

Winter 1-1-2013

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James Gibson

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### Recommended Citation

James Gibson, *Vertical Boilerplate*, 70 Wash. & Lee L. Rev. 161 (2013),  
<https://scholarlycommons.law.wlu.edu/wlulr/vol70/iss1/4>

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# Vertical Boilerplate

James Gibson\*

## *Abstract*

*Despite what we learn in law school about the “meeting of the minds,” most contracts are merely boilerplate—take-it-or-leave-it propositions. Negotiation is nonexistent; we rely on our collective market power as consumers to regulate contracts’ content. But boilerplate imposes certain information costs because it often arrives late in the transaction and is hard to understand. If those costs get too high, then the market mechanism fails.*

*So how high are boilerplate’s information costs? A few studies have attempted to measure them, but they all use a “horizontal” approach—i.e., they sample a single stratum of boilerplate and assume that it represents the whole transaction. Yet real-world transactions often involve multiple layers of contracts, each with its own information costs. What is needed, then, is a “vertical” analysis, a study that examines fewer contracts of any one kind but tracks all the contracts the consumer encounters, soup to nuts.*

*This Article presents the first vertical study of boilerplate. It casts serious doubt on the market mechanism and shows that existing scholarship fails to appreciate the full scale of the information cost problem. It then offers two regulatory solutions. The first works within contract law’s unconscionability doctrine, tweaking what the parties need to prove and who bears the burden of proving it. The second, more radical solution involves forcing*

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*both sellers and consumers to confront and minimize boilerplate's information costs—an approach I call “forced salience.” In the end, the boilerplate experience is as deep as it is wide. Our empirical work should reflect that fact, and our policy proposals should too.*

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*I. Introduction*

Forget what your contracts professor told you about offers, counteroffers, and meetings of the minds. Most contracts are merely boilerplate—i.e., take-it-or-leave-it propositions. In theory, that's fine because the same is true of most market transactions. We negotiate over almost nothing. No one haggles with a supermarket cashier over the price of a loaf of bread, or how thinly it is sliced, or whether it's covered by a warranty. Instead, we rely on our collective power as consumers to drive unwanted terms (contractual or otherwise) out of the marketplace. Competition, not negotiation, is the answer.

Scholars have observed for some time, however, that when it comes to boilerplate contracts, market competition may not work as well as theory would have us believe.<sup>1</sup> Boilerplate, these observers maintain, is particularly resistant to market forces because of the high information costs it imposes on consumers: it often arrives late in the transaction, and once it arrives it often consists of overlong, impenetrable gobbledygook. This means that consumers routinely disregard boilerplate in their purchasing decisions, which in turn means that the market cannot be trusted to regulate it.<sup>2</sup>

Recent empirical evidence supports this view. But the studies so far have all been “horizontal”—they examine a single stratum of boilerplate (e.g., an array of software licensing agreements) and assume that it represents the whole transaction. Such studies are certainly useful in that they reveal some of the information costs that boilerplate creates for consumers. But they capture only a single moment in time, one aspect of the overall

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1. See, e.g., Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 STAN. L. REV. 211, 240–48 (1995); Robert A. Hillman, *Online Boilerplate: Would Mandatory Website Disclosure of E-Standard Terms Backfire?*, 104 MICH. L. REV. 837, 840–45 (2006); Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. CHI. L. REV. 1203, 1217–44 (2003); Todd D. Rakoff, *Contracts of Adhesion: An Essay in Reconstruction*, 96 HARV. L. REV. 1174, 1225–27 (1983).

2. See Michael I. Meyerson, *The Efficient Consumer Form Contract: Law and Economics Meets the Real World*, 24 GA. L. REV. 583, 601 (1990) (“[T]here generally will be too few informed consumers to produce a competitive market for contract terms.”).

consumer experience. A more realistic approach would recognize that a consumer's ability to evaluate boilerplate is a function of the information costs of the entire purchase, soup to nuts. What is missing, then, is a "vertical" analysis—a study that examines fewer contracts of any one kind, but places the consumer's encounter with those contracts in a more representative, real-world context, in which the boilerplate represents part of the transaction rather than its entirety. In short, a horizontal study is a still life, whereas a vertical study is a film—a moving picture of the consumer's entire transaction.

This Article presents the results of the first-ever vertical study of boilerplate. The subject of the study, like the subject of the emerging empirics and the foundational case law in the field, is the computer industry. To gauge overall information costs, I purchased ordinary desktop computers from four major vendors, tallied every word of boilerplate to which I became contractually bound, and recorded the point in the transactions at which each term arrived. The result? An average of twenty-five different contracts, comprising almost as many words as a *Harry Potter* novel. And nine out of every ten of those boilerplate terms arrived late in the transaction, long after the seller had been paid.

This study casts doubt on the law's current approach to boilerplate terms, which is to enforce them whenever minimal disclosure and assent requirements have been satisfied.<sup>3</sup> And when the study's results are situated in the current scholarship, they show that even those who doubt the market's efficacy fail to appreciate the full scale of the information cost problem. In the end, these observations lead me to offer two regulatory solutions. The first and more conventional consists of tweaks to the unconscionability doctrine—modest changes in what the parties need to prove under the doctrine and who bears the burden of proving it. The second, more radical solution involves forcing both sellers and consumers to confront and minimize the information

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3. See Korobkin, *supra* note 1, at 1204 ("If the non-drafting party indicates his general assent to the form, courts will enforce the terms contained therein whether or not that party approves of the terms provided, understands those terms, has read them, or even has the vaguest idea what the terms might be about.").

costs that boilerplate creates—an approach I call “forced salience.”

Two clarifications before we continue. First, as the discussion so far implies, I use the term “boilerplate” to mean any written contract drafted by one party and not subject to revision by the other (what others variously call form contracts or contracts of adhesion).<sup>4</sup> For my purposes, then, it does not matter whether boilerplate terms are the same across a given industry or whether they vary from seller to seller. As long as a seller’s contract is a take-it-or-leave-it proposition, it falls within my definition.

Second, this Article examines information costs and their effect on the market from the point of view of the individual consumer—“bottom up,” so to speak. It therefore does not make “top down,” legislative-style judgments about what particular terms are bad for consumers as a class and should therefore be forbidden by fiat. Such judgments have their place, but this is an Article about boilerplate, not about arbitration clauses or class action waivers or hidden credit card fees (important though those topics are). Indeed, as we will see, even boilerplate that goes unread can contain provisions that benefit both parties, and it is not the province of the law to forbid such terms, even if they emerge from an impaired market.<sup>5</sup>

The Article proceeds as follows. Part II summarizes the current debate between those who believe that the market for boilerplate functions reasonably well and those who don’t, and it discusses emerging empirical evidence on the issue. Part III adds a new dimension to those empirics by presenting the results of my vertical study and demonstrating the overwhelming information costs that a real-world transaction imposes on consumers. Part IV uses this real-world perspective to review and reject two common defenses of boilerplate’s enforceability. Finally, Part V details my approach to regulating boilerplate in a world of vertical transactions. Take it or leave it.

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4. See Rakoff *supra* note 1, at 1177 (listing characteristics of a “contract of adhesion”).

5. See *infra* Part V.A (discussing boilerplate as an example of the classic market for lemons).

## *II. The State of the Debate*

To understand why boilerplate's information costs are important, one must first understand how consumers and boilerplate interact in the marketplace. I therefore begin by defining a core issue on which almost everyone agrees—namely, that the enforceability of boilerplate depends on how well the relevant market is functioning. I then describe how consumers' information costs can threaten that market function. This will set the stage for Part III's vertical study of boilerplate's real-world information costs.

### *A. The Common Ground: Contracts as Product Features*

Anyone who has taken (or taught) Contracts in law school is familiar with the typical reaction when the topic turns to contracts of adhesion. By that point in the semester, students have learned to think of a contract as a negotiated arrangement of parties' personal preferences—a meeting of the minds, mediated by the give-and-take of offer and counteroffer. Then, suddenly, they encounter boilerplate and its adhesive terms, and they realize that in real life the vast majority of contracts are take-it-or-leave-it propositions. No negotiation takes place. No minds meet. One party gives; one party takes. Madness!

If the market is functioning properly, however, these objections are unavailing. Nonnegotiable terms are the norm in the modern marketplace. Price is a prime example: consumers don't usually negotiate over the price of the products they buy. Rather, price tends to be a take-it-or-leave-it term, and we trust that competition will punish those sellers that set theirs too high.<sup>6</sup> Likewise, if a consumer desires a product feature that one

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6. "Seller" is my shorthand for the party that introduces the boilerplate into the transaction. Obviously there are circumstances in which the buyer originates the contract, but this Article focuses on consumers, who will usually be buyers and will usually be contract "takers" rather than contract "givers." In a similar vein, this Article limits its scope to consumers and the market failure that attends their contractual transactions. But it may well be the case that the market is no more adept at responding to the contractual preferences of sophisticated business entities than those of consumers. Many of the adhesion

seller does not provide (say, a sunroof on a rental car),<sup>7</sup> the answer is not negotiation; the answer is that the consumer takes his or her business elsewhere—namely, to a competing seller that does offer that feature.

Instead of relying on the individual power of negotiation, then, we rely on the collective power of competition to provide consumers with the array of product features they desire, at a price they are willing to pay. Why shouldn't we approach boilerplate the same way?<sup>8</sup> Let the market punish those sellers whose contracts are too onerous. Consumers will express their

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contracts that I encountered in my study would have applied equally to businesses or had a separate but equally complex contractual counterpart for such purchasers. And Mitu Gulati and Robert Scott have recently shown that even in the sovereign-debt market, where multibillion-dollar banks and hedge funds transact with nation-states, boilerplate language fails to respond to the parties' clear preferences—a phenomenon that Gulati and Scott blame on a suspect familiar to this Article's readers, namely “a business model that relies on herd behavior, fails to provide incentives for innovation and thus rises and falls on volume-based, cookie-cutter transactions.” G. Mitu Gulati & Robert E. Scott, *Introduction: The Three and a Half Minute Transaction: Boilerplate and the Limits of Contract Design* 8 (Columbia Univ. Law Sch., Working Paper No. 410, 2011), available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1945988](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1945988); see also Florencia Marotta-Wurgler, *What's in a Standard Form Contract? An Empirical Analysis of Software License Agreements*, 4 J. EMPIRICAL LEGAL STUD. 677, 680 (2007) [hereinafter Marotta-Wurgler, *Empirical Analysis*] (finding that “[end-user license agreements] associated with products targeted toward the general public are not significantly more pro-seller than the [end-user license agreements] associated with business-oriented products”).

7. For some reason, cars (with and without sunroofs) tend to be the example of choice when discussing market responses to consumer preferences. See, e.g., Clayton P. Gillette, *Rolling Contracts as an Agency Problem*, 2004 WIS. L. REV. 679, 688 (using the example of a red sports car with a sunroof and standard transmission); Korobkin, *supra* note 1, at 1220 (using the example of different colored cars, each with different options available).

8. See, e.g., RICHARD A. POSNER, *ECONOMIC ANALYSIS OF LAW* 144 (8th ed. 2011) (“[W]hat is important is not whether there is haggling in every transaction but whether competition forces sellers to incorporate in their standard contracts terms that protect the purchasers.”); Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age*, 77 N.Y.U. L. REV. 429, 442 (2002) (“[T]he aggregate decisions of many consumers can pressure businesses into providing an efficient set of contract terms in their standard forms.”); Korobkin, *supra* note 1, at 1209 (describing “the market discipline established by the ability of buyers to shop among sellers for the most desirable package of product attributes, including contract terms”); Rakoff, *supra* note 1, at 1251 (“[B]argaining is not essential . . . as long as shopping concerning the particular term takes place.”).



preferences by rejecting those terms in favor of more attractive terms offered by another seller. Unwanted boilerplate will simply disappear from the market, just as ridiculously high prices do.<sup>9</sup>

In other words, a boilerplate term is merely a product feature—no different from price or a sunroof. The law would not normally regulate the price that a car rental company charges its customers or force it to offer sunroofs in its vehicles. For the same reason, the argument goes, the law should enforce a boilerplate contract without regard to its content. Let the market work it out.

This notion of boilerplate as a product feature, regulated by market forces, has become a staple of both the scholarly literature and the case law. Scholars consistently equate contract terms to noncontractual attributes of a product.<sup>10</sup> And perhaps the most well-known case on boilerplate, *ProCD, Inc. v. Zeidenberg*,<sup>11</sup> wholeheartedly embraced this idea in discussing the adhesive “terms of use” that the seller had included with its digital database software:

Terms of use are no less a part of “the product” than are the size of the database and the speed with which the software

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9. See Korobkin, *supra* note 1, at 1219 (explaining that the standard economic model assumes that consumers engage in a cost–benefit analysis of products before they buy and that such behavior drives out of the market all products with undesirable attributes or with production costs that are higher than buyers are willing to pay).

10. See, e.g., Douglas G. Baird, *The Boilerplate Puzzle*, 104 MICH. L. REV. 933, 933 (2006) (equating adhesion contracts to computer screens, microprocessors, and battery power); Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 214 (“There is no reason to distinguish contract terms from any other aspect of a product’s composition.”); David M. Grether et al., *The Irrelevance of Information Overload: An Analysis of Search and Disclosure*, 59 S. CAL. L. REV. 277, 281 n.7 (1986) (“A contract can be regarded as another product attribute . . .”); Arthur Allen Leff, *Contract as Thing*, 19 AM. U. L. REV. 131, 147 (1970) (characterizing adhesion contracts as just one part of “a unitary, purchased bundle”); Margaret Jane Radin, *Boilerplate Today: The Rise of Modularity and the Waning of Consent*, 104 MICH. L. REV. 1223, 1229 (2006) (noting the widespread assumption among symposium participants regarding “the collapse of any distinction between the product . . . on the one hand, and the contract . . . on the other”); Alan Schwartz & Louis L. Wilde, *Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis*, 127 U. PA. L. REV. 630, 671 (1979) (characterizing contract terms as “another product feature” and comparing them to “color varieties”).

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

compiles listings. Competition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy. . . . ProCD has rivals, which may elect to compete by offering superior software, monthly updates, improved terms of use, lower price, or a better compromise among these elements.<sup>12</sup>

This widespread acceptance of boilerplate as just another product feature approach has occasioned a shift in the scholarly literature. Scholars no longer worry about individual negotiation; instead, they worry about whether *ProCD*'s assertion is correct: does competition among sellers over the terms of contracts adequately protect consumer interests? We turn to that question next.

### *B. The Battleground: Market Function or Market Failure*

We have now seen that contract law and scholarship treat boilerplate as simply another product feature, which consumers are free to accept or reject according to their own preferences. Under this view, a functioning market will regulate the content of adhesive contracts just as it regulates other features, such as price. Enforceability of boilerplate accordingly depends on how well the market responds to consumer preferences regarding that "feature" of the transaction—the boilerplate's terms.

To evaluate the market's responsiveness to the boilerplate "feature," however, one must first understand how the market regulates the features of a product as a general matter. In an ideal world, a consumer identifies and evaluates all the features of a product, rating each against the others in an internal cost-benefit calculus that reflects his or her particular preferences. So when evaluating a car rental, I decide how much each of the many product features matters to me, regardless of whether that feature is contractual in nature (e.g., mileage allotment, insurance coverage) or noncontractual (e.g., the model of the car,

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12. *Id.* at 1453 (citation omitted).

its color, whether it has a sunroof).<sup>13</sup> I then perform the same evaluation on the competing car rentals that the market offers.

When I have evaluated all the rental offerings, I choose the one that most closely approaches my optimal balance of features, so as to maximize the utility I derive from the transaction—or I exit the market entirely, having failed to identify any option that justifies the price that the seller demands.<sup>14</sup> Either choice sends a signal to the marketplace about what features I desire and how much I am willing to pay for them, and that signal is combined with the signals from other consumers to produce an efficient array of market options.<sup>15</sup>

This idealized model, known as “compensatory” decisionmaking,<sup>16</sup> makes many assumptions about consumer behavior. Most important, it assumes that consumers are capable of both *acquiring* the information they need and then *processing* that information in a sophisticated cost–benefit analysis, under which the merits of unrelated features like sunroofs and insurance policies are reduced to some common utility metric (price, presumably) by which they can be compared and traded off

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13. In a sense, of course, the latter features could also be considered contractual, in that the rental agency promises to provide a car with those features. But the “contractual” label here is meant to capture the more abstract, intangible kinds of promises, which are often found in boilerplate.

