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Recommended Citation

Maureen A. O'Rourke, Defending Disclosure in Software Licensing, in No. 010-008 Cornell Law School Legal Studies Research Paper Series (2010).

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Defending Disclosure in Software Licensing

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Cornell Law School research paper No. 010-008

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DEFENDING DISCLOSURE IN SOFTWARE LICENSING

Robert A. Hillman* & Maureen O'Rourke**

I. Introduction

For lack of our imagination, this article does not have the most scintillating title. However, the subject matter is critically important. We survey prominent kinds of disclosures in law and show why the disclosure tool, though subject to substantial criticism, is central to the legitimacy of any legal regime. Our working example is the American Law Institute's "Principles of the Law of Software Contracts" (hereinafter "ALI Principles").

The ALI Principles include three kinds of disclosure: disclosure of facts (concerning the quality of software), disclosure of terms (of standard forms), and disclosure of post-contract intentions (to pursue remote disablement of software). We take each up respectively in the three sections that follow and show how these forms of disclosure promote important social values and goals.

II. Disclosing Facts

Section 3.05(b) of the ALI Principles provides that a party that transfers software (by sale, license, or otherwise) and receives money or a monetary obligation warrants "that the software contains no material hidden defects of which the transferor was aware at the time of the transfer."

A transferor that receives money or a right to payment of a monetary obligation in exchange for the software warrants to any party in the normal chain of distribution that the

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¹ ALI Principles of the Law of Software Contracts (2009). We disclose that we are the Reporters of this project.

² ALI Principles § 3.05(b). The Principles apply to software contracts, including those denominated licenses, sales, or access contracts. See § 1.06. But section 3.05(b) does not apply if the transferor does not receive money or a right to payment of a monetary obligation, hence it excludes many open source transfers. Section 3.05(b) states in full

This section does no more than incorporate existing contract law's duty to disclose and tort's fraudulent concealment law.³ Still, the section has concerned some software licensors largely on the false ground that the section creates new licensee rights.⁴ In addition, some licensors claim that the

software contains no material hidden defects of which the transferor was aware at the time of the transfer. This warranty may not be excluded. In addition, this warranty does not displace an action for misrepresentation or its remedies.

³ ALI Principles § 3.05, Reporters' Notes to cmt. b provide 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. See, e.g., 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 § 161(b) 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." Section 161, cmt. d of the Restatement (Second) 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 character as would probably prevent the buyer from buying at the contract price."

. . .

Restatement (Second) of Contracts § 161 applies the law of fraudulent concealment, which requires knowingly suppressing facts that the other party reasonably cannot ascertain with the intent of misleading that other party to her detriment. See Gibb v. Citicorp Mortgage, Inc., 518 N.W.2d 910, 916 (Neb. 1994).

⁴ See Letter from Karen Copenhaver, Choate, Hall & Stewart LLP, counsel to the Linux Foundation & Horacio Gutierrez, Corporate Vice President and Deputy General Counsel, Microsoft Corporation to Robert Hillman, American Law Institute Reporter, Cornell Law School, et al. (May 14, 2009), available at http://microsoftontheissues.com/cs/files/folders/5090/download.aspx (last

section will increase litigation, a tired cry often heard by those opposing laws that protect parties from overreaching.⁵ Here, we show that this long-standing disclosure rule makes sense on any of a number of normative and policy grounds.

A. Economic efficiency. As a general matter, the efficiency standard calls for "the adoption of legal rules that facilitate the movement of assets to their most productive uses with as few transactions costs as possible" A duty to disclose material defects contributes towards this goal in a number of ways. For example, the duty increases the flow of information and therefore the likelihood that each party will value what they get more than what they give up. In addition, a disclosure duty allocates the risk of material defects to the party best able to accommodate or avoid them. As a comment to section 3.05(b) states: "Hidden material defects, known to the software licensor but not disclosed, shift costs to the licensee who cannot learn of the defects until it is too late and therefore cannot protect itself." A disclosure duty should also create incentives for the software licensor to improve the quality of its software.

visited Feb. 15, 2010).

⁵ See Letter from Karen F. Copenhaver & Mark Radcliffe, outside counsel to the Linux Foundation and the Open Source Initiative, to Professor Robert A. Hillman & Maureen A. O'Rourke, American Law Institute Reporters, available at 954 PLI/Pat 159, 164 (claiming the law of material breach is unclear in software context).

⁶ Michael J. Trebilcock, The Limits of Freedom of Contract 112 (1993).

⁷ "The 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).

⁸ ALI Principles § 3.05(b) cmt. b. The line between misrepresentation and concealment is not bright. See, e.g., Michael J. Borden, Mistake and Disclosure in a Model of Two-Sided Informational Inputs, 73 Mo. L. Rev. 667, 671 (2008) (silence has a "communicative or signaling effect[]."); see generally Richard Craswell, Taking Information Seriously: Misrepresentation and Nondisclosure in Contract Law and Elsewhere, 92 Va. L. Rev. 565 (2006).

⁹ See Craswell, supra note, at 587-88 ("In regulatory settings, agencies are often concerned with improving buyers' information precisely in order to give sellers better incentives to improve the quality of their offerings.").

Disclosure also reduces transaction costs. For example, section 3.05(b) applies only if the licensee cannot reasonably ascertain the material defect.¹⁰ Therefore, a licensee need not engage in a costly and ultimately useless investigation to uncover material defects, information already in the possession of the licensor.¹¹

But does the duty to disclose material defects create other costs that outweigh the benefits of the rule?¹² One prominent issue in the literature of disclosure law is the effect of disclosure on the incentives to "generate and utilize . . . information in the first place."¹³ Professor Kronman argues that the law does not require disclosure of deliberately acquired information in order to create an incentive to acquire the information. For example, a company might not search for oil if it had to disclose its findings to a prospective seller of the land, who obviously would raise the price if it knew of the oil. Requiring the disclosure of casually acquired information, on the other hand, does not discourage the production of information.¹⁴

¹⁰ Under section 3.05(b), the licensor must disclose only *hidden* defects, which means "that the defect would not surface upon any testing that was or should have been performed" by the licensee. ALI Principles § 3.05(b) cmt.b.

Trebilcock supra note, 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.); see also Richard Posner, Economic Analysis of Law 112 (7th ed. 2007); Melvin A. Eisenberg, Disclosure in Contract Law, 91 Cal. L. Rev. 1645, 1647 (2003) (avoidance of duplicate searches); Marc Ramsay, the Buyer/Seller Asymmetry: Corrective Justice and Material Non-Disclosure, 56 U. Toronto L.J. 115, 130 (2006) (avoidance of "wasteful investments" attempting to uncover problems.).

¹² See Craswell, supra note, at ("In deciding whether any given disclosure is desirable, both benefits and costs must be considered.").

¹³ Trebilcock, supra note , at at 112. In a twist, Professor Shavell worries about excessive investment in information. He points out that "[w]hen information has low social value, its costly acquisition should be discouraged, suggesting the desirability of requiring its disclosure." Steven Shavell, Foundations of Economic Analysis 334 (2004).

¹⁴ See Anthony T. Kronman, Mistake, Disclosure, Information and the Law of Contracts, 7 J. Legal Stud. 1 (1978). Strudler remarks that Kronman's analysis is "calamitously speculative." Strudler, supra note, at 361.

Analysts are almost unanimous in concluding that disclosure of important information by sellers is desirable notwithstanding Kronman's analysis. ¹⁵ For example, Trebilcock urges that sellers must disclose adverse information because nondisclosure would "substantially impair the expected value of the transaction to the buyer," whereas the adverse information is a "sunk cost" for the seller. ¹⁶ The role of the law is to deter "further misallocat[ion]" of the resources. ¹⁷ In addition, sellers would likely acquire information about their assets even if required to disclose the information. ¹⁸ This certainly is likely in the case of software licensors, who inevitably uncover problems with their software in the process of engineering, debugging, and manufacturing it. ¹⁹

An additional potential cost of disclosure identified in the literature is that it would require wasteful disclosures of either unimportant information or information the buyer already knows.²⁰ In such situations, the costs of disclosing minor information likely exceeds the benefits to the party receiving the information. Further, if that party already has the information, the costs of disclosure are "redundant." But section 3.05(b) does not apply to defects the licensee knows about or to immaterial defects. Another related problem with disclosure is that it might "obscur[e] other, more

¹⁵ See, e.g., Shavell, supra note , at 333 ("The appeal of requiring disclosure is stronger when sellers possess information than when buyers do, for the simple reason that it is buyers who typically can make socially valuable use of information."); Eisenberg, supra note , at 1677; infra notes , and accompanying text.

¹⁶ Trebilcock, supra note, at 114.

¹⁷ Id.

¹⁸ Trebilcock writes that seller's product information is "casually acquired in the sense that enforced disclosure is unlikely to diminish significantly . . . investment" Id. at 113; see also id. at 112; Eisenberg, supra note , at 1676.

¹⁹ A software licensor might argue that debugging is itself an investment, but it is an investment licensors likely make to ensure the profitability of their software.

²⁰ See, e.g., Trebilcock, supra note, at 107, 112; see also Posner, supra note, at 113 ("The case for requiring disclosure is strongest when a product characteristic is not ascertainable by the consumer at low cost.").

 $^{^{21}}$ If the licensee should know about a defect, "it would be redundant to require the seller to disclose it." Posner, supra note, at 113.

important information."²² But there is hardly more important information than that the software contains defects that render it substantially useless.

Those opposed to the material defect disclosure rule focus on still another possible cost of disclosure, namely its administrative costs. For example, is the rule clear enough to deflect unwarranted claims? Does the rule create unmanageable proof issues?²³ Does the rule create unduly costly notification requirements? We submit that the administrative costs of section 3.05(b) should be quite manageable mainly because the rule borrows from longstanding existing law that clarifies issues, including the law of material breach and reasonable expectations. A comment to the section elaborates on the operation and boundaries of the rule:

Section 3.05(b) requires that the licensor know of the defect at the time of the transfer, the defect is material, and it is hidden. The *time of the transfer* is the time of conveyance of rights in the software or of authorization to access software. . . .

A material defect consists of a software error serious enough to constitute a material breach of the contract. . . . [T]he well-established common-law material-breach doctrine, which ask[s] whether the injured party received substantially what it bargained for and reasonably expected, inform[s] the court's decision on whether a defect is material. Software that requires major workarounds to achieve contract-promised functionality and that causes long periods of downtime or never achieves promised functionality ordinarily would constitute a material defect. . . .

Disclosure of a material hidden defect occurs when a reasonable licensee would understand the existence and basic nature of the defect. Disclosure ordinarily should involve a direct communication to the licensee, if feasible. A mere posting of defects on the licensor's website may be insufficient depending on the circumstances. . . .

²² "[D]isclosure can sometimes produce benefits; but it can also be costly by obscuring other, more important information." Craswell, supra note, at 566.

Trebilcock worries about such costs, but recognizes that "administrative costs cannot be absolutely determinative of contract rules or we would simply ban all actions for breach of contract." Trebicock, supra note, at 115.

Putting together the requirements of licensor actual knowledge of the defect at the time of the transfer, licensee reasonable lack of knowledge, and a defect that constitutes a material breach means that a licensor would not be liable if the licensor has received reports of problems but reasonably has not had time to investigate them, if the licensee's problems are caused by uses of which the licensor is unaware, if the licensor learns of problems only after the transfer, or if the problems are benign or require reasonable workarounds to achieve functionality.²⁴

Finally, opponents are troubled because the disclosure rule is mandatory. However, case law supports the proposition that a party cannot contract away responsibility for fraud.²⁵ In addition, the argument in favor of mandatory disclosure is heightened in the case of standard form contracts where the licensee typically is not even aware of disclaimers.²⁶ Even in negotiated deals, a reasonable licensee would believe an "as is" clause or the like insulates a licensor from liability for defects that are known or unknown by both parties at the time of contracting, not those known and knowable only by the licensor that render the software substantially worthless. For such reasons, the law should not aid and abet fraud.

