based on the notion that contract rights are enforceable only between consenting parties and property rights are enforceable against the world, this distinction is blurred if not erased completely in the context of computer software where the license can be embedded in the software itself and is configured to require each new user to agree to its terms before the program can be run." Robinson adds that the software license then "becomes virtually identical to a running servitude and can be regarded, like other servitudes, as a form of property right").

61. *See generally* Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. DAYTON L. REV. 511 (1997); Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CAL. L. REV. 111 (1999) [hereinafter *Beyond Preemption*]; Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239 (1995) [hereinafter *Shrinkwrap*]; Maureen A. O'Rourke, *Rethinking Remedies at the Intersection of Intellectual Property and Contract: Toward a Unified Body of Law*, 82 IOWA L. REV. 1137 (1997).

are preempted by federal law,[62] most courts have disagreed or have skirted around the issue and left it unresolved.[63]

2. The "goods" problem

Another view of software emphasizes the way it is distributed rather than the rights held by the licensor. Under this view, software that is widely available to the public and is sold "off the shelf," is a "good" under the Uniform Commercial Code ("UCC").[64] Accordingly, the "software as commercial good" view ignores the validity of any license agreement accompanying the software and would look instead to the laws generally governing consumer product transactions in the event of a dispute.[65] The underlying

62. *See also* Viva R. Moffatt, *Super-Copyright: Contracts, Preemption, and the Structure of Copyright Policymaking*, 41 U.C. DAVIS L. REV. 45 (2007) (arguing that contract provisions that limit the fair use doctrine should be preempted by federal law); *cf.* Robinson, *supra* note 18, at 1477 (stating that "as a matter of legislative interpretation . . . a categorical exclusion from the preemptive effect of copyright for all contractual restrictions is unwarranted").

63. *See* Bowers v. Baystate Techs., Inc. 320 F.3d 1317, 1324–25 (Fed. Cir. 2003) (citing *ProCD* and holding that "most courts to examine this issue have found that the Copyright Act does not preempt contractual constraints on copyrighted articles"); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (finding that a contractual restriction on the first sale doctrine was not preempted by the Copyright Act); Davidson & Assocs., Inc. v. Internet Gateway, 334 F. Supp. 2d 1164, 1174–75 (E.D. Mo. 2004) (finding that a breach of contract claim was not preempted because it creates a right not existing under copyright law); Huckshold v. HSSL, L.L.C., 344 F. Supp. 2d 1203, 1208 (E.D. Mo. 2004) (stating that Section 301 of the Copyright Act does not prevent states from enforcing private transactions); *see also* Christina Bohannan, *Copyright Preemption of Contracts*, 67 MD. L. REV. 616, 629 (2008) ("[C]ourts have uniformly held that the [Copyright] Act does not preempt breach of contract claims."). Bohannan argues against categorical approaches to preemption of contracts under the Copyright Act and proposes an intermediate approach based upon waiver doctrine. *Contra* Vault Corp. v. Quaid Software Ltd., 847 F.2d 255, 269–70 (5th Cir. 1988) (finding a state statute permitting contractual restrictions on decompilation or disassembly to be preempted by the Copyright Act).

64. *See* Jean Braucher, *Contracting Out of Article 2 Using a "License" Label: A Strategy That Should Not Work for Software Products*, 40 LOY. L.A. L. REV. 261, 263–64 (2005) (explaining that software product transactions should be treated as "sales" under Article 2 because doing so works "well enough"). *But cf.* O'Rourke, *supra* note 61, at 1142 (arguing that "federal intellectual property law should support application of the remedial provisions of the UCC in many situations, and that the use of such remedies is fully consistent with the policies of both the UCC and intellectual property law" and that "the default rule should be one which allows an aggrieved licensee to exercise its relevant UCC remedy of resale or cover without being subject to liability for intellectual property infringement").

65. *Braucher*, *supra* note 64, at 264–67; *see also* Advent Sys. Ltd. v. Unisys Corp., 925 F.2d 670, 675–76 (3rd Cir. 1991) (computer software a "good" under the UCC); Colonial Life Ins. Co. v. Elec. Data Sys., Corp., 817 F. Supp. 235, 239 (D.N.H. 1993) (stating that

policy consideration is consumer protection (as the terms contained in Article 2 of the UCC are generally more favorable to consumers than those contained in software license agreements),[66] and an aversion to corporate antitrust behavior that limits consumer choices.[67]

Opponents of this view believe that software is different from other consumer products, and often use labels for software such as "information" or "technology" to distinguish its nature from other consumer products or goods.[68] They argue that software is not a good that is sold, but a right that is—of necessity—licensed.[69] The UCC itself is unclear as to whether software products are included in the definition of "goods." Under the preamended UCC, a good is defined as "all things (including specifically manufactured goods) that are movable at the time of identification to the contract for sale other than the money in which price is to be paid, investment securities . . . and things in action."[70]

Under the amended version of the UCC,[71] the definition of goods includes

> all things that are movable at the time of identification to a contract for sale. The term includes future goods, specially manufactured goods, the unborn young of animals, growing crops, and other identified things attached to realty . . . . The term does not include information, the money in which the price is to be paid, investment

computer software was a "good" under Article 2); Wachter Mgmt. Co. v. Dexter & Chaney, Inc., 114 P.3d 747 (Cal. 2006) (applying Article 2 to licensed software).

66. *See* Florencia Marotta-Wurgler, *What's in a Standard Form Contract? An Empirical Analysis of Software License Agreements*, J. OF EMPIRICAL LEGAL STUDIES, Dec. 2007, at 27, *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1186102.

67. Determann & Fellmeth, *supra* note 20, at 27–35 (discussing the importance of classifying software as "goods" under the UCC for consumers of mass market software).

68. *See, e.g.*, Raymond T. Nimmer, *An Essay on Article 2's Irrelevance to Licensing Agreements*, 40 LOY. L.A. L. REV. 235, 237 (2005) ("Article 2 sales rules are, and should be, irrelevant to licensing, except for the broad themes of Article 2 that have already been incorporated into the common law."); *see also* Raymond T. Nimmer, *Licensing in the Contemporary Information Economy*, 8 WASH. U. J.L. & POL'Y 99, 113 (2002) (characterizing as a "mistaken belief" that the computer industry deals in goods).

69. Nimmer, for example, an opponent of the "software as consumer goods" view, states that the computer information industries "do not deal in goods. Their focus is not on tangible property. They deal in information and transactions in intangibles." Nimmer, *Licensing in the Contemporary Information Economy*, *supra* note 68, at 113.

70. U.C.C. § 2-105(1) (2003).

71. Article 2 of the UCC was amended in 2003 but most of the provisions have not been enacted by state legislatures.

> securities . . . , the subject matter of foreign exchange transactions or choses in actions.[72]

It is unclear whether the drafters meant to refer to "software" when they expressly excluded "information" from the definition of goods.[73] The Official Comments dance around the issue by stating that

> [t]his article does not directly apply to an electronic transfer of information, such as the transaction involved in *Specht v. Netscape*. However, transactions often include both goods and information: some are transactions in goods. . . . and some are not. . . . When a transaction includes both the sale of goods and the transfer of rights in information, it is up to the courts to determine whether the transaction is entirely within or outside of this article, or whether or to what extent this article should be applied to a portion of the transaction. While this article may apply to a transaction including information, nothing in this article alters, creates, or diminishes intellectual property rights.[74]

While the media upon which the software program is loaded could readily be defined as a "good," the accompanying license to use the program is not so susceptible to interpretation. On the other hand, it is inaccurate to say that a license is "information." While the code contained in the software product is certainly "information," the right to use that information—and the media upon which it is contained—is not. Thus, the amended version of the UCC leaves the "license versus sale" issue to be resolved by the courts.

Another view of software—or of the information that comprises software—is that it is a "public good."[75] The two primary features of

72. U.C.C. § 2-103(1)(k) (2003).

73. *See* Braucher, *supra* note 64, at 269 ("The uncertainty of what [the exclusion of information] means, if anything, is one of the key reasons the proposed amendments package [to Article 2] has not been enacted by any jurisdiction. If information means intangible data, the exclusion adds nothing. . . . The software customer coalition as well as software producers have all opposed the proposed exclusion of information because of its failure to clarify the law.").

74. U.C.C. § 2-103 cmt. 7 (2003) (citation omitted). The lack of clarity has prompted at least one scholar to comment, "[s]ince the sponsors [to the amendments] have nothing clarifying to say, they would be wiser to remain silent." Braucher, *supra* note 64, at 263.

75. *See* Peter S. Menell, *Tailoring Legal Protection for Computer Software*, 39 STAN. L. REV. 1329, 1337–40 (1987).

public goods are that they are non-excludable and non-rival.[76] As Peter Menell explains:

> Given the availability of low-cost copying, it is often impossible to exclude nonpurchasers from the benefits of innovative computer programs once they are made commercially available. Moreover, one person's use of the information does not detract from any other person's use of that same information. Since the authors and creators of computer software cannot reap the marginal value of their efforts, in the absence of other incentives to innovate they will undersupply technological advances in computer software. The government typically alleviates the public goods problem in generating innovation and original expression by bestowing limited legal protection for goods that embody novel ideas and literary works that contain original expression.[77]

The flip side of the public goods problem is that software is a public benefit and access to it should not be unduly restricted.[78] Promoting access to software encourages technological innovation that benefits society in many ways, such as facilitating communication, increasing productivity, and enhancing creativity.[79] According to Menell, the problem with applying intellectual property protection to software is that innovation and advancement in computer technology are made at many interrelated levels and at many different stages.[80] Thus, the model adopted for literary and artistic works fails to adequately capture—and consequently fails to provide—the optimal amount of incentive for innovation of software.[81]

The view that software should be used to benefit the public[82] is exemplified by proponents of the "free software" movement[83] who

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76. *But see* Demsetz, *The Private Production of Public Goods*, *supra* note 55, at 295 ("There is nothing in the public good concept that disallows the ability to exclude. . . . Ability to exclude nonpurchasers is compatible with both private and public goods.").

77. Menell, *supra* note 75, at 1337.

78. *See, e.g.*, Hardy, *supra* note 50, at 222–32 (critiquing the view that digital materials are "public goods").

79. But as Henry Smith notes, while information is a public good and can be consumed at zero marginal cost, creating information requires resources that are rival and susceptible to exclusion. Smith, *supra* note 51, at 1744.

80. Menell, *supra* note 75, at 1330–31.

81. *Id.*

82. J.H. Reichman & Jonathan A. Franklin, *Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good Uses of Information*, 147 U. PA. L.

advocate open access to software and consider a proprietary or "fee-paid" software system to be antisocial.[84] Not surprisingly, the "software as property" advocates oppose the "software as public benefit" viewpoint, believing that since software "belongs" to the licensor, the licensor may or may not license the software at its discretion. Under the "software as property" view, the licensor should be permitted to reap the benefits of its investment in researching and developing the software by using whatever protective measures it deems necessary, including licenses that curtail otherwise permissible uses under the Copyright Act.[85]

Ironically, both the "software as public benefit" and the "software as property" views rely on license agreements to further and reinforce their position.[86] The general public license ("GPL") used by free software advocates contains a license grant provision that expressly permits reproduction and distribution,[87] whereas a

REV. 875, 877 (1999) ("[A]ny model of contract formation not driven by the traditional norms of mutual assent requires specially formulated doctrinal tools to avoid undermining long-established public good uses of information for such purposes as education and research, technical innovation, free speech, and the preservation of free competition.").

83. *See, e.g.*, Jonathan Zittrain, *Normative Principles for Evaluating Free and Proprietary Software*, 71 U. CHI. L. REV. 265 (2004).

84. *See* José J. González de Alaiza Cardona, *Open Source, Free Software, and Contractual Issues*, 15 TEX. INTELL. PROP. L.J. 157, 167 (2007).

85. As Mark Lemley has noted, however, the use of property rhetoric in intellectual property cases "is accordingly closely identified not with common law property rules in general, but with a particular view of property rights as the right to capture or internalize the full social value of property." Lemley, *supra* note 57, at 1037.

86. Madison, *Reconstructing the Software License*, *supra* note 50, at 285 (observing that while the open source code model contrasts with the closed source code model, they both adopt the same legal framework).

87. The general public license version 3.0 states, in part, as follows:

> All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. . . . This License acknowledges your rights of fair use or other equivalent, as provided by copyright law.
>
> You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force . . . .
>
> No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.
>
> When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work,

typical consumer software license restricts or prohibits such reproduction and distribution.[88] Thus, both views employ contracts to control licensee use of software but differ radically over the purpose and scope of the license grant.