14. Shoshana Shiloh et al., *Individual Differences in Compensatory Decision-Making Style and Need for Closure as Correlates of Subjective Decision Complexity and Difficulty*, 30 PERSONALITY & INDIV. DIFFS. 699, 701 (2001) (“A compensatory strategy entails that the alternative chosen is superior to the other alternatives in the sum of the weighted utilities of all the attributes considered, and leads to maximization of utilities—the main criterion of normative decision making.”). For a more detailed (and quite excellent) explanation of this idealized process in a contracts context, see Korobkin, *supra* note 1, at 1219–22.

15. See R. Ted Cruz & Jeffrey J. Hinck, *Not My Brother’s Keeper: The Inability of an Informed Minority to Correct for Imperfect Information*, 47 HASTINGS L.J. 635, 638 (1996) (explaining that in an ideal world with perfect information, contracts “will contain only efficient terms . . . because all of the terms will, by definition, be fully understood and properly valued”).

16. See Shiloh et al., *supra* note 14, at 701 (explaining that “compensatory” decisionmaking means that “the decision maker clarifies objectives, surveys an array of alternatives, searches for relevant information, assimilates information in an unbiased manner, and evaluates alternatives carefully before making a choice”).

against one another.<sup>17</sup> As discussed below, both assumptions are suspect.

### 1. Information Acquisition

The first flaw in the idealized model of compensatory decisionmaking is that it assumes that consumers can efficiently acquire the necessary information about the options the market offers.

Suppose I want to rent a car with two particular features: I want it to be reliable and I want it to have a sunroof. It is relatively easy to distinguish cars that have sunroofs from those that do not. It might be harder to determine whether a car is reliable. And if the cost of acquiring information about reliability exceeds the value I attach to that feature, I will make my decision without regard to reliability.<sup>18</sup> It is rational for me to do so, given the cost of information acquisition, but my choice nevertheless sends the wrong signal to the marketplace because the information acquisition cost prevented me from expressing my preference with regard to reliability.

If we view a boilerplate contract as just another product feature, then the information acquisition problem requires us to examine how difficult it is for consumers to learn the terms of the contract and make compensatory judgments accordingly. Contract law has several mechanisms that address this issue, such as the requirement that terms be reasonably certain before a contract is formed,<sup>19</sup> the distinction between an acceptance and a counteroffer,<sup>20</sup> and limitations on the modification of contracts after formation.<sup>21</sup> In various ways, these mechanisms mediate the tension between the need to arrive at a meaningful agreement

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17. Grether et al., *supra* note 10, at 287 (“Consumers could fail to choose the best because of high costs of acquiring information about market choices . . . or because of high costs of processing information about market choices . . .”).

18. *See id.* at 287–88 (explaining that “even rational consumers fail to consider all options in the face of high information costs”).

19. RESTATEMENT (SECOND) OF CONTRACTS § 33 (1981).

20. *Id.* § 59.

21. *Id.* § 89.

and the fact that all contracts are incomplete—i.e., that some contractual terms are unknown or become known only after the parties are heavily invested in the transaction.<sup>22</sup>

Despite these existing doctrinal mechanisms, there is compelling evidence that current contract law does not adequately address consumers' information acquisition costs, such that consumers often cannot engage in compensatory decisionmaking with regard to the boilerplate terms that accompany many common transactions. Indeed, the significance of those costs has been one of the most hotly contested topics in contract case law and scholarship over the last fifteen years.<sup>23</sup>

On one side of the debate are those who have no objection to delaying the availability of boilerplate terms until other aspects of the transaction are well underway. The best example of this approach is, again, Judge Easterbrook's famous *ProCD, Inc. v. Zeidenberg*,<sup>24</sup> which stands for the proposition that contractual terms withheld from a consumer until late in the transaction are nevertheless enforceable, as long as the consumer had a chance to return the product if the terms were not acceptable.<sup>25</sup> After all, the argument goes, consumers know that modern transactions often come with boilerplate attached.<sup>26</sup> Some courts have followed *ProCD*, and some scholars have defended it.<sup>27</sup>

In other quarters, however, *ProCD*'s belief in a functioning market has not been as well received. The main objection is that even if the late-arriving boilerplate gives consumers the option to

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22. See STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 299–301 (2004) (discussing incomplete contracts).

23. See sources cited *infra* notes 24–29.

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

25. *Id.* at 1452.

26. See, e.g., *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1149–50 (7th Cir. 1997) (Easterbrook, J.) (following *ProCD* and noting that late-arriving boilerplate contains terms that consumers value as part of the transaction).

27. For courts, see, e.g., *id.* at 1148–49; *Meridian Project Sys., Inc. v. Hardin Constr. Co.*, 426 F. Supp. 2d 1101, 1107 (E.D. Cal. 2006); *i.Lan Sys., Inc. v. Netscout Serv. Level Corp.*, 183 F. Supp. 2d 328, 338 (D. Mass. 2002). For scholars, see, e.g., Eric A. Posner, *ProCD v Zeidenberg and Cognitive Overload in Contractual Bargaining*, 77 U. CHI. L. REV. 1181, 1194 (2010) (“[*ProCD*] will be remembered as a masterpiece of realist judging, one of the great opinions in the canon of contract law cases.”).

reject its terms, by that point they have invested too much time and attention to return the product (i.e., reject the “offer”) and go back to square one. For example, in *ProCD*’s world, consumers who want to comparison-shop for personal computers must purchase a computer, bring it home, and search it for boilerplate (both within its box and once it is started up)—and then must repeat this process for each and every computer they are considering.<sup>28</sup> This imposes arguably insuperable information acquisition costs, and, for this reason, many commentators and several courts have rejected *ProCD* and argued against the enforceability of late-arriving boilerplate.<sup>29</sup>

As we will see below, a common response to the problem of information acquisition costs is to require the disclosure of

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28. *Cf. Hill*, 105 F.3d at 1150 (relying on *ProCD* to enforce contractual terms found in the box of a mail-order computer).

29. For courts, see, e.g., *Klocek v. Gateway, Inc.*, 104 F. Supp. 2d 1332, 1339–41 (D. Kan. 2000) (discussing why the court was not persuaded to follow the reasoning used in *Hill* and *ProCD*); *Novell, Inc. v. Network Trade Ctr., Inc.*, 25 F. Supp. 2d 1218, 1230–31, 1230 n.17 (D. Utah. 1997) (following the “majority” position that late-arriving shrinkwrap licenses are invalid “contracts of adhesion, unconscionable, and/or unacceptable pursuant to the U.C.C.”), *vacated on other grounds*, 187 F.R.D. 657 (D. Utah 1999); *Wachter Mgmt. Co. v. Dexter & Chaney, Inc.*, 282 Kan. 365, 377–78 (2006) (adhering to “traditional contract principles” and treating shrinkwrap agreements as a proposal to modify the terms of the contract pursuant to UCC 2-209). For commentators, see, e.g., Jean Braucher, *Amended Article 2 and the Decision to Trust the Courts: The Case Against Enforcing Delayed Mass-Market Terms, Especially for Software*, 2004 WIS. L. REV. 753, 755 [hereinafter Braucher, *Decision to Trust the Courts*] (arguing that a buyer does not agree to a seller’s delayed mass-market terms); Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93, 110–11 (1997) (arguing that agreements received so late in the transaction dissuade consumers from rejecting the terms because of the high transaction costs already endured by the consumer); Korobkin, *supra* note 1, at 1265 (arguing against enforcement of late-arriving boilerplate because buyers, “[a]fter the purchase, . . . [have] already invested in the particular products, and returning them would . . . require[] expending additional time and effort”). Note that the sunk cost effect might cause an actual consumer to be even less likely to return the computer than the theoretical rational consumer. Shmuel I. Becher, *Behavioral Science and Consumer Standard Form Contracts*, 68 LA. L. REV. 117, 129 (2007) (“Since the efforts to become familiar with the transaction’s details are sunk, a natural tendency, according to the framework proposed by behavioral law and economics, is to ignore potentially adverse terms that the [standard form contract] may contain, although this tendency is irrational according to traditional law and economics.”).

boilerplate earlier in the transaction. Such an approach can indeed substantially decrease those costs—a necessary and welcome step towards a functioning market. It is not, however, sufficient all on its own. Something else stands in the way, a second and even more problematic shortcoming of the idealized model of compensatory decisionmaking: the cost of *processing* information about a product. It is to that issue that we now turn.

## 2. Information Processing

The second flaw in the idealized model of compensatory decisionmaking has to do with consumers' ability to process information once they acquire it. Even if information about each product and all its features is available, such that information acquisition costs are low, consumers frequently lack the capacity to evaluate that information and express their preferences accordingly.

The problem here is information overload. Again, the car rental example: Rental cars come in many shapes and sizes, with a variety of features (both contractual and not): make, model, color, transmission, mileage allotment, insurance coverage, and more. Compensatory decisionmaking would require me to decide how much each feature matters, rate it against the other features, produce some sort of aggregate score, and then do the same for the many other rental options the market offers.

This is a demanding information processing task. I must make a high number of feature-to-feature comparisons and then account for both the gradations of difference among them and the value I attach to each such gradation. Do I value a sunroof more than an automatic transmission? If so, by how much? And that's just two features. Contemplate the added complexity that would come with a third—say, color. Would I choose an orange car with a sunroof and manual transmission over a blue car with no sunroof and an automatic transmission?

One can see how quickly the cost of processing such information rises as market options expand. Consider the variety of choices available for everyday purchases like food:

An ordinary supermarket contains 285 varieties of cookies, including 21 chocolate chip options alone; 20 different types of

Goldfish crackers; 13 “sports drinks,” 65 “box drinks,” and 85 flavors of juice; a dozen varieties of Pringles potato chips; 80 pain relievers; 40 lipstick shades; 16 varieties of instant mashed potatoes, 75 different instant gravies, and 120 different pasta sauces; 175 different salad dressings; and a whopping 275 types of cereal.<sup>30</sup>

And keep in mind that not only is there often a huge number of competing products, but the products differ from one another along multiple dimensions such that each has multiple features to be weighed and compared. Do I want low-fat, Chewy Chips Ahoy or Double-Stuf Oreos?<sup>31</sup>

Not surprisingly, then, empirical studies show that, for all but the most basic transactions, the cost of processing information makes compensatory decisionmaking a mere pipe dream.<sup>32</sup> Consumers abandon a purely compensatory strategy when faced with as few as six options,<sup>33</sup> process no more than five

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30. Simona Botti & Sheena S. Iyengar, *The Dark Side of Choice: When Choice Impairs Social Welfare*, 25 J. PUB. POL'Y & MKTG. 24, 26 (2004).

31. The correct answer is the Oreos.

32. See Jacob Jacoby, *Perspectives on Information Overload*, 10 J. CONSUMER RES. 432, 435 (1984)

[T]he key finding to emerge [from studies of consumer decisionmaking] is that consumers stop far short of overloading themselves. They tend to examine only small proportions of the brand and attribute information that is available. . . . Few findings regarding consumer behavior have proven to be as consistent across so many different procedures, contexts, products, investigators, and so on.

See also Naresh K. Malhotra, *Information Load and Consumer Decision Making*, 8 J. CONSUMER RES. 419, 427 (1982) (summarizing studies that show—with remarkable consistency—a decline in optimal decisionmaking after the number of data inputs exceeds ten). These findings seem to be offshoots of the theory of the “magic number seven,” the conclusion from cognitive science that people generally cannot retain and process more than approximately seven bits of information in their short-term memories. See George A. Miller, *The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information*, 63 PSYCHOL. REV. 81, 95 (1956) (synthesizing research on information processing in different contexts and concluding that “the span of absolute judgment and the span of immediate memory impose severe limitations on the amount of information that we are able to receive, process, and remember”).

33. Denis A. Lussier & Richard W. Olshavsky, *Task Complexity and Contingent Processing in Brand Choice*, 6 J. CONSUMER RES. 154, 164 (1979).



features of any particular option,<sup>34</sup> and make decisions essentially at random when faced with just four options that have four features each.<sup>35</sup> And the low levels of complexity at issue in these studies do not even begin to represent the amount of information that consumers frequently encounter in the real world.<sup>36</sup> Moreover, not only is it clear that the typical consumer can only process a limited (and surprisingly small) amount of product information, but there is also some empirical evidence that, once that limit is reached, providing more information and options is worse than useless: it may actually reduce the consumer's ability to make the right choice.<sup>37</sup>

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34. *Id.* at 162; *see also* Malhotra, *supra* note 32, at 423 (“[T]he probability of correct choice decreases significantly as the number of attributes on which information is provided increases from five to 15, 20, or 25.”).

35. Grether et al., *supra* note 10, at 297. Grether and his co-authors curiously conclude that these findings support the proposition that “consumers do not experience serious problems as a result of the amount of information that markets and the state now generate,” *id.* at 294—a conclusion for which other commentators rightly take them to task. *See* Melvin Aron Eisenberg, *Text Anxiety*, 59 S. CAL. L. REV. 305, 308–09 (1986); Roberta Romano, *A Comment on Information Overload, Cognitive Illusions, and Their Implications for Public Policy*, 59 S. CAL. L. REV. 313, 317 (1986).

36. The largest of the studies involve options that number in the teens or twenties, with a similar number of features per option. *E.g.*, Malhotra, *supra* note 32, at 420 (twenty-five options with up to twenty-five features). As Jacob Jacoby points out in commenting on a sixteen-option, sixteen-feature study, the real world presents consumers with considerably more information than that. *See* Jacoby, *supra* note 32, at 434 (noting that there are approximately 150 cereal brands on the market and their packaging can contain over 100 items of information).

37. *See* Kristin Diehl, *When Two Rights Make a Wrong: Searching Too Much in Ordered Environments*, 42 J. MKTG. RES. 313, 314 (2005) (listing reasons why more information can lead to worse decisions); Sheena S. Iyengar & Emir Kamenica, *Choice Proliferation, Simplicity Seeking, and Asset Allocation*, 94 J. PUB. ECON. 530, 533–34 (2010) (finding small but significant negative effect on 401(k) investment decisions as employees were offered more fund options); Sheena Sethi-Iyengar et al., *How Much Choice Is Too Much? Contributions to 401(k) Retirement Plans*, in PENSION DESIGN AND STRUCTURE: NEW LESSONS FROM BEHAVIORAL FINANCE 83, 88–91 (Olivia S. Mitchell & Stephen P. Utkus eds., 2004) (finding a 1.5% to 2% decrease in employee 401(k) participation for every ten funds added to plan); Paul Slovic, *Toward Understanding and Improving Decisions*, in 2 HUMAN PERFORMANCE AND PRODUCTIVITY: INFORMATION PROCESSING AND DECISION MAKING 157, 168 (William C. Howell & Edwin A. Fleishman eds., 1982) (reporting study in which horse-race handicappers' predictions failed to improve and actually became

So how do consumers respond to these insuperable information costs? They simplify, usually by identifying just a few salient, easily processed features and focusing on those, or at least using them as a screening device to reduce the number of products under consideration to a more manageable level at which compensatory comparison is possible. They try to make a satisfactory choice by sacrificing inquiry into certain features in favor of pursuing inquiry into few, salient others—an approach known as “satisficing.”<sup>38</sup>

Replacing a purely compensatory approach with a satisficing strategy makes sense for consumers. Indeed, they may have no other choice, given their inherent cognitive limitations and the presence of so much information in the marketplace. But satisficing has important implications for whether we can rely on the market to adequately account for consumer preferences. After all, by definition satisficing results in something other than an optimal expression of consumer preferences.<sup>39</sup> In other words, if a particular product feature does not make the cut during the satisficing process—i.e., if it is not one of the features that are salient to consumers when they screen available options—then there is less reason to believe that the market is sending the right signal to sellers about the desirability of that feature.<sup>40</sup>

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more inconsistent as available information increased); *see also* Jeffrey Davis, *Protecting Consumers from Overdisclosure and Gobbledygook: An Empirical Look at the Simplification of Consumer-Credit Contracts*, 63 VA. L. REV. 841, 847–49 (1977) (citing studies).