Mandatory disclosure of material defects in market software serves still another purpose. Disclosure means potential access by other software users to information about the quality of a licensor's software. Sharing such information is consistent with the spirit of the growing software commons movement.²⁷

For the reasons discussed, we are confident that the benefits of section 3.05(b) outweigh its costs. Those less certain, however, might argue that non-legal sanctions are sufficient to produce optimal disclosure. For example, licensors do not want to injure their reputation by distributing

²⁴ ALI Principles § 3.05 cmt. b.

²⁵ Disclaimers and "as is" clauses often do not preclude claims of fraud. See, e.g., Limoge v. People's Trust Co., 719 A.2d 888, 891 (Vt. 1998); Gibb v. Citicorp Mortgage, Inc., 518 N.W.2d 910 (Neb. 1994). But see Trebilcock, supra note, at 114 (sellers "can contract out of the duty to disclose by an 'as is' clause.").

 $^{^{\}rm 26}\,$ See infra notes $\,$, and accompanying text.

²⁷ See Robert A. Hillman & Maureen O'Rourke, Rethinking Considersation in the Electronic Age, 61 Hastings L. J. 311 (2009).

close-to-worthless software. But licensors may be able to hide behind software's tendency to contain bugs and avoid the loss of many customers despite licensing software they know to be dysfunctional.²⁸ Further, fly-by-night software licensors that can "exit the market at low cost"²⁹ and large licensors that enjoy a quasi monopoly position would be less motivated by reputational concerns.³⁰ Finally, licensors who infrequently market software with known hidden defects may believe the damage to their reputation from nondisclosure of those defects will be minimal.³¹

A frequent additional argument of those that oppose consumer protection is that sellers will simply raise prices.³² Software licensors adopting this argument with respect to section 3.05(b) would be in the unusual position of having to claim that they will raise prices if they are not permitted fraudulently to conceal material facts. Further, we have already shown that the disclosure rule's lines are bright and that licensors have little to fear from spurious litigation.³³ If we are correct, we can expect prices to be fair because they should correspond to the actual value of the licensed software.

B. Additional normative grounds. Several additional theories and principles support or explain the material-defect disclosure rule. For example, under the principle of autonomy a licensee's agreement is not voluntary if the licensee does not have the material facts.³⁴ Closely related, corrective justice requires a legal system that has "[r]espect and concern for people who are

 $^{^{28}}$ See Posner, supra note $\,$, at 113 (competitors are unlikely to disclose defects their products share).

Id. at 112 ("[I]interim profits obtainable by the fraudulent seller may exceed any long-term costs in loss of reputation, especially if the seller can exit the market at low cost.").

³⁰ Id.

³¹ See Alon Harel & Yuval Procaccia, On the Optimal Regulation of Unread Contracts, SSRN 2009 (with "low-probability contingencies . . . potential transmitters of . . . information will be small and hence reputation will perform poorly as a vehicle for market correction.").

³² See, e.g., Craswell, supra note, at 618 (discussing argument).

³³ See supra notes, and accompanying text.

Trebilcock, supra note, at 107.

duped."³⁵ In the context of software licensing, the law therefore should seek to ensure that the licensee makes knowledgeable decisions about her assets.³⁶

Contractarians posit that "individuals behind a veil of ignorance but aware of their cultural and social context" would assent to rules that protect a party from catastrophe.³⁷ Accordingly, a party must disclose "deep secrets," meaning that the other party reasonably has no knowledge of the information.³⁸ A party should also disclose "shallow secrets," in which the other party has an inkling of the secret, if the first party received the information because of its "special advantage."³⁹ In the context of software disclosure, contractarians would therefore argue that the licensor must disclose material hidden defects if the licensee reasonably is unaware that the software is defective. Even if the licensee has some knowledge of a problem but is reasonably unaware of the specifics, contractarians would urge a disclosure duty.

Moralists would require disclosure as a matter of right and wrong.⁴⁰ For example, moralists argue that it is "impermissible to take advantage of another party's ignorance of material facts."⁴¹ Further, "[u]sing...ignorance to increase one's own profits violates respect for persons."⁴² Failure

³⁵ Strudler, supra note, at 349.

Ramsay, supra note, at 124; see also id. at 143 ("the buyer cannot . . . sell [disclosed] information to other prospective buyers. Since other buyers are themselves protected by the disclosure rule, they too would receive this information free of charge during the bargaining process with the seller in question.").

 $^{^{\}rm 37}$ Trebilcock, supra note , at 109 (discussing Kim Lane Scheppele, Legal Secrets: Equality and Efficiency in the Common Law (1988)).

Id. ("deep secrets" exist "where the target of the secret has no reason for imagining the existence of the information in question \dots "); see also Ramsay, supra note, at 126.

³⁹ Craswell, supra note, at 572. "Shallow secrets" consists of "relevant information" which the target of the secret "has reason to suspect the existence of." Trebilcock, supra note, at 109.

⁴⁰ See Robert A. Hillman, The Richness of Contract Law 8-19 (discussing Charles Fried, Contract as Promise 80 (1981)).

⁴¹ Ramsay, supra note, at 135 (discussing Fried, supra note).

⁴² Id. (discussing Fried, supra note).

to disclose known material defects in software also constitutes bad faith under this interpretation.⁴³

Finally, prospect theory helps explain the apparent asymmetry between the disclosure requirement of sellers and buyers (here licensors and licensees), with only the former subject to an aggressive requirement at common law.⁴⁴ Prospect theory observes that people suffer from a loss of assets more than they feel good about a comparable gain in assets.⁴⁵ Consistent with the theory, the law requires sellers to disclose material information about goods because the buyer loses (is made worse off) if the buyer purchases worthless goods. On the other hand, if a buyer fails to disclose material facts, the seller foregoes a gain. "Seller does not exactly lose anything . . . by selling without Buyer's information. [Seller] sells at a price equal to or above the market price. [Seller] is merely deprived of the benefit created by Buyer's investment."⁴⁶ The law of disclosure simply may reflect this cognitive bias.

Disclosure about the facts relating to the quality of software is not the only kind of disclosure in the ALI Principles. We now turn to the issue of disclosure of standard terms.

III. Disclosing Terms

A well-accepted proposition is that, for a host of reasons, people do not read their standard

⁴³ See, e.g., Hillman, Richness, supra note, at 152.

Thanks to Jeffrey Rachlinski for this insight. Ramsay, supra note, analyzes the asymmetry, but does not focus on prospect theory. For a discussion of this psychological theory as it applies to disclosure, see Eisenberg, supra note, at 1675 (discussing Amos Tversky, & Daniel Kahneman, Rational Choice and the Framing of Decisions, in The Limits of Rationality 60 (Karen Schweers Cook & Margaret Levi eds., 1990)).

⁴⁵ Eisenberg, supra note, at 1675.

 $^{^{46}}$ Borden, supra note , at 700 (discussing Ramsay, supra note); see also id. (a seller who is duped "has no conventional expectation of . . . surplus.") (discussing Fried, supra note $\,$).

forms.⁴⁷ Further, electronic commerce may have exacerbated the problem.⁴⁸ These realities create a dilemma for contract law in the electronic age. For example, they undermine contract law's paradigm of assent by knowledgeable parties.⁴⁹ They also increase the likelihood that some licensors will draft terms that overreach.⁵⁰ What should contract law, and in this instance, the ALI Principles do about this problem? One of us has written extensively on this subject and we will not repeat many of the arguments here.⁵¹ Instead, we simply set forth and then defend the ALI Principles' disclosure-of-terms strategy against concerns of some analysts.

The ALIPrinciples do not *require* a pre-contract disclosure of terms.⁵² Instead, the Principles set forth a safe harbor that ensures enforcement of standard forms so long as they are not unconscionable or against public policy. The safe harbor requires software licensors, among other things, to make their forms available on the Internet prior to any transaction so that a prospective customer can shop around for terms if so inclined.⁵³ Admittedly, few people likely will do so, which

⁴⁷ See generally Robert A. Hillman & Jeffrey J. Rachlinski, Standard Form Contracting in the Electronic Age, 77 N.Y.U. L. Rev. 429 (2002); Robert A. Hillman, On-line Consumer Standard-Form Contracting Practices: A Survey and Discussion of Legal Implications, in Consumer Protection in the Age of the "Information Economy," 283 (2006) (hereinafter Hillman, "On-line Practices").

⁴⁸ Hillman & Rachlinski, supra note.

⁴⁹ Id.

⁵⁰ See Craswell, supra note, at 591 ("[I]f consumers have perfect information about the prices offered by different sellers, and perfect information about the average effects of contract terms in sellers' standard forms, but if they have no information (or only poor information) about the effect of the contract terms used by any individual seller, each seller will then have an incentive to degrade the 'quality' of its terms.").

 $^{^{51}\,}$ See, e.g., Hillman & Rachlinski, supra note $\,$; Hillman, On-line Practices, supra note $\,$

⁵² Section 2.02(b) of the ALI Principles adopts the common law objective test of assent.

See id. at § 2.02(c). Section (c)(1) provides that "[a] licensee will be deemed to have adopted a standard form as a contract if (1) the standard form is reasonably accessible electronically prior to initiation of the transfer at issue" The section also requires a "clickwrap" acceptance of terms, which means that the "I accept" icon must appear at the end of or adjacent to the standard form. See Robert A. Hillman & Brahim Barakat, Warranties and Disclaimers in the Electronic Age, 11 Yale J.L. Tech. 1, 5 (2009) (revealing that 34 out of 100 of Amazon's best selling software titles did not disclose their terms).

is the principal basis for complaints about the disclosure strategy, although we believe that the situation may not be as hopeless as some allege.⁵⁴ Nevertheless, here we rest the justification for disclosure on other grounds. In addition, we argue that the cost of disclosure is negligible. Finally, we assert that alternative proposals are either unrealistic and expensive or can easily supplement the disclosure rule.

The *opportunity* to read a standard form is important in part because it substantiates assent to the form even if a party does not read it. The ALI Principles reason that

[i]ncreasing the opportunity to read supports autonomy reasons for enforcing software standard forms and substantiates Karl Llewellyn's conception of licensees' "blanket assent" to reasonable standard terms, so long as they have had a reasonable opportunity to read them. Blanket assent means that licensees have delegated to the drafter the duty of drafting reasonable boilerplate terms, just as they delegate to software [licensors] and engineers the duty of creating the appropriate software for the task at hand."55

Llewellyn's "blanket asset" approach is more than an abstraction. It describes the reality of what is in the minds of reasonable people who agree to standard forms. But there is more. A fundamental tenet of the rule of law is reasonable notice. For example, in criminal law "fair warning" requires that the law "explicitly... inform those who are subject to [the law] what conduct on their part will render them liable to its penalties"56 The goal is to "give the person of

⁵⁴ For detailed criticism of disclosure in this context, see Omri Ben-Shahar, The Myth of the 'Opportunity to Read' in Contract Law, 5 European Review of Contract Law 1 (2009). Increasing access to standard forms on the Internet reduces some of the roadblocks to reading, such as time constraints and search costs. Nevertheless, in the following discussion we assume that people will not read their standard forms for all of the reasons discussed in Ben-Shahar's provocative article. However, we confess to some confusion over whether Ben-Shahar sees any value in disclosure. We think he does. For example, he is comfortable with the terms-after-payment process only so "long as there is an option not to take the contract as a whole" Id. at 12. Apparently, terms-after-payment is satisfactory to Ben-Shahar because the purchaser can exercise the option to reject the contract *after* having the opportunity to read the terms.

⁵⁵ ALI Principles, Chapter 2, Topic 2, Summary Overview.

⁵⁶ Keeler v. Superior Court, 470 P.2d 617, 633 (1970) (quoting Connally v. Gen.Constr. Co. 269 U.S. 385, 391 (1926)); see Paul H. Robinson, Fair Notice and Fair Adjudication: Two Kinds of Legality, 154 U. Penn. L. Rev. 335, 336 (2005) (the "legality principle . . . means that criminal").

ordinary intelligence a reasonable opportunity to know what is prohibited"⁵⁷ Yet we all know that people rarely read criminal statutes or understand many of the intricacies of rules governing even those wrongs of which they are aware, such as murder or thievery. The point is that people *could* gain access to these materials, which legitimizes the rules as law.⁵⁸ Further, the importance of the common law principle of *stare decisis* does not depend on the proposition that people actually know and understand precedent, but on the notion that the legal texts are available to them.⁵⁹ That is why courts take great pains to legitimize decisions that stray from precedent by distinguishing the cases on the facts even in situations where it is clear that the parties did not have an inkling of that precedent.

Standard forms constitute private legislation backed by the state's enforcement processes and the legitimacy of these forms also depends on reasonable notice of content. In fact, adequate notice of terms constitutes a foundation for much of contract doctrine, including rules of interpretation (such as interpreting terms against the drafter), the parol evidence rule, and, of course, the general rules of formation. To be sure, creating a safe harbor that requires greater access to standard forms is a modest contribution if the goal is to increase reading. But it is a crucial step if the goal is to create legitimacy in the contracting process.

liability and punishment can be based only upon a prior legislative enactment of a prohibition that is expressed with adequate precision and clarity."); see also Douglas N. Husak & Craig A. Callender, Wilful Ignorance, Knowledge, and the 'Equal Culpability' Thesis: A Study of the Deeper Significance of the Principle of Legality, 1994 Wis. L. Rev. 29 (1994).

⁵⁷ Robinson, supra note, at 360; see also id. at 364 ("Although it is not likely that a criminal will carefully consider the text of the law before he murders or steals, it is reasonable that a fair warning should be given to the world in language that the common world will understand, of what the law intends").

Thanks to Sherry Colb for this observation. "From the inception of Western culture, fair notice has been recognized as an essential element of the rule of law." Note, Textualism as Fair Notice, 123 Harv. L. Rev. 542, 543 (2009). "Fair notice" promotes fairness and "social efficiency." Id. Nor is "fair notice" limited to criminal law. Id. at 546-48.

See, e.g., Planned Parenthood of Se. Pa. v. Casey, 505 U.S. 833, 869 (1992) (overruling precedent would be at "the cost of both profound and unnecessary damage to the Court's legitimacy, and to the Nation's commitment to the rule of law."); Payne v. Tennessee, 501 U.S. 808, 827 (1991) ("[s]tare decisis . . . contributes to the actual and *perceived* integrity of the judicial process.") (emphasis added).

Increasing the opportunity to read also may lead to the improvement of the quality of standard forms. As we have said, we doubt that disclosure will increase the numbers of readers very much nor do we subscribe to the argument that a few readers create sufficient incentives for licensors to improve the quality of terms.⁶⁰ But watchdog groups have already sprung up on the Internet and the digital revolution means that information they collect about "dangerous terms" can easily be disseminated.⁶¹ Licensors therefore have reason to be concerned about the nature of terms that are easily accessible as Facebook recently learned when it introduced a term that appropriated its users' information.⁶² Protests fueled in part by Internet communications caused Facebook to retract this infamous term.⁶³

Disclosure is also inexpensive and, at worst, harmless. The ALI Principles point out that "[t]he costs of maintaining a web homepage and displaying a standard form should be insignificant, especially because virtually all software licensors have or soon will have a web page. . . ."⁶⁴ Further, proving a licensor complied with the obligation should not be difficult:

⁶⁰ See Alan Schwartz & Louis Wilde, Intervening in Markets on the Bais of Imperfect Information: A Legal and Economic Analysis, 127 U. Pa. L. Rev. 630 (1979). But see Yannis Bakos, Florencia Marotta Wurgler & David R. Trossen, Does Anyone Read the Fine Print? Testing a Law and Economics Approach to Standard Form Contracts, SSRN (2009). The Bakos, et. al. paper examined companies that did not employ a clickwrap acceptance process, meaning that users were not required to agree to EULAS before completing their transaction. This group of users predictably would read even less than those engaged in a clickwrap deal.

⁶¹ See Ben-Shahar, supra note, at 24 (discussing EULAlyzer); Annalee Newitz, Dangerous Terms, A User's Guide to EULAs, Electronic Frontier Foundation, available at http://www.eff.org/wp/eula.php (last accessed); but see Ronald J. Mann & Travis Siebeneicher, Just One Click: The Reality of Internet Retail Contracting, 108 Colum. L. Rev. 984 (2008) (reporting relatively fair terms in large retailers' Internet standard forms).

⁶² See Chris Walters, Facebook's New Terms of Service: "We Can Do Anything We Want With Your Content, Forever," in Consumerist, available at http://consumerist.com/5150175/facebooks-new-terms-of-service-we-can-do-anything-we-want-with-your-content-forever (last accessed Oct. 28, 2009).

⁶³ See Wikipedia, Criticism of Facebook, available at http://en.wikipedia.org/wiki/Criticism_of_Facebook#.22Terms_of_Use.22_controversy (last accessed Oct. 28, 2009).

⁶⁴ ALI Principles § 2.02 cmt. e.

Many licensors already maintain archival records of website content, including when material was introduced, modified, and removed. Server logs also indicate when and if a web page was modified.... Helpful corroborative evidence would include, for example, the testimony of visitors to the licensor's website at or near the time of the contested transaction. Licensors can locate these visitors through their web logs. In the longer term, improvements in technology and entrepreneurial activity will create new methods of proving website content over time. For example, entrepreneurs are already establishing independent archiving services that can lend credibility to a licensor's proof of web content.⁶⁵

A potential cost of disclosure that one of us has described in detail previously is that disclosure will increase the possibility that marginal terms will be enforceable because disclosure eliminates the argument that such terms are procedurally unconscionable. However, many businesses do not make their standard forms available prior to a transaction, suggesting that they believe that the costs of disclosure outweigh the benefit of creating a litigation defense. Perhaps these secretive businesses worry about the long term, believing that eventually word will get out about their marginal terms. If this prediction is accurate, then disclosure ultimately will benefit software end users notwithstanding a possible drop in successful unconscionability cases.

Consider the experience of cigarette manufacturers who, in response to legislation, put warning labels on their packages. For a considerable period of time, these labels helped manufacturers "fend[] off smokers' suits" based on smokers' assumption of the risk. As a result, "what was intended as a burden on tobacco became a shield instead." In the long run, however, the package warnings, along with the many revelations about cigarette manufacturers' attempts to hide other adverse facts about their products, led to a massive

⁶⁵ Id. cmt. f.

⁶⁶ Robert A. Hillman, Online Boilerplate: Would Mandatory Website Disclosure of E-Standard Terms Backfire?, 104 Mich. L. Rev. 837 (2006).

 $^{^{67}}$ See Hillman & Barakat, supra note , at (revealing that 34 out of 100 of Amazon's best selling software titles did not disclose their terms).

See Robert A. Hillman, Online Boilerplate: Would Mandatory Website Disclosure of E-Standard Terms Backfire?, 104 Mich. L. Rev. 837, 856 (2006) (quoting Daylian M. Cain et al., The Dirt On Coming Clean: Perverse Effects of Disclosing Conflicts of Interest, 34 J. Legal Stud. 1, 3 n.2 (2005), quoting Action on Smoking and Health, Tobacco Deal Has Potential for Even Greater Dirty Tricks, available at http://www.no-smoking.org/sept97/9-11-97-1.html):

Finally, alternative proposals are either unrealistic because too expensive or unwieldy or could easily supplement the disclosure rule. For example, one proposal, discussed in the ALI Principles, is to enforce terms only if a licensee clicks "I agree" at the end of *each* term or at least the particularly contentious ones, such as forum selection and dispute resolution terms.⁶⁹ Neither licensors nor licensees desire the contract formation process to become bogged down in such formalities, which ultimately may not promote any additional reading anyway.⁷⁰

An additional proposal is to create a government agency to provide oversight or even preapproval of the content of standard forms.⁷¹ This strikes us as costly and subject to the common pitfalls of administrative rulemaking, including agency capture by the software industry, lack of agency resources, and inattention to context-dependent variables. In addition, as a matter of principle, agency involvement is troublesome because it increases government intrusion into what should remain an essentially private process.⁷²

Another proposal is for the private sector to rate contracts, just as rating services presently evaluate restaurants and hotels, among other things.⁷³ Of course, the disclosure rule discussed here does not contradict or impede such a strategy. In fact, we have already discussed the importance of watchdog groups and would applaud their employment of a systematic rating service, if indeed the

change in public opinion and, ultimately, to serious legal sanctions against the cigarette companies. Perhaps mandatory website disclosure will also have a long-term beneficial effect."

⁶⁹ ALI Principles, Chapter 2, Topic 2, Summary Overview.

⁷⁰ Hillman & Barakat, supra note, at 26.

See, e.g., Clayton P. Gillette, Preapproved Boilerplate, in Boilerplate: Foundations of Market Contracts (O. Ben-Shahar ed., 2006). The European Union has created a nonexclusive list of contractual terms that may be considered unfair when not individually negotiated. The ALI Principles "opt to rely on traditional unconscionability doctrine rather than defining which terms are enforceable and which are not. A court may, however, find the Directive's list useful in evaluating unconscionability claims." ALI Principles, § 1.11, cmt. c.

⁷² For more on alternative proposals, see Robert A. Hillman, Contract Law in Context: The Case of Software Contracts, Wake Forest Law Review (2010).

⁷³ Ben-Shahar, supra note, at 22-25.

quality of terms can be so rated.⁷⁴ But, of course, for such ratings to succeed the first step is to make standard forms easily accessible, which is precisely what the ALI Principles seek.

A final strategy worth mentioning, in the case of terms-after-payment, is to identify and label important provisions on packaged software.⁷⁵ Disclosure of terms on the Internet does not impede this reform either. In fact, the ALI Principles admonish software providers to disclose terms on the package.⁷⁶ A challenge will be selecting the terms that must appear on the package without repeating most of the contract there.

We now discuss a third kind of disclosure, namely disclosure of ex post remedial strategies.

IV. Disclosing Ex Post Strategies

Contract law permits a wide variety of post-breach conduct, sometimes requiring disclosure in the agreement of post-breach intentions as a condition of enforceability, sometimes not.⁷⁷ Here,

However, parties often contract around the default remedies by setting liquidated damages or limiting remedies. Such liquidation or limitation generally must be a part of the agreement itself, thus effectively requiring disclosure of post-breach strategy. Id. § 2-718(1) ("Damages for breach

⁷⁴ See supra notes, and accompanying text.

⁷⁵ In rolling contracts, people "see the terms after paying for goods." Robert A. Hillman, Rolling Contracts, 71 Fordham L. Rev. 743, 743 (2002). "Labeling of standard form contract terms can be designed [with] a uniform box in a uniform and prominent place on the package" Ben Shahar, supra note __, at 26.

⁷⁶ ALI Principles § 2.02 cmt. b ("If the licensee can read the standard form before opening the software because, for example, the standard form is printed on or attached to the package" the licensee may be bound to the form).

⁷⁷ Consider for example, UCC Article 2's remedial scheme. The parties may opt to rely on the UCC's default rules which, by their mere existence as background law, give notice of the parties' intentions on breach. For example, in the case of a defective tender by the seller, the buyer may reject the goods or accept them and sue for damages. UCC §§ 2-601; 2-714. A rejection is "ineffective unless the buyer seasonably notifies the seller." Id. § 2-602(1). The seller, in turn, may have a right to cure under certain circumstances, with exercise of that right dependent on the seller's "seasonably notify[ing]" the buyer. Id. § 2-508.

we focus on a particular type of post-breach conduct in business settings--the non-breaching licensor's automated disablement of software resident on the breaching party's computer.⁷⁸ The Principles place several restrictions on such disablement, including that the term authorizing it must be in the agreement and be conspicuous.⁷⁹

Automated disablement of software is essentially a high-tech version of self-help. Historically, contract law, most notably the UCC in the context of secured transactions, has not required disclosure in the agreement of an intent to use self-help.⁸⁰ Rather, the non-breaching party

by either party may be liquidated in the agreement . . ."); Id. § 2-719(1)(a) ("[T]he agreement may provide for remedies in addition to or in substitution for those provided in this Article . . .").

⁷⁸ See ALI Principles § 4.03(a) ("'Automated disablement' means the use of electronic means to disable or materially impair the functionality of software.""); see also id. at cmt. a. ("The Section applies . . . in both the remedial and other contexts.). In this article, we concentrate on electronic disablement as a remedy for breach.

The Principles do not permit automated disablement in a consumer agreement or in a standard-form transfer of generally available software. Id. at (c). The Principles define "consumer agreement" as "an agreement for the transfer of software or access to software primarily for personal, family, or household purposes." Id. § 1.01(d). They define standard-form transfer of generally available software as "a transfer using a standard form of (1) a small number of copies of software to an end user; or (2) the right to access software to a small number of end users [;] if the software is generally available to the public under substantially the same standard terms." Id. § 1.01(l).

⁷⁹ ALI Principles § 4.03(d)(1). Additionally, as conditions of permitting self-help, the Principles require that "the transferor provide[] timely notice of the breach and its intent to use automated disablement and provide[] the transferee with a reasonable opportunity to cure the breach and the transferee has not so cured." Further, the transferor must obtain a court order permitting it to use automated disablement. Id. at (d)(2)-(3).

⁸⁰ See UCC § 9-609(a)(1) ("After default, a secured party: (1) may take possession of the collateral . . ."); see also UCC § 2A-525(2) (providing a right of repossession to an aggrieved lessor of goods in certain circumstances); see also generally Mark P. Gergen, A Theory of Self-Help Remedies in Contract, 89 B.U. L. Rev. 1397 (2009) (discussing self-help rules and how they fit with contract law theories); Celia R. Taylor, Self-Help in Contract Law: An Exploration and Proposal, 33 Wake Forest L. Rev. 839 (1998) (describing self-help doctrine under the UCC and Restatement (Second) of Contracts and proposing changes to existing law to encourage self-help in commercial transactions).

may simply rely on the background law to exercise self-help in the event of breach. Why do we depart from that approach here?

As we noted earlier in the context of a duty to disclose material defects, disclosure can "increase[] the flow of information and therefore the likelihood that each party will value what they receive more than what they give up." Although self-help has a long history under UCC Article 9, the use of electronic self-help is a relatively recent phenomenon, and whether a licensee would expect its use in the absence of a contractual term is an open question. We think the licensee often would not and, in particular, that an intent to use automated disablement alters the valuation of the contract such that were it not disclosed, the licensee would pay too much for the software.

To disable software resident on another computer remotely requires that the software provider write its code to include a way effectively to enter the licensee's system from outside--a so-called "back door." The mere existence of this back door places the licensee's system at risk by making it less secure. Further, computers generally have a number of software programs and accompanying data installed. Automated disablement can adversely affect programs and data having

⁸¹ See supra notes , and accompanying text.

The debates over the electronic self-help provision of the Uniform Computer Information Transactions Act (UCITA) are illustrative. In its 1999 version, UCITA provided a limited right of electronic self-help, requiring the licensee's separate assent to a term in the agreement authorizing its use and post-breach notice of intent to exercise the remedy. Unif. Computer Info. Trans. Act § 816 (1999). Commentators disagreed on the desirability of this provision. See sources cited in ALI Principles § 4.03 cmt. a. Eventually UCITA prohibited electronic self-help. Unif. Computer Info. Trans. Act § 816 (2002); see also Raymond T. Nimmer, 2 Information Law § 11:156 - Electronic Remedies (2009) ("The difficulty with examining electronic self-help under existing law is that the common law and the UCC rules were not developed with attention to the protective capability of digital systems or their potential for abuse. The ability to disable the other party's use of the technology creates strong leverage to enforce performance. This benefits licensors, but leverage can mount into undesirable duress or coercion.").

⁸³ See Cem Kaner, Why You Should Oppose UCITA, Computer Law., May 2000, at 26 ("[D]isabling codes create a hole in the customer's system security . . .").

⁸⁴ See id.

nothing to do with the contractual dispute between the parties.⁸⁵ Damages from disablement can be quite high: Lack of access to software and data can have far-reaching effects on the licensee and third parties with whom the licensee's system is networked or with whom it does business.⁸⁶

Additionally, breach of contract is often a highly contextual inquiry. Complicating matters in the area of software contracting is the overlay of federal intellectual property law that may bear on enforceability of particular provisions.⁸⁷ For example, a party may premise the right to automated disablement on breach of a contractual provision against reverse engineering. But patent law and/or copyright law may render that provision unenforceable and thus the disablement (that may cause large damages) wrongful.⁸⁸ Unlike repossession of tangible goods, electronic repossession of informational goods implicates difficult questions of intellectual property law, suggesting that more caution is appropriate in this context.⁸⁹

UCC Article 9's self-help repossession scheme is limited by the malleable concept of breach of the peace.⁹⁰ A repossession carried out in breach of the peace is wrongful and the debtor is

⁸⁵ See Timothy P. Heaton, Note, Electronic Self-Help Software Repossession: A Proposal to Protect Small Software Development Companies, 6 B.U. J. Sci. & Tech. L. 205, 212 (2000) & sources cited therein ("Computer systems hold an immense amount of data; lack of access to that data because of a software disablement could have effects far beyond the value of the breached licensing agreement.").

⁸⁶ See id.

⁸⁷ See ALI Principles § 1.09; Julie E. Cohen, Copyright and the Jurisprudence of Self-Help, 13 Berkeley Tech L.J. 1089 (1998).

⁸⁸ See ALI Principles § 1.09.

⁸⁹ See Cohen, supra note, at 1127-37 (considering the effect of information law and policy on self-help involving copyrighted works and concluding: "May the states reshape their law of contract to allow automatic, self-enforcing foreclosure of conduct privileged by copyright law and, ultimately, by the Intellectual Property Clause and First Amendment . . . ? [T]he answer must be no.").

⁹⁰ UCC § 9-609 (b)(2) ("A secured party may [take possession of the collateral] without judicial process, if it proceeds without breach of the peace.").

entitled to damages.⁹¹ The breach of the peace limitation makes it difficult for a foreclosing secured party to enter the debtor's dwelling or place of business to repossess collateral in the absence of the debtor's consent.⁹²

At first glance, electronic self-help seems to eliminate any breach of the peace issue. To the extent that the breach of the peace limitation is intended to forestall the violence inherent in a face-to-face confrontation over repossession, that is indeed the case. The breach of the peace doctrine in Article 9, however, may vindicate interests in addition to preventing violence, including: "protect[ing] dignitary losses to debtors . . . protect[ing] the sanctity of private dwellings; [and] enabl[ing] debtors, by contesting repossession, to force creditors to proceed by action." The expectation of privacy in the sense of freedom from nonconsensual intrusion is an evolving concept in the high-tech area but there is some evidence that consumers, at least, are likely to react with dismay when vendors monitor their computer activities in one way or another. We think that businesses would also be surprised by an automated disablement of software in the absence of a contractual provision permitting it.

For all of these reasons, we believe that requiring disclosure of an intent to use electronic

⁹¹ Id. § 9-625. Note that an aggrieved debtor may recover damages in tort law under a trespass or conversion theory. See id. at cmt. 3 ("[P]rinciples of tort law supplement [§ 9-609] . . . However, to the extent that damages in tort may compensate the debtor for the same loss dealt with by this Article, the debtor should be entitled to only one recovery.").

⁹² See generally James J. White & Robert S. Summers, Uniform Commercial Code § 25-7, at 896-98 (5th ed. West Group) (discussing breach of the peace doctrine).

⁹³ Alan Schwartz & Robert E. Scott, Commercial Transactions 950 (2d ed. Found. Press 1991).

⁹⁴ See, e.g., Cohen, supra note , at 1105-06 (arguing that the "touchstone" of the breach of the peace standard is "nonconsensual intrusion", noting consumer dismay over Microsoft's program that used the Internet to report back to Microsoft about the contents of users' hard drives, and stating, "Imagine for example, that a team of high-tech repo men had just used a transporter to 'beam' your sofa out of your living room and back to the furniture store. It would be difficult for the creditor to convince you that no intrusion had occurred."). The ALI Principles do not allow self-help in a consumer agreement, see ALI Principles § 4.03(c).

means to disable software remotely is amply justified.⁹⁵ Disclosure as a condition of enforceability is not costly and will force the software licensor to bring its intent to use this unusual, intrusive remedy to the transferee's attention. The licensee can then make an informed judgement about whether to enter the agreement and at what price.

Some parties interested in the Principles objected to our prohibiting electronic self-help in consumer agreements and in other retail-like transactions. In both of these contexts, we believe that disclosure in the agreement is insufficient to bring home to the licensee the possibility and ramifications of automated disablement. In part, this is because, as we have noted, consumers are unlikely to read their standard forms. In addition, consumers and other licensees in retail transactions likely will not appreciate and value correctly the potentially dire consequences of remote disablement's use.

Others objected to our imposing burdens in addition to disclosure--notice and an opportunity to cure and obtaining a court order before engaging in automated disablement.⁹⁹ The Principles also provide for damages for violation of the restrictions on automated disablement notwithstanding an

⁹⁵ The caselaw generally supports this view. See Robbin Rahman, Comment, Electronic Self-Help Repossession and You: A Computer Software Vendor's Guide to Staying Out of Jail, 48 Emory L.J. 1477, 1499 (1999) (collecting cases and stating, "[O]ne thing is certain: the presence of a time bomb or other type of disabling device must be disclosed sometime between the initial negotiation period and the execution of the agreement in order for the vendor to escape liability."); see also Conn. Gen. Stat. § 42a-9-609(d)(2) (2009) ("Electronic self-help is permitted only if the debtor separately agrees to a term of the security agreement authorizing electronic self-help that requires notice of exercise Except in a consumer transaction, the debtor is deemed to have separately agreed to a term of the security agreement authorizing electronic self-help if a clause is included in the security agreement that specifically states that electronic self-help is authorized.").

 $^{^{96}\,}$ For the ALI Principles' definitions of the kind of transactions referred to in text, see supra note $\,$.

⁹⁷ See supra notes and accompanying text.

⁹⁸ For example, licensees may be overly optimistic that nothing will go wrong or fail to appreciate the potential for automated disablement to adversely affect other programs and reduce privacy. See supra notes , and accompanying text.

 $^{^{99}}$ ALI Principles $\$ 4.03(d)(2)-(3); see supra note $\,$, and accompanying text.

agreement to the contrary and make the obligations in the relevant section non-waivable. ¹⁰⁰ Justifying these requirements is beyond the scope of this paper. Here we simply note that disclosure is one part of a multi-faceted approach to automated disablement. ¹⁰¹

V. Conclusion

Our aim here was to use certain provisions of the ALI Principles as case studies to show that disclosure can play a useful--indeed, central--role in helping to legitimize a legal regime. Particularly where the cost of disclosure is low, it can promote values as diverse as economic efficiency, due process, and corrective justice. In the case of disclosure of material hidden defects and disclosure of an intent to use automated disablement as a remedy for breach, among other things, disclosure performs the important function of increasing the probability that the transferee of the software will value the transaction correctly. In the case of standard forms, disclosure seems the most practical of a host of imperfect solutions or, at minimum, is a necessary precursor to other solutions. By itself, disclosure of standard forms at least provides an opportunity for transferees to read the terms. This opportunity supports important values even if very few licensees actually avail themselves of it. Disclosure in the case of standard forms also raises the potential in the longer run for the improvement in the quality of standard terms.

¹⁰⁰ ALI Principles § 4.03(e)-(f).

 $^{^{101}}$ For discussion of these requirements, see ALI Principles § 4.03 and comments.