Policy-based approaches attempt to characterize software and are thus, ultimately, unsatisfying because what software is depends upon the context and how it is used.[89]

The mechanism by which software is ostensibly licensed is a contract; accordingly, the enforceability of that contract should depend on an analysis under contract law.[90]

B. Contract-Based Approach to the Licensing of Software

Software producers purport to license software by means of a contract.[91] Licensing agreements may be either negotiated or non-

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> and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

GNU General Public License Version 3, June 29, 2007, http://www.gnu.org/licenses/gpl-3.0.txt.

88. In contrast to the general public license, a standard vendor license agreement states as follows:

> Vendor grants to Customer a non-exclusive, non-transferable limited license to use the Licensed Software solely for Customer's internal business purposes, subject to the number of licensed concurrent users. Customer may make one copy of the Licensed Software in machine-readable form for back-up and archival purposes only . . . . Customer shall not cause the Licensed Software in any way to be disassembled, decompiled or reverse engineered, nor shall any attempt to do so be undertaken or permitted . . . . Customer's use of the Licensed Software shall be subject to the following restrictions . . . . Customer shall not upload, post, publish or create derivative works of the Licensed Software; and copy, translate, port, modify . . . . the Licensed Software.

MICHAEL OVERLY & JAMES R. KALYVAS, SOFTWARE AGREEMENTS LINE BY LINE 14 (2004).

89. *See* Samuelson et al., *supra* note 19, at 2372 ("Over the years both the view of software as a product and the character of the product have . . . evolved considerably, from business applications supplied with a mainframe, to applications intended for the end-user and aimed at a mass market, to the more narrowly aimed vertical markets today.").

90. *But see* O'Rourke, *supra* note 61, at 1142 (noting that the nuances of the economic rationale underlying federal intellectual property law and the UCC differ substantially in two contexts: federal intellectual property law responds primarily to market imperfections whereas the UCC is mostly concerned with minimizing costs and maximizing gains of contracting).

91. The use of licensing by software producers as a way to protect software from unauthorized uses is attributed to the fact that the copyrightability of software was, for a time, uncertain. Bradford L. Smith & Susan O. Mann, *Innovation and Intellectual Property Protection in the Software Industry: An Emerging Role for Patents?*, 71 U. CHI. L. REV. 241, 243–44 (2004) (noting that "relatively few" software developers took advantage of copyright

negotiated. Negotiated license agreements fit the classic model of bargaining under contract law and generally follow proper contract formation including an offer, acceptance, mutual assent, and consideration. Negotiated licenses may be held unenforceable, however, with some other invalidating condition such as fraud, unconscionability, or duress.[92]

Transactions involving non-negotiated license agreements, on the other hand, pose a multitude of problems. Non-negotiated license agreements can be categorized into four groups: executed written agreements, shrinkwrap agreements, clickwrap agreements, and browsewrap agreements. Because of the plethora of scholarship written on "wrap" agreements,[93] the following discussion of the contract formation issues with respect to each type of non-negotiated license is not an exhaustive analysis and is intended only to frame the rest of the Article.

1. Written agreements and clickwraps

A standard form license agreement may require a written signature from both parties but still be an adhesion contract.[94] A typical scenario involves a large software producer with a monopoly on the marketplace and a smaller business with a desire to purchase the software (where the software has become the industry standard). In such a situation, the large software producer may not find it cost

protection for their programs due to the registration requirements). Although the Copyright Office began to accept software programs for registration in 1964, the Copyright Act itself did not expressly address the issue of protection for software or computer programs. *See* Litman, *supra* note 35, at 16. In 1978, the Commission on New Technological Uses of Copyrighted Works (CONTU) proposed amendments to the Copyright Act. *Id.* Those amendments were later approved by Congress in the 1980 amendments to the Copyright Act and left no question that software programs are within the subject matter of copyright. *Id.*; *see also* Menell, *supra* note 75, at 1347.

92. *See* Nancy S. Kim, *Mistake, Changed Circumstances and Intent*, 56 KAN. L. REV. 473, 474 (2008) (discussing various contract defenses).

93. *See, e.g.*, Nancy S. Kim, *Clicking and Cringing*, 86 OR. L. REV. 797, 836–56 (2007); Lemley, *Shrinkwrap*, *supra* note 61; Mark A. Lemley, *Terms of Use*, 91 MINN. L. REV. 459 (2006).

94. Adhesion contracts are standard-form agreements that are offered on a non-negotiable basis and indicate a lack of bargaining power on the part of the non-drafting party. *See* Friedrich Kessler, *Contracts of Adhesion: Some Thoughts About Freedom of Contract*, 43 COLUM. L. REV. 629, 632 (1943); Todd D. Rakoff, *Contracts of Adhesion: An Essay in Reconstruction*, 96 HARV. L. REV. 1173 (1983); W. David Slawson, *Standard Form Contracts and Democratic Control of Lawmaking Power*, 84 HARV. L. REV. 529 (1971).

effective to negotiate individual terms of a contract with the small business, either because the total purchase price of the software is not sufficient to justify such negotiations or because the software producer has a monopoly on the marketplace due to a patent or market dominance. Form agreements, even adhesion contracts (i.e., those offered on a "take-it-or-leave-it" basis) have typically been upheld by the courts under a "blanket assent" theory. The blanket assent theory is attributed to Karl Llewellyn, who stated:

> Instead of thinking about "assent" to boiler plate clauses, we can recognize that so far as concerns the specific, there is no assent at all. What has in fact been assented to, specifically, are the few dickered terms, and the broad type of transaction, and but one thing more. That one thing more is a blanket assent (not a specific assent) to any not unreasonable or indecent terms . . . which do not alter or eviscerate the reasonable meaning of the dickered terms.[95]

Thus, under the blanket assent theory of contracts, a signatory to a contract is deemed to have assented to the "not unreasonable" or "not indecent" terms of the contract.[96]

Clickwraps are electronic agreements that appear during installation of software products and prior to accessing certain websites.[97] The user manifests assent by clicking on an icon that expresses such assent, usually a box with the words "I accept" or "I agree" or some similar phraseology. Because the user is required to indicate assent, albeit through electronic means, clickwrap agreements are generally enforceable provided that the user has the opportunity to review the contractual terms prior to clicking on the "I accept" icon.[98]

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95. KARL N. LLEWELLYN, THE COMMON LAW TRADITION: DECIDING APPEALS 370 (1960).

96. *See also* Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age*, 77 N.Y.U. L. REV. 429, 461 (2002) (defining Llewellyn's notion of "blanket assent" as meaning that "although consumers do not read standard terms, so long as their formal presentation and substance are reasonable, consumers comprehend the existence of the terms and agree to be bound to them").

97. *See* Lemley, *supra* note 93, at 465–66.

98. *See* Davidson & Assoc. v. Jung, 422 F.3d 630, 638–39 (8th Cir. 2005); Forrest v. Verizon Commc'n, Inc., 805 A.2d 1007, 1010 (D.C. 2002) (click-wrap); Caspi v. Microsoft Network, LLC, 732 A.2d 528, 532 (N.J. Super. Ct. App. Div. 1999). *But see* Specht v. Netscape Commc'n, Corp., 306 F.3d 17, 28–30 (2d Cir. 2002) (refusing to enforce a click-

Both non-negotiated written agreements and clickwraps lack indicia of bargaining. The user is offered contractual terms on a "take-it-or-leave-it" basis and the terms are generally more favorable to the licensor than to the licensee.[99] Provided that the terms are not unconscionable, however, courts have tended to enforce both types of agreements.[100] Both types of agreements require the licensee to manifest assent—either by affixing his or her signature, or by clicking on an electronic icon—and such assent is deemed to be blanket assent to all the "not unreasonable" terms contained in the document.[101]

2. Shrinkwraps and browsewraps

Rolling contracts are terms that attach to a transaction after the acts constituting the transaction have already been performed.[102] Shrinkwrap agreements are a type of rolling contract since the buyer typically does not have an opportunity to review the terms until after the software is purchased.[103] A shrinkwrap agreement is encased in plastic wrap and bundled with physical media containing software.[104] Although many legal commentators have argued against the enforceability of these agreements on the grounds of lack of mutual assent, many courts have held that "assent" occurs when the consumer, after purchasing and possessing the product, opens the shrinkwrap, notices the paper agreement contained therein, and declines to return the product[105] (despite the fact that returning

wrap); Comb v. Paypal, Inc., 218 F. Supp. 2d 1165, 1172–73 (N.D. Cal. 2002) (stating that a click-wrap was an invalid contract of adhesion).

99. *But see* Florencia Marotta-Wurgler, *Competition and the Quality of Standard Form Contracts: An Empirical Analysis of Software License Agreements*, N.Y.U. Sch. of Law, Law & Econ. Research Paper Series, Working Paper No. 05-11, 2005) *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=799274 (finding little correlation between greater market power and pro-seller standard terms). On the other hand, in an empiral study of 647 software end user license agreements, Marotta-Wurgler found that "the vast majority of the contracts" in her sample were more pro-seller relative to the default rules of Article 2 of the UCC. Marotta-Wurgler, *supra* note 66, at 27.

100. *See supra* note 98.

101. LLEWELLYN, *supra* note 95, at 370.

102. Robert A. Hillman, *Rolling Contracts*, 71 FORDHAM L. REV. 743, 743–45 (2002).

103. *Id.*

104. Mark A. Lemley, *Shrinkwrap*, *supra* note 61, at 1241.

105. *See* ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1452–53 (7th Cir. 1996); Meridian Project Sys., Inc. v. Hardin Constr. Co., 426 F. Supp. 2d 1101, 1107 (E.D. Cal. 2006); Peerless Wall & Window Coverings, Inc. v. Synchronics, Inc., 85 F. Supp. 2d 519, 527 (W.D.

opened software can be a non-trivial undertaking and that many retail outlets refuse to accept digital products that have been opened).[106] Browsewraps are commonly found on websites or when downloading software that links to a website.[107] Browsewraps purport to govern the use of a website or product.[108] Cases discussing browsewrap agreements have generally held them enforceable if the user had notice of their existence.[109]

Neither shrinkwraps nor browsewraps require an affirmative action from the licensee to manifest assent. A licensee is deemed to have assented to the terms of a shrinkwrap simply by failing to return the software contained within, even if the licensee was unaware of the existence of such a "contract" at the time of the sales transaction. In other words, the licensee's manifestation of assent is deemed to occur *after* the licensee has paid for and taken possession of the software.[110] Therefore, that manifestation of assent is a failure to act by the licensee.[111] The licensee is also not required to manifest assent to browsewrap terms, either before or after engaging in the conduct purported to be governed by such terms. Both browsewraps and

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Pa. 2000); M.A. Mortenson Co. v. Timberline Software Corp., 998 P.2d 305, 313 (Wash. 2000). *But see* Vault Corp. v. Quaid Software Ltd., 847 F.2d 255 (5th Cir. 1988); Softman Prods., LLC v. Adobe Sys. Inc., 171 F. Supp. 2d 1075, 1088 (C.D. Cal. 2001); Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1341 (D. Kan. 2000).

106. *See, e.g.*, J.D. Biersdorfer, *Return Policies Vary for Opened Software*, N.Y. TIMES, Dec. 23, 2004, http://www.nytimes.com/2004/12/23/technology/circuits/23askk.html.

107. Christina L. Kunz et al., *Browse-Wrap Agreements: Validity of Implied Assent in Electronic Form Agreements*, 59 BUS. LAW. 279, 279–80 (2003); Lemley, *supra* note 93, at 464.

108. Kunz et al., *supra* note 107, at 279.

109. *See, e.g.*, Ticketmaster Corp. v. Tickets.com, Inc., No. CV99-7654-HLH(VBKx), 2003 U.S. Dist. LEXIS 6483, at *9 (C.D. Cal. Mar. 7, 2003) (holding that contract formed by proceeding to interior web pages after knowledge or presumptive knowledge of prominent notice on home page of website). For a summary of leading cases addressing the enforceability of online agreements, see Patricia Bayer Cunningham & Erin C. Witkow, *Click with Caution: Liability for Breach of Click-Wrap and Browse-Wrap Agreement*, 23 COMPUTER & INTERNET LAWYER 1 (June 2006); Kim, *supra* note 93, at 836–56.

110. *See* cases *supra* note 105.

111. While foisting contract terms upon consumers in this manner may be procedurally unfair, one study has found that "rolling" end user license agreements (i.e., agreements where the terms are presented after the product has been paid for and possession transferred) do not offer more pro-seller terms than firms that make their end user license agreements available pre-purchase. *See* Florencia Marotta-Wurgler, *Are "Pay Now, Terms Later" Contracts Worse for Buyers? Evidence From Software License Agreements*, (N.Y.U. Law Sch. Law & Econ. Research Paper Series, Working Paper No. 05-10, 2005), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=799282.

shrinkwraps put the onus of rejection upon the licensee. The licensor makes no effort to make the licensee's access or use of the licensed product or website contingent upon contract review and approval. Although the form of such agreements has generally been found enforceable, a court may still refuse to enforce any particular agreement if its terms are unconscionable or if any contract defenses (such as fraud, duress, or mistake) apply.[112]

The problem with contract-based approaches to software issues has been in their application.[113] Those who use the rhetoric of contracts have tended to impose a rigid view of contracts that ignores contract law's underlying philosophical objectives. Some scholars and judges have reacted by arguing that contract law is ill-suited to address software issues and thus should be supplanted by policy rationales;[114] others have reacted by masking their policy agenda under the guise of contract law that violates existing rules of contract formation.[115]

In fact, modern or "dynamic" contract law is neither as unrealistic nor as unreasonable as many would suggest. As an outgrowth of dynamic contract law, the concept of presumed assent reflects and accommodates the business realities of modern commercial transactions without wholly ignoring the underlying objective of contract law to effectuate the intent of contracting parties. As the next section illustrates, analyzing software transactions through the lens of dynamic contract law reveals that the licensing dilemma is more illusion than reality.

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112. Professor Hillman has argued that rather than focusing on the technical requirements of formation and notice, courts should enforce those rolling contract terms that are conscionable. *See* Robert A. Hillman, *A Tribute to Joseph M. Perillo: Rolling Contracts*, 71 FORDHAM L. REV. 743, 745 (2002).

113. For an interesting discussion of the issues surrounding rolling contracts, see Stephen E. Friedman, *Improving the Rolling Contract*, 56 AM. U. L. REV. 1 (2006). Professor Friedman proposes using a "Template Notice," an intermediate form of disclosure that contains vital information prior to or at the time of purchase. *Id.*

114. For example, Viva Moffatt argues that state contract law doctrines are not adequate vehicles to address fair use restrictions in contracts because they lack uniformity and are ineffective at policing terms. *See* Moffatt, *supra* note 62, at 98–101.

115. See, for example, the Second Circuit's analysis of contract formation in *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (7th Cir. 1996) (stating that contract formation occurred after the sales transaction occurred); *see also* Dodd, *supra* note 46, at 198 (stating that applying standard rules of contract formation to information products "works strange and awful consequences").

C. A Dynamic Contracts Approach to Software Transactions

The question of software transactions, or "licensing," should be answered by dynamic contract law. According to Professor Melvin Eisenberg, "dynamic contract law" depends upon a "moving stream of events that precedes, follows, or constitutes the formation of a contract" and that has as its objective fulfilling the intent of the parties and then balancing the parties' intent with policy considerations."[116] The initial inquiry in determining the predominant nature of the transaction under a dynamic contracts approach concerns the intent of the parties—did the parties to the software transaction intend for the transaction to be a licensing of the software or a sale of the software?

At first blush, the question seems superfluous because it is obvious that at least the licensor intended a licensing arrangement rather than a sale. "Intent," however, is in reference to the nature of the transaction, not the label used to refer to the transaction.[117] If the parties intended for the licensee to obtain ownership of the physical media as well as the license to use the program contained on the media (although not ownership of the program), then the parties intended for a sale of the software product notwithstanding the labeling of the transaction as a license in any written document accompanying the product.[118]

The distinction between the label attached to the transaction and the nature of the transaction is important considering that in many types of transactions the label is used in an agreement drafted by one party that is neither read nor understood by the other party. In many

116. Melvin Aron Eisenberg, *Symposium on Law in the Twentieth Century: The Emergence of Dynamic Contract Law*, 88 CAL. L. REV. 1743, 1762 (2000).

117. *See* Rice, *supra* note 15, at 172 (stating that it is necessary to "look behind labels to the realities of how program copies are distributed"); *see also* Microsoft Corp. v. DAK Indus., 66 F.3d 1091 (9th Cir. 1995); United States v. Wise, 550 F.2d 1180 (9th Cir. 1977) (examining the "economic realities" to determine whether a transaction is a license or a sale); Softman Prods., LLC v. Adobe Sys. Inc., 171 F. Supp. 2d 1075 (C.D. Cal. 2001) (examining circumstances of transaction to find a "sale" rather than a license).

118. The UCC adopts a similar approach that looks at the facts of the transaction in determining whether a contract is a lease or a "disguised sale." *See* U.C.C. § 1-203(a) (2003) (noting that whether a transaction in the form of a lease creates a lease or a security interest is determined by the facts of the case); Carlson v. Giachetti, 616 N.E.2d 810, 812 (Mass. App. 1993) (stating that "the declared intention of the parties, standing alone, cannot be decisive" in determining whether a stated lease is in fact a lease or a disguised sale but that the "test certainly must be applied in accordance with the outward appearance of the facts").

cases, the type of transaction entered into more accurately reflects intent than the terms of a written document accompanying the product. More to the point, in non-negotiated, mass consumer transactions, the purchase of the license by the consumer is called a "license" only in the written document; the parties themselves in referring to the transaction refer to it as a "sale." Consequently, in order to determine the intent of the parties, courts should not start with interpreting the written terms that purport to govern the transaction; rather, the starting point for analysis should be the transaction itself. The nature of the transaction then determines what relevance and meaning to assign to the written terms accompanying the product.

1. Characterizing the transaction

Under a dynamic contracts approach, a court determines the intent of the parties in part by examining the nature of the transaction. In determining whether the parties intended to enter into a licensing transaction or a sale of software, courts should consider the following criteria: whether the contract was negotiated, the structure and timing of license fees, the scope of the license grant, tax and accounting issues, whether the contract terms are mass consumer or individualized, the method by which the software is distributed, the relationship between the software producer and the software user, the term of the license, and whether the product eventually must be destroyed or returned to the software producer.[119] A discussion of each of these criteria follows.

119. Professor Rice has identified the following characteristics as those of a sale: temporally unlimited possession subject to use restrictions that reinforce and extend intangible rights; unitary rather than serial pricing and payment; subsequent transfer that is neither prohibited nor conditioned on obtaining the licensor's prior approval; and the principle purpose of use restrictions "is to protect intangible copyrightable subject matter, not to preserve property interests in individual program copies." Rice, *supra* note 15, at 172. My approach incorporates many of the factors identified by Rice; however, under my approach, the underlying objective of characterizing the transaction is to first determine the intent of the parties. Furthermore, while Rice recognizes that "nonsale transfer of copies offers a workable and attractive means for accomplishing clearly legitimate ends" in the commercial market context, he concludes that "commercial market software distribution presents no new issues . . . [and] do not legitimate copy use licensing in either [the mass market or commercial market] context." *Id.* at 178–79; *see also* Elizabeth Winston, *Why Sell What You Can License? Contracting Around Statutory Protection of Intellectual Property*, 14 GEO. MASON L. REV. 93, 121–28 (2006) (setting forth several factors relevant to the determination of whether a transaction is a license or a sale of intellectual property, including the terms of the contract, the

a. Negotiated or non-negotiated. The first factor in determining whether a transaction should be characterized as a pure license or a sale is whether the parties negotiated the contract or "license agreement." The parties to a negotiated contract are aware of the terms and, regardless of whether they are satisfied with the resolution of their negotiations, they are aware of the type of transaction they have entered into by executing the document. Non-negotiated agreements do not indicate awareness of terms, although the lack of negotiation does not thereby render the transaction a sale instead of a license. In other words, a non-negotiated agreement establishes neither awareness nor ignorance.

b. Structure of license fee/timing and method of payment. Another relevant factor in characterizing whether a software transaction is a sale or license is the structure of payment. Is the payment a one-time, paid-up fee? Is it payable in installments? Is payment based upon use or royalties? If it is a one-time fee, it is more likely that the parties intended a sale rather than a license. A royalty- or seat-based license is a factor weighing in favor of finding a licensing transaction.[120] Perhaps the most important factor of all is the timing and method of payment. If the licensee paid a one-time license fee prior to being informed of written terms, the terms cannot be viewed as an "agreement"[121] unless they were expressly accepted prior to payment.[122]

c. Scope of license grant. Generally, the greater the restrictions imposed by the licensor, the more likely it is that the transaction was intended by the licensor to be a pure licensing arrangement; the fewer the restrictions, the more likely that the licensor intended the transaction as a sale. I deliberately refer solely to the "licensor" because in many transactions, the "licensee" may not be aware of the terms of the license either because the license grant terms were not made available prior to payment or because the licensee did not

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nature of the intellectual property, the pricing structure and the intellectual property owner's intellectual property policy).

120. *But see* Rice, *supra* note 15, at 177–81 (acknowledging that while site licensing differs from mass market licensing, the differences do not justify treatment as non-sales).

121. *Softman Prods.*, 171 F. Supp. 2d at 1085 (noting as one factor in the determination of a "sale" that the user paid a one-time fee).

122. In a case where terms are expressly agreed to prior to payment (i.e., prior to conclusion of the transaction), the transaction may still be a sale, but if in fact it is determined to be a sale, it would be a "conditional sale" because the sale was conditioned upon acceptance of certain terms prior to completion.

bother to read them. There are two mutually exclusive ways of viewing the scope of a license. The first is as a contractual term. If the parties expressly negotiate a contract prior to entering into the sales transaction, then the sale is a conditional one premised upon adherence to the license grant. The second and alternate way to view the license grant is as an independent promise made by the licensor where there is no contract formation prior to completion of the transaction, i.e., in a "rolling contract" situation. In that case, the license grant may be interpreted as a promise or statement of policy by the licensor *not to sue* for copyright infringement provided that the licensee adheres to the use restrictions (and provided, of course, that any fee has been paid). The license grant is not an "agreement" because both parties have not agreed to the terms; however, if the licensee exceeds the scope of use provision granted by the licensor, then the licensor may sue if such use violates the licensor's rights under copyright law.

d. Tax and accounting issues. Tax and accounting rules should also be considered in determining whether a software transaction is a sale or a license. A license is typically treated in a different manner from a sale under tax and accounting rules. For example, the "generally accepted accounting principles" or "GAAP" distinguish sales of goods from consulting or services commitments.[123] In mass consumer transactions, if a software producer recognizes a "sale" upon shipment of the product, then it seems inconsistent to say that the transaction is recognized by the software producer as merely an offer that has yet to be accepted by the consumer, as has been stated in the rolling contract situation.[124] Similarly, the accounting and accrual method used by the purchaser should be helpful in determining whether the purchaser intended that the transaction be a sale rather than a licensing or leasing transaction.

e. Mass consumer or individualized license terms. The fifth factor to consider is whether the license has individualized or standard mass consumer terms. In pure licensing transactions, the parties are more likely to expressly negotiate the terms of the license. The licensor may be more flexible depending upon its bargaining power vis-à-vis

123. *See* Statement of Financial Accounting Standard No. 86, *Accounting for the Costs of Computer Software To Be Sold, Leased, or Otherwise Marketed*; Statement of Position No. 97-2, *Software Revenue Recognition* (setting forth how software and maintenance revenues are to be recognized over the term of the contract).

124. *See* ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1452 (7th Cir. 1996).

the licensee with whom it is negotiating terms. The individualized terms reflect consideration of the licensee's business and intended use of the software. In mass consumer transactions, the license terms reflect a business model that is not tailored to the needs of an individual customer but is geared toward a class or type of consumer. The terms of use for mass market consumer software are standardized and the licensor does not care about the identity of any particular consumer so long as that consumer is able to pay the requisite product price. The consumer's expectations are also different from those of a licensee seeking specific terms with a licensor. The consumer is responsible for determining whether the software product meets its intended purposes based upon publicly available information. Where the parties are agreeing to individualized terms, there is awareness on both sides of the particular needs of the software user and the limitations of the software product.

There is usually overlap between this factor and the first factor (i.e., whether the terms of the license agreement have been negotiated), but the two factors are not necessarily the same. The licensor may establish individualized licensing terms for the licensee's operating system that are not subject to negotiation; on the other hand, the parties may negotiate pricing terms for software even though the use of the software may be subject to standard consumer license terms.

f. Method of distribution. Another factor that should be considered in determining whether a transaction is a license or a sale is the method by which the software is distributed. Software can either be sold directly from the software producer to the software user or it can be distributed by a third party. If the software is distributed through a third party, the role of that third party must be determined. For example, is that third party an authorized "sublicensor"? While the software producer may claim that it "licenses" the software to the end user, is this a claim that the retailer can credibly make? Is the retailer or third party acting as an authorized agent of the software producer? The implications for third parties are further discussed in Part V. For now, it is sufficient to acknowledge that the method of software distribution is relevant in assessing whether the parties intended a license or a sale transaction. If the third party is not authorized to act on behalf of the software producer, then the transaction is more likely to be a

sale; if the third party is an authorized sublicensor or agent of the software producer, then that factor weighs in favor of finding a licensing transaction.

g. Existence and nature of ongoing relationship. If the software producer and the software user contemplate an ongoing relationship, the parties may have intended a pure licensing, rather than a sales, transaction.[125] An ongoing relationship may be evidenced by the provision of ancillary services, such as consulting or implementing services, or maintaining the software. The relational nature of the parties is important in determining the character of the transaction because each may have an effect on the other. The parties may have agreed to certain licensing terms based upon the ancillary services agreement or vice versa. In a sales transaction, the parties typically do not contemplate an ongoing relationship other than that necessary to recover for defective merchandise under applicable state warranties.

h. Term of license. Perhaps one of the most important factors in assessing the nature of a transaction is the term of the license grant. If the license is a perpetual one—especially if it is a perpetual, non-exclusive license—the parties almost certainly contemplated a sale rather than a licensing transaction. If the term of the license grant is for a specified period of time, the parties probably contemplated a pure licensing transaction.

i. Destruction or return of product. The final factor to consider in characterizing the nature of the transaction is whether the software product eventually must be returned or destroyed upon expiration or termination of the license grant.[126] It is not, however, determinative

125. *See* Maureen O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 493–95 (1995). O'Rourke observes that software providers

> [g]enerally contract with end users in one of three ways. At one end of the spectrum are individually negotiated transactions, usually between two competent, informed parties. Often these transactions reflect a long-term relationship between the parties and involve customized software. . . . At the other end of the licensing spectrum are the familiar shrink wrap agreements. . . . In the middle . . . are contracts that are signed by the licensee, but are generally not negotiated.

Id. O'Rourke's observations are consistent with this author's own experience as a licensing and business attorney at several Silicon Valley software companies.

126. This factor was crucial to the court's decision in the *Autodesk* case discussed in the opening paragraph of this Article. *See* Vernor v. Autodesk, Inc., 555 F. Supp. 2d 1164, 1169 (W.D. Wash 2008). The *Vernor* court based its conclusion that the transaction was a sale, rather than a license, upon the Ninth Circuit case, United States v. Wise, 550 F.2d 1180 (9th Cir. 1977). *See Vernor*, 555 F. Supp. 2d at 1172. At issue in *Wise* were transfer contracts

given the ease with which software products can be copied. Unlike with non-digital goods, the return of a compact disc containing the software does not indicate that the user has in fact transferred all software to the software producer. Nevertheless, when the parties include a provision requiring return or destruction of software, they are acknowledging that the right to use the software may expire or terminate at some point in time, which indicates that parties intended a license rather than a sale of the software product.

The above factors are not exhaustive, although they are likely to be the most important criteria in determining the nature of the transaction. Different software transactions require different business models. As a general matter, producers of enterprise-wide software in a commercial environment may find it necessary or prudent to employ a pure licensing scheme,[127] whereas producers of mass market consumer software may use the label "license" merely to effectuate otherwise invalid restraints on alienability of personal property.

2. Presumed assent and the effect of the license "agreement"

After characterizing a transaction as a sale or license using the criteria discussed above, the courts can then determine the effect of the written document accompanying the product. If the parties intended to enter into a pure licensing transaction, the terms of the written license agreement govern the transaction provided that they

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between movie studios and recipients of movie prints, some of which that court found to be licenses and others to be sales. *Vernor*, 550 F.2d at 1184. The *Vernor* court stated that "(i)n comparing the transactions found to be sales in Wise with those that were not, the critical factor is whether the transferee kept the copy acquired from the copyright holder." 555 F. Supp. 2d at 1170. In *Vernor*, however, the court distinguished between the return of the product and destruction of the product, finding that destruction was insufficient to negate a sale. *Id.* The *Vernor* court interpreted *Wise* to mean that "[e]ven a complete prohibition on further transfer . . . or a requirement that the print be salvaged or destroyed, was insufficient to negate a sale where the transferee was not required to return the print." *Id.* There is a significant difference, however, where the object subject to the license or sale is a non-digital item, such as a film print, and where the object is software, which can be readily copied. With digital products, the return of the object is not mutually exclusive with retention by the software user. In such case, a promise to destroy the object may be more effective than mere return of the product.

127. *See* Rice, *supra* note 15, at 178 ("Differentiating factors such as the character of relationships and business purposes served make title reservation and related use limitation seem more appropriate in commercial market settings. . . . [but i]t does not follow, *a fortiori*, that copy use licensing is a statutorily permitted form of transfer in the limited distribution of program copies.").

are otherwise enforceable under contract law. Whether the written terms are binding as an agreement upon the parties depends on whether there was valid contract formation and no invalidating circumstances (such as unconscionability or duress). If the document fails as an agreement—for example, because there was a lack of assent on the part of the licensee—the license grant provisions have independent effect as a statement of the licensor's policies in much the same way they would in a sales transaction.

Courts tend to find contract formation even where the usual actions that constitute a sales transaction—the payment by a buyer, the acceptance of payment by a seller, and the exercise of dominion and control by the buyer with the seller's knowledge and consent—were completed prior to receipt of license terms. This finding of assent by courts is an accommodation to the realities of the marketplace that, unfortunately, misapplies formalistic contract rules. In many cases, the transaction is completed under rules of offer and acceptance before the written terms are made available to the "licensee."[128] In such cases, it does not make sense to review the terms as part of the bargain between the two parties.

Notwithstanding the failure of the parties to expressly agree to the written terms of a contract, there is an understanding between the parties that the transaction has certain parameters, and that those parameters will define the relationship between the parties. Even if terms are not expressly agreed to, both parties understand that certain terms nevertheless govern their relationship. These terms govern the relationship not because the licensee has in fact agreed to them, but because the licensee's rights derive from and are defined by those terms.[129] Elsewhere, I have used the term "presumed assent" to refer to the concept that the licensee, by agreeing to the transaction, may also be presumed to have assented to certain contract terms.[130] The licensee's assent to certain terms may be *presumed* because the licensee's right to use the software is conditioned upon assent to those terms. In a typical mass consumer

128. *See, e.g.*, *ProCD*, 86 F.3d 1447.

129. *See also* William W. Fisher III, *Property and Contract on the Internet*, 73 CHI.-KENT L. REV. 1203, 1212 (1998) ("[T]he question of the proper scope of intellectual property rights on the Internet and the question of the proper magnitude of contractual freedom on the Internet should be understood as interdependent. Neither can be resolved sensibly without attention to the other.").

130. *See* Kim, *supra* note 93, at 818–19.

software transaction, both parties understand that the consumer intends to use the software in exchange for a sum of money. The consumer understands that the software producer may set the price it wishes, and the software producer understands that the consumer may use the software if it pays that price. As further explained in this Part, the consumer's assent may be presumed with respect to the license grant or scope of use provision provided that such provisions do not impose an affirmative obligation upon the licensee or deprive the licensee of a legal right that exists independently of the license grant.[131]

A software producer has certain exclusive rights to the intellectual property embodied in the software product that enable it to engage in certain activities; accordingly, anyone other than the software producer may not engage in those activities without the software producer's consent.[132] In granting a license, the software producer is giving such consent and thereby relinquishes its exclusive right to the software. Yet, it is within the discretion of the software producer how much of its exclusive rights to give up or share with

131. *Id.* at 819–26.

132. It may be useful to consider the concept of presumed assent in Hohfeldian terms. Wesley Hohfeld noted that certain legal terms are used indiscriminately to cover different legal concepts or relationships. He set up a well-known typology of jural opposites and jural correlatives to elucidate the scope and application of these concepts. *See generally* Hohfeld, *supra* note 43. For the purposes of this Article, I focus on Hohfeld's conception of "rights and duties" and "privileges and 'no-rights.'" Hohfeld limited and sharpened the definition of "rights" by pointing out that its correlative was "duty," so that "if X has a right against Y that he shall stay off the former's land, the correlative (and equivalent) is that Y is under a duty toward X to stay off the place." A privilege is the jural opposite of duty and the correlative of "no right" so that if X in the above example has a right against Y, X himself has the "privilege" of entering upon the land and has "no duty" to stay off the land and Y has "no-right" to keep X from entering the land. *Id.* at 31–32 (italics added). If a software producer grants a license to a consumer, the consumer then has the privilege of using the software, meaning that it has no duty to *refrain* from using the software (a duty that it would otherwise have if not for the grant of license by the software producer). Hohfeld notes that the term "license" is "a generic term to indicate a group of *operative* facts required to create a particular privilege." *Id.* at 44 (emphasis in original).

In order to minimize confusion and pretentiousness, and in recognition of the ordinary usage of the word "rights" to include "privileges," I will use the term "rights" to encompass "privileges." As Max Radin observed, Hohfeld's insistence that "privileges" not be called rights "unfortunately contradicts so fully established a usage both in law and literature, that it is idle to suppose that any terminological reform will overcome it. So clearly are [certain] 'privileges' rights, that they are usually the first thing that are thought of as rights when the word occurs in speech." Max Radin, *A Restatement of Hohfeld*, 51 HARV. L. REV. 1141, 1149 (1938).

the software user; those rights that are not given up or shared are reserved to the software producer.

On the other hand, the software *user* also has rights that the software producer does not control and that have nothing to do with whether and how the software is used. I will refer to these rights as "non-derivative" because they do not derive or flow from the license conferred by the software producer or from any exclusive rights of the software producer. Only the scope of the software user's right to use the software is subject to the software producer's control, because it derives from the license grant. Without the license grant, the software user would have no right to use the software due to the exclusive rights reserved to the software producer under copyright law.

The non-derivative rights of the software user, by contrast, do not exist as a result of the grant conferred by the software producer. Accordingly, the software producer cannot take away or restrict non-derivative rights—those rights may only be relinquished or restricted by the rights' holders themselves (i.e., the software users). In other words, the software producer may expand or increase a consumer's right to exploit the software, but she may not encumber the consumer's non-derivative rights without obtaining the consumer's actual assent. The consumer may use the software but cannot do anything else with it—such as distribute it or make copies (which is a right reserved exclusively to the *software* owner under the Copyright Act)—unless such a right is expressly granted by the software owner or permitted as a "fair use" under the first sale doctrine. The consumer's assent to "only use" the software is presumed; any greater use may be a violation of the licensor's intellectual property rights unless that right exists independently of the licensor's grant of rights to the consumer.

On the other hand, if the licensor wishes to impose greater restrictions or affirmative obligations upon the consumer, then the consumer would need to actually assent to such terms because the licensor's rights over the software do not include the power to diminish the consumer's non-derivative rights. For example, the licensor can, without the licensee's express consent, prohibit the licensee from making copies of the software. The licensor cannot, however, mandate arbitration without the licensee's actual assent as the ability to file a lawsuit is a non-derivative right that exists

independently of the right to use the software afforded by the license grant.[133]

The concept of presumed assent is integral to the first part of a dynamic contracts analysis because it reflects the parties' awareness and willingness to enter into a transaction in which the licensee gains only certain rights with respect to a product and the licensor retains certain rights over that product—this contrasts from traditional sales transactions where one party relinquished all rights to a product that the other party acquired. If the facts indicate that the parties intended to enter into a transaction for the sale of a software product, then, despite the fact that the licensor may refer to the transaction as a "license" in a written document accompanying the product (or a digital agreement contained in the product), the transaction is in fact a sale. One party should not have the power to change the nature of a transaction by unilaterally inserting a written document into product packaging.[134]

On the other hand, the fact that the transaction is a sale does not mean that the written terms accompanying the product are meaningless. The written document establishes what the licensor agrees to—it sets forth the licensor's warranty policies, disclaimers, contact information, and other useful information. The validity of the warranty disclaimers depends on whether they conform to the applicable UCC and Magnuson Moss provisions. In other words, the written document states the licensor's obligations, but it does not necessarily serve as an effective limitation of those obligations unless those limitations conform to applicable law.[135] The document is not

133. The desirability of actual assent is reflected in the abundance of spyware that many consumers unwittingly authorize via clickwraps. *See* Jane K. Winn, *Contracting Spyware by Contract*, 20 BERKELEY TECH. L.J. 1345, 1346 (2005) ("[F]or contract law to provide a meaningful constraint on the distribution of spyware programs, a major revision of current contract law would be required."). Winn further predicts that

> [g]iven the strong trend in recent cases favoring the enforcement of clickwrap agreements in the absence of a conflict between contract terms and fundamental public policy of the forum, or evidence of misconduct so egregious that it might rise to the level of unconscionable, courts are likely to find that adware EULAs are enforceable contracts.

Id. at 1353.

134. As Raymond Nimmer states, "Labels are useful. But labels should not be allowed to muddy one's analysis of the actual transaction and the terms it conveys." RAYMOND T. NIMMER & JEFF C. DODD, MODERN LICENSING LAW § 5.5, 255 (2007 ed.).

135. For example, the UCC requires that disclaimers of implied warranties be conspicuous. UCC § 2-316(2) (2003).

an "agreement" in that it does not express what the licensee has agreed to, but it is contractual in the sense that the licensee is presumed to agree to the licensor's written policies insofar as such written policies conform to other applicable law. Furthermore, because the licensee never agreed to the terms, the written document should not curtail any rights that the licensee would otherwise have. The tension between the licensor's rights and obligations as a business owner and seller and the licensee's rights and obligations as a consumer and product owner is most apparent in the license grant or scope of use provision.

a. What effect does the license grant/scope of use provision have in a sale transaction? The software licensing dilemma falsely constructs a binary proposition that pits software producers against software users in an all-or-nothing struggle against each other. In fact, the sale of a software product does not exclude a *license* of the *software program.* On the contrary, in a software product sale, the user purchases both the medium that contains the software as well as a license to use the software program. (Of course, users may also simply download the program from a website. In that case, the software product sale would consist only of the sale of the license to use the software product and any help desk services and downloadable documentation.)[136] The user does not acquire the software program or code itself, nor does the user acquire the underlying intellectual property rights to the program.[137] What the user purchases in a sales transaction is the right to use the software program on a computer system under certain conditions and subject to certain restrictions.[138] The purchase of a software product does not mean that the licensee can do whatever it wishes with the software.[139] A license is a promise

136. *But see* Llewellyn Joseph Gibbons, *Stop Mucking Up Copyright Law: A Proposal for a Federal Common Law of Contract*, 35 RUTGERS L.J. 959, 979 (2004) (questioning whether there can be a "first sale" in the absence of the exchange of some tangible copy).

137. *See* Chin, *supra* note 42, at 5 ("The purchaser of a software product does not acquire plenary property rights in the accompanying software; rather, he or she purchases legal rights and technological capabilities to use certain services that may be performed by his or her computer system when the accompanying software is installed and executed on the system under certain specified conditions. The purchase of a software product is not the purchase of software code, but the purchase of these rights and capabilities.").

138. *Id.* at 26–28 (distinguishing software from the software product, which includes the right to use the code). In this Article, I use the term "software" the way an average consumer would, to refer to both the code and the product, unless otherwise specified.

139. As David Rice points out, the Copyright Act recognizes the distinction between tangible property rights in copies of a work and intangible property rights in the creation itself.

not to sue for infringement or misuse provided the licensee adheres to the terms of the license grant. The use of that software is subject to the license terms, at least to the extent that those terms do not exceed the licensor's authority. If the licensee exceeds the license grant, the licensor may sue on any available cause of action that stems from use beyond the terms of the license grant since the license (the promise *not* to sue) pertained only to use within those boundaries.[140] In other words, the license grant in a sales transaction is simply a promise by the licensor that it will not sue provided that certain use restrictions are adhered to; it is enforceable as a statement of the limitations on the licensor and the licensor's obligations. Whether or not the licensee agrees to the license grant in a sales transaction is irrelevant; this is what the licensor is permitting and what it is prohibiting. For example, I can walk into a clothing store that has a "no money back, only exchanges or store credit" policy. I might not like that policy, and I did not really agree to the policy (in many cases, I might not even be aware of the policy), but it does not matter because the store sets its own merchandise return policy. The store is still subject to state-implied warranties, but provided that the clothing meets commercial merchantability standards, the store is not required to accept returns and provide refunds. Adherence to the policy is contractual in the sense that I am presumed to have agreed to that policy, even if I have not actually read the policy at the time of purchase. Nonetheless, the policy is enforceable if it meets the minimum state warranty requirements.

If, however, the licensor purports to restrict the use of the software product in a way that is unexpected or otherwise unreasonable (i.e., narrower than one would think is typically allowed to the owner of a copy of software), and assuming that,

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> For instance, section 106 allows an owner of copyrights, by any means of conveyance, to authorize others to make copies of a protected work, prepare a derivative work or distribute copies of the original. However, the transfer of rights comprised in a copyright, including the distribution right, is governed by section 201(d) rather than by section 106(3). The difference is significant, a fact made clear by the section 202 declaration that transfer of a copy conveys no rights in the work fixed therein and that transfer of copyright carries no property rights in any copy.

Rice, *supra* note 15, at 166–67.

140. *But see* Gibbons, *supra* note 136, at 977–78 ("Once the first sale has occurred, even if a buyer disregards the copyright owner's express restrictions on the use of the copyrighted work, the buyer is not liable for copyright infringement, but the buyer may still be liable for breach of contract.").

based on an analysis of the factors set forth in Part III.C.1, the transaction is in fact a sale rather than a true licensing transaction, the restriction is not binding on the licensee; rather, it is an unenforceable attempt to limit the licensor's liabilities or responsibilities.

The written document contained with the software product provides useful information given the lack of standards established by existing law regarding the extent of the licensor's rights to control the software, but that does not mean it is accurate or even binding. It is the licensor's statement of what it has allowed the licensee, and of what it believes its own obligations are.[141] The licensee is presumed to have assented to the terms of that policy, but only with respect to the use of the software. If the licensee exceeds the scope of use, then the licensee is subject to any infringement claims available to the licensor—although such claims would not include breach of contract because the licensee has not actually agreed that he would abide by those license terms prior to purchasing the software product.

The license grant in a sale transaction then is a grant of rights to the licensee and a reservation of rights by the licensor; it is also a statement of the limitations on the licensor and the licensor's obligations. The license grant sets forth which rights the licensor makes available to the licensee. The license grant does not, and cannot, take away rights from the licensee that do not derive from the rights granted by the licensor. The licensor can grant rights to the licensee, and it can reserve other rights to itself, but it cannot unilaterally restrict the non-derivative rights that are otherwise available to the licensee.

b. What happens where the licensee exceeds rights granted by the licensor? The foregoing addresses the impact or legal significance of the written agreement that accompanies a software product. It also discusses the importance and relevance of the license grant or scope of use provision. Part IV of this Article addresses what happens where a licensor claims that the licensee has exceeded the scope of use or license grant rights, and explains how to determine whether the scope of use or license grant provision has in fact been violated.

141. *See* Sharon K. Sandeen, *The Sense and Nonsense of Web Site Terms of Use Agreements*, 26 HAMLINE L. REV. 499, 508–09 (2003) (noting that some common provisions in browsewrap agreements seek merely to explain or characterize the Web site's business).

It is important to recognize that not every restriction in a written document is a scope of use or license grant provision regardless of the caption or paragraph heading under which it is contained. In some cases, a restriction contained in the paragraph with the heading "scope of use" may not in fact be a use restriction; on the other hand, albeit less likely, a scope of use restriction may be contained in a paragraph with a heading other than "License Grant" or "Scope of Use." Whether a provision is in fact a restriction on the use of the product will depend on how the provision is drafted and how the court interprets it.[142] In interpreting any particular provision, the courts should be mindful of the nature of the transaction—that of a sale as opposed to a licensing transaction—and not just the meaning of the written terms devoid of context.[143] Accordingly, "scope of use" in a mass market sales transaction should refer to how the product is used, not *who* uses it. In mass consumer sales transactions, the licensor has no particular interest in the identity of the licensee; it cares only that the licensee can pay the asking price for the product. On the other hand, in a pure licensing transaction, the identity of the licensee is much more relevant and important to the licensor and might be considered a scope of use restriction.

If the particular use of the software in fact exceeds the license grant, then the licensor would be entitled to sue for infringement. Because the promise to forbear from pursuing an infringement claim extends only to use within certain parameters, and since the licensee transgressed those parameters, the promise to *not* sue does not

142. *See* NIMMER & DODD, *supra* note 134, § 6.5, 315 ("In practice, contractual restrictions about a licensee's use of subject matter may be in either a scope provision or a separate promise (covenant). The distinction lies not in what limits are agreed to or whether the limits are contractual in nature [sic] contain an implicit promise to not exceed them, but in how the parties draft the license and, ultimately, how a court interprets the license terms in the event of dispute.").

143. As Nimmer and Dodd note:

> Contextual approaches to contract interpretation often have meaning solely for the particular agreement and carry limited precedential value beyond the particular agreement. This returns us to a basic theme of contract law: terms of each commercial deal should be read in light of the relationship of the parties (a routinely applied common law and commercial law theme). Expectations are quite different in remote-use licenses as contrasted to development or end user contracts. Product licenses entail different expectations that do [sic] system or process licenses. The same language used in one license may confer quite different rights when used in another.

Id. § 6.6, 318–19.

pertain to the licensee's excessive or out-of-scope use. The licensor then would not sue the licensee for breach of a contract; rather, it would exercise rights available to it under copyright law.

IV. APPLYING A DYNAMIC APPROACH: TWO EXAMPLES

The enforceability of software license agreements tends to arise most frequently with two provisions, both of which purport to restrict the licensee's use of the software. The first provision limits the licensee's ability to transfer or sell its copy of the software product. The second provision restricts the licensee's use of the software to only "non-commercial" purposes. I will analyze each of these provisions in turn in order to demonstrate how to apply a dynamic approach to software licenses.

A. Example 1: Restrictions on Transferability

The following provision is typical of license grant provisions restricting transfer of software:

> 2.1 License Grant. [Licensor] grants You a non-sublicensable, non-exclusive, non-transferable, limited license to use a single copy of the Software . . . in accordance with the applicable User Documentation, within the scope of the License Parameters.[144]

There may also be a separate section governing prohibited uses of the software:

> 3.2 Prohibited Actions. [Licensor] does not permit any of the following actions and licensee acknowledges that such actions shall be prohibited:
>
> . . .
>
> 3.2.3 Transfers. You may not distribute, rent, loan, lease, sell, sublicense, or otherwise transfer all or any portion of the Software or Documentation, or Your Product(s), in whole or in part, or any rights granted in this Agreement, to any other person without the prior written consent of [Licensor].[145]

The first step in a dynamic contracts analysis is to determine what type of transaction was intended by the parties using the factors

144. *See* Autodesk's agreement, *available at* http://usa.autodesk.com/adsk/servlet/item?siteID=123112&id=7565485.

145. *See id.*

outlined in Part III.C.1. If it is determined that the parties intended to enter into a pure licensing transaction, then the prohibition regarding transferability should be enforceable as a contractual obligation provided that it is not otherwise unenforceable under an available contract defense, such as unconscionability, mistake, fraud, or duress. If the transaction is determined to be a sales transaction,[146] the restriction fails as a covenant because the provision is not one that was agreed to by the software user.

Notwithstanding the failure of the restriction as a contractual obligation, can the licensor sue for infringement on the grounds that the licensee has exceeded the scope of use rights granted by the licensor? The second step after determining the nature of the transaction is to determine the type of restriction imposed upon the licensee. A prohibition on the transferability of software is ineffective as a scope of use term because the licensor loses its ability to impose such a prohibition as soon as it has sold the software without such a prohibition. In other words, in a sales transaction, the rights arising from the first sale doctrine attach to the licensee's purchase of the software from the moment of purchase. Even assuming, *arguendo*, that the licensor has the power to contractually restrict the transferability of the software if it had in fact done so prior to the sale taking place, the fact that it did not do so means that it has lost that right. The licensor cannot, after the sale transaction, reserve a right that it no longer has, nor can it deprive the licensee of a right that was not dependent upon, or derivative of, the license for its existence.

The restriction on transferability has significance in that it sets forth the licensor's proclaimed limitations on the obligations of the licensor with respect to third-party transferees. For example, while the attempted prohibition on transfer is not effective to prevent a licensee-purchaser from transferring the license, the licensor is not required to provide support to non-registered transferees. Whether or not the licensor's proclaimed obligations (or lack thereof) to third parties are in fact valid will then depend on state law governing consumer sales transactions.

146. It is possible that the parties may enter into a conditional sale transaction whereby the terms of the sale are expressly negotiated prior to the purchase of the software by the user. In most cases involving software, however, it is unlikely that a software producer who expends the resources necessary to engage in individually negotiated contracts would engage in a conditional sale, rather than a licensing, transaction.

B. Example 2: "Non-Commercial Use Only" or "Personal Use Only"

A dynamic approach to contract interpretation extends beyond a simple textual analysis. Because the objective is to determine the intent of the parties, as with the foregoing analysis regarding restrictions on transferability, the first step in analyzing the validity of "non-commercial use only" or "personal use only" restrictions is to determine the nature of the transaction. Many "non-commercial use only" licenses are issued by educational institutions and, by definition, are not part of a sales transaction because there is no license fee. Assuming that, based upon an analysis of the factors set forth in Part III.C.1., the transaction is one for the sale of the software product rather than a licensing transaction,[147] the next step is to determine whether the restriction is, as a matter of interpretation, to be construed as a restriction on the scope of use or whether it is an attempted contractual restriction.[148]

1. Interpreting the intent of the parties

The following is an example of a license where the "non-commercial use" restriction is clearly intended by the licensor (although not intended by the licensee) to be part of the scope of use and not a restrictive covenant:

> **1. General.** A non-exclusive, nontransferable, perpetual license is granted to the Licensee to install and use the Software for academic, non-profit, or government-sponsored research purposes. Use of the Software under this License is restricted to non-commercial purposes. Commercial use of the Software requires a separately executed written license agreement.
>
> **2. Permitted Use and Restrictions.** Licensee agrees that it will use the Software, and any modifications, improvements, or derivatives to the Software that the Licensee may create (collectively, "Improvements") solely for internal, non-commercial purposes and shall not distribute or transfer the Software or Improvements to any person or third parties without prior written permission from the Licensor. The term "non-commercial," as

147. As discussed in the previous Part, if the transaction is deemed to be a pure licensing one, the license agreement would govern as a contract subject to any available contract defenses.

148. In addition to the concerns raised in this Article regarding limitations on software use, there may be antitrust implications. *See generally* Chin, *supra* note 42.

> used in this License, means academic or other scholarly research which (a) is not undertaken for profit, or (b) is not intended to produce works, services, or data for commercial use, or (c) is neither conducted, nor funded, by a person or an entity engaged in the commercial use, application or exploitation of works similar to the Software.[149]

Often it is difficult to understand precisely what "non-commercial use" or "personal use only" means. In some documents, the terms mean that the software should not be productized or that the software should not be leased or rented. Such use of the software is also prohibited by the Copyright Act,[150] and the provision would then serve the useful purpose of informing the user of what activities constitute infringement. In some documents, however, the terms refer to the type of entity that purchased the software and would not qualify as a scope of use limitation.

2. Policy considerations in interpreting "non-commercial use/personal use only" clauses

In addition to determining the intent of the parties with respect to the "non-commercial use/personal use only" provision, a dynamic approach takes into account policy considerations. Because the license terms in a written document accompanying a mass market software product do not reflect the intent of both the parties, policy considerations take on heightened significance.

a. Scope of use restrictions should be construed narrowly in mass market licenses. As discussed above, in a sale of a mass market software product, the license "agreement" does not reflect a meeting of the minds between the parties. The transfer of title to the software copy and the purchase of the right to use that software have already been completed. The interpretation of the purchaser's "right to use" should conform to reasonable expectations and avoid any unfair surprises.[151] The grant is enforceable not because it has been agreed to by the licensee, but because the licensor has the right to set parameters of use. Notwithstanding the licensor's rights as the

149. This license provision is substantially similar to one used by the University of California, San Francisco, *available at* http://www.cgl.ucsf.edu/chimera/license.html.

150. 17 U.S.C. § 109(b) (1997).

151. RESTATEMENT (SECOND) OF CONTRACTS § 211 (1979).

copyright holder, however, the licensee has certain rights as a consumer.

If the restriction were in fact related to the functionality or the function-ability of the software, it is more likely to be interpreted as a scope of use restriction. If the non-commercial use restriction is directed at the identity of the user, the provision should be interpreted as an unenforceable covenant. In a sales transaction, and especially in a mass market sales transaction, the licensor is not concerned with the identity of the purchaser as long as the purchaser can pay for the software. In the following example, the "personal use" limitation purports to restrict not how the software is used, but by whom the software is used:

> This License entitles you to install the Software on a maximum of two personal computers (laptops/desktops) for your personal use only. "Install" means to place in temporary memory or permanent storage on the computer. "Personal use" means use exclusively by the Registered User and does not include use by your business associates, partners, employees or co-workers. Each user of the Software must purchase his or her own individual License.[152]

The "personal use" limitation fails both as a restrictive covenant, because the user never agreed to the term prior to completion of the sale, and as a scope-of-use limitation, because as an interpretive matter, it does not address how the software is used, but by whom it is used (provided that it is only installed, i.e., copied, on two computers at any time). The limiting clause may be relevant, however, in determining the licensor's obligations and liabilities for non-personal use of the software. For example, a manufacturer of paint may label its cans as being "for interior use only," but such a label does not mean that the purchaser is legally prohibited from using the paint for exteriors. What it does mean, however, is that the paint is not made to withstand exterior weather conditions and that the purchaser should not expect that it will. It thus serves to limit the manufacturer's liability by setting appropriate standards and expectations for the product.

b. Price discrimination should not be the sole purpose. In some cases, software is labeled "for personal use only" because the version is in development and intended only for evaluation or development

152. This provision was copied from a Real Data software license agreement, *available at* http://www.realdata.com/p/license.shtml.

purposes. In such cases, however, the transaction engaged in by the software producer and the user is a pure licensing transaction rather than a sale. In other cases, the distinction between personal and commercial use is intended only to effectuate a price differentiation strategy.[153] From the software producer's standpoint, differential pricing is an easy and effective way to maximize profits and sales.[154] Software producers should be able to price their products differently based upon the targeted buyer; however, their ability to do so should depend upon implementing innovative business practices, strategic control of distribution channels, and qualitative differences in product offerings. Pricing discretion should not depend on restrictive covenants in contracts that were never agreed to, or upon license restrictions that are difficult to understand and police.[155] This section explains why policy considerations dictate that non-commercial use/personal-use-only licenses should not be enforced in a sales transaction simply to effectuate a price differentiation strategy.

(1) The pricing dilemma is not unique to the software industry. The pricing dilemma faced by software producers is no different from that faced by producers in other industries. As a general matter, businesses in all industries want their customers to pay the highest price they are willing to pay—the problem for them is figuring out what that price is. Certain customers might also value a particular product, at a certain price; other customers might value a particular product but only at a much lower price. Some businesses have learned to address the issue of consumer demand by offering qualitatively different products. The publishing industry, for example, regularly issues books in hardcover several months to a year before publishing the same books in paperback. While many customers may be willing to pay a premium for the privilege of reading a book when it is first released, other customers may only purchase that book at a reduced price. The publishing industry thus

153. ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1450 (7th Cir. 1996); Christian H. Nadan, *Software Licensing in the 21st Century: Are Software Licenses Really Sales, and How Will the Software Industry Respond?*, 32 AIPLA Q. J. 555 (2004).

154. *See* Fisher, *supra* note 129, at 1234–40.

155. *But see id.* at 1238–40 (arguing that price discrimination has substantial benefits, including improvements in distributive justice because more consumers can access intellectual works and there is a reduction in social welfare losses). For a discussion of price discrimination and goods protected by copyright, see Michael J. Meurer, *Copyright Law and Price Discrimination*, 23 CARDOZO L. REV. 55 (2001).

accommodates differing customer demands by issuing hardcovers first and paperbacks later.[156] Publishers are able to justify the price differential by printing the earlier versions in hardback.

Businesses have different ways of dealing with customers who may challenge their business models. Scholastic Books, for example, regularly sells paperback versions of children's books to school markets at greatly reduced prices. Such books (often originally printed by publishers other than Scholastic) contain a legend on their back covers that states, "This edition is for distribution by schools only." The legend reflects Scholastic's practice of not selling these books to retail outlets—and discourages purchasers who intend to buy books from Scholastic and resell them to retail outlets at a profit. Retailers are discouraged from buying these books from unscrupulous third parties because doing so reflects poorly on the retailers. It does not, however, prevent purchasers from reselling their copies of books on eBay, for example, or to used book stores. Another example is Estée Lauder, which often gives "gifts with purchase." These miniature-sized cosmetics often contain the words, "not for individual sale" on their containers. This discourages resale of these products and puts potential purchasers on notice that they are not getting the full-sized item and should not be paying for the sample. The notice "not for individual sale" brings into question the integrity of the reseller (and the safety of the sample-sized, unauthorized-by-the-manufacturer, resold product). Furthermore, music groups with fan clubs have a long history of trying to thwart scalpers who may buy up tickets and prevent true fans from attending concerts. They have employed various strategies to address the scalping problem, such as requiring proof of identification at ticket pick-up and tracking multiple fan club memberships.[157]

As these examples illustrate, businesses in all industries must deal with customers who refuse to play by the rules set by these businesses—and they typically do so by controlling their channels of distribution, not by unilaterally imposing overbroad pseudo-contractual restrictions. In fact, in many ways software manufacturers can police product use more easily than other types of businesses.

156. *See* Nadan, *supra* note 153, at 578–79; R. Anthony Reese, *The First Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577, 591 (2002).

157. *See* Joseph De Avila, *A Controversial Way to Score Concert Tickets: Emerging Secondary Market in 'Presale' Passwords Irks Dues-Supported Fan Clubs*, WALL ST. J., Sept. 20, 2007, at D1.

Software companies can make registration a prerequisite of maintenance and support or help desk services. Alternatively, they can charge more for software support services based upon anticipated increased use in the need for support. They can build mechanisms into their products that restrict use.[158] There are indications that denying the software industry preferential treatment might actually encourage socially beneficial changes to existing business models.[159] For example, many software companies now make a larger percentage of their revenues from selling services than selling products.[160]

(2) The line between personal and commercial use of software is often blurred. As a practical matter, with some types of software it is difficult to separate commercial from non-commercial use, especially if the meaning of "non-commercial use" or "personal use" is ambiguous in the written document. For example, a consumer may purchase a "personal use only" version of a word processing software product and intend to use the software to compose personal letters. She may also work for a company and often take work home, where she composes documents using her "personal use only" software. Has she violated the scope of license? What if she purchased graphic design software because she wanted to design her own birthday cards and then decided to start a business because creating cards was much easier than she thought? Does she have to switch from one program to another depending on the project that she is working on? At what point is she considered a "commercial" customer—with her first paying customer? With her tenth?[161]

158. *See* Hardy, *supra* note 55, at 236–58 (discussing how the costs of drawing and monitoring "borders" in cyberspace may be lower than for other informational works).

159. *See* Nancy Kim, *Internet Challenges to Business Innovation*, 12 J. OF INTERNET LAW 3 (2008).

160. *See* Esther Dyson, *Intellectual Value: A Radical New Way of Looking at Compensation for Owners and Creators in the Net-based Economy*, 3.07 WIRED 136, 141 (July 1, 1995) (noting that "while most packaged software vendors continue to fight the perennial battle against software piracy, others have chosen to begin adopting a different business model" that depends upon compensation for "services rather than for code"). Microsoft's chief executive, Steven A. Ballmer, recently acknowledged that the company was making an effort to adapt "to the opportunities and risks of a more connected, more services-oriented world," reflecting consumer shift away from using software on a PC and to services on the Web. Steve Lohr, *Microsoft Will Share More Secrets*, N.Y. TIMES., Feb. 22, 2008, at C1, C6.

161. *See also* Frischmann & Lemley, *supra* note 55, at 274–75 (discussing how the indeterminacy of intellectual property rights makes enforcement complicated).

Whatever social benefit may result from permitting a company to price discriminate must be considered and weighed against the deterrent or stifling effect that a non-commercial use/personal use only restriction has upon the software user.[162] If one of the reasons we permit price discrimination is that we wish to encourage business innovation and entrepreneurialism, then we must also consider that there is a business interest that is also implicated—and frustrated—where we prohibit software from being used for business purposes for reasons unrelated to software capacity or functionality.[163]

Perhaps we should also consider what social utility exists in permitting a software producer to price the same product differently for different customers without having to justify or earn that increased price. The goal of economic efficiency provides a justification for permitting price discrimination; yet it does not explain why price discrimination is facilitated in this manner for software but not for other types of businesses. We do not charge wealthy people more for goods simply because they are willing to pay more. A car buyer is not given a purchase price based upon whether he or she will use the vehicle for business, personal, or mixed business and personal journeys. Enforcing a non-commercial use/personal use only restriction is particularly anomalous given that it may be much easier and more practical to provide a commercial version of software by providing enhanced functionality or additional support hours.

It is important to realize that a refusal to enforce "non-commercial use/personal use only" licenses does not render all commercial uses of software permissible. Certain "commercial" uses of software will still violate the Copyright Act. These uses include software leasing and rental of the software, and productizing or incorporating software into a new product.[164] The fact that there are

162. *See also* Llewellyn Joseph Gibbons, *Entrepreneurial Copyright Fair Use: Let the Independent Contractor Stand in the Shoes of the User*, 57 ARK. L. REV. 539 (2005) (discussing some of the difficulties that small businesses and consumers may face when they attempt to fully exercise their rights to use software by hiring independent contractors).

163. *But see* Harold Demsetz, *Information and Efficiency: Another Viewpoint*, 12 J.L. & ECON. 1, 17–19 (1969) (arguing that more monopolistic industries provide the greatest encouragement to invention).

164. 17 U.S.C. § 109(b)(1)(a) (2000) ("[U]nless authorized by the owners of copyright in the sound recording or the owner of copyright in a computer program (including any tape, disk, or other medium embodying such program), and in the case of a sound recording in the musical works embodied therein, neither the owner of a particular phonorecord nor any person

illegal commercial uses of software does not justify enforcing overbroad provisions that restrict otherwise legal uses. Finally, it is worth noting that both parties to a sales transaction are obligated under the UCC to act in good faith and in accordance with reasonable commercial standards of fair dealing.[165] A party who uses software for commercial purposes in a way that constitutes unfair competition then might be found to have breached its obligation of good faith and fair dealing.

V. ANTICIPATED OBJECTIONS AND POLICY CONSIDERATIONS

In this section, I address additional anticipated objections to my proposed approach and the usual arguments in favor of permitting software transactions to be classified as "licensing transactions" rather than "sales transactions" even where reality indicates otherwise. I conclude that my approach exposes the license-sale opposition as a false dichotomy which in turn falsely constructs the software licensing dilemma. While the manipulability of software as a product is unique, the issues a licensing strategy seeks to resolve are not. While there may in fact be issues particular to software producers, the dilemma that they now face is one that is common to manufacturers of other products in other industries.[166]

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in possession of a particular copy of a computer program (including any tape, disk, or other medium embodying such program), may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that phonorecord or computer program (including any tape, disk, or other medium embodying such program) by rental, lease, or lending, or by any other act or practice in the nature of rental, lease, or lending.").

165. U.C.C. § 1-304 (2001). While both the amended and pre-amended version of Article 1 impose a duty of good faith in the performance of contracts, the two versions define good faith differently. *See* Keith A. Rowley, *The Often Imitated, but Not Yet Duplicated, Revised Uniform Commercial Code Article 1*, (Mar. 6, 2007), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=968869. As Rowley notes, while both versions require subjective honesty, the revised Article 1 would require reasonable commercial standards from both merchants and non-merchants alike. *Id.* at 4. While it may be an open issue whether software constitutes "goods" for purposes of the UCC, courts will likely look to the Code for guidance, even if it is not binding upon the transaction.

166. Keith Rowley notes that "[m]ost state courts recognize an implied duty of good faith and fair dealing in all contracts." *See* Rowley, *supra* note 165, at 19.

A. Software Manipulability Necessitates Greater Control (i.e., The First "Software is Different" Argument)

Some may argue that software producers need to contractually protect their products because of software manipulability.[167] Yet, many copyrighted products such as books, movies, and music are easy to copy.[168] Paintings and architecture are also capable of being copied more easily now than in the past due to technological improvements, including improved digitization capabilities. There may have been a need for contractual protection when it was uncertain that intellectual property law protected software.[169] As previously noted, a software sale is not a transfer of ownership to the underlying code or the program.[170] Software is still subject to copyright protection.[171] The written documents—the shrinkwrap and clickwrap "agreements"—served a useful purpose at a time when the

167. *See* O'Rourke, *supra* note 125, at 486–87 ("[The] public goods problem addressed by copyright law is particularly acute in the case of software. Millions of dollars may be invested in software design and coding. However, once the software is distributed on disk or made electronically accessible, it is easily copied and distributed to others.").

168. *See* Nadan, *supra* note 153, at 557–59 ("This article argues that software is different, but not for the traditional (and flawed) rationale that software is easy to copy. Rather, software is different because of the two considerations observed above—the same copy can be significantly more valuable to a commercial user (the personal and commercial versions are often identical—only the license that comes with the software would be different), with potentially enormous liability for its malfunction. These considerations are fairly unique to software.").

169. Database protection is largely still unavailable under copyright law. Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 361–62 (1991) (holding that in order to receive copyright protection, a database needs to demonstrate sufficient originality in the selection or arrangement of its contents); *see also* Jennett M. Hill, Note, *The State of Copyright Protection for Electronic Databases Beyond* ProCD v. Zeidenberg*: Are Shrinkwrap Licenses a Viable Alternative for Database Protection?*, 31 IND. L. REV. 143 (1998); *see also* Lipton, *Mixed Metaphors*, *supra* note 50. While the code used to compile the database information may be protected by copyright, the information likely would not be. Consequently, a provider of database information would likely choose to enter into a licensing—as opposed to a sales—transaction. In addition, a software provider would be wise to incorporate some type of encryption measure to minimize the likelihood of unauthorized access.

170. 17 U.S.C. § 202 (2000) ("Ownership of a copyright, or of any of the exclusive rights under a copyright, is distinct from ownership of any material object in which the work is embodied.").

171. Determann & Fellmeth, *supra* note 20. For a discussion of the potential problems related to copyright protection to computer programs, see generally Litman, *supra* note 35. *But see* Smith & Mann, *supra* note 91 (arguing that intellectual property laws have had an "important impact" on the success of the software industry but that copyright may not be enough to adequately protect against certain forms of copying in the near future).

parameters of software use were unclear.[172] The parameters are better defined now.[173] In May 1964, the Copyright Office agreed to register copyrights on computer programs.[174] In fact, some commentators believe that software copyrights are too easily obtained, thus chilling innovations in software development.[175] The 1998 Digital Millennium Circumvention Act ("DMCA") further enhances the ability of software producers to take electronic measures to protect their works.[176]

If a patent has been filed for the code, patent law also protects the corresponding program, making any unauthorized uses subject to an infringement suit.[177] Some commentators have suggested that patent law provides a *better* regime for governing software than either copyright or trade secret law.[178] Software may be even more protectable than other products since the passage of the DMCA. One of the goals of the DMCA was to reassure copyright owners that making their works available on the Internet would not subject them to massive piracy.[179] Congress believed that it could encourage

172. *See* O'Rourke, *supra* note 125, at 488 (noting that "in the earliest days of software distribution, it simply was not clear that software was protected by copyright law" and as a result, software producers felt a need to obtain such protection contractually).

173. *But see id.* at 489–99 (stating that while the availability of copyright protection for software is more certain, software is still more vulnerable to abuse than hard copy works). This author believes that the ease with which hard copy works can be converted to digital format and widely distributed makes this argument—while perhaps true ten years ago—much less forceful today. For example, this year there was the unauthorized digital "release" of the much anticipated "hard copy" seventh installment of the Harry Potter series.

174. *See generally* Note, *Copyright Protection for Computer Programs*, 64 COLUM. L. REV. 1274 (1964).

175. *See* JESSICA LITMAN, DIGITAL COPYRIGHT 81–86 (2001); Jacqueline D. Lipton, *IP's Problem Child: Shifting the Paradigm for Software Protection*, 58 HASTINGS L.J. 205 (2006).

176. *See* 17 U.S.C. § 1201 (Supp. V. 1999).

177. *See* Smith & Mann, *supra* note 91, at 242 (suggesting that "patent protection may emerge as a critical form of IP protection for software" in the next few years).

178. *See id.* at 256; *see also* Menell, *supra* note 75, at 1364–65; Nadan, *supra* note 153, at 555. Some commentators believe that patent protection for software, like copyright protection, stifles innovation. *See* Julie A. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CAL. L. REV. 1 (2001); Eloise Gratton, *Should Patent Protection Be Considered for Computer Software-Related Innovations?*, 7 COMP. L. REV. & TECH. J. 223 (2003).

179. S. Rep. No. 105-190, at 8 (1998); *see also* Jane C. Ginsburg, *Copyright and Control over New Technologies of Dissemination*, 101 COLUM. L. REV. 1613, 1618 (2001) ("While copyright owners could distribute their works encased in some form of technological protection, they still perceived a probability that others would remove those protections,

digital communication only by reinforcing the control that copyright holders had over distribution of their works, despite the loss to the public of circumvention devices.[180] In other words, while software producers may need to control use of their products, they do not need to do so *more* than do producers of other types of products.

Much of this analysis is also applicable to other consumer products containing digital information, such as music CDs and movie DVDs, which are also readily distributable.[181] But in addition to being susceptible to unauthorized distribution, the manipulable quality of software makes it much more difficult to discover infringing uses in competitive products. For example, while it may be difficult for a music producer to discover all the infringers who are distributing its music without permission, a product, such as a song, which incorporates the music or any portion thereof, is easily detectable. In most cases, a software producer would have a much more difficult time proving that its software was incorporated into a competitive product.[182]

As a practical matter, however, the existence of a contract will likely not dissuade users who knowingly infringe copyrights. Enforcing a license as an "agreement" between the parties is no more likely to deter infringers than would notifying them of the difference between legitimate and infringing activity.

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making the work as vulnerable to unlicensed copying as it would have been without resort to technological measures.").

180. *See* Ginsburg, *supra* note 179, at 1613. In fact, Glynn Lunney argues that "the DMCA goes too far in its efforts to eliminate the threat digital technology poses." Glynn S. Lunney, Jr., *The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act*, 87 VA. L. REV. 813, 819 (2001). He further argues that "[b]y prohibiting others from possessing the decryption tools necessary to break the technological locks that the copyright industry places on its digital works, the DMCA empowers those who produce digital works of authorship to set the terms of public access." *Id.*

181. David Rice notes that one of the objectives of software license agreements is to achieve market protection by prohibiting rental of software. The rental prohibition aims to eliminate the opportunity for third parties to rent software at a fraction of its retail price and then make an unauthorized copy of the software at little additional cost. *See* Rice, *supra* note 15, at 158. Rental of software is now prohibited under 17 U.S.C. § 109(b)(1)(a) (2000). The problem of illicit copying is one that the movie industry has faced since the inception of video rentals and is not unique to the software industry.

182. Difficult, but not impossible. One way that software companies thwart infringers is by embedding pieces of useless code into a program. If such code shows up in another program, infringement is likely to be found. CONSTANCE E. BAGLEY & CRAIG E. DAUCHY, THE ENTREPRENEUR'S GUIDE TO BUSINESS LAW 486 (2008).

In addition to the protections available under the law, software producers may also protect their product through its architecture or by installing lock-up or other protective devices.[183]

B. Software Is Inherently Faulty, Which Necessitates Substantial Control over Distribution (i.e., The Second "Software Is Different" Argument)

Another oft-cited justification for software license agreements is that it is nearly impossible to produce bug-free software.[184] The argument is usually employed to justify contractual restrictions on commercial use of software since, the argument goes, if a product is used in a business, the potential for loss of profit and other consequential damages in the event of software failure is so substantial that it would cripple the software industry. According to this argument, software license agreements are necessary even in mass-market, consumer transactions in order to encourage innovation in the software industry and to facilitate the introduction of new products into the marketplace that would otherwise be delayed or deterred by liability concerns.

The concerns over the liability of software producers for consequential damages are greatly exaggerated. Both the UCC and the Magnuson Moss Act permit sellers to limit their liability for lost profits and other consequential damages. Although sellers may be constrained in their ability to completely disclaim implied

183. Lipton, *Mixed Metaphors*, *supra* note 50, at 251 ("Technological encryption measures are often utilized to prevent unauthorized access, and contractual licensing and transfer schemes are used for commercial transactions involving such databases."); *see also* Brett Frischmann & Dan Moylan, *The Evolving Common Law Doctrine of Copyright Misuse: A Unified Theory and Its Application to Software*, 15 BERKELEY TECH. L.J. 865 (2000) (discussing legal and extralegal protections of software). Frischmann and Moylan note that "today's landscape affords software producers unprecedented protection over their products" that may ultimately hurt innovation. *Id.* at 915. Of course, such software protections are susceptible to hackers, but in this way, such protective measures are no different from anti-burglary measures taken by a homeowner who continues to be susceptible to break-in. As Lawrence Lessig famously noted, "Code is law," meaning that code regulates cyberspace, but law in cyberspace as in the physical world, is not failsafe. LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 6 (1999); *see also* James Grimmelmann, Note, *Regulation by Software*, 114 YALE L.J. 1719 (observing that while regulation by software is attractive in some areas, it is dangerous in others).

184. Nadan, *supra* note 153; Rice, *supra* note 15, at 178 (acknowledging that in the commercial market context, "controlling liability exposure may have strong efficacy and efficiency justification in some circumstances").

warranties,[185] they may limit the available remedy, thereby limiting their risk exposure.

In light of the software producer's ability to limit its liability for consequential damages, there is no good reason to permit software producers to exempt themselves from all the warranties implied under state law. Software producers should be required to deliver a product that meets certain minimal standards of merchantability, and a failure to do so should entitle consumers to receive refunds. This should not enable consumers to copy software and then falsely claim that it does not work. A software producer may implement return policies, such as allowing product testing, to deter false claims. By the same token, software producers should not receive payments for products that do not work.

There is another important reason why we should not permit software producers to "contract" out of state implied warranties. If courts were to view mass-market software transactions as "licensing transactions" and thus exempt from the regulatory systems that govern sales transactions, they would put retailers in an untenable position. Any license agreement governs only the relationship between the licensor and the end user; there is typically no such agreement between the retailer and the consumer. Mass-market consumer license agreements do not usually include any reference to retailers or other third-party distributors. Under ordinary rules of offer and acceptance, the retailer has sold a product to the consumer that makes the retailer subject to liability for warranties implied under state law. If the terms of the written document contained within a software product package are deemed to be "contract terms" that govern the relationship between the software producer and the end user, then incongruously the retailer is liable for state implied warranties for having "sold" the product (when it should have sublicensed it), whereas the software producer is not liable.

185. The UCC permits warranty disclaimers provided that they conform to certain requirements under U.C.C. § 2-316(2). The Magnuson-Moss Act does not permit disclaimers of implied warranties if the product is accompanied by a written warranty although the Act does not require the issuance of *any* warranty at all. However, the Magnuson-Moss Act does permit limitations of liability.

C. Software Producers Should Be Able to Distribute Their Products as They See Fit (i.e., The Libertarian View of Property)

Some may contend that software producers should be permitted to decide how they wish to release their products to the public. Certainly software producers have the prerogative to decide whether to license rather than to sell their software products. But such freedom does not entitle software producers to reshape reality. In other words, nothing in my proposal prohibits software producers from entering into pure licensing, rather than sales transactions,[186] nor am I arguing against the enforceability of form contracts in general. Software producers, however, should not be able to characterize a transaction in ways that violate generally accepted principles of contract law. Until *ProCD* and its progeny, a sales transaction was considered concluded when the purchaser paid the purchase price and the retailer transferred possession of the product. Software producers, of course, are free to enter into pure licensing transactions, or to negotiate or impose contractual terms—provided that they do so prior to the conclusion of the sales transaction.

Some may argue that transaction costs are too high for software producers to realistically consider individual negotiations of software license agreements, which is one of the factors involved in determining whether a transaction is a license or a sale. While there is undoubtedly a transaction cost issue, it is unclear how much of an obstacle it truly is, given the existence of form contracts in other consumer transactions. The transaction cost issue is not one that is unique to the software industry. Transaction cost issues arise in all mass-market consumer transactions where the seller or manufacturer wishes to somehow "condition" the sale or use of the product being sold. In fact, that is the cost that the seller, manufacturer, or lessor *should* incur to obtain terms that might otherwise be unavailable under the default rules (such as the UCC) governing the transaction. If software producers wish to limit the duration and use of their software products, then they should engage in a true licensing transaction instead of a transaction that has all the characteristics of a sale save for a written "contract" contained within the software

186. Other commentators, however, have expressed concern about permitting a software producer to contractually eliminate the right of first sale. *See, e.g.*, Determann & Fellmeth, *supra* note 20; Lemley, *Beyond Preemption*, *supra* note 61; Lemley, *Shrinkwrap Licenses*, *supra* note 61.

package (and accessible only after the end user has taken possession of the product). A true licensing transaction—while increasing the transaction costs for the software producer—heightens the end user's awareness that the software product that he or she is paying for may not meet his or her expectations.[187] Contract law posits that, as a general matter, courts will not review the adequacy of consideration; much of this laissez faire attitude is justified on the grounds that the parties have actively bargained for their rights and obligations. Where a basic assumption of contract law—and the doctrinal rules that flow from that assumption—is negotiated terms, it is misguided to say that high transaction costs justify enforcing transactions as contracts without any negotiations.[188] Furthermore, as Part III.C explains, the failure of written terms (whether electronic or printed) to constitute a contract does not mean that none of the terms contained in that written document are enforceable. The software purchaser's assent may be presumed with respect to the rights granted, and the derivative restrictions contained, in that document. Recognizing the license grant terms as enforceable, independent from the validity of the written terms as a contract, eliminates much of the justification for non-negotiated license agreements.

D. Software Producers Need to Control Subsequent Sales in Order to Sell More Copies of Software

Another objection to characterizing software transactions as "sales" rather than "licenses" is that, in doing so, the end user becomes an owner of a copy of the software product, thus implicating the first sale and associated rights under the Copyright Act.[189] If a consumer is able to purchase used copies of legitimately

187. *See* Niva Elkin-Koren, *Copyrights in Cyberspace: Rights Without Laws?*, 73 CHI.-KENT L. REV. 1155 (1998) (expressing skepticism about the desirability of regulating information access through contracts); Fisher, *supra* note 129, at 1246 (noting that contracts on the Internet "go far toward eliminating the presumption of social desirability usually accorded voluntary bargains" because of the informational asymmetries and the lack of bargaining power characteristic of such contracts).

188. *But cf.* Reichman & Franklin, *supra* note 82, at 954–59 (proposing non-negotiable terms that are even-handed and socially responsible).

189. Christopher B. Yeh, WallData Inc., v. Los Angeles County Sheriff's Dep't*: License Versus Sale at the Crossroad of Contract and Copyright*, 22 BERKELEY TECH. L.J. 355, 362 ("The key rationale, however, for supporting a licensing regime is concern for preservation of the software industry's business model. The first sale doctrine is the bane of the business model because it prevents software developers from controlling subsequent transfer of their product,

acquired software products at a reduced price, this creates a lost revenue opportunity for the software producer.[190] While this observation may be true, it does not express a truth that is confined to the software industry.[191] Especially with the ready availability of the Internet as a marketplace and distribution channel, the issue of product resales plagues many industries and products. The challenge that consumer goods manufacturers face arises from the creation of a secondary market in goods that is much more accessible due to the low barriers to entry for Internet resellers, the ease of comparison shopping on the Web, and the existence of sites like eBay and Amazon. But if one of the underlying goals of contract law is promoting economic efficiency, that goal is furthered by the Internet and sites like eBay and Amazon, which bring buyers and sellers together and reduce transaction costs and the need for intermediaries. If the Internet causes some businesses to rethink their business model, then it encourages innovation and entrepreneurialism.[192] In this respect, however, software is not different from other products—and the dilemma faced by the software industry is not unique.

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which in turn prevents them from generating revenue from it."); *see also* Nadan, *supra* note 153, at 268–84.

190. For a discussion of how digital dissemination may actually diminish the impact of the first sale doctrine see Reese, *supra* note 156, at 579. Reese speculates that as e-commerce and encryption technology grows, the "first sale doctrine may remain on the books . . . but if few or no copies of copyrighted works exist, then the doctrine will essentially be a dead letter." *Id.*

191. *See also* Madison, *supra* note 50, at 299–300 (stating that treating a software transaction as a license rather than a sale "effectively treats section 109, the codification of copyright's venerable first sale doctrine, as a nullity in the context of computer programs . . . . 'Copies' of computer programs might be 'licensed' and therefore excluded from section 109 . . . but there is no evidence in the statute or in the logic and history of copyright law that supports permitting owners of copyrights in computer programs to have the power to 'license' copies in ways that publishers of books and phonorecords cannot").

192. For example, software producers might bypass the first sale doctrine altogether by distributing software digitally or through technological protection measures. *See* Reese, *supra* note 156. R. Anthony Reese notes that new digital markets have already developed in existing industries:

> Websites for newspapers such as *The New York Times* and *The Los Angeles Times* sell access to individual articles. Encyclopedia Britannica offers the full content of its encyclopedia online for an annual or monthly subscription fee, offering a new alternative to previous choices. . . . Additionally, the major recording labels have launched . . . online music services . . . that give users the ability to listen to a limited music catalog on demand for a monthly fee.

Id. at 619.

VI. CONCLUSION

The dilemma faced by the software industry is not whether software is or should be licensed or sold but how software producers can adapt their business model to an environment where distribution is cheap and transactions are efficient.[193] Paradoxically, technology that threatens an existing business or industry may provide unexpected revenue streams for that business or industry. For example, streaming music on the Internet has been blamed for the decrease in the number of CDs sold; however, technological developments have created new uses for music in other forms. The ubiquity of recorded music on electronic and wireless devices opens new opportunities for music companies and related businesses that are savvy enough to recognize the opportunity.[194] The issues that the software industry must address are common to those faced by other industries, including the music industry. Not surprisingly, the way the software industry resolves these challenges has implications that reverberate beyond that particular market segment.[195] The policy considerations—economic efficiency and business innovation—used to justify special treatment for software producers also militate against such treatment, as software license agreements often discourage both.[196]

The "contractualization" of software transactions has set a dangerous precedent for other commercial goods as sales of non-

193. *See* Kim, *Internet Challenges to Business Innovation*, *supra* note 159 (discussing ways that companies might re-think their businesses to adjust to changes in the digital environment).

194. *See* Jay Reeves, *Company Gets Rich on College Fight Songs*, Associated Press, Feb. 23, 2008 (discussing "a major trend in the music industry, where publishing companies are reaping the benefits of the digital music that's become the soundtrack to life thanks to microprocessors and streaming sound").

195. Some courts, however, may be reluctant to accept the use of a licensing strategy with non-software products. In a recent case, for example, a federal district court held that a promotional music CD was a gift or a sold product, despite being labeled with language stating that it was being licensed for personal use only. *See* UMG Recordings, Inc. v. Troy Augusto, 558 F. Supp. 2d 1055 (C.D. Cal. 2008).

196. *See also* Lemley & Weiser, *supra* note 58, at 783–84 ("Over the last several decades . . . more and more courts and commentators have sought to align the rights of IP holders with those of real property owners, arguing for pervasive use of property rules and limited uses of 'liability rules' (which allow access at a price set by a court or agency). Whether this trend is managed sensibly will greatly influence how innovation develops and whether the Internet will remain as a platform for innovation and economic growth.").

software products are increasingly conditioned upon certain terms.[197] The restrictions on the use of products stifle entrepreneurialism and innovation.[198] The prohibition on subsequent transfers hinders economic efficiency by keeping second-generation buyers and sellers apart. If other industries were to adopt the contract model adopted by the software industry the results may even be environmentally wasteful because they would prevent original owners from reselling products that they no longer wanted and would force potential buyers to purchase new products.[199] The manufacturers of goods would benefit from increased production of products but the class of purchasers would not. The re-use and recycling of products that have lost utility for their original owners, but that retain commercial value, should be encouraged. While the material waste associated with producing software and other digital products may be minimal compared to other products, the rationale used to support software licensing may be used to support licensing of other types of products.

The business issues faced by the software industry as a result of technological advancements are not different from those faced by other industries and neither is the "solution" that the software industry has adopted. While an outright prohibition or ban on sales contracts is not desirable or socially beneficial, neither is the reconfiguration of reality by software producers and other goods manufacturers. The software industry faces a dilemma, but it is not

197. *See* Winston, *supra* note 119, at 93 ("[T]he use of private legislation to circumvent and frustrate public legislation has expanded, due to the success of software licenses, and now owners of many types of intellectual property are relying on private legislation, rather than public legislation, to regulate users' rights in their chattels"). While there may be an increase in licensing, contractual restrictions on the sale of goods have existed prior to the advent of mass consumer software and personal computers. *See generally* Raymond Nimmer, *Issues in Licensing: An Introduction*, 42 HOUS. L. REV. 941, 947 (2005) ("Although licenses have been widely used in the commercial marketplace for generations, express licenses became widespread in mass markets only within the past quarter century"); Robinson, *supra* note 18.

198. *See also* Frischmann & Lemley, *supra* note 55, at 258 (arguing that "spillovers"—the uncompensated benefits that one person's activity provides to others—encourage greater innovation).

199. *See, e.g.*, Arizona Cartridge Remanufacturers Ass'n v. Lexmark Int'l Inc., 421 F.3d 981 (9th Cir. 2005) (holding that a printer cartridge notice restricting reuse of printer cartridges in return for a discount at purchase was enforceable). Ironically, Lexmark asserted that one of the reasons for its "prebate" policy was an effort to be environmentally conscious. *Id.* at 984. This author is skeptical of the sincerity of this environmental commitment as the post-sale restriction did not require consumers to return cartridges at all but only precluded them from returning them to another remanufacturer. *Id.* at 984 n.2.

one that presents itself because of the unique nature of software. It is a dilemma created by technology and one that should be resolved by innovative business strategies rather than novel—and questionable—legal tactics.