38. Grether et. al, *supra* note 10, at 287–88. The term *satisficing* was coined by Herbert Simon, one of the godfathers of behavioral economics, in Herbert A. Simon, *Rational Choice and the Structure of the Environment*, 63 PSYCHOL. REV. 129, 136 (1956).

39. Over the years, different commentators have used different definitions of satisficing. *See, e.g.*, Eisenberg, *supra* note 1, at 214–15 (defining *satisficing* as searching until one finds an option that meets certain predetermined criteria at which point the choice is made and the search stops); Grether et al., *supra* note 10, at 287–88 (defining *satisficing* as used in main text above); *see also* Korobkin, *supra* note 1, at 1223–25 (describing various simplifying strategies that consumers use in response to information processing costs). For present purposes, these distinctions make no difference because they all stand for the proposition that, in the real world, consumers depart from compensatory decisionmaking.

40. *See* Botti & Iyengar, *supra* note 30, at 27 (“[T]he objective of reducing the cognitive costs involved in making the choice can produce suboptimal

What do information processing costs mean for boilerplate? According to contract law, very little. Courts and legislatures tend to assume that the problem, if any, is information acquisition, and thus that early disclosure of terms is all that consumers need.<sup>41</sup> Other than the anemic doctrine of unconscionability (to which we will return later),<sup>42</sup> current law is largely silent on the issue.<sup>43</sup>

The law may be silent, but a chorus of commentators has argued that information processing costs can routinely prohibit the reading of boilerplate even when it is provided early in the transaction.<sup>44</sup> And empirical studies (mostly of the software industry) have begun to confirm this suspicion that information acquisition is only half of the problem. One study of more than six hundred software contracts found a lack of correlation between competitive market conditions and the content of boilerplate

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decisions and subsequent dissatisfying outcomes.”); Naresh K. Malhotra, *Reflections on the Information Overload Paradigm in Consumer Decision Making*, 10 J. CONSUMER RES. 436, 438 (1984) (“While consumers may employ heuristics to limit the intake of information, these heuristics may often involve a tradeoff between simplifying and optimizing.”). Even those who have strong faith in the market admit that satisficing departs from the optimal. *E.g.*, Grether et al., *supra* note 10, at 287 (noting that a consumer engaged in satisficing could make a choice “that fails to include the consumer’s most preferred product—the one which would be chosen if every product in the market were inspected”).

41. See Omri Ben-Shahar & Carl E. Schneider, *The Failure of Mandated Disclosure*, 159 U. PA. L. REV. 647, 657–58 (2011) (reviewing the law on mandatory disclosure of contract terms).

42. See *infra* Part V.A.

43. The incapacity doctrine is one way in which contract law already accepts the proposition that cognitive ability should play a role in enforceability, at least at the extreme. See Eisenberg, *supra* note 1, at 212–13 (“[T]he doctrine of capacity rests on the ‘assumption that incompetents, properly defined, require protection from their own actions,’ so that the premise of the bargain principle, that a contracting party will act with full cognition to rationally maximize his subjective expected utility, is not fulfilled.” (footnote omitted)). For a comprehensive review of contract doctrines that address information processing costs for boilerplate, see Hillman & Rachlinksy, *supra* note 8, at 454–60.

44. *E.g.*, Eisenberg, *supra* note 1, at 247; Gillette, *supra* note 7, at 682; Hillman, *supra* note 1, at 850; Korobkin, *supra* note 1, at 1217; Rakoff, *supra* note 1, at 1226.

terms,<sup>45</sup> suggesting that boilerplate does not respond to competitive pressures.<sup>46</sup> And in a study of online software purchases, Florencia Marotta-Wurgler tracked one month of Internet click-stream data for 47,399 website visitors.<sup>47</sup> Her finding? Even if the seller forces consumers to click “I agree” and provides a direct link to the boilerplate, only one in every two hundred consumers reads it—and that’s under a very liberal definition of “read” that includes any consumer that spends at least one second on the page where the adhesive terms are available.<sup>48</sup> (Relaxing these limitations led to an even lower reading rate.)<sup>49</sup>

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45. Florencia Marotta-Wurgler, *Competition and the Quality of Standard Form Contracts: The Case of Software License Agreements*, 5 J. EMPIRICAL LEGAL STUD. 447, 451 (2008). In fact, a competitive market might be worse for consumers; monopolists can afford to offer decent contract terms, whereas “competition forces sellers to exploit the biases and misperceptions of their customers.” Oren Bar-Gill, *Competition and Consumer Protection: A Behavioral Economics Account 2* (NYU Ctr. Law, Econ. & Org., Working Paper No. 11-42, 2011).

46. A related study found that boilerplate that was available early in the transaction was no more pro-consumer than boilerplate that arrived later, suggesting that lowering the costs of information acquisition does not necessarily lead to different contract terms. Florencia Marotta-Wurgler, *Are “Pay Now, Terms Later” Contracts Worse for Buyers? Evidence from Software License Agreements*, 38 J. LEGAL STUD. 309, 333 (2009). Of course, this finding might be read to show that all boilerplate is responsive to consumer preferences, rather than that no boilerplate is. And the study’s absolute measure of “pro-consumer” versus “pro-seller” should be taken with a grain of salt because it uses the methodology from an earlier study in which the maximum pro-consumer score for a contract was six and the maximum pro-seller score was seventeen. Marotta-Wurgler, *Empirical Analysis*, *supra* note 6. Nevertheless, for comparative purposes—determining whether one contract is more pro-consumer than another—the methodology is sufficiently reliable.

47. Florencia Marotta-Wurgler, *Does Contract Disclosure Matter?*, 167 J. INSTITUTIONAL & THEORETICAL ECON. 94, 106–10 (2012) [hereinafter Marotta-Wurgler, *Does Contract Disclosure Matter?*].

48. *See id.* at 108 (finding that only 0.52% of such consumers spend more than one second on the contract web page); *see also id.* at 110 (concluding that “the primary cost [to consumers] lies not in locating and accessing EULAs, but rather in reading and assessing contract terms”).

49. *See id.* at 108 (finding a rate of only 0.13% when the boilerplate is not directly called to the consumer’s attention and 0.00% when it takes more than one click of the mouse to locate it).

This, in sum, is the boilerplate problem. If a contract term is merely a product feature, then more terms mean more features. More features mean more complexity. More complexity increases the use of satisficing strategies that eliminate boilerplate from consumers' decisionmaking calculus. And if consumers routinely eliminate boilerplate from their decisionmaking, the justification for its enforcement—the protection of the marketplace through the collective power of competition—goes away.

### *III. A Vertical Study of Boilerplate*

We have now seen that the problem of information costs casts doubt on whether the market registers consumer preferences regarding boilerplate. We have also seen some emerging empirics that suggest that this concern is more than theoretical. In this Part, I offer a different lens through which to view the boilerplate problem: a “vertical” study that contextualizes both information acquisition and information processing within the realities of consumer decisionmaking.

#### *A. Verticality's Advantages*

The existing empirical studies that examine information costs in the world of boilerplate share one important limitation: they examine one stratum of individual contracts, all of a kind, and assume that this single contract defines the entire transaction.<sup>50</sup> Even the click-stream study, which tracked actual consumer interactions with boilerplate, limited itself to interactions with a single kind of contract in a simple one-off transaction (the purchase of a stand-alone item of software).<sup>51</sup>

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50. See studies cited *supra* notes 6, 45–49. This is not meant as a criticism; those studies were designed to measure something other than the overall consumer experience. For example, one study was primarily interested in identifying the balance of pro-seller versus pro-consumer terms. Marotta-Wurgler, *Empirical Analysis*, *supra* note 6, at 679.

51. See Marotta-Wurgler, *Does Contract Disclosure Matter?*, *supra* note 47 (examining software licensing agreements in the context of purchasing a single item of software). The issue is not that the click-stream study focuses only on software licensing; the issue is that by focusing on any one kind of contract and

That sort of “horizontal” analysis is revealing, but its focus on a single kind of contract, and nothing else, means that it sacrifices depth for breadth. In contrast, a “vertical” analysis would look at fewer contracts of any one kind, but would situate the consumer’s encounter with those contracts in the real world—an encounter in which the boilerplate is only part of a transaction, not its entirety. Consider software licensing. Sometimes consumers encounter software boilerplate in the sort of one-off horizontal context that earlier studies have focused on.<sup>52</sup> But other times they encounter software boilerplate as part of an overall shopping experience, an experience that also presents noncontractual features to be evaluated, and indeed often involves multiple vendors and multiple contracts.<sup>53</sup> Measuring the consumer experience vertically, from top to bottom, therefore provides a uniquely instructive view of information costs and the tradeoffs that consumers make in deciding which features to evaluate and when.

In other words, a horizontal study tells us something about the practices of a given industry, but it tells us less about the consumer experience in dealing with that industry and the true information costs that the industry imposes on consumers. A vertical study can overcome that deficiency. After all, if boilerplate is just one feature of a product, then a consumer’s ability to acquire and process information about boilerplate is not a function of the complexity of any one contract. It is a function of the complexity of the entire transaction, soup to nuts. Therefore, if we want to know *when* in the transaction the consumer

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assuming that it represents the totality of the transaction, one can draw only limited conclusions about consumer ability to acquire and process information in a real-world context.

52. Thus the saying in the software world, “The license is the product.” See, e.g., Robert W. Gomulkiewicz, *The License Is the Product: Comments on the Promise of Article 2B for Software and Information Licensing*, 13 BERKELEY TECH. L.J. 891, 896 (1998) (“For most software products, the license is the product; the computer program provides functionality to the user, but the license delivers the use rights.”).

53. See Leff, *supra* note 10, at 146–47 (noting that “when one stands far enough back from the whole deal, from the whole process of goods buying, what one sees is a unitary, purchased bundle” and that boilerplate is just one part of “the whole ‘set’”).

encounters boilerplate (a factor of vital importance to information acquisition costs) and *how much* total transactional complexity the consumer encounters (a factor of vital importance to information processing costs), a vertical study is the way to go.<sup>54</sup>

What would such a study look like? As explained in more detail below, my approach was to purchase personal computers and measure both the volume of boilerplate (the “how much” factor) that came with them, and the point in the transactions at which I encountered each bit of boilerplate (the “when” factor). I chose this approach for four reasons.

First, a computer purchase is exactly the kind of transaction that shows the advantages of a vertical analysis. From the consumer’s point of view, buying a computer is a single transaction, with a one-time, lump-sum price term. Yet the product to be purchased presents the consumer with many different features that emerge at different points in time. Examining such a transaction therefore allows one to track both the “when” and the “how much” aspects of information cost.

Second, most of the scholarship and case law in this area focuses on the computer industry. Indeed, some of the foundational cases on consumers and boilerplate specifically involve computer purchases.<sup>55</sup> Therefore, regardless of one’s views on the study’s broader application, it is germane to an important debate in the field—and to an industry that generates around \$50 billion annually from such purchases.<sup>56</sup>

Third, a computer purchase involves a high degree of contractual complexity. It thus demonstrates the critical role that information costs play in boilerplate’s enforceability. One can

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54. Of course, a vertical case study of this kind constitutes just one example of a consumer’s encounter with boilerplate. In a sense, then, this approach is the mirror opposite of the horizontal approach in that it sacrifices breadth for depth.

55. *E.g.*, *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir. 1997); *Klocek v. Gateway, Inc.*, 104 F. Supp. 2d 1332 (D. Kan. 2000).

56. The recent economic downturn has affected personal computer sales, dropping domestic earnings from \$51.3 billion in 2007 to a low of \$45.8 billion in 2009. DATAMONITOR, *PCS IN THE UNITED STATES* 10 (2011). But the numbers have begun to bounce back, with \$47.2 billion earned in 2010—and volume rose steadily even during the recession, from 62.4 million units in 2006 to 75.7 million in 2010. *Id.* at 10–11.

imagine transactions with comparable vertical complexity (for example, a vacation package that includes flights, hotels, tours, and of course a rental car), as well as transactions that are much simpler (for example, buying a loaf of bread). But as we will see in Part V,<sup>57</sup> part of my thesis is that the enforceability of boilerplate should vary with the overall complexity of the transaction, and starting with an example that involves high complexity helps drive that point home.

Finally, contracts and complexity are inextricably intertwined in the market for information goods. Sellers have significant incentives to offer merchandise that, like a computer system, comprises many different products that could have been sold separately—and to then use boilerplate to restrict consumers' resale of the individual products within. This strategy, known as bundling, allows sellers to sell a set of goods to consumers at a unitary price even though particular consumers attach disparate values to the set's individual components.<sup>58</sup> For example, the Microsoft Office Home and Student suite, available for \$150, contains four separate programs (Word, Excel, PowerPoint, and OneNote).<sup>59</sup> Some consumers may value Word, Excel, and PowerPoint at \$40 each and OneNote at \$30, whereas others value Word, Excel, and PowerPoint at \$30 each and OneNote at \$60. Selling the suite at \$150 satisfies both groups and generates more surplus than could be gained from selling the same consumers each program as a

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57. In particular, see the discussion of procedural unconscionability in Part V.A.

58. Nobel laureate George Stigler first introduced this concept in George J. Stigler, *United States v. Loew's Inc.: A Note on Block-Booking*, 1963 SUP. CT. REV. 152, 152 (1963) (discussing the strategy as employed through the concept of "block-booking" of movies). The "bundling" label came later. See, e.g., Yannis Bakos & Erik Brynjolfsson, *Bundling Information Goods: Pricing, Profits, and Efficiency*, 45 MGMT. SCI. 1613, 1613 (1999) (studying the strategy of "bundling" a large number of information goods).

59. See *Buy Microsoft Office 2010*, MICROSOFT, [http://office.microsoft.com/en-us/buy/buy-office-2010-FX101843016.aspx?WT.mc\\_id=ODC\\_ENUS\\_OAT\\_ExcelHome\\_MonBuy](http://office.microsoft.com/en-us/buy/buy-office-2010-FX101843016.aspx?WT.mc_id=ODC_ENUS_OAT_ExcelHome_MonBuy) (last visited Feb. 4, 2013) (listing the "one household, three PCs" price) (on file with the Washington and Lee Law Review). The Microsoft Office example appears in CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* 75–76 (1998).



standalone product at a unitary price.<sup>60</sup> But for bundling to succeed, the seller must be able to prevent arbitrage;<sup>61</sup> the strategy will not work if, for example, a consumer who values OneNote at \$30 can unbundle it from the suite and resell it as a standalone program to a consumer who values it at \$60.<sup>62</sup> Enter boilerplate, which restricts consumers from doing that exact thing.

For these reasons, then, a vertical study of the information costs inherent in the purchase of an entire computer system can teach us a lot about boilerplate enforceability in the real world. To such a study we now turn.

### B. Study Design

The subject matter of the study was the purchase of desktop computers from the four top sellers of Windows-based computer systems (Acer, Dell, HP, and Toshiba), which together make up two-thirds of the domestic computer market.<sup>63</sup> Each order comprised just a single basic desktop unit and the software and accessories that were included in the base price; any additional hardware, software, or other option that required additional fees was declined. I paid in full at the time the system was ordered, had it shipped, opened the box, set it up, and started up various

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60. Microsoft sells the components individually as well as in a suite—a practice known as “mixed bundling.” See William James Adams & Janet L. Yellen, *Commodity Bundling and the Burden of Monopoly*, 90 Q.J. ECON. 475, 475 (1976). The standalone versions, however, are sold at a significant markup. See *Buy Microsoft Office 2010*, *supra* note 59 (listing OneNote at \$80 and the other components at \$140).

61. See Bakos & Brynjolfsson, *supra* note 58, at 1614 (noting that one of the conditions for analyzing bundling as a device for price discrimination is “no reselling”).

62. *Id.*

63. See Gartner, Inc., *Gartner Says Worldwide PC Shipments in Fourth Quarter of 2011 Declined 1.4 Percent; Year-End Shipments Increased 0.5 Percent* (Jan. 11, 2012), <http://www.gartner.com/it/page.jsp?id=1893523> (last visited Feb. 4, 2013) (showing HP market share at 23.1%, Dell at 22.4%, Toshiba at 10.7%, and Acer at 9.8%, for a total of 66.0%) (on file with the Washington and Lee Law Review). Due to funding limitations, the other major vendor (Apple, at 11.6%) was not included.

programs that came with it. All along the way, I kept track of the boilerplate I encountered—every contract term that was presented to me in a take-it-or-leave-it fashion.<sup>64</sup>

The most difficult part of the study design was deciding which contracts should count. In the Dell purchase, for example, I collected data on 186 different potential contracts. But determining which of those 186 should be included in my tally required two judgment calls.

### *1. Assumptions About Enforceability*

The first and most important judgment call was to decide which of the various terms I encountered would be viewed as enforceable under current law. My goal was to be very conservative—to include only those contracts that a court would enforce without any real controversy. I achieved this goal through the use of two narrowly conceived enforcement criteria: the acceptance criterion and the availability criterion.

The acceptance criterion meant that I counted only those contracts to which I had clearly and affirmatively manifested assent.<sup>65</sup> Usually this assent took the form of the classic “I agree” or “I accept” mouse click—the classic “click-wrap” contract.<sup>66</sup> So, for example, at the end of Dell’s online order process I encountered the screen depicted in Figure 1, which asked me to affirmatively manifest agreement to Dell’s Terms and Conditions of Sale. Any court would find that selecting the “I AGREE” option and then submitting the order, as I did, was a manifestation of

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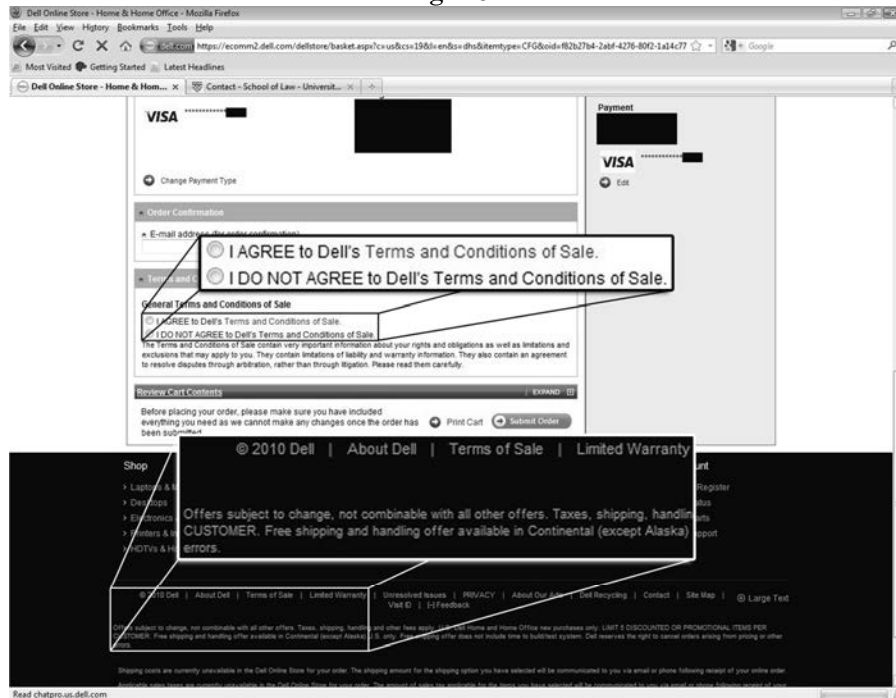
64. This meant that contractual terms for which I had an array of options (for example, shipping) were not included in the tally.

65. Some courts have upheld adhesion contracts without explicit manifestations of assent. *See, e.g., Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1150 (7th Cir. 1997). But I applied an explicit acceptance criterion because other cases suggest that terms that arrive after purchase are binding only if acceptance is unequivocal. *See, e.g., Klocek v. Gateway, Inc.*, 104 F. Supp. 2d 1332, 1341 (D. Kan. 2000).

66. The origin of the term *click-wrap* is obscure, but it at least dates back to 1996. *See Koh Su Haw, E-Commerce: Technology Can Bypass the Legal Pitfalls*, BUS. TIMES (Singapore), Oct. 14, 1996, at 16 (defining “click-wrap”).

assent to be bound.<sup>67</sup> Those Terms and Conditions of Sale therefore counted in my tally.

Figure 1



In contrast, the bottom of the screen in Figure 1 contained some classic, barely perceptible “fine print” (e.g., “Offers subject to change.”) in gray font on a black background. These terms were not included in my analysis. Although some courts would undoubtedly enforce them, the lack of an affirmative manifestation of assent meant that enforceability was too uncertain to merit inclusion under my conservative assumptions.<sup>68</sup> Similarly, some courts would enforce the various policies that one could access by clicking on the hyperlinks above

67. See Nathan J. Davis, *Presumed Assent: The Judicial Acceptance of Click-Wrap*, 22 BERKELEY TECH. L.J. 577, 583 (2007) (“[C]ourts have almost uniformly found assent when the user clicks while having notice of the terms.”).

68. *E.g.*, *Specht v. Netscape Commc’ns Corp.*, 306 F.3d 17, 19–30 (2d Cir. 2002) (finding no online contract formation when assent was ambiguous and terms were relegated to the bottom of the web page).

the fine print (e.g., “© 2010 Dell” and “Limited Warranty”)<sup>69</sup>—but not all courts would do so,<sup>70</sup> so I did not count them either. The same goes for the hyperlinks indicated by the arrow in Figure 2; those links were prominently displayed *next to* a contract to which I did clearly manifest assent (the Terms and Conditions of Sale), but it was not clear that acceptance of the latter constituted acceptance of the additional contractual terms that one would reach by following those links, so I did not include them in my tally.

My second criterion, availability, meant that the terms to which I manifested assent had to be easily accessible if they were to count in the overall tally. In the online context, it is common for contract terms to be located on a separate web page from the assent mechanism, rather than being forced upon the user as part of that mechanism.<sup>71</sup> Figure 1’s reference to Dell’s Terms and Conditions of Sale provides an example; those terms were available with a single click of a mouse on the prominent hyperlink next to “I AGREE.” To remain conservatively consistent with the relevant case law, I counted such terms only if one could follow the given hyperlink (or nonhyperlinked web address) and find them no more than two web pages away.<sup>72</sup> In

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69. *E.g.*, *Burcham v. Expedia, Inc.*, No. 4:07CV1963, 2009 WL 586513, at \*4 (E.D. Mo. Mar. 6, 2009) (finding defendant bound by browse-wrap agreement even absent affirmative assent because “[a] link to the full text of the user agreement is found at the bottom of the very web page that [defendant used]” and “[t]he user agreement specifically states that users consent to be bound . . . by . . . using the website”); *Pollstar v. Gigmania, Ltd.*, 170 F. Supp. 2d 974, 982 (E.D. Cal. 2000) (refusing to dismiss breach of contract claim involving “browse wrap license” and noting that although “the user is not immediately confronted with the notice of the license agreement, this does not dispose of [plaintiffs] breach of contract claim”).

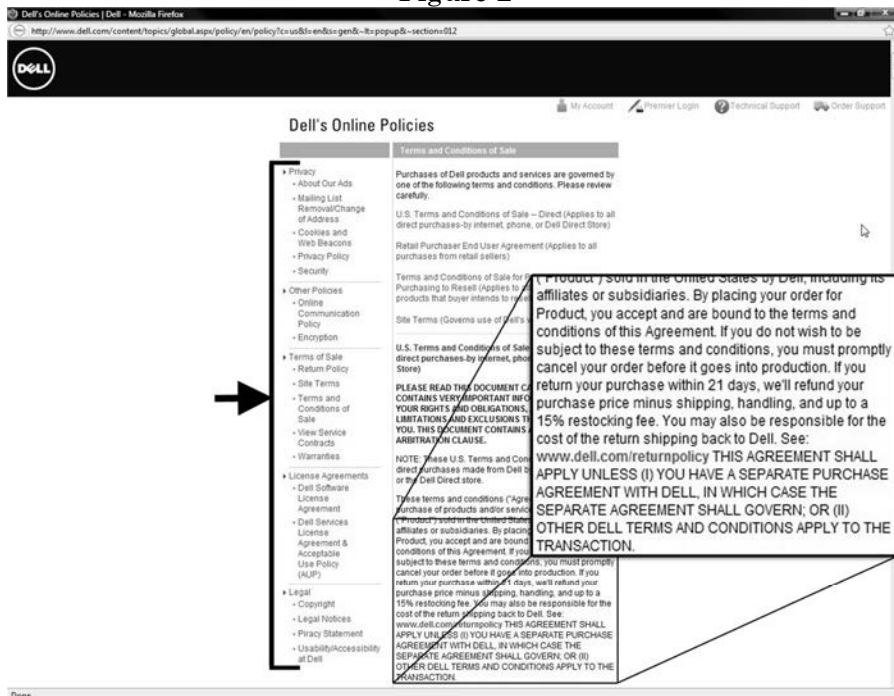
70. *E.g.*, *Specht*, 306 F.3d at 19–30.

71. See Cheryl B. Preston & Eli W. McCann, *Unwrapping Shrinkwraps, Clickwraps, and Browsewraps: How the Law Went Wrong from Horse Traders to the Law of the Horse*, 26 *BYU J. PUB. L.* 1, 20 (2011) (surveying eight popular service providers’ methods for acquiring consent to terms of service and finding that all of them provided links to the terms rather than displaying them directly).

72. *E.g.*, *Fteja v. Facebook, Inc.*, 841 F. Supp. 2d 829, 839–40 (S.D.N.Y. 2012) (enforcing a contract found one click away); *Kwan v. Clearwire Corp.*, No. C09-1392JLR, slip op. at 10–11 (W.D. Wash. Jan. 3, 2012) (finding no assent when a consumer had to click on three links to locate a contract).

addition, it had to be obvious which boilerplate applied; if a link led to a menu of undifferentiated contracts, and the consumer could not easily identify the correct one, then I would not count any of them.

Figure 2



These two criteria also guided the inclusion of terms that were incorporated by reference in qualifying boilerplate (a common occurrence in the online world). First, acceptance: the actual text of the originating contract had to include a reference to the incorporated terms, such that acceptance of the former implied acceptance of the latter. Second, availability: the incorporated terms had to be easily accessible to the reader of the originating contract. For example, the text of Dell's Terms and Conditions of Sale contained a hyperlink to a Return Policy (in such a manner that it was clear that acceptance of the one constituted acceptance of the other), and the hyperlink led directly to the Return Policy terms. In contrast, a later "Service Contracts" hyperlink within the Terms and Conditions of Sale failed to satisfy the availability criterion; it took two mouse clicks

just to get to a menu of potentially applicable contracts, and it was not entirely clear which of them applied. Therefore, the Return Policy was included in the overall volume measurement but the Service Contracts were not.

## *2. Assumptions About the Scope of the Transaction*

The second judgment call inherent in my analysis involved which software boilerplate to include. As we all know, when you start up a computer for the first time, you find all sorts of programs that you may not have known were part of your purchase—games, trial versions of software, system accessories, and so forth. Opening such programs often leads to click-wrap boilerplate. Should such contracts be counted in the study?

As before, my approach here was conservative; I only included contracts associated with programs and features that the seller had represented as part of the deal when I ordered the computer. A reasonable purchaser might expect more programs than that as a practical matter because extras like media players and DVD burners come standard on most computers. But a conservative approach to contract law would tell us that the purchaser only has a right to expect those programs that were explicitly promised.

Again, I did not pay extra for any of this software; all of it came with the computer. And of course the same enforceability criteria applied here; none of the software contracts counted unless I clearly and affirmatively manifested assent and could easily access their terms.

In the aggregate, what these conservative assumptions mean is that the study almost certainly underestimates information costs that boilerplate truly imposed in the transaction, perhaps by a wide margin.<sup>73</sup> The acceptance criterion means that the word

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73. To take just one example, my conservative criteria ended up excluding a lot of arbitration procedures, despite the fact that a court would almost certainly find that the presence of arbitration clauses binds the consumer to use those procedures. In most cases, however, those procedures were excluded because they failed to satisfy the availability criterion: the arbitration clauses usually linked to the home page of an arbitration organization (e.g., the American Arbitration Association or JAMS), rather than to the particular

count includes only those contracts that very clearly alerted the consumer to the need to search for terms because it was very clear that proceeding with the transaction meant agreeing to be bound. And more important, the availability criterion means that only those contracts that could be easily located would qualify—even though in reality courts might enforce contracts that are much harder to find. In several important respects, then, the study makes information costs look less costly than they really are.

### C. Study Results

Even under the conservative assumptions outlined above, the four purchases produced a weighted average of twenty-five binding contracts totaling 74,897 words.<sup>74</sup> In other words, the average computer purchase binds the consumer to twenty-five contracts, comprising 74,897 words of boilerplate. To put that word count in perspective, it's just a tad less than the number of words in the first *Harry Potter* book.<sup>75</sup> Of course, *Harry Potter* is a

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arbitration procedures to which the consumer would be bound—and it took several clicks of the mouse and some guesswork to find those procedures on the organization's website. Nevertheless, a court would almost certainly say that the consumer had a contractual obligation to arbitrate and to use those procedures. (For instance, the arbitration clause that was upheld in *Cavalier Manufacturing, Inc. v. Clarke*, 862 So. 2d 634 (Ala. 2003), merely stated that disputes would be arbitrated under American Arbitration Association (AAA) procedures, with no hyperlink to the AAA website, let alone to the procedures themselves. Brief of Appellant Cavalier Manufacturing, Inc. at 5, *Cavalier Mfg. v. Clarke*, 862 So. 2d 634 (Ala. 2003).)

74. The exact figures were 24.75 contracts and 74,897.19 words. A weighted average was used so that data from sellers with a greater market share would receive proportionately more emphasis in the calculation, under the theory that consumers are more likely to buy products from them than from their competitors. The weights used correspond to the market share figures from *supra* note 63. (The non-weighted average would not have been much different: twenty-three contracts comprising 71,828 words.) See the Appendices for a full breakdown of the figures discussed in this section.

75. *Harry Potter and the Sorcerer's Stone* totaled 76,944 words, according to the never-wrong Internet. See *Harry Potter and the Philosopher's Stone*, THE HARRY POTTER LEXICON, [http://www.hp-lexicon.org/about/books/ps/book\\_ps.html](http://www.hp-lexicon.org/about/books/ps/book_ps.html) (last visited Feb. 4, 2013) (citing the book's publisher for a word count) (on file with the Washington and Lee Law Review). Granted, the *Harry Potter* books got

page-turner, whereas boilerplate contracts are anything but. So perhaps a better analogy is tax forms: you could read every word of the instruction booklet for IRS Form 1040a, cover to cover—all eighty-eight pages—and still be more than a thousand words short of the boilerplate total from this single computer purchase.<sup>76</sup> Or, for the truly masochistic among you, try reading this Article, and then do it again, and then once more. And don't skip the footnotes this time.

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much longer; J.K. Rowling really started to get verbose with the 107,253 words of book three. See *Harry Potter and the Prisoner of Azkaban*, THE HARRY POTTER LEXICON, [http://www.hp-lexicon.org/about/books/pa/book\\_pa.html](http://www.hp-lexicon.org/about/books/pa/book_pa.html) (last visited Feb. 4, 2013) (citing the book's publisher for a word count) (on file with the Washington and Lee Law Review). One suspects that the success of the series had put Rowling beyond the influence of any editor by this point; the fourth book was even longer, and the fifth book set the record for the series, clocking in at 257,045 words! See *Harry Potter and the Order of the Phoenix*, THE HARRY POTTER LEXICON, [http://www.hp-lexicon.org/about/books/op/book\\_op.html](http://www.hp-lexicon.org/about/books/op/book_op.html) (last visited Feb. 4, 2013) (citing the book's publisher for a word count) (on file with the Washington and Lee Law Review).

76. Cutting and pasting the text of the 2011 1040a instructions from the PDF (at <http://www.irs.gov/pub/irs-pdf/i1040a.pdf>) into Microsoft Word resulted in a word count of 73,509. IRS, *I.R.S. 1040A Instructions 2011* (Nov. 25, 2011), <http://www.irs.gov/pub/irs-pdf/i1040a.pdf> (last visited Feb. 4, 2013) (on file with the Washington and Lee Law Review).



Table 1: Summary of Results

Seller	No. of Contracts	No. of Words . . .				. . . per \$
		. . . overall	. . . at purchase	. . . at computer startup	. . . at program startup	
Acer	12	33,128	9,135	23,993	0	47.1
Dell	29	78,203	9,765	24,165	44,273	84.7
HP	25	79,340	0	24,328	55,012	103.4
Toshiba	27	96,641	18,678	34,744	43,219	131.5
<b>Total</b>	93	287,312	37,578	107,230	142,504	
<b>Total Unique</b>	56	161,767	39,065 [24.1%]	38,225 [23.6%]	84,477 [52.2%]	
<b>Raw Average</b>	23.25	71,828	9,394	26,807	35,626	91.7
<b>Weighted Average</b>	24.75	74,897	7,698 [10.3%]	25,911 [34.6%]	41,286 [55.1%]	93.2

### 1. Information Acquisition Costs

The number of words is informative, and we will return to the question of total volume when we consider information processing costs (the “how much” question). First, however, what does the study tell us about the cost of information acquisition? Even with the conservative assumptions discussed above, one acquisition issue comes through loud and clear—an issue one can appreciate only through a vertical study: the “when” question. At what stage of the transaction was each contract encountered?

Of the 74,897 total words, only 7,699 (10.3%) were presented to me by the time I had to decide whether to order (and pay for) the computer.<sup>77</sup> I had to wait until the computer arrived before the rest were made available. Of the remaining 67,198 words, 25,912 (34.6%) were presented when the computer arrived and

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77. Note that if I had bought the computer in a store instead of online, many of the website’s boilerplate terms would have arrived as paperwork in the box, or would have been presented to me on startup. Whether those presentations would have satisfied my enforceability criteria is an issue I did not explore.

was first started up, and the other 41,287 (55.1%) when individual programs were opened.<sup>78</sup>

In other words, the verticality of the study shows how very pertinent the issue of late-arriving terms is. At the time that consumers tender payment, they will have had no opportunity to express their preferences regarding nine out of every ten words to which they will become contractually bound. Of course, they will eventually have the opportunity to explicitly say no to these late-arriving terms, and thus to communicate their preferences to the market.<sup>79</sup> But that opportunity arises only after a considerable investment in acquiring the information that would bear on formation of those preferences—the time spent navigating the website, deciding which computer to buy, placing the order, waiting for the shipment, starting up the computer, and opening the various programs to find the applicable contractual language. That investment represents a considerable information acquisition cost. In essence, by the time I have an opportunity to express my preferences to the market, I am no longer at the market. I am already home.

Moreover, the true acquisition cost imposed by late-arriving terms would actually be a multiple of the cost I experienced in my study because, for a market to function most effectively, consumer decisionmaking should be not only compensatory but

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78. I might have been able to find some of the late-arriving boilerplate by searching the websites of the software providers before deciding to purchase. But such an approach would have carried acquisition costs of its own, and it is far from certain that I could have located the correct terms. See Jean Braucher, *Delayed Disclosure in Consumer E-Commerce as an Unfair and Deceptive Practice*, 46 WAYNE L. REV. 1805, 1860–61 (2000) [hereinafter Braucher, *Delayed Disclosure*] (finding that 87.5% of software websites did not make boilerplate available to consumers pre-purchase); James F. Rodriguez, *Software End User Licensing Agreements: A Survey of Industry Practices in the Summer of 2003*, at 2 (unpublished and undated manuscript) (finding that only twelve of forty-three major software companies provided license terms on their websites, none provided an easily identifiable pre-purchase link to the terms, and only two offered a website search capability enabling users to find the terms) (on file with the Washington and Lee Law Review).

79. This opportunity to explicitly manifest or refuse express assent is what makes the boilerplate term enforceable, even under the most consumer-friendly cases, such as *Klocek v. Gateway, Inc.*, 104 F. Supp. 2d 1332, 1339–41 (D. Kan. 2000) (noting that late-arriving terms are enforceable if consumers “expressly agree[] to them”).

comparative. Consumers do not decide whether they will purchase a given product in the abstract; they decide whether to purchase it in light of the options available from other sellers. This means that for a consumer to truly express his or her market preferences regarding late-arriving boilerplate, he or she would have to order multiple computers, start them all up, open the programs on each, and then examine the boilerplate within. To make such a comparison between the four computers in this study would have meant reading fifty-six unique contracts totaling 161,767 words.<sup>80</sup>

Finally, having made that comparison and decided which terms to reject, the consumer would have to register that rejection with the marketplace—e.g., by returning the rejected feature and receiving a corresponding refund. Even if we generously assume that the seller's return policy allows for this possibility, it is far from clear how it would work in practice. How could one return, say, the antivirus software but retain the operating system (and what would the refund be)? If the return really turns out to be an all-or-nothing proposition, then it sends a weak signal to the marketplace because it would not be clear which features prompted the rejection. And even if these obstacles could be overcome, the return process adds more expense (including both the hassle and the possibility of restocking fees), which means more information acquisition costs.

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80. When all the boilerplate in the four transactions is added together, there were ninety-three contracts totaling 287,312 words. Appendix A. But there was some overlap among these contracts (for example, each seller offered the same Microsoft Windows license), so the number of unique contracts was lower. This demonstrates the intuitive notion that comparison among products is easier if each seller offers the exact same features—but that is hardly an argument for market function; it simply substitutes an antitrust problem for an information cost problem. Note also that more of the unique contracts arrived early in the transaction, such that a consumer who bought all four computers for comparison purposes would have encountered nearly one out of every four unique terms (24.1%) before submitting payment, rather than one out of every ten (10.3%).

## 2. Information Processing Costs

The analysis so far has shown that the costs of acquiring information about boilerplate are a significant impediment to compensatory decisionmaking. As we have already seen, however, the cost of processing information can constitute a separate and equally problematic obstacle to market function. So what does the case study have to teach us about the information processing costs associated with boilerplate?

The issue here is one of sheer volume of terms—the “how much” question. A few empiricists have taken note, mostly in passing, of the volume of boilerplate terms that sellers present to consumers. For example, one of Marotta-Wurgler’s horizontal studies found an average length of 1,500 words for the typical end-user license agreement in the software industry.<sup>81</sup> And a horizontal study of the boilerplate that accompanied the top fifty programs at Download.com for 2006 found an average of 2,752 words and a nearly-college-level readability.<sup>82</sup>

Here again, we see the advantages of a study that looks vertically at all the boilerplate in a single transaction. As noted above, even under my conservative assumptions, the average computer purchase results in 74,897 words of binding contracts. This finding casts the information overload problem in sharp relief. Even if all that boilerplate were presented up front—i.e., even if the acquisition problem were solved—consumers could not engage in compensatory decisionmaking unless they first paid the processing cost of reading and understanding the terms well enough to form preferences and compare them to other sellers’ contractual offerings.

Whether consumers would pay that cost depends on how high it is. Recall that consumers who confront complex products (like computers) minimize those costs by satisficing—ignoring certain features in favor of others. The higher the cost of processing boilerplate, then, the more likely consumers are to

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81. Marotta-Wurgler, *Empirical Analysis*, *supra* note 6, at 694.

82. Jens Grossklags & Nathan Good, *Empirical Studies on Software Notices to Inform Policy Makers and Usability Designers*, in FINANCIAL CRYPTOGRAPHY AND DATA SECURITY 341, 346–47 (Sven Dietrich & Rachna Dhamija eds., 2007).

ignore it and turn their attention instead to other, more salient product features.<sup>83</sup>

The question, then, is how to measure the cost of processing 74,897 words of boilerplate. One potential answer is to measure the time one would need to read all those terms. A few studies have examined how long it takes the average person to read legal text. The most relevant, conducted by Michael Masson and Mary Anne Waldron, presented subjects with short excerpts from four contracts (a mortgage, a property sale, a bank loan, and a lease renewal) and measured how long it took to read and understand them.<sup>84</sup> That study's application here is somewhat complicated by the fact that it also explored the effect of using "plain English" in contracts, so it tested four different versions of each contract (with varying degrees of complexity in wording) and thus did not produce a single average reading rate.<sup>85</sup> Furthermore, because it involved short excerpts of a few hundred words each rather than long contracts,<sup>86</sup> its results might not be a precise fit for the contracts at issue here, which averaged 3,016 words; perhaps reading speed increases as one goes along, or declines as one gets tired. Nevertheless, by averaging the reading rates for the various contracts in the study, we can reach a fair estimate of how fast the typical consumer can read contractual language: 177.5 words per minute.<sup>87</sup>

At that rate, the 74,897 words worth of boilerplate would take just over seven hours to read (assuming, optimistically, that

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83. *Supra* note 38 and accompanying text.

84. *See generally* Michael E.J. Masson & Mary Anne Waldron, *Comprehension of Legal Contracts by Non-Experts: Effectiveness of Plain Language Redrafting*, 8 APPLIED COG. PSYCHOL. 67 (1994).

85. *Id.* at 74–75. There is no easy way to determine which of the experiment's different wording categories the contracts at issue here would fall under. Note that one study of complexity in consumer contracts suggests that shorter contracts are easier to comprehend, although that result is confounded somewhat by the fact that the shorter contract was also written in simpler language. *See* Davis, *supra* note 37, at 869.

86. Masson & Waldron, *supra* note 84, at 71.

87. I arrived at this figure by taking the study's four entire-document reading rates and averaging them. *Id.* at 74 tbl.4. One might object to using an average, rather than one of the specific rates that Masson and Waldron found, but it would make little difference; the four rates only ranged from a low of 167.0 to a high of 193.6. *Id.*

the reader could keep up the pace for that long without a moment's rest).<sup>88</sup> Therefore, even if all the contracts had been presented to the reader at the outset of the transaction, such that information acquisition costs were low, the information processing costs of actually reading the contracts would be significant—further evidence that consumers would focus instead on other product features and thus fail to register their preferences regarding boilerplate terms. And, as with acquisition costs, consumers who wish to make an apples-to-apples comparison would also have to read the contracts that competing vendors offered; to do so with the four competing products at issue here would have meant more than fifteen hours of reading.<sup>89</sup>

Yet even this conclusion may underestimate the amount of information overload because, when it comes to boilerplate, compensatory decisionmaking requires not only reading but understanding.<sup>90</sup> Masson and Waldron used two mechanisms (question-answering and paraphrasing) to measure how well their subjects understood the contracts at the above reading speed—and found them wanting.<sup>91</sup> Comprehension improved when archaic terms were replaced, yet even then “performance of subjects on both the question-answering and the paraphrase tasks remained relatively poor (in the best cases average performance ranged from about one-third to two-thirds correct, depending on which aspect of comprehension was measured) and misconceptions were apparent across all versions of the documents.”<sup>92</sup> In other words, even at the relatively slow reading rate of 177.5 words per minute, a substantial subset of consumers

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88.  $74,897 \text{ words} \div 177.5 \text{ words/minute} = 421.95 \text{ minutes}$ , or 7.03 hours.

89. As explained *supra* note 80, there was some overlap among the boilerplate that each seller offered, so consumers who had already read one seller's boilerplate would be able to save some time when they got to the next seller.

90. Note also that part of the problem with boilerplate is that consumers can't know what it covers without at least skimming it. In a sense, then, consumers don't know whether they should read boilerplate until after they have done so! At a minimum, it takes some effort even to determine whether learning the contents of boilerplate can be discounted in favor of learning about other product features.

91. Masson & Waldron, *supra* note 84, at 72.

92. *Id.* at 79.

would have a hard time understanding boilerplate and consequently would have a hard time forming and expressing compensatory and comparative preferences regarding contractual terms.<sup>93</sup>

Another way to get a sense of information processing costs is to express them in dollars per word. After all, computers are expensive—the four in the study averaged \$782.24—and one might tolerate higher information costs when spending a lot of money, so as to ensure that a big expenditure produces a worthwhile payoff. Even under this metric, however, the information costs are significant. The 74,897 words of boilerplate worked out to a weighted average of ninety-three words per dollar spent. For comparison's sake, imagine having to read ninety-three words of boilerplate each time you buy a can of soda, or 279 words when buying a three-dollar gallon of milk, or 5,580 words when filling a twenty-gallon tank with gas. And none of the contracts here seemed to be related to my choice to buy moderately powerful computers, so more affordable models would likely have come with exactly the same contracts.

In the end, however one chooses to measure information costs, the evidence strongly suggests that the market would not be responsive to consumer preferences regarding the binding boilerplate in this study. Consumers confronted with such purchases would almost certainly ignore the boilerplate entirely; the costs of finding and reading it are quite high, and they would likely consider its terms to be less important than other, more salient features of the transaction. (As a general matter, boilerplate terms relate to rare events—the defective product, the lost shipment, the litigious purchaser—for which the average consumer has little legal exposure.<sup>94</sup>)

Boilerplate would accordingly be one of those product features that would not make the cut when consumers, overloaded by information, abandon compensatory decisionmaking in favor of satisficing. And when consumers

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93. For a discussion of how a representative subset of informed consumers might avert market failure, see *infra* Part IV.A.

94. Cruz & Hinck, *supra* note 15, at 663; Eisenberg, *supra* note 1, at 243; Hillman & Rachlinski, *supra* note 8, at 443; Rakoff, *supra* note 1, at 1226.

ignore contract terms, the market ignores contract terms—removing the justification for enforcement of those terms in the first place.

#### *IV. Responding to Boilerplate's Defenders*

In Part II, we saw that in transactions of even moderate complexity, consumers satisfice; they abandon compensatory decisionmaking and focus their limited attention on a few product features. Horizontal studies of consumer decisionmaking have begun to provide evidence that such satisficing threatens the function of the boilerplate market. In Part III, I presented new, vertical evidence of this dysfunction, showing that both acquisition costs and processing costs are even higher than the horizontal studies have shown. All in all, then, the evidence suggests that boilerplate is high on the list of features that consumers ignore.

If the enforceability of boilerplate terms depends on their responsiveness to consumer preferences, it seems impossible to defend enforcement when most consumers ignore those terms. Yet scholars have offered two distinct arguments in favor of enforcing boilerplate even in the face of the mounting evidence that it goes unread. The first is an *ex ante* argument that the market works, due to a sufficiently large subset of consumers that actually do read the terms. The second is an *ex post* argument that even when the market fails, reputational concerns keep sellers from unduly aggressive enforcement of one-sided terms.

If either of these arguments is correct, then this Article has not proved anything, and no regulatory intrusion into the market is necessary notwithstanding boilerplate's information cost problem. In the following discussion, however, I evaluate both arguments, on their own merits and in light of the verticality findings above, and find them wanting.

##### *A. Informed-Minority Theory*

No market functions perfectly. Information costs and other impediments to compensatory decisionmaking are the rule, not



the exception, even for transactions that involve no contractual terms whatsoever.<sup>95</sup> Therefore, although there is compelling evidence that when it comes to boilerplate the market does not function particularly well, the question is whether it functions well enough.

The answer to this question depends partly on the available alternatives to pure market regulation (“well enough” in comparison to what?), an issue to which we will return in Part V. But the answer also depends on how dysfunctional the market is. In a perfectly functioning market, every consumer would costlessly find, read, and understand all adhesive contract terms and would then use compensatory decisionmaking to weigh their impact in the purchase decision. As Alan Schwartz and Louis Wilde have argued, however, a less-than-perfect market, in which only some consumers pay attention to those terms, can produce approximately the same outcome as a fully functional market, so long as sellers compete for those marginal, attentive consumers.<sup>96</sup> In other words, if information costs cause most *but not all* consumers to ignore boilerplate, the consumers who do pay attention—the “informed minority”—might represent the interests of the ignorant, such that the resulting terms would adequately reflect overall consumer preferences.<sup>97</sup>

Numerous commentators have relied on the Schwartz and Wilde theory to argue that the market adequately responds to consumer preferences even when many consumers are ignorant

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95. See Howard Beales et al., *The Efficient Regulation of Consumer Information*, 24 J.L. & ECON. 491, 512 (1981) (“[V]irtually no consumer product market or associated information market meets the textbook ideal of perfect information and perfect competition.”); Schwartz & Wilde, *supra* note 10, at 630 (“It is generally recognized . . . that information is never perfect; the decisionmaker’s task, therefore, is to characterize, in terms of the need for intervention, real world states that are intermediate between perfect information and perfect ignorance.”).

96. Schwartz & Wilde, *supra* note 10, at 638 (“Rather than asking whether an idealized individual is sufficiently informed to maximize his own utility, the appropriate normative inquiry is whether competition among firms for particular groups of searchers is, in any given market, sufficient to generate optimal prices and terms for all consumers.”); see also *id.* at 659–62 (offering some observations about the implications of this theory for boilerplate).

97. *Id.* at 660.

about its offerings.<sup>98</sup> In the boilerplate context, however, this argument depends on a number of questionable premises. First, it assumes that the consumers who constitute the informed minority have the same preferences (with regard to contractual terms) as the ignorant majority.<sup>99</sup> Yet we already know that the members of the informed minority are different in at least one important way: they read the boilerplate that the rest of us ignore. Why would we think that they would be different in only that one respect?<sup>100</sup> By definition their payoff from reading a contract is higher than most people's, which suggests a different valuation for the terms it contains.<sup>101</sup> In short, for the informed-minority theory to work, we must assume heterogeneity in the

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98. *E.g.*, Baird, *supra* note 10, at 936 (“The sophisticated buyer provides protection for those that are entirely ignorant.”); Clayton Gillette, *Pre-Approved Contracts for Internet Commerce*, 42 HOUS. L. REV. 975, 976–77 (2005) (noting that the inability of a seller to distinguish attentive consumers from inattentive consumers will prevent the seller from acting opportunistically); George L. Priest, *A Theory of the Consumer Product Warranty*, 90 YALE L.J. 1297, 1347 (1981) (“If a small group of consumers reads warranties and selects among products according to warranty context, manufacturers may be forced to draft warranties responsive to the group’s preferences, even though the large majority of consumers generally neglect warranty terms.”).

99. If they don’t, they cannot represent the majority; they would send sellers the wrong market signal. *See* Schwartz & Wilde, *supra* note 10, at 638 (“When the preferences of searchers are positively correlated with the preferences of nonsearchers, competition among firms for searchers should tend to protect all consumers.”).

100. *See* Cruz & Hinck, *supra* note 15, at 671 (“All that we can know [about members of the informed minority] is that they are particularly sensitive to some aspect of the contract—not that the average consumer (or even just one other consumer outside the marginal minority) necessarily shares their preferences.”); *id.* at 676 (“[T]here is no guarantee—indeed it seems unlikely—that the marginal consumer will be typical of other consumers.”).

101. Another possibility is that the informed minority comprises repeat purchasers, who choose to incur the information costs because they can amortize them across a number of purchases. Such purchasers might have idiosyncratic preferences regarding the content of terms; for example, they would not care as much about a class action waiver because their high volume would make it cost-efficient to sue individually. *See* Gillette, *supra* note 7, at 694. But even if their preferences were the same as the ignorant majority’s, repeat buyers are more likely to be accommodated when something goes wrong (even if the contract does not require such accommodation)—which means that they will be less worried about contractual guarantees and therefore less able to act as a proxy for nonreaders. *Id.* at 692. And of course, the amortization argument assumes that the boilerplate does not change over time; try telling that to an iTunes user.

minority's proclivity to read boilerplate but homogeneity in its preferences for boilerplate terms—a dubious pair of assumptions and a slim reed on which to build a theory of enforcement.

Second, even if the informed minority has the same boilerplate preferences as the ignorant majority, the former cannot adequately represent the latter if sellers can differentiate between the two groups.<sup>102</sup> Sellers that can differentiate will offer better terms to the informed minority and continue to offer one-sided terms to the uninformed majority, thereby delinking the fates of the two groups and returning the latter market to a largely nonresponsive state.<sup>103</sup> How easy such differentiation would be is an open question, dependent on the particular industry at issue.<sup>104</sup> In the online context, for example, one could easily imagine a website offering different terms to different consumers based on their browsing habits and the attention they pay to boilerplate.<sup>105</sup>

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102. See Schwartz & Wilde, *supra* note 10, at 638 (assuming that “it is usually too expensive for firms to distinguish among extensive, moderate, and nonsearchers” and that “it would often be too expensive to draft different contracts for each of these groups even if they could conveniently be identified”); *id.* at 663–64 (explicitly addressing this assumption).

103. Cruz & Hinck, *supra* note 15, at 656; Gillette, *supra* note 7, at 692; Jeffrey J. Rachlinski, *Cognitive Errors, Individual Differences, and Paternalism*, 73 U. CHI. L. REV. 207, 228 (2006). Omri Ben-Shahar provides an interesting example of how this differentiation can be done in the very body of the contract: a clause in a residential Comcast contract offered an arbitration opt-out—which would of course be seen only by the attentive (read: rare) reader. Omri Ben-Shahar, *The Myth of the “Opportunity To Read” in Contract Law*, 6 EUR. REV. CONT. L. 1, 20 (2009) [hereinafter Ben-Shahar, *Opportunity To Read*].

104. On a related note, Ted Cruz and Jeffrey Hinck see an inherent tension between, on the one hand, the number of informed consumers and, on the other, the ability of sellers to differentiate. The informed-minority theory grows more plausible as the number of attentive readers necessary to adequately represent the ignorant majority decreases—but Cruz and Hinck argue that “[t]he ability to identify and segregate consumers . . . becomes much easier as the number of informed buyers becomes smaller” and therefore “[u]nder such conditions, the seller needs only to target a small proportion of his buyers to defeat the effect of an informed minority upon the terms offered to uninformed consumers.” Cruz & Hinck, *supra* note 15, at 656.

105. See Robert A. Hillman & Ibrahim Barakat, *Warranties and Disclaimers in the Electronic Age*, 11 YALE J.L. & TECH. 1, 17 (2009) (exploring the possibility that industries can “employ new e-technologies to segregate readers and offer them more advantageous terms”); Hillman & Rachlinski, *supra* note 8, at 471–72 (“E-businesses can use data on consumer behavior collected from their prior

Finally, the market is likely to underproduce informed consumers because the informed-minority theory creates a collective action problem: only a few consumers incur the information costs, but all consumers reap the resulting benefits. This means that even consumers who are inclined to read the boilerplate have an incentive to ignore it, sit back, and free-ride on the efforts of others.<sup>106</sup> In contrast, the seller always pays careful attention to boilerplate terms because the seller is a party to every transaction to which the terms apply and thus internalizes all their benefits.<sup>107</sup> (Indeed, the seller is the party that drafted the terms.)

These arguments give us reason to doubt the informed-minority theory, but the proof of the pudding is in the eating: are boilerplate-reading consumers really common enough to adequately represent the interests of their nonreading counterparts? Schwartz and Wilde themselves are skeptical, estimating that more than one in three consumers would have to read the boilerplate for the informed-minority concept to work.<sup>108</sup> Modeling and industry-specific empirics suggest that their skepticism is well-founded.<sup>109</sup> For example, one study of software

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transactions and offer different terms to those consumers who are most likely to read the boilerplate (or who have already read it during a prior site visit.”); cf. Ben-Shahar, *Opportunity To Read*, *supra* note 103, at 20 (noting that contracts can easily distinguish between readers and non-readers by offering an opportunity to opt out of a clearly pro-seller term).

106. See Beales et al., *supra* note 95, at 503; Cruz & Hinck, *supra* note 15, at 668; Hillman & Rachlinski, *supra* note 8, at 447.

107. This is merely another way of stating the information asymmetry problem familiar to those who study adhesion contracts. See, e.g., POSNER, *supra* note 8, at 145; Omri Ben-Shahar, *Fixing Unfair Contracts*, 63 STAN. L. REV. 869, 901 (2011); Eisenberg, *supra* note 1, at 243.

108. Schwartz & Wilde, *supra* note 10, at 661.

109. For modeling, see Cruz & Hinck, *supra* note 15, at 648–55 (concluding that under reasonable assumptions “the proportion of consumers that must be term-informed is somewhere between 10% and 30%, both of which are relatively large given the impediments to formation of an informed minority”). For empirics, see Yannis Bakos et al., *Does Anyone Read the Fine Print? Testing a Law and Economics Approach to Standard Form Contracts* 3 (NYU Law & Econ. Working Paper No. 195, 2009) (finding an “informed minority . . . orders of magnitude smaller than the required informed minority size in the theoretical examples of Schwartz and Wilde”), available at [http://lsr.nellco.org/nyu\\_lewp/195](http://lsr.nellco.org/nyu_lewp/195).

retailers who made their licensing agreements available online found that only two out of every one thousand shoppers accessed the agreements for more than one second—and even that small subset averaged less than a minute spent on the relevant web page.<sup>110</sup>

Yet even these caveats do not fully capture the limitations of the informed-minority theory because they consider boilerplate in the abstract rather than as part of a complex, integrated transaction. In other words, for a real-world perspective, we must examine the impact of verticality on the informed-minority theory. And as it turns out, verticality challenges the informed-minority theory in two particular ways.

First, this Article's vertical study reveals information costs that are much higher than previous studies have shown; the informed minority acquires almost all of the boilerplate late in the transaction and faces more than seven hours of reading.<sup>111</sup> As these information costs increase, the number of contract readers will shrink, all else being equal. After all, even those with an idiosyncratic tendency to read boilerplate must deal with their own finite resources and cognitive limitations. And as the number of readers shrinks, so does the likelihood that the informed minority will be of sufficient size to serve as an adequate proxy.

Second, the added complexity of a fully vertical transaction may increase the differences between the preferences of the informed minority and the preferences of the ignorant majority, such that the former cannot represent the latter in the marketplace. Homogeneity of demand with regard to a single product is one thing; homogeneity of demand with regard to an entire series of products is another.<sup>112</sup> As discussed above, in a vertical-boilerplate situation it can be prohibitively hard for the consumer to reject a single contract or term; one usually either

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110. Bakos et al., *supra* note 109, at 3, 26.

111. *See supra* note 88 and accompanying text.

112. It is possible, however, that increased complexity brings with it increased, rather than decreased, homogeneity—i.e., that heterogeneity in individual demand is smoothed out by bundling more products into the transaction. *See supra* notes 58–62 and accompanying text (discussing bundling). If this is true, then added complexity would not make the informed minority less able to represent the ignorant majority.

rejects or accepts the entire transaction.<sup>113</sup> Therefore, as more sellers and features are introduced—i.e., as vertical complexity increases—the ability to send a signal to the market about a single product feature (such as a boilerplate term) becomes increasingly muted.

In the end, then, the informed-minority theory gives us little reason to be confident in the market's responsiveness to consumers' boilerplate preferences. In theory, a subset of attentive consumers could serve as a proxy for the inattentive remainder. But in practice, the empirical evidence points the other way, and the assumptions on which the informed-minority argument rests prove far-fetched—even more so once it is applied to a real-world vertical transaction that involves multiple adhesion contracts and other indicators of high product complexity.

### *B. Reputational Theory*

Commentators have also offered a second, separate defense of boilerplate's enforceability in the face of seemingly insuperable information costs: the reputational theory. The gist of the reputational theory is that it does not matter if boilerplate terms fail to respond to consumer preferences at the time of contract formation because, when the opportunity arises to enforce a term at the tail end of the transaction, sellers waive enforcement and accommodate the consumer.<sup>114</sup>

And why would the seller do so? For reputational reasons. It wants to retain the consumer's future business and avoid becoming known for poor customer service.<sup>115</sup> Thus boilerplate is

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113. *Supra* Part III.C.1.

114. *E.g.*, POSNER, *supra* note 8, at 145; Lucian A. Bebchuk & Richard A. Posner, *One-Sided Contracts in Competitive Consumer Markets*, 104 MICH. L. REV. 827, 829–31 (2006); Gillette, *supra* note 7, at 703–12; Robert A. Hillman, *Rolling Contracts*, 71 FORDHAM L. REV. 743, 747 (2002); Hillman & Rachlinski, *supra* note 8, at 442; Jason Scott Johnston, *The Return of Bargain: An Economic Theory of How Standard-Form Contracts Enable Cooperative Negotiation Between Businesses and Consumers*, 104 MICH. L. REV. 857, 879 (2006); Rakoff, *supra* note 1, at 1221.

115. *See* sources cited *supra* note 114.

not a concern (the argument goes), because even if the market fails to rid the transaction of unwanted terms *ex ante*, reputational concerns will get rid of them *ex post*.<sup>116</sup>

If reputational constraints are sufficient to govern the outcome of disputes, however, why do we need boilerplate at all?<sup>117</sup> The answer that the theory's proponents give is that a seller will not *always* disregard contractual clauses in favor of a customer service strategy.<sup>118</sup> Instead, the seller will enforce boilerplate selectively, reserving its use for those few opportunistic consumers who seek to exploit the seller's "the customer is always right" instinct—e.g., the conniving buyer who damages a product and then tries to return it as defective.<sup>119</sup> The boilerplate terms are thus relevant because they form an *ex ante*

116. See sources cited *supra* note 114.

117. See Hillman & Barakat, *supra* note 105, at 12 ("If accepted, the [reputational] argument means that we do not need contract law at all."). Indeed, one well-known study of actual business-to-business practices found that reputation dominates contracts as the key determinant in dispute resolution.

Even where the parties have a detailed and carefully planned agreement which indicates what is to happen if, say, the seller fails to deliver on time, often they will never refer to the agreement but will negotiate a solution when the problem arises apparently as if there had never been any original contract.

Stewart Macaulay, *Noncontractual Relations in Business: A Preliminary Study*, 28 AM. SOC. REV. 55, 61 (1963) [hereinafter Macaulay, *Noncontractual Relations*].

118. See sources cited *supra* note 114.

119. Clay Gillette uses a similar example in *Rolling Contracts as an Agency Problem*, *supra* note 7, at 704; see also Bebchuk & Posner, *supra* note 114, at 834 (using an example of a hotel guest who checks out late). Some of the theory's proponents further explain that, although boilerplate gives sellers an advantage over consumers, that advantage merely counterbalances an advantage that consumers have: namely, sellers have a reputation in the marketplace that tells consumers which sellers to avoid, but consumers have no reputation that tells sellers which consumers to avoid. Thus there is a need for an *ex post* contractual mechanism to weed out the "bad" consumers. Bebchuk & Posner, *supra* note 114, at 829–30; Gillette, *supra* note 7, at 704. *But see* eBay, *All About Feedback Policies*, <http://pages.ebay.com/help/policies/feedback-ov.html> (last visited Feb. 4, 2013) (describing a feedback system that not only allows eBay buyers to rate sellers but also allows sellers to rate buyers) (on file with the Washington and Lee Law Review).

baseline from which the seller has the *ex post* discretion to depart.<sup>120</sup>

Unlike the informed-minority theory, the reputational theory neatly solves the problem of information costs, in both their horizontal and vertical dimensions, because under its approach boilerplate terms are only enforced against the rare opportunist who deserves no better. My vertical empirics thus do not directly speak to the reputational theory. (Indeed, if the theory is true, there is no boilerplate problem to be solved.) Nevertheless, the theory fails to survive when evaluated in light of my broader theme: examining the boilerplate problem from the perspective of what actually takes place in the real world. When one views the reputational defense from that perspective, its foundations fall away; it is revealed to be merely an interesting theory, rather than a practical justification for enforcing real-world boilerplate against real-world consumers.

The reputational theory proves unrealistic for three reasons. First, the theory relies on questionable assumptions about sellers' ability to differentiate among consumers. For the reputational dynamic to rescue boilerplate, we must expect a seller to be unable to distinguish opportunistic buyers *ex ante* but somehow be able to distinguish them *ex post* (because a seller that can make the distinction *ex ante* will simply impose different boilerplate terms on the different types of buyers).<sup>121</sup> Both propositions are problematic. How certain are we that sellers can accurately identify the consumers who really received defective products and distinguish them from the opportunists? And how certain are we that sellers could draw such distinctions at the tail

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120. POSNER, *supra* note 8, at 145 (“[T]he seller’s right to stand on the contract as written will protect it against opportunistic buyers.”); Johnston, *supra* note 114, at 878 (“The key to understanding why a firm can benefit by allowing its employees to forgive some customers’ contract breaches lies in the recognition that not all existing customers are worth keeping.”); Rakoff, *supra* note 1, at 1221 (“[I]f legal liabilities are set lower than the obligations that the firm recognizes in its actual practice, the gap can provide room to maneuver in the face of inevitable adversity.”).

121. See Johnston, *supra* note 114, at 879 (describing sellers’ *ex post* enforcement discretion as “a substitute for ex-ante screening”).



end of the transaction but not at the front end?<sup>122</sup> It seems just as likely, if not more so, that the presence of one-sided boilerplate would scare off the “good” customers from even asking for accommodation.<sup>123</sup> Indeed, one reasonable definition of an opportunistic customer would be someone who hounds sellers for concessions to which he or she is not legally entitled—which would imply no accommodation for anyone who bothers to ask.<sup>124</sup>

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122. See Todd D. Rakoff, *The Law and Sociology of Boilerplate*, 104 MICH. L. REV. 1235, 1236 (2006) [hereinafter Rakoff, *Sociology of Boilerplate*] (stating that the reputational dynamic will not “lead firms to recognize voluntarily the supposed legitimate claims of decent consumers” at a volume “congruent with . . . any known economic measure of an incentive for efficient behavior”); cf. Bob Sullivan, *Discount Cellphone Sites Come with Double Dose of Termination Fees, Hassles*, REDTAPE CHRONICLES (May 8, 2012, 5:11 AM), [http://redtape.msnbc.msn.com/\\_news/2012/05/08/11582479-discount-cellphone-sites-come-with-double-dose-of-termination-fees-hassles?lite](http://redtape.msnbc.msn.com/_news/2012/05/08/11582479-discount-cellphone-sites-come-with-double-dose-of-termination-fees-hassles?lite) (last visited Feb. 4, 2013) (recounting a tale of an innocent customer who was not accommodated until the news bureau got involved) (on file with the Washington and Lee Law Review).

123. See Gillette, *supra* note 7, at 706 (“Sellers may use contract terms in an *in terrorem* effort to deter requests for redress, or as an initial response to buyer complaints.”); Dennis P. Stolle & Andrew J. Slain, *Standard Form Contracts and Contract Schemas: A Preliminary Investigation of the Effects of Exculpatory Clauses on Consumers’ Propensity to Sue*, 15 BEHAV. SCI. & L. 83, 91 (1997) (finding that exculpatory clauses in contracts have a deterrent effect on propensity to seek compensation when they are read); Charles A. Sullivan, *The Puzzling Persistence of Unenforceable Contract Terms*, 70 OHIO ST. L.J. 1127, 1136 (2010) (explaining that unenforceable provisions in contracts deter uninformed parties from exercising contractual rights). It may seem odd for consumers to be scared off by onerous boilerplate terms, given the compelling evidence that they don’t read boilerplate. But here we are not talking about reading boilerplate before making the purchase decision; we are talking about reading it much later, once something has gone wrong. Consumers who do not read boilerplate when entering into a transaction may well read it later when the transaction takes a turn for the worse and they need to assess the possibility of legal recourse.

124. In addition, some empirical research suggests that lower-class consumers are more likely to view contracts as binding than upper-class consumers. See Zev J. Eigen, *The Devil in the Details: The Interrelationship Among Citizenship, Rule of Law and Form-Adhesive Contracts*, 41 CONN. L. REV. 381, 421–22 (2008) (presenting preliminary findings). If this is true, then the willingness to seek extracontractual accommodation may depend not just on whether a consumer is “good” or “bad” but on his or her socioeconomic status—an unsettling possibility.

Second, the reputational theory resurrects the employee as an agent with discretion to negotiate.<sup>125</sup> Such employee discretion contrasts with one of the longstanding justifications for enforcing boilerplate in the first place, namely the need to *avoid* the agency costs of individualized negotiation—e.g., to keep employees from succumbing too easily to Marshall Field’s “give the lady what she wants” philosophy.<sup>126</sup> Of course, the *ex post* negotiation that the reputational theory calls for would occur less frequently, and thus would arguably impose lower agency costs, than the *ex ante* negotiation that would occur if all contracts were individually bargained. Nevertheless, for the reputational theory to work we must believe that the benefits of this approach would exceed the inevitable costs of giving employees the discretion to waive terms on a case-by-case basis. The theory’s proponents provide no evidence that this would actually be the case in the real world.

Finally, even if we assume that employees can differentiate between the good and bad customers, and we zero out the agency costs (so that the employee invariably acts in the best interests of the seller), we still must believe that it is in the seller’s best interests to accommodate the “good” consumer.<sup>127</sup> In other words, sellers may derive reputational benefit from forgoing enforcement of a boilerplate term, but that benefit comes at a price. For example, a seller incurs a cost each time it replaces a product. If

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125. See, e.g., Johnston, *supra* note 114, at 878–80 (highlighting the importance of managerial discretion to waive one-sided terms when dealing with “good, high value customers”).

126. As legend has it, Field—the founder of the eponymous Chicago department store—uttered this phrase as a rebuke to an employee who was arguing with a female customer. It soon became the store’s motto. Mark D. Bauer, “Give The Lady What She Wants”—As Long As It Is Macy’s, 80 TEMP. L. REV. 949, 950 (2007). Yet it is that very customer service attitude that boilerplate is meant to protect against. Stewart Macaulay, *Private Legislation and the Duty to Read—Business by IBM Machine, the Law of Contracts and Credit Cards*, 19 VAND. L. REV. 1051, 1059 (1966) (warning against employees’ “the customer is always right” attitude); Macaulay, *Noncontractual Relations*, *supra* note 117, at 65 (citing the need to “keep . . . salesmen from making concessions to the customer”); Rakoff, *supra* note 1, at 1222–24 (warning against “wayward sales personnel”). Perhaps that’s why Marshall Field & Co. is no more. See Bauer, *supra* note 126, at 950 (revealing that the store is now Macy’s).

127. See, e.g., Johnston, *supra* note 114, at 878–80 (discussing the benefits of “granting discretionary forgiveness” in loan-repayment agreements in order to build “profitable, long-term relationships” with “high-value” borrowers).

it is not contractually obligated to do so, then it will not accommodate a replacement request, even from a “good” customer, unless the reputational benefit exceeds that cost.

That cost–benefit calculation involves a daunting number of unknowns. On the benefit side of the ledger, it assumes that consumers generate and share meaningful quantities of accurate reputational information.<sup>128</sup> But like any informational asset, reputation is a nonrival public good; consumers therefore do not fully internalize the gains from publicizing their experience with disreputable sellers, which means that such accounts are likely to be underproduced.<sup>129</sup> And even if we ignore the public-goods problem, sellers may find it more cost-effective to buttress their reputations through advertising, marketing, and outright manipulation than through accommodating complaining customers one by one.<sup>130</sup> Indeed, short-term and one-off sellers

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128. Although no one has conducted an empirical study of boilerplate that focuses on the reputational factor, Victoria Plaut and Robert Bartlett found that associating a click-wrap contract with Google (presumably a company with a good reputation) had no statistically significant effect on whether consumers read the contract’s terms. Victoria C. Plaut & Robert P. Bartlett III, *Blind Consent? A Social Psychological Investigation of Non-Readership of Click-Through Agreements*, 36 L. & HUM. BEHAV. 293, 302, 305 (2012).

129. See Gillette, *supra* note 7, at 704; Hillman & Rachlinski, *supra* note 8, at 447; cf. Rakoff, *Sociology of Boilerplate*, *supra* note 122, at 1236 (criticizing reputation-theory proponents for *inter alia* “offer[ing] no model of how the market in reputation works, or of why the values it generates are responsive to anything other than firms’ fears of how much reputational damage particular claimants are, for a myriad of possible reasons, in a position to cause”). Gillette uses the public-goods issue to show that sellers are unlikely to share information on disreputable consumers, but it applies equally to the sharing of information by consumers about sellers. See Gillette, *supra* note 7, at 704.

130. See, e.g., *ReputationReset*, <http://www.reputationreset.com> (last visited Feb. 4, 2013) (“We help clean up the bad [search engine] results, restoring your reputation and making sure poor reviews, misinformation, or bad-mouthing competitors no longer hold you back.”) (on file with the Washington and Lee Law Review). The converse situation—websites or search engines that aggregate information on sellers’ boilerplate—is, like the reputational theory, an idea that is conceptually appealing but that has found no purchase in the real world. Bakos et al., *supra* note 109, at 33–34 (finding it “highly unlikely that shoppers are, to an important extent, becoming informed about EULA terms by consulting other online sources”); Ben-Shahar, *Opportunity To Read*, *supra* note 103, at 22–25 (evaluating the possibility of rating services for contracts but finding little hope); Florencia Marotta-Wurgler, *Will Increased Disclosure Help? Evaluating the Recommendations of the ALI’s “Principles of the Law of Software*

probably have little interest in building a reputation through any means at all.<sup>131</sup>

On the cost side of the ledger, some contractual prerogatives may be too valuable to give up, reputational consequences notwithstanding. For example, one of the most litigated issues in the world of boilerplate is the consumer class-action waiver.<sup>132</sup> Does anyone seriously believe that a seller would ever voluntarily forgo enforcement of such a clause? In addition, those provisions that are not too valuable to forgo may come up too infrequently to have any reputational impact one way or the other, given that boilerplate terms tend to govern rare contingencies.<sup>133</sup>

For all these reasons, the reputational theory is too unreliable to rescue boilerplate from its shortcomings. True, it identifies a dynamic that might cause a seller to refrain from enforcing an adhesive term against a consumer. But only if the planets align in a particular—and particularly unrealistic—way. The theory falls short of providing support for the general proposition that allowing unread boilerplate to be enforced at the whim of the seller is in the public interest.

We are therefore left with a question. If information costs render the market dysfunctional, and neither the informed-minority theory nor the reputational dynamic rescues it from that dysfunction, what other solutions to the boilerplate problem exist? For the answer, we turn to Part V.

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*Contracts*,” 78 U. CHI. L. REV. 165, 184 & n.65 (2011) (discussing the “EULalyzer” boilerplate analysis program but finding it rarely used).

131. See Hillman & Rachlinski, *supra* note 8, at 444.

132. *E.g.*, AT&T Mobility LLC v. Concepcion, 131 S. Ct. 1740, 1750–51 (2011) (upholding consumer class-action waiver against unconscionability challenge). Moreover, to be truly effective, the waiver of a class-action prohibition would have to be done on a grand scale, rather than made on a case-by-case basis, because by definition a class action cannot be filed by one consumer at a time.

133. See Cruz & Hinck, *supra* note 15, at 663 (“[T]he probability of any single customer being affected by any given contract term is usually quite small.”); Hillman & Rachlinski, *supra* note 8, at 443 (noting that “standard terms cover events that are unlikely to occur”).

### *V. Toward Enforceable Boilerplate*

We now know that once a transaction reaches a certain level of complexity, consumers simply will not read boilerplate. The functioning market that forms the basis for boilerplate's enforceability is thus largely an illusion, particularly when one considers the full verticality of the transactions that consumers encounter in the real world. No informed minority rescues nonreading consumers. And reputational concerns will not reliably constrain sellers from enforcing the boilerplate.

So where do we go from here? In the following discussion, I first review the two solutions at the extreme: enforcing no boilerplate and enforcing all of it. I then suggest a pair of solutions that fall in between the extremes. The first of the two is the more conventional in that it operates within existing unconscionability doctrine, but it reforms the doctrine using insights from the verticality approach. The second is my more radical, "forced salience" mechanism, which makes sellers and consumers alike confront boilerplate's information costs—and, by confronting them, minimize them.

#### *A. Two Extremes*

##### *1. Get Rid of All Boilerplate*

The most extreme solution to the boilerplate problem would be to refuse to allow sellers to even include boilerplate in any transaction of minimal complexity, or at least to declare it all unenforceable. Given the evidence of market failure, this approach is not as crazy as it first sounds. Yet it goes too far because even a one-sided boilerplate term is sometimes efficient. When that's the case, undoing a term would be worse than preserving it.

To understand why some one-sided boilerplate is worth preserving, one must appreciate that boilerplate presents an example of the classic market for lemons.<sup>134</sup> Although consumers

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134. For the original conception of the lemons theory, see George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84

do not usually consider boilerplate terms when making a purchase, they do pay attention to other features of the product; indeed, the whole point of satisficing is that certain features are ignored so that others can be considered. So some features (such as price, presumably) will be salient even though others (such as boilerplate) will not. Thus the lemons problem: sellers will decrease the quality of the nonsalient features and use the resulting savings to make the salient features more attractive.<sup>135</sup> Boilerplate, as a nonsalient feature, will accordingly be full of terms that reduce seller costs and shift risks to consumers, and sellers will use the money they save to lower the price of the product.<sup>136</sup> Commentators have observed this dynamic in the adhesive contract terms that accompany products as diverse as cell-phone plans,<sup>137</sup> bank accounts,<sup>138</sup> and credit cards,<sup>139</sup> and some empirics for the software industry lend support to its presence as well.<sup>140</sup>

If the lemons effect consistently shifts boilerplate's costs and risks to consumers, without any informed consent on their part, why would boilerplate ever be worth preserving? The answer is that sometimes consumers can bear those costs and risks more

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Q.J. ECON. 488, 488–500 (1970). For those who first applied it to boilerplate, see Beales et al., *supra* note 95, at 510–11; Eisenberg, *supra* note 1, at 244 & n.158. For the most thorough explanation of boilerplate's lemons dynamic, see Korobkin, *supra* note 1, at 1206.

135. See Korobkin, *supra* note 1, at 1206 (“[M]arket competition actually will force sellers to provide low-quality non-salient attributes in order to save costs that will be passed along to buyers in the form of lower prices.”).

136. *Id.*

137. Oren Bar-Gill & Rebecca Stone, *Mobile Misperceptions*, 23 HARV. J.L. & TECH. 49, 52–53 (2009).

138. Eisenberg, *supra* note 1, at 244.

139. Oren Bar-Gill, *Seduction by Plastic*, 98 NW. U. L. REV. 1373, 1401–02 (2004). For Bar-Gill, the nonsalience of credit-card terms is rooted in behavioral biases, rather than in information costs, but the effect is the same: consumers routinely discount certain features of the transaction, which gives sellers an incentive to reduce their quality so as to improve the more salient features. *Id.* at 1400–01.

140. Marotta-Wurgler, *Empirical Analysis*, *supra* note 6, at 680 (studying 647 software contracts from 598 different companies and 114 distinct markets and finding that they were “almost without exception tilted toward the seller, relative to the relevant default rules—some sharply so”).

efficiently than sellers. As Russell Korobkin explains, a “low quality” boilerplate term (i.e., a term that favors sellers over consumers) is not necessarily an inefficient one.<sup>141</sup> There are some pro-seller terms to which a fully informed consumer would want to agree because the resulting savings in price would be greater than the cost of the term to the consumer.<sup>142</sup> For example, a software company might realize substantial savings if it could contractually limit installation of its programs to one computer per customer. Such a term would arguably be “low quality,” in that it constrains consumers,<sup>143</sup> but many consumers might nevertheless be happy to accept it because they never planned to install the program on multiple machines and so can pay a lower price without giving up much in return.

In short, if a term is efficient, it should be enforced whether it emerges by sheer luck from a dysfunctional market for lemons or by design from a functioning market with robust competition and universal salience of product features. The alternative is to allow consumers to have their cake and eat it too—i.e., to enjoy the lower price but then escape enforcement of the term. Faced with that possibility, sellers would change the boilerplate to allocate such risks to themselves, inefficiently, and charge higher prices to make up for it.<sup>144</sup> Such an outcome would do no favors for seller or consumer.

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141. Korobkin, *supra* note 1, at 1283. Korobkin also points out that the lemons effect can hurt sellers as well as consumers because it prevents sellers from competing on nonsalient features. *Id.* at 1206. Indeed, the main contribution of the lemons theory is to show how high-quality products are driven out of the marketplace whenever quality is not salient. *See* Akerlof, *supra* note 134, at 489–90 (explaining the lemons theory through the market for used cars).

142. *See* Rakoff, *supra* note 1, at 1222 (“[C]osts saved by shifting risks to the customer via form terms may well be returned to the customer by means of lower prices.”).

143. Query whether copyright law already provides that constraint in 17 U.S.C. § 106(1) (2006), which forbids unauthorized reproduction of copyrighted works. But consumers might have a defense in 17 U.S.C. § 107 (fair use doctrine) or 17 U.S.C. § 117(a)(1) (limited usage license for owner of computer program).

144. *See* Korobkin, *supra* note 1, at 1213 (explaining that, if courts would refuse to enforce market-efficient terms, “the majority of resulting contracts would be inefficient and the majority of buyers made worse off”).

## 2. Enforce All Boilerplate

The solution at the other extreme is to enforce all boilerplate, information costs or not, because we can't do without it. This is a common response of boilerplate's defenders to the information cost problem; they admit its shortcomings but nonetheless insist on its inevitability, under the assumption that transactions cannot proceed unless they are governed by reams of unread contracts. Eric Posner—one of *ProCD*'s few champions in the legal academy—bases his support for the case on such an argument: “Contracts are long and detailed by necessity. To sell goods, manufacturers need to be able to put just the crucial terms on the box (such as the price) along with useful information, and to omit information of little use to consumers, including obvious information.”<sup>145</sup> And Judge Easterbrook, the author of *ProCD*, envisions only two possible worlds: one in which consumers pay now but get the terms later, and another in which cashiers read pages of contracts to customers before ringing up sales, in a “droning voice [that] would anesthetize rather than enlighten many potential buyers.”<sup>146</sup>

This insistence on boilerplate's importance is overblown. Consider my Toshiba computer purchase. If all 96,641 words of boilerplate disappeared from that transaction, the heavens would not fall. Instead, default rules would fill in the blanks, and the transaction would proceed with surprisingly little disruption. In place of Toshiba customer service contracts, I would have an implied warranty of merchantability and express warranties based on statements Toshiba made about its goods.<sup>147</sup> In place of

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145. Posner, *supra* note 27, at 1183.

146. Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1149 (7th Cir. 1997) (Easterbrook, J.).

147. See U.C.C. § 2-314 (1977) (implied warranty of merchantability); *id.* § 2-313 (express warranties). Note that the warranty of merchantability allows for some variation in the quality of goods and that the generally accepted practice in the relevant industry is a major factor in determining merchantability. See Step-Saver Data Sys., Inc. v. Wyse Tech., 752 F. Supp. 181, 191 (E.D. Pa. 1990) (“Acceptance in the trade . . . has long been a reliable barometer for determining whether a particular product is merchantable.”), *aff'd in relevant part, rev'd in irrelevant part*, 939 F.2d 91 (3d Cir. 1991). Therefore, given the bugs that one encounters as a matter of course when dealing with computers, one would not expect the warranty to have much force. For example, the *Step-Saver* court held



Microsoft's licenses, I would rely on the Copyright Act's limited grant of user privileges to software purchasers.<sup>148</sup> Instead of arbitrating various disputes with sellers, I would use the court system. And so forth.

This is not to say that a transaction can always proceed if the associated contracts disappear. To the contrary, in some instances contractual terms are essential, and getting rid of them would accordingly mean getting rid of the entire transaction. For example, no default rule will be able to tell me how soon I must return my rental car; a specific contractual term would be needed. Such essential terms, however, are generally not hidden in boilerplate. Rather, they tend to be presented up front, in a salient context, often with an array of options from which the consumer is forced to consciously choose. No one rents a car without having made a deliberate choice about the rental period. Or consider my computer purchase, in which the website walked me through the options for a number of important features, both contractual (shipping terms, service plan, extended warranty) and noncontractual (monitor, memory, size of hard drive). None of these web pages presented me with any boilerplate, and none of them was included in the boilerplate tally. Getting rid of the boilerplate would thus not have destroyed the transaction.<sup>149</sup>

The prospect of unenforceable boilerplate does, however, draw attention to the importance of formulating appropriate default rules to fill the gap that unenforceable boilerplate would leave. The traditional view of default rules holds that they merely insert into the contract whatever term the parties would most likely have negotiated themselves—i.e., the efficient term.<sup>150</sup>

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that computer hardware's incompatibility with popular software did not violate the merchantability standard. *Id.* The software programs in question included WordPerfect (which qualified as popular back in the early 1990s despite its near-moribund existence today).

148. See 17 U.S.C. § 117(a).

149. Cf. Preston & McCann, *supra* note 71, at 9 (commenting on *ProCD* by observing that "the seven-by-nine-by-three-inch box in which software is sold would provide plenty of space if the terms were limited to the reasonable number of terms necessary to protect intellectual property written in plain English").

150. See, e.g., POSNER, *supra* note 8, at 120 (calling for gap-filling default rules that "mimic the terms that the parties would have incorporated"); Frank

Modern scholarship, however, has revealed that substituting an inefficient term can sometimes be better because it forces a party to reveal welfare-enhancing information.<sup>151</sup> Attractive as that prospect might be in some cases, it is exactly the wrong approach to take for boilerplate terms because the whole point of the boilerplate problem is that consumers already have more information than they can deal with.<sup>152</sup> This suggests that when the possibility of unenforceable boilerplate is significant, the applicable default rule should be formulated based on the traditional gap-filling theory. Otherwise, we end up with the worst of both worlds: an unenforceable contract term displaced by an inefficient default rule.

In short, getting rid of all boilerplate is too extreme, but so is preserving all boilerplate. Therefore, the correct legal solution must appreciate that some boilerplate is good for consumers, even if produced by a dysfunctional market, and that doing away with boilerplate will not necessarily explode the transaction, as long as the law remains attentive to filling the resulting gap with appropriate default rules. With those caveats in mind, let us turn to a pair of more promising solutions to the boilerplate problem.

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H. Easterbrook & Daniel R. Fischel, *The Corporate Contract*, 89 COLUM. L. REV. 1416, 1433 (1989) (calling for gap-filling default rules that “duplicate the terms the parties would have selected”); Charles J. Goetz & Robert E. Scott, *The Mitigation Principle: Toward a General Theory of Contractual Obligation*, 69 VA. L. REV. 967, 971 (1983) (calling for gap-filling default rules that “mimic the agreements contracting parties would reach were they costlessly to bargain out each detail of the transaction”).

151. See Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87, 97–100 (1989) (discussing penalty default rules and arguing that inefficient default contract terms should be enforced against the party that possesses more information, thus encouraging both information sharing and explicit “contract[ing] around” the inefficient rules). Ayres and Gertner also discuss using defaults to incentivize the sharing of information with third parties, such as courts, rather than with the other contracting party. *Id.* at 95–98. Those defaults are less relevant here.

152. See *supra* Part II.B.2 (discussing consumers’ cognitive limitations and the problem of information overload).

### B. *Two In-Betweens*

Having rejected the solutions at the two extremes, let us now consider two approaches in between. The first is to use verticality to adjust contract law's well-known approach to adhesion contracts—namely, the unconscionability doctrine—so as to better contextualize its inquiry and properly allocate its burdens of proof. The second is to directly require sellers to lower the information costs that their boilerplate imposes, both by making it more salient and by reducing its overall volume.

#### 1. *Unconscionability*

When concerns about boilerplate arise, contract law turns to the unconscionability doctrine.<sup>153</sup> The unconscionability analysis focuses on whether there were defects in the bargaining process (procedural unconscionability) and on whether the resulting contract contains grossly one-sided terms (substantive unconscionability).<sup>154</sup> Some courts will invalidate a contract only

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153. To be sure, there are other applicable doctrines, such as the “reasonable expectations” doctrine, *see, e.g.*, *Sparks v. St. Paul Ins. Co.*, 495 A.2d 406, 414 (N.J. 1985) (ruling that consent to an insurance contract “can be inferred only to the extent that the policy language conforms to public expectations and commercially reasonable standards”), and the Restatement’s rule for standardized agreements, *see* RESTATEMENT (SECOND) OF CONTRACTS § 211(3) (1981) (“Where the other party has reason to believe that the party manifesting such assent would not do so if he knew that the [standardized] writing contained a particular term, the term is not part of the agreement.”). But as Russell Korobkin points out, both doctrines suffer from infirmities similar to those of unconscionability, and in any event, they “appear to have been almost completely forgotten by courts, at least outside of the realm of insurance contracts.” Korobkin, *supra* note 1, at 1270–71. In any event, to the extent that these doctrines remain appealing, they can easily be folded into my substantive unconscionability proposal.

154. The distinction between procedural and substantive unconscionability originated in Arthur Allen Leff, *Unconscionability and the Code—The Emperor’s New Clause*, 115 U. PA. L. REV. 485, 487 (1967) (referring to “bargaining naughtiness as ‘procedural unconscionability’” and to “evils in the resulting contract as ‘substantive unconscionability’”) and has become a staple of the case law. *See, e.g.*, *Morrison v. Circuit City Stores, Inc.*, 317 F.3d 646, 666 (6th Cir. 2003) (discussing Ohio law); *Williams v. Walker-Thomas Furniture Co.*, 350 F.2d 445, 449 (D.C. Cir. 1965) (not using the terms “procedural” and “substantive,” but explaining that “[u]nconscionability has generally been

when they find both kinds of unconscionability,<sup>155</sup> whereas others are satisfied with just one of the two subcategories.<sup>156</sup> The following proposal requires proof of both but makes a small adjustment to procedural unconscionability and a bigger adjustment to substantive unconscionability. In combination, these changes would go a long way toward addressing the infirmities in the way contract law approaches boilerplate.

Start with procedural unconscionability. As Russell Korobkin points out, the procedural inquiry asks whether the allegedly unconscionable term was presented in such a way as to attract the reader's attention—was it on the first page? was it in boldface?<sup>157</sup>—but ignores the fact that cognitively overburdened consumers might fail to process even a prominent term.<sup>158</sup> In contrast, Korobkin observes, a better procedural unconscionability analysis would not be satisfied with examining whether a boilerplate term was *prominent*, but would instead directly address whether it was *salient* to consumers as a class.<sup>159</sup>

What does verticality add to this conversation? Context. In order to determine whether a term is truly salient, courts must look beyond the four corners of the contract itself and consider

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recognized to include an absence of meaningful choice on the part of one of the parties together with contract terms which are unreasonably favorable to the other party”).

155. See, e.g., *Gillman v. Chase Manhattan Bank, N.A.*, 534 N.E.2d 824, 828 (N.Y. 1988) (“A determination of unconscionability generally requires that a contract was both procedurally and substantially unconscionable when made . . .”).

156. See, e.g., *Maxwell v. Fid. Fin. Servs., Inc.*, 907 P.2d 51, 59 (Ariz. 1995) (concluding that “a claim of unconscionability can be established with a showing of substantive unconscionability alone”).

157. See, e.g., *Russell v. Performance Toyota, Inc.*, 826 So. 2d 719, 726 (Miss. 2002) (enforcing an arbitration clause “preceded by boldface and capitalized headings”); *Commercial Credit Corp. v. Leggett*, 744 So. 2d 890, 895–98 (Ala. 1999) (enforcing an arbitration clause appearing in upper-case letters in the “boxed-in” part of a contract).

158. Korobkin, *supra* note 1, at 1272–73. Procedural unconscionability has other failings as well. See *id.* at 1258–68. Most relevant here, however, is its overly narrow emphasis on prominence of the term at issue.

159. See *id.* at 1279–83 (arguing that salience is the key feature of procedural unconscionability and calling for courts to “initially inquire into whether a challenged term is salient or non-salient” prior to “considering the possibility of invalidating a form contract term”).

the entire transaction from start to finish, with all its information costs. A term may be unresponsive to market forces, notwithstanding its prominence, if it arrives after the consumer has invested considerable time in the purchase (the acquisition cost issue) or has concentrated his or her limited attention on other product features (the processing cost issue). And a term that is not prominent may nonetheless be salient if it is an important part of the transaction, regardless of how inconspicuous it seems in the abstract.

Requiring courts to relax their focus on the particular text of the boilerplate and account for the big picture is not a radical change, and in fact is consistent with the rhetoric of procedural unconscionability jurisprudence. The consumer's "age, education, intelligence, [and] business acumen and experience" are all relevant, at least in theory, to the procedural issue,<sup>160</sup> as is the "commercial setting, purpose, and effect" of the contract.<sup>161</sup> The law thus already calls for a contextualization of sorts. Yet in practice, factors like age and setting are difficult to weigh with any certainty, which is why courts tend to give them lip service and then focus on the text of the contract itself. Measuring boilerplate's information costs, however, is much easier; evidence of word count, late-arriving terms, and related factors should be readily available to consumer and seller alike, and courts can evaluate that evidence in light of the emerging empirical findings on consumers' cognitive limitations when dealing with boilerplate.<sup>162</sup>

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160. *Morrison v. Circuit City Stores, Inc.*, 317 F.3d 646, 666 (6th Cir. 2003) (quoting *Cross v. Carnes*, 724 N.E.2d 828, 837 (Ohio Ct. App. 1998)); *accord Cooper v. MRM Inv. Co.*, 367 F.3d 493, 504 (6th Cir. 2004) (quoting *Morrison*, 317 F.3d at 666); *Williams v. Walker-Thomas Furniture Co.*, 350 F.2d 445, 449 & n.7 (D.C. Cir. 1965) (stating that lack of education and "ignorance of arithmetic" are factors a court should consider); *Layne v. Garner*, 612 So. 2d 404, 408 (Ala. 1992) (examining whether a party is "unsophisticated and/or uneducated").

161. *Perdue v. Crocker Nat'l Bank*, 702 P.2d 503, 512 (Cal. 1985).

162. Korobkin would place the burden of proving nonsalience on the party that wishes to invalidate the term because all salient terms and some nonsalient terms are efficient. Korobkin, *supra* note 1, at 1280. Given the mounting evidence that boilerplate goes unread by nearly everyone, this should not be a particularly hard burden to bear. The key issue, then, is not who should bear the burden of proving procedural unconscionability; the question is

This simple expedient of adding vertical context to the analysis would result in more frequent findings of procedural unconscionability. But it would not upend boilerplate entirely. When information costs were low, as in the purchase of a straightforward product accompanied by a short contract, then the law would expect consumers to read the terms and register their individual preferences. Enforceability would merely scale with overall transactional complexity—and appropriately so.

Next, consider substantive unconscionability. Context is an important but overlooked factor here as well. A term may appear one-sided in isolation, but if the seemingly oppressed party got something more valuable in return (e.g., a significant price reduction), then invalidating the term would upset an efficient bargain. The inverse is also true: a term that appears reasonable on its face may in fact be oppressive if one party unilaterally imposed it on the other with no concomitant benefit.<sup>163</sup> In short, by examining terms in isolation, rather than in the overall bargaining context, substantive unconscionability fails to weigh the costs and benefits of the transaction as a whole.<sup>164</sup>

As Korobkin has pointed out, a better substantive unconscionability inquiry would focus not on whether the term at issue imposes a cost on the consumer, or on how high that cost is, but on whether imposing that cost on the consumer is efficient—whether it increases the parties' joint wealth.<sup>165</sup> As we saw in the lemons discussion above, unread boilerplate shifts costs to consumers as a matter of course, but such shifting is welfare-enhancing only when the consumer is the party better able to bear the risk. Therefore, to determine whether the term is “fair” to the consumer (as the substantive unconscionability analysis

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whether courts will come to understand that such proof requires a more holistic view of the transaction, in all its complexity.

163. See Baird, *supra* note 10, at 939 (“Advantage-taking through fine print is still advantage-taking, even if the stakes are small.”).

164. See Korobkin, *supra* note 1, at 1273–74 (calling the courts' failure to conduct a true cost–benefit analysis “the glaring flaw in substantive unconscionability jurisprudