CONTRACT LAW IN CONTEXT: THE CASE OF SOFTWARE CONTRACTS

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INTRODUCTION

The membership of the American Law Institute ("the ALI") approved the *Principles of the Law of Software Contracts* ("*ALI Principles*") in May of 2009.[1] In this Article, I draw on my experience as Reporter on this project to add my perspective on an interesting general question: is specialization of contract law wise and, if so, in what contexts? For the purpose of this Article, general contract law comprises the rules and standards exemplified by the *Restatement (Second) of Contracts* that apply generally to exchange transactions. Specialized contract law consists of specific bodies of contract rules that govern particular subject matter transactions, such as insurance, employment, real estate, and the sale of goods.[2] I certainly cannot definitively answer the question of whether, in the abstract, society is better off with general or specialized law, but my experience in drafting the software rules sheds some light. In fact, I am keenly aware of this issue because of occasional resistance to the project on the ground that specialization was unnecessary.

In a fine recent contribution on the subject of generalization versus specialization in contract law, Professor Nathan Oman discusses several costs and benefits of generalization.[3] I will rely on his list, along with some embellishment of my own, in setting forth some tentative conclusions about generalization and specialization in the context of software contracts. Obviously, the *ALI Principles* are not law unless and until courts adopt them. But for purposes of

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1. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS (2009).

2. According to Professor Nathan Oman, general contract law is "a single set of legal principles that purports to govern liability for basically all voluntary transactions." Nathan B. Oman, *A Pragmatic Defense of Contract Law*, 98 GEO. L.J. 77, 77 (2009). "[S]pecialized bodies of law govern[] particular kinds of transactions." *Id.* at 78. But the distinction is not sharp once courts apply general contract law to decide specific cases involving particular subject areas.

3. *See id.* at 79.

comparison between general and specialized law, I will proceed as if the *ALI Principles* constitute a body of law.

I. THE COSTS AND BENEFITS OF GENERAL CONTRACT LAW

Professor Oman usefully identifies many of the possible costs and benefits of general contract law.[4] I cannot do justice to Oman's elaborate discussion in this Article, but, greatly simplified, he first presents three major costs of generalization. First, generalization does not work well because abstract, general principles provide poor guidance for predicting outcomes.[5] Oman notes that this argument is essentially an attack on formalism and nicely summarizes: "The push for a single set of rules to govern all voluntary transactions seems to rest on the misguided hope that law can be made into a simple set of abstract premises from which correct results can be deduced."[6]

Second, Oman suggests that generalization fails because of the absence of a single preeminent normative theory of contract that can guide decision making.[7] Instead, contract law consists of various normative choices in disparate contexts.[8] The development of different rules for different subject matters logically follows from contract law's normative pluralism.[9]

Third, Oman points out that general contract law often produces "undesirable outcomes," in part because of the failure of formal law and a unitary theory, and in part because of general

4. *See id.*

5. *Id.* at 82.

6. *Id.* Formalism has not been in vogue for a quite some time. *See* ROBERT A. HILLMAN, THE RICHNESS OF CONTRACT LAW 126–28, 175–79 (1998).

7. Oman, *supra* note 2, at 82–83.

8. *Id.* at 79 ("[I]t is exceedingly unlikely that a single normative theory can actually cover all of the factual circumstances that give rise to 'contracts.'"); *see also* Melvin A. Eisenberg, *The Theory of Contracts*, *in* THE THEORY OF CONTRACT LAW: NEW ESSAYS 206, 240–41 (Peter Benson ed., 2001) ("In contract law, as in life, all meritorious values must be taken into account, even if those values may sometimes conflict, and even at the expense of determinacy."); HILLMAN, *supra* note 6, at 274; Alan Schwartz & Robert E. Scott, *Contract Theory and the Limits of Contract Law*, 113 YALE L.J. 541, 543 (2003) ("Normative theories that are grounded in a single norm—such as autonomy or efficiency—also have foundered over the heterogeneity of contractual contexts to which the theory is to apply.").

9. Oman, *supra* note 2, at 83 ("Differing normative commitments tend to lead to different legal rules."); Tony Weir, Case Comment, *Contract—The Buyer's Right To Reject Defective Goods*, 35 CAMBRIDGE L.J. 33, 38 (1976) ("Different transactions call for different rules, even if they are all contracts, just as lockjaw and goitre call for different prescriptions though both are diseases.").

contract law's idealized vision of fair bargaining between equal partners.[10] In my view, however, the equal-bargaining paradigm has given way to a more realistic model of contracting that is governed by principles mindful of the quality of assent.[11] Nevertheless, some theorists argue that policing tools such as unconscionability are exceptions to the main body of contract law and therefore largely ineffectual.[12] To the extent that general contract law's idealized vision survives, it is bound to produce poor outcomes in many circumstances.

On the flip side, Oman identifies two principal benefits of general contract law. First, borrowing from public choice theory, he suggests that legal decision makers are most influenced by those groups investing the greatest amount of resources in the outcomes.[13] However, general contract law reduces the payoff to interest groups, thereby decreasing the incentive to invest in influencing outcomes.[14] General contract law reduces payoffs in several ways. For example, application of general law may be unpredictable because the law is not specifically geared to a particular set of controversies. In addition, interest groups are likely to have more competition for the attention of the drafters and are thus less likely to succeed.[15] In sum, "[T]he first practical, functional defense of contract law's generality is that it serves as a prophylaxis against capture of the law by special interests."[16]

Second, according to Oman, general contract law facilitates the resolution of "collective problems."[17] The law achieves this goal because, by virtue of its generality, parties can experiment with different forms of transactions and can tailor transactions to fit their needs.[18] Oman explains that "[t]he transactional agnosticism of General Contract Law increases the ability of private actors to experiment with different solutions" to their problems.[19] "By facilitating the process of trial and error, General Contract Law serves to advance democratic values, pragmatically conceived."[20]

10. *See* Oman, *supra* note 2, at 82.
11. *See* HILLMAN, *supra* note 6, at 128–55.
12. *See generally, e.g.*, Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 HARV. L. REV. 1685 (1976) (examining the connections between rules and standards through the lens of contract law, and the character of contractual concepts such as unconscionability).
13. Oman, *supra* note 2, at 89–91.
14. *Id.* at 90–94.
15. *Id.* at 92.
16. *Id.* at 93.
17. *Id.* at 95.
18. *Id.* at 101–04.
19. *Id.* at 104.
20. *Id.*

The bottom line, according to Oman, is that general contract law better facilitates private lawmaking.[21]

I would add to Oman's list two additional possible benefits of general contract law. First, generality means that contract law can better adapt to rapid changes in the form or substance of exchange transactions. The discussion of the *ALI Principles* in Part II of this Article elaborates on the problem of drafting in the context of rapid technological advances.[22] Second, general law may better reflect the moral, cultural, and institutional values of a heterogeneous society, which may lead to more just decisions.[23] In other words, what general law gives up in the way of predictability may be more than made up for by the improvement in substantive results.[24]

Employment law offers an example of the latter point. I have previously observed that "employees receive a barrage of communications from their employers" calculated to establish an "'orderly, cooperative and loyal work force.'"[25] Employees often rely on representations and promises in these messages, especially because of their "material and psychic investments" in their jobs.[26] Nevertheless, many courts have applied employment law's termination-at-will principle at the expense of an employee's reasonable reliance on job security.[27] Perhaps employees would have had a better chance of achieving job security in this context if

21. Section 2-207 of the Uniform Commercial Code ("UCC"), which administers the so-called "battle of the forms," is an example of failed specialization. Instead of allowing parties to experiment with their use of order forms and confirmations, the UCC section tied their hands. *See generally* James J. White, *Promise Fulfilled and Principle Betrayed*, 1988 ANN. SURV. AM. L. 7 (discussing the successes, failures, and limitations of UCC Article 2); *id.* at 33 (suggesting that realists "grossly overestimated their knowledge of the underlying transactions").

22. *See infra* notes 55–56 and accompanying text.

23. *See* Leon Trakman, *Pluralism in Contract Law*, 55 BUFF. L. REV. (forthcoming Dec. 2010) (manuscript at 38), *available at* http://papers.ssrn.com /sol3/papers.cfm?abstract_id=1455386 ("Cultural pluralism is about acknowledging the cultural background and life experiences which particular groups such as religious, cultural, political, economic communities share. It is about the impact which their different backgrounds and life experiences have upon their individual practices, such as the impact their religious affiliations have on marriage contracting, or on agreements between spiritual leaders and congregants.").

24. Thanks to Heather D. Hillman for suggesting this point.

25. Robert A. Hillman, *The Unfulfilled Promise of Promissory Estoppel in the Employment Setting*, 31 RUTGERS L.J. 1, 4 (1999) (quoting Touissaint v. Blue Cross & Blue Shield, 292 N.W.2d 880, 892 (Mich. 1980)).

26. *Id.* at 4–5.

27. *Id.* at 2, 25–27.

employment law had not broken off from general contract law, the latter of which emphasizes the "justice" of protecting reasonable reliance through the vehicle of promissory estoppel.

Oman recognizes that he cannot resolve whether generalization or specialization is a "better" approach to contract law.[28] Nor can I. However, in the next Part, I explain how the costs and benefits of generalization identified here apply to the software project and explain why I think producing the *ALI Principles* was the right choice.

II. THE CASE OF THE SOFTWARE PRINCIPLES

The *ALI Principles* constitute specialized contract law. They apply to "agreements for the transfer of software for a consideration," including sales, licenses, leases or access contracts, whether negotiated or standard form and whether the delivery of software is by a tangible or electronic medium.[29] But the *ALI Principles*' scope is not overly broad. The project excludes embedded software unless, measured objectively, the predominant purpose of the transferee is to obtain the software.[30] The *ALI Principles* also exclude some mixed transactions from their scope.[31] Further, the project does not apply to the transfer of digital media or digital databases, although they often raise comparable issues, such as the validity of contract formation types and the enforcement of suspect terms.[32] The *ALI Principles* explain that "excluding digital art and digital databases narrows the transaction types to a manageable level because digital-art and digital-database transactions implicate many industries and kinds of transfers."[33] More important, software is unique in that it is "a mixture of expressive art and a utilitarian invention, and does not fit comfortably within any existing class of

28. Somewhat puzzling to me, however, Oman then opts for a "rule of thumb" that "problems giving rise to the urge for specialized law are often best dealt with at the highest level of generality possible." Oman, *supra* note 2, at 79. I doubt he has made the case for this precisely because there are so many immeasurable (at least based on his methodology) costs and benefits to each approach.

29. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 1.06(a) (2009). The *ALI Principles* specifically exclude the transfer of disks, CD-ROMs, "or other tangible medium that stores the software." *Id.* § 1.06(b).

30. *Id.* § 1.07(a).

31. The *ALI Principles* exclude the software portion of mixed transactions that include software, hard goods, digital content, or services if the predominant purpose of the transferee was to obtain the non-software subject matter. *Id.* § 1.08(b).

32. *Id.* at 15.

33. *Id.* at 16.

intellectual property."[34] It is thus worthy of specialization on its own.[35]

Are specialized software principles a net benefit? In this Part, I apply the criteria identified in Part I to respond to this question.

A. *Costs of Generalization*

1. *Abstract Principles Cannot Predict Outcomes Coherently*

Abstract principles of general contract law provide inadequate guidance to resolve software contract disputes because software transactions raise numerous new questions. In addition, issues that have arisen under general contract law often have a unique twist in the software realm. Here are just a few examples.

a. *How To Treat Open-source Software.* Under open-source licenses, software transferees are free to copy, reverse engineer, and transfer the software, subject to restrictions designed to maintain the openness of the software.[36] For example, the "same terms" provision of many open-source licenses requires the transferee to distribute derivative software to its own transferees using the same terms as in the original transfer.[37] Among the many terms passed on is the "copyleft" provision that requires transferees to disclose the source code of any software the transferee modifies and transfers to its own transferees.[38] The open-source movement is not unique in seeking to create a "creative commons," but arguably it is the

34. *Id.* at 15 (citing Gregory J. Maier, *Software Protection—Integrating Patent, Copyright and Trade Secret Law*, 69 J. PAT. & TRADEMARK OFF. SOC'Y 151, 151 (1987) ("It is the hybrid nature of software that causes its failure to fit neatly into any one existing category of intellectual property, resulting in seemingly endless confusion as to how it may best be protected.")).

35. *See id.* at 15–16.

36. For a discussion of open-source software, see Robert A. Hillman & Maureen A. O'Rourke, *Rethinking Consideration in the Electronic Age*, 61 HASTINGS L.J. 311, 313–14 (2009):

> Although there are many different open-source licenses, the General Public License (GPL) is likely the most common. To achieve the goal of creating a software commons, the GPL authorizes copyholders to transfer, copy, or modify the software subject to a series of restrictions. The restrictions are designed to further an environment of openness by requiring copyholders to reveal the source code to transferees of any software products that are derived from the original source code (often referred to as the "copyleft" provision) and to transfer such software under the same terms as the GPL ("same terms" provision), making the terms themselves "viral" in nature.

37. *Id.*

38. *Id.*

preeminent example of the movement.[39] What is unique is the series of questions open-source software presents for contract law, such as whether the licenses are contracts,[40] what constitutes assent to them,[41] whether they are supported by consideration,[42] whether any warranties attach to the quality of the software,[43] and whether the copyleft and other provisions guaranteeing openness conflict with federal intellectual property law.[44]

The *ALI Principles* supply answers to each of these questions that would otherwise remain a challenge under general contract law. For example, a decision maker applying the foggy consideration principle under general contract law would receive little guidance on whether agreeing to the same-terms provision of an open-source license supplies consideration to support a contract. The *ALI Principles* borrow from and expand on general contract law in meeting this issue head on. Consideration for the software can be money or something else given in exchange for the software. The *ALI Principles* therefore "apply to the transfer of proprietary or 'open-source software' if the transferor requires the transferee to agree to maintenance or integration services or other consideration (such as providing source code)."[45]

> Terms-of-use agreements attached to open-source software also may constitute consideration under the *ALI Principles*, although the issue of whether some open-source licenses are contracts is controversial. General contract law distinguishes between a condition for a gift and consideration, but in the typical case a court finds consideration if a condition constitutes more than is necessary to transfer a gift. Terms-of-use agreements, such as requiring the distribution of derivative software under the same terms as the initial transfer, are not necessary to convey software and therefore should constitute consideration under general contract law.[46]

b. *Automated Disablement.* The *ALI Principles* define automated disablement as "the use of electronic means to disable or

39. *See id.* at 330.

40. *Id.* at 313–15; *see also* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 1.06 cmt. d (2009).

41. Open-source licenses often provide that "copying, exchanging, or modifying software constitutes acceptance of the terms of the license." PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 1.06 cmt. d (2009).

42. *See id.*; Hillman & O'Rourke, *supra* note 36, at 313–15.

43. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS §§ 3.02–.05 (2009).

44. *Id.* § 1.09.

45. *Id.* § 1.06 cmt. d.

46. *Id.*

materially impair the functionality of software."[47] The concept has roots in creditor remedies such as self-help repossession of collateral subject to a security interest. However, technology has made it easy for a transferor to "reach in" to a transferee's computer system and disable the software, thereby creating a unique set of issues in the software setting. Obviously, disablement of software can substantially harm business transferees and some constraint on disablement is important. However, transferors also suffer if a transferee continues to use software after a default in payment or uses the software in an unauthorized manner.[48] The *ALI Principles* balance the interests of transferors and transferees and authorize automated disablement in limited circumstances and only after receiving court authorization.[49]

c. *The Implied Warranty of No Hidden Material Defects of Which the Transferor Is Aware.* According to one expert, "In mass-market software, a large proportion of defects (often the vast majority of them) that reach customers are discovered and intentionally left unfixed by the publisher before the product is released."[50] If this is true, it certainly sets software apart from most, if not all, other subject matters of exchange. No one should expect perfection, but the number of necessary patches and updates and the not-infrequent frustration of software transferees resulting from the number of glitches and crashes raises concern, at least if the problems constitute a material failure of the software. In such situations, transferors should disclose known material hidden defects for several reasons that I discuss later.[51]

The *ALI Principles* thus include a nondisclaimable warranty of no hidden material defects of which the transferor is aware.[52] True,

47. *Id.* § 4.03(a).

48. *Id.* § 4.03 cmt. a.

49. *Id.* § 4.03(d).

50. Cem Kaner, *Why You Should Oppose UCITA*, COMPUTER LAW., May 2000, at 23.

51. *See infra* notes 107–15 and accompanying text.

52. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 3.05(b) (2009). Comment b to the section explains why the warranty cannot be disclaimed: the implied warranty of no material hidden defects is an immutable rule, meaning that it cannot be disclaimed. A party should not be able to disclaim liability for what amounts to fraud and case law supports this idea too. Further, the doctrine of good faith means that a party cannot hide behind an "as is" clause or the like, when it knows of a material defect that makes the software largely worthless to the transferee and knows that the transferee cannot reasonably detect it. Instead, an "as is" clause should mean only that the transferor is not liable for express promises or implied warranties of merchantability when it

the warranty borrows from existing law, "including the contract obligation of good faith, the contract duty to disclose, and fraudulent-concealment law."[53] But confirming that the disclosure principle applies to software contracts clarifies and emphasizes the duty of software vendors to disclose material hidden defects. The resistance of software transferors, notwithstanding the disclosure principle's roots in existing law, underscores the importance of reinforcing this fundamental obligation.[54]

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does not know that the software is materially defective and largely worthless. A transferor can disclose material defects to insulate it from liability under the subsection. *See id.* § 3.05 cmt. b.

53. *Id.* Comment b to the reporters' notes in section 3.05 discusses several cases and states in part:

> Under the common law, a contracting party must disclose material facts if they are under the party's control and the other party cannot reasonably be expected to learn the facts. Failure to disclose in such circumstances may amount to a representation that the fact does not exist and may be fraudulent.

Id. reporters' notes cmt. b (citing Hill v. Jones, 725 P.2d 1115, 1118–19 (Ariz. Ct. App. 1986) ("[U]nder certain circumstances there may be a 'duty to speak.' . . . [N]ondisclosure of a fact known to one party may be equivalent to the assertion that the fact does not exist. . . . Thus, nondisclosure may be equated with and given the same legal effect as fraud and misrepresentation.")). The *Restatement (Second) of Contracts* supports the *Hill* dictum:

> A person's non-disclosure of a fact known to him is equivalent to an assertion that the fact does not exist . . . where he knows that disclosure of the fact would correct a mistake of the other party as to a basic assumption on which that party is making the contract and if non-disclosure of the fact amounts to a failure to act in good faith and in accordance with reasonable standards of fair dealing.

RESTATEMENT (SECOND) OF CONTRACTS § 161(b) (1981). Comment d adds:

> In many situations, if one party knows that the other is mistaken as to a basic assumption, he is expected to disclose the fact that would correct the mistake. A seller of real or personal property is, for example, ordinarily expected to disclose a known latent defect of quality or title that is of such a character as would probably prevent the buyer from buying at the contract price.

Id. § 161 cmt. d.

54. Some large transferors opposed the duty to disclose known material defects. *See, e.g.*, Letter from the Linux Found. & Microsoft to author, Maureen A. O'Rourke, Dean, Boston Univ. Sch. of Law & Lance Liebman, Dir., Am. Law Inst. (May 14, 2009), http://microsoftontheissues.com/downloads/Microsoft-LinuxFoundation-letter.pdf [hereinafter Linux/Microsoft Letter]. In part, they claimed that the rule would increase administrative costs, such as the costs of notifying end users of material defects. *See* Letter from the Ass'n of Corporate Counsel's IT, Privacy & eCommerce Comm. to author & Maureen A. O'Rourke, Dean, Boston Univ. Sch. of Law (May 11, 2009), www.ali.org/doc/Comments-ACC.pdf. But, in some instances, posting a list of material defects on the transferor's website should suffice. In others, notification by e-mail should be sufficient.

d. *Contract Interpretation.* Contract interpretation issues obviously are not unique to software transactions. However, they are a hot issue in the software context because contracting parties' terminology often cannot keep up with the rapid changes in technology and forms of transactions.[55] As a comment in the *ALI Principles* states:

> [C]ontract terms do not always keep up with the parties' understanding of precisely what software is being transferred because vendors continue to improve the functionality and features of software, distribute many different versions, and provide plug-ins and updates. Further, an agreement may fail to delineate clearly authorized uses of software because technology has created new uses during the contracting or performance periods. In addition, parties do not always clearly describe the meaning of terms involving, for example, functionality and quality because of software's complexity, tendency to contain bugs, and, in some instances, uniqueness. In fact, the case law is expanding rapidly on all of these fronts, making the clear formulation of rules of interpretation particularly relevant in the software realm.[56]

In addition to rapid technological change, contract interpretation constitutes a novel challenge in the software context because the parties draft licenses in the shadow of federal intellectual property law. For example, federal copyright law may preempt a contract term if it infringes on federally protected rights

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Transferors also complained that the rule would "increase[] litigation," a cry often heard by business against consumer protection of any kind. *See supra*, Linux/Microsoft Letter. But a defect must be sufficiently serious so that it would constitute a material breach of the contract. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 3.05 cmt. b (2009). And the defect also must be hidden, meaning that a software transferee could not find it upon any reasonable testing. *Id.* As a comment to the *ALI Principles* points out:

> Putting together the requirements of transferor actual knowledge of the defect at the time of the transfer, transferee reasonable lack of knowledge, and a defect that constitutes a material breach means that a transferor would not be liable if the transferor has received reports of problems but reasonably has not had time to investigate them, if the transferee's problems are caused by uses of which the transferor is unaware, if the transferor learns of problems only after the transfer, and if the problems are benign or require reasonable workarounds to achieve functionality.

Id.

55. *See, e.g.*, PlayMedia Sys., Inc. v. Am. Online, Inc., 171 F. Supp. 2d 1094 (C.D. Cal. 2001).

56. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS 215 (2009).

such as fair use.[57]

The *ALI Principles* offer guidance on this set of issues. For example, the project sets forth a streamlined parol evidence rule that clarifies the judicial procedure for determining whether a writing is ambiguous or incomplete.[58] In addition, the *ALI Principles* clarify when the parties have failed to make an enforceable agreement because of a misunderstanding as to the nature of the software terms.[59] The *ALI Principles* also set forth a provision on "Enforcement of Terms Under Federal Intellectual Property Law" geared to promote innovation *and* the creation of a "rich public domain."[60]

2. The Absence of a Unitary Normative Theory

A second cost of general contract law identified by Oman is the absence of a unitary normative theory.[61] However, I am reluctant to call general contract law's social and economic pluralism a cost. In truth,

> [F]or all of its failings, our system of "private" exchange seems to work better than alternatives precisely because it does seek to harmonize the value of private preferences and the need for social control. The various norms of contract law reflect the major social, economic, and institutional forces of a pluralistic society. . . . In short, contract law flourishes largely because it is the fruit of the legal system's reasonable and practical compromises over conflicting values and interests in a diverse society.[62]

Unitary theories of general contract law, on the other hand, obfuscate the law by desperately attempting to fit its diverse rules and principles into a single framework.[63]

If the *ALI Principles* succeed, it will not be because their foundation is a unitary theory, but because they share general contract law's pluralism. The *ALI Principles* draw on, among other things, freedom of contract, morality, fairness, reasonableness, efficiency, and public policy.[64] The *ALI Principles* also borrow from state tort and property law, and federal law and policy in areas such

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57. *Id.* § 1.09 & cmt. a. On the relationship between federal copyright law and the interpretation of licenses, see, for example, S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081 (9th Cir. 1989).

58. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 3.08 (2009).

59. *Id.* § 3.10(b).

60. *Id.* § 1.09 & cmt. c.

61. Oman, *supra* note 2, at 82–83.

62. HILLMAN, *supra* note 6, at 268–69.

63. *See generally id.*

64. *See infra* notes 93–117 and accompanying text.

as antitrust and intellectual property law. But pragmatism does not have to mean indeterminacy. The goal was to carefully draft rules and clarifying comments that would help guide decision making and limit the number of "hard" cases that defy predictability.[65]

3. *Undesirable Outcomes of General Law*

As mentioned, contract law's idealized view of fair bargaining between equal parties, to the extent that it still exists, fails to account for, among other things, take-it-or-leave-it form contracts, unequal bargaining power, and resulting "dangerous terms."[66] The *ALI Principles* do not ignore such problems. For example, they apply to the digital delivery of software supported by electronic form contracts that transferees neither read carefully nor even peruse.[67] These e-standard forms may include oppressive terms, such as automatic renewal, modification without notice, and authorization to download spyware on the transferee's computer.[68] In partial response, the *ALI Principles* set forth a safe harbor that encourages disclosure of terms even before a shopper initiates a transaction.[69] The *ALI Principles* also favor clickwrap agreements, in which the transferee must click "I agree" next to or at the end of the e-standard form.[70] Although these approaches may fail to increase general reading very much, access to terms enables watchdog groups to list offensive terms on the Internet and create adverse publicity that may persuade transferors to draft reasonable terms.[71] Further, even if transferees continue to ignore e-standard forms, the *ALI Principles*' disclosure duty reinforces Karl Llewellyn's conception that a promisee who has had a reasonable opportunity to read a standard form gives blanket assent to its reasonable terms.[72]

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65. *See* HILLMAN, *supra* note 6, at 269–70 ("[A]cknowledging the reality of limited determinacy in contract law would not threaten the institution's legitimacy or mean that judges have unbridled discretion. Many, if not most, cases fall within one principle or another. Judges simply enjoy room in hard cases to attempt to harmonize the principles to fit the context.").

66. *See generally* Annalee Newitz, *Dangerous Terms*, ELECTRONIC FRONTIER FOUND., http://w2.eff.org/wp/eula.php (last visited Sep. 1, 2010) (discussing harmful terms of end user license agreements).

67. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 2.02 (2009).

68. *See* Newitz, *supra* note 66.

69. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 2.02(c) (2009).

70. *Id.*; *see also id* § 2.02 cmts. b–c. Browsewrap, in which the transferee has to browse to find the governing form, often would not suffice. *Id.* § 2.02 cmt. b.

71. *Id.* at 115.

72. *See* Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age*, 77 N.Y.U. L. REV. 429, 455, 492 (2002).

Blanket assent means that the promisee consents to delegate to the drafter the duty to write reasonable terms.[73]

Although critics of disclosure deem it ineffectual and even wasteful, other solutions to the problem seem even more problematic.[74] For example, the law could require a transferee to click "I agree" at the end of *each* term or at least particularly onerous ones, such as automatic renewals.[75] But such cumbersome procedures may fail to promote additional reading and may simply slow down transactions to the benefit of neither party.[76] Another proposal is to place oversight of the content of standard forms in the hands of a governmental agency.[77] This would introduce new worries such as agency capture by software vendors, lack of agency resources to police forms adequately, and inability to appropriately weigh context-dependent variables. Needless to say, agency involvement also jeopardizes the freedom and privacy of the exchange process.

Some writers seem bothered by the fact that the *ALI Principles*' solutions to problems may have resonance in other forums.[78] For example, lawmakers could apply the disclosure approaches adopted by the *ALI Principles* to any subject matter of exchange, not just software. In fact, nothing should stop courts or legislatures from applying helpful sections of the *ALI Principles* to other subject matters and even from including them in a future *Restatement (Third) of Contracts*. But as stated elsewhere:

> Law reform has to start somewhere, and a focus on software transactions that are currently governed by law that predates

73. *See id.* at 492 ("If e-consumers have some opportunity to read the standard terms before deciding whether to enter into the contract, then courts should apply Llewellyn's presumption of enforceability of such terms. Just as in the paper world, consumers understand the existence of standard terms and agree to be bound by them, even though they rarely choose to read them.").

74. *See generally, e.g.*, Robert A. Hillman & Maureen A. O'Rourke, *Defending Disclosure in Software Licensing*, 78 U. CHI. L. REV. (forthcoming 2011). Some critics are especially zealous in their criticism of disclosure strategies: "[J]udicial inquiry about the conspicuousness and clarity of form contract terms is a waste and a fraud unless it really is a covert investigation of the fairness of the contract." JAMES J. WHITE & ROBERT S. SUMMERS, PRINCIPLES OF SALES LAW 43 (2009).

75. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS 120 (2009).

76. *See* Robert A. Hillman & Ibrahim Barakat, *Warranties and Disclaimers in the Electronic Age*, 11 YALE J.L. & TECH. 1, 26 (2009).

77. *See, e.g.*, Clayton P. Gillette, *Preapproved Boilerplate*, *in* BOILERPLATE: FOUNDATIONS OF MARKET CONTRACTS 95, 96 (Omri Ben-Shahar ed., 2007).

78. *See generally* Peter A. Alces & Chris Byrne, *Is It Time for the* Restatement of Contracts, Fourth*?*, 11 DUQ. BUS. L.J. 195 (2009) (expressing concern that Restatements and Principles may erode existing bodies of law).

> even an inkling of the digital revolution, makes sense. In drafting the *Principles* (with great help from our ALI advisers, council members, and consultative group), we were able to focus, among other things, on the nature of software, the types of software transaction, and the parties to them. We could evaluate prospective rules in this field against the goals of clarity, efficiency, and fairness. We could avoid the level of generality in drafting that often produces legal ambiguity and limited usefulness . . . . And we could leave to other law reformers who are evaluating a new set of issues in another subject area, whether our rules makes sense in their domain.[79]

B. Benefits of General Contract Law

I have reviewed several possible benefits of general contract law. Here I analyze whether the specialization of software contract law came at the expense of these benefits.

1. Insulation from Interest Groups

For the reasons discussed in Part I, Professor Oman suggests that general contract law is better insulated from interest groups than specialized law.[80] But the process of producing the *ALI Principles* largely shielded the project from interest group capture.[81] Most important, the ALI selected a diverse group of advisers, including judges, lawyers, legal theorists, and technicians, with varying experiences dealing with software contract issues.[82] These advisers drew on their experiences and perspectives to convey concerns. Of course, interested parties and organizations that were not part of the formal ALI process weighed in heavily as well in meetings with the reporters, on the telephone, and through Internet postings and e-mails. For example, large software developers registered their objections to the warranty of no material hidden

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79. Robert A. Hillman & Maureen A. O'Rourke, *Principles of the Law of Software Contracts: Some Highlights*, 84 TUL. L. REV. 1519, 1521 (2010).

80. *See supra* notes 13–16 and accompanying text.

81. *But cf.* Robert E. Scott, *The Politics of Article 9*, 80 VA. L. REV. 1783 (1994) (discussing the effects of interest groups and internal conflicts of interest on Article 9 of the UCC).

82. Advisers represented or had dealings with large and small software transferors, consumer groups, business transferees, and software foundations and organizations. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS, at v (2009). Liaisons included people from the American Bar Association's Section of Science and Technology Law, the Business Software Alliance, and the Uniform Law Commission. *See id.* at vi. The project also received input from ALI's Consultative Group made up of ALI members interested in contributing to the software project. *See id.* at vii.

defects by writing letters to the ALI membership and the Director and by posting articles on the Internet.[83] On the whole, this input enriched the rulemaking process without overwhelming it, largely because the ALI process ensured access to all sides in the debate. In addition, perhaps the knowledge that the *ALI Principles* were not statutes—but in essence simply guidance for courts—toned down interest group responses both in number and vehemence.

2. "Laboratories of Democracy" Facilitate Resolution of Collective Problems

Will the *ALI Principles* inhibit experimentation and evolution towards new software transaction types? The answer, of course, depends on the nature of the *ALI Principles* and the kind of experimentation envisioned. The *ALI Principles* are, for the most part, default rules that should not impede experimentation if the latter refers to contracting parties achieving through trial and error more efficient and fairer exchanges.[84] For example, the *ALI Principles* set forth a disclaimable implied merchantability warranty.[85] The issue of what constitutes "merchantable" software is controversial because of software's tendency to contain glitches. But business parties' hands are not tied in light of this default rule. They can allocate the risk of unknown defects and shape remedies as best suits them. Further, as mentioned earlier, the *ALI Principles* seek to increase reading of forms and incentives to write fair terms by setting forth a safe harbor that requires ample disclosure of the standard form.[86] But transferors are free to experiment with other modes of formation. The *ALI Principles*' general formation rule is that "[a] transferee adopts a standard form as a contract when a reasonable transferor would believe the transferee intends to be bound . . . ."[87] This objective test obviously should not hinder future development of modes of assent to standard forms.

Still, as a general matter, the tailored rules of the *ALI Principles* obviously constitute more specific regulation of software contracting than general contract law. But the issue is whether the benefit of drafting clarifying rules exceeds the cost of regulation. The answer depends in part on whether software technology and transaction types have evolved to the point where clarification of the law helps more than hurts. In the judgment of the ALI, the time came for clarification of the law: "[D]enominating the Project as

83. *See, e.g.*, Linux/Microsoft Letter, *supra* note 54.

84. *But see* Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 NW. U. L. REV 1227, 1269–72 (2003) (arguing that it is costly to contract around default rules).

85. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 3.03(a) (2009).

86. *See supra* notes 69–71 and accompanying text.

87. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 2.02(b) (2009).

'*Principles of the Law of Software Contracts*' does not shield it from the claim that *any* legal work in this area is premature. However, the benefits of establishing some order now outweigh the costs of having to accommodate new technologies and business methods later."[88] The next Subpart elaborates on the issue of whether the time was ripe for software rules.

3. Generalization and Rapid Change

As just noted, specialized law does not have to be inflexible. Specialized law that includes default rules and broad standards minimizes the problem of keeping up with rapid changes in technology and kinds of transactions. In addition, drafters of specialized law can watch for developments in the field and accommodate them. For example, we can expect to see dramatic advances in the use of "cloud computing," which essentially means that transferees will access software on the Internet instead of downloading it onto their own computers.[89] But issues of contract formation, interpretation, breach, and remedies arise under "access contracts," just as they arise under current contracts for the transfer of software. The *ALI Principles* therefore include access contracts within the scope of the project.[90] But the *ALI Principles* also include special carve-outs for situations in which access contracts should be treated differently. For example, the remedy of automated disablement, discussed earlier, which requires a transferor to receive a court order before disabling software, does not apply to access contracts.[91] Transferors that offer access to their software for a price should not be required to obtain a court order before cutting off access to breaching transferees who fail to pay or use the software in an unauthorized manner. The automated disablement rule therefore does not apply "if the transferor engages in self-help by refusing access to its systems without reaching in to the transferee's systems to disable software. In such cases, the transferor is not using 'electronic means to disable or materially

88. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS 3 (2009). *But see* Peter A. Alces, *W(h)ither Warranty: The B(l)oom of Products Liability Theory in Cases of Deficient Software Design*, 87 CAL. L. REV. 269, 271–72 (1999) ("Because the technology that a uniform software license law would govern has not reached anything even approaching repose, it is impossible to draft a U.C.C. software article in the best Llewellynesque tradition.").

89. *See Battle of the Clouds*, ECONOMIST, Oct. 17, 2009, at 16.

90. "Software agreements include agreements to sell, lease, license, access, or otherwise transfer or share software." PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 1.06(a) (2009). Further, the *ALI Principles* define an access agreement as "an agreement that authorizes the user of software to access the provider's software via a data-transmission system, such as the internet, or via a private network or another intermediary now known or hereafter developed." *Id.* § 1.01(a).

91. *See supra* notes 48–49 and accompanying text.

impair the functionality of software.'"[92]

4. Values of a Heterogeneous Society

I have already argued that the diversity of norms and pragmatic model of decision making of general contract law that the *ALI Principles* share best facilitate exchange transactions. In this Subpart, I describe in greater depth some of the norms that enrich the *ALI Principles*.

a. *Freedom of Contract*. Freedom of contract is, of course, the foundation of contract law. In fact, general contract law largely consists of default rules that apply when the parties do not contract around them. The *ALI Principles* also consist mainly of default rules, along with safe harbors and examples of best practices.[93] The *ALI Principles*' few mandatory rule exceptions are not foreign to general contract or other law.[94]

b. *Honesty*. The *ALI Principles* police against sharp practices, such as failing to disclose known material defects that the transferee cannot discover, inducing sales by making express warranties only to disclaim them in a standard form, and unilaterally modifying terms without notice for the purpose of extracting unbargained-for gains.[95] The *ALI Principles* respond to each of these instances of dishonesty by, in turn, creating the warranty of no hidden material defects, declining to enforce express warranty disclaimers that the transferee reasonably should not expect, and barring unilateral modification of standard form contracts in the retail-like setting.[96]

92. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 4.03 cmt. a (2009). The project also considered the rapid rise of software embedded in hard goods, such as software embedded in most appliances and automobiles. *Id.* § 1.07 cmt. a. The *ALI Principles* apply a "predominant purpose" test to determine whether embedded software comes within its scope. *Id.* § 1.07(a).

93. *See, e.g.*, *id.* § 3.03(a) (implied warranty default rule); *id.* § 2.02(c) (formation safe harbor and best practices).

94. Mandatory rules in the *ALI Principles* include § 1.13(a) (stating that the *ALI Principles* choice of law rule applies if the law chosen by the parties in a standard form "would lead to a result that is repugnant to public policy as expressed in the law of the jurisdiction that would otherwise govern"); §1.14 (requiring that the forum chosen not be "unfair or unreasonable"); § 3.05(b) (establishing a warranty of no material hidden defect); § 4.01(b) (providing the full range of remedies to an aggrieved transferee if the "circumstances cause an exclusive or limited remedy to fail of its essential purpose"); § 4.02 (limiting the enforceability of liquidated damages provisions); § 4.03(e) (prohibiting unauthorized automated disablement).

95. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS §§ 2.03(d), 3.05(b), 3.06(a), 3.06 cmt. a (2009); *see also supra* note 52 and accompanying text.

96. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS §§ 2.03(d), 3.05(b), 3.06(a) (2009).

c. *Fairness.* Fairness in the *ALI Principles* in part means balancing the interests of the parties with the goal of ensuring that each enjoys the fruits of their exchange.[97] For example, the *ALI Principles*' unconscionability provision polices against unfairness in the bargaining process and the resulting terms.[98] In addition, the *ALI Principles*' handful of mandatory provisions in part focus on the potential for unfairness in take-it-or-leave-it standard forms, a problem magnified by the use of electronic forms. For example, the parties' choice of law in a standard form must bear a reasonable relationship to the transaction.[99] Further, the *ALI Principles* seek to ensure fairness by requiring reasonable communication between the parties. For example, mere notice of a unilateral modification is insufficient in the case of standard form transfers even if the original contract authorizes this mode of modification.[100] In addition, as we have seen, a transferor must disclose known material defects in the software.[101]

d. *Reasonableness.* The *ALI Principles* contain many provisions fostering reasonable conduct. For example, they set forth an example of reasonable prohibitions on reverse engineering.[102] In addition, the *ALI Principles* rest contract and modification formation on whether a reasonable person would believe the transferee intends to be bound.[103] Further, the *ALI Principles* determine whether a transferor made an express warranty based on whether a reasonable transferee could rely on the promise or representation.[104]

e. *Public welfare.* The *ALI Principles* naturally also take into account public welfare. For example, the project evaluates whether the parties can contractually narrow or extinguish transferee rights such as federal fair-use rights or expand transferor copyright or patent rights beyond the protection afforded by federal law. According to the *ALI Principles*, such terms "strike at the heart of the intellectual property balance between promoting the public welfare by granting exclusive rights as an incentive to innovate, and promoting the public welfare through robust competition fueled in part by broad dissemination of information and a rich public

97. *See generally* Robert A. Hillman, *An Analysis of the Cessation of Contractual Relations*, 68 CORNELL L. REV. 617 (1983) (discussing judicial balancing of fairness factors in contract cessation).

98. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 1.11 (2009).

99. *Id.* § 1.13(a).

100. *Id.* § 2.03(d).

101. *See supra* note 52 and accompanying text.

102. PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 1.09 cmt. c, illus. 3 (2009).

103. *See id.* § 2.01(a); *id* § 2.01 cmt. b; *id.* 2.03(a); *id.* 2.03 cmt. a.

104. *Id.* § 3.02(b).

domain."[105] The *ALI Principles* ask courts to be especially vigilant when such terms appear in a take-it-or-leave-it standard form.[106]

Not only do the *ALI Principles* as a whole reflect multiple norms, many of the individual software rules draw on a diversity of norms and principles as well. For example, the duty to disclose material defects is based on economic efficiency, autonomy, corrective justice, contractarian theory, and morality.[107] Efficiency requires law that moves resources to "their most productive uses with as few transactions costs as possible . . . ."[108] The disclosure obligation helps achieve this goal by increasing information available to the parties, which helps ensure that each party values what they receive more than what they transfer.[109] In addition, the disclosure duty reduces costs. For example, if a material defect is hidden but known to the transferor, the transferee must swallow the costs of using defective software in the absence of a disclosure duty.[110] Disclosure also eliminates duplicative searches for information.[111] But the duty to disclose will not deter transferors from acquiring useful information about the quality of the software because the information inevitably will be revealed during the process of engineering the software.[112] Nor will administration of the rule be too costly because the rule depends on longstanding existing law that through time has developed clear boundaries.[113]

Additional norms support the duty to disclose material hidden defects. For example, the principle of autonomy requires assent based on knowledge of all pertinent facts.[114] Corrective justice bars

105. *Id.* § 1.09 cmt. c.

106. *See id.* For a discussion of contracting around fair use, see Charles R. McManis, *The Privatization (or "Shrink-Wrapping") of American Copyright Law*, 87 CAL. L. REV. 173 (1999).

107. Dean Maureen O'Rourke and I elaborate on these themes in Hillman & O'Rourke, *supra* note 74.

108. MICHAEL J. TREBILCOCK, THE LIMITS OF FREEDOM OF CONTRACT 112 (1993).

109. "[T]he more information individuals possess about goods they buy and sell, the more reason society has to think that these goods will go to those who most value them, and hence, the better off society will be." Alan Strudler, *Moral Complexity in the Law of Nondisclosure*, 45 UCLA L. REV. 337, 350 (1997).

110. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 3.05(b) (2009); *id.* § 3.05 cmt. b.

111. TREBILCOCK, *supra* note 108, at 112 ("[T]here should be a general presumption in favour of disclosure of material facts known to one party and unknown to the other. [Otherwise, people will] invest in wasteful precautions to generate information about the asset [that the first party already has].").

112. *See* Anthony T. Kronman, *Mistake, Disclosure, Information and the Law of Contracts*, 7 J. LEGAL STUD. 1, 12–15 (1978) (discussing the creation of incentives to produce information).

113. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS § 3.05 cmt. b (2009).

114. TREBILCOCK, *supra* note 108, at 107.

gains acquired by taking advantage of the other party's ignorance.[115] Contractarians reason that people cognizant of the context would expect transferors to disclose important secrets that protect the transferee from serious harm.[116] Moralists require disclosure because it is "impermissible to take advantage of another party's ignorance of material facts."[117]

CONCLUSION

Software contracting raises several challenging issues. Because of the importance of software to the economy, clarifying the law through specialization is inevitable whether it comes from courts adopting the *ALI Principles* or through a more gradual common law development of software cases.[118] Nevertheless, the distinction between general contract law and specialized software rules need not be stark. The *ALI Principles* necessarily borrow from general contract law on issues such as the meaning of consent, the nature of breach, and the menu of remedies. As with general contract law, the *ALI Principles* also reflect the various norms of a diverse society, while carving out special rules attentive to specific problems. Both general contract law and the *ALI Principles* consist mainly of default rules and partly of flexible standards. I suspect that most specialized bodies of law share such characteristics with general contract law. In the case of the *ALI Principles*, the result of this amalgamation of the general and specific is a body of principles that hopefully predicts outcomes and reaches desirable results without handcuffing innovation or increasing the susceptibility of decision makers to interest group pressure.

115. *See* Marc Ramsay, *The Buyer/Seller Asymmetry: Corrective Justice and Material Non-Disclosure*, 56 U. TORONTO L.J. 115, 139–40, 142 (2006). *See generally* Strudler, *supra* note 109.

116. TREBILCOCK, *supra* note 108, at 109 (discussing KIM LANE SCHEPPELE, LEGAL SECRETS: EQUALITY AND EFFICIENCY IN THE COMMON LAW (1988)).

117. *See* Ramsay, *supra* note 115, at 135 (discussing CHARLES FRIED, CONTRACT AS PROMISE (1981)).

118. *See* PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS 1 n.2 (2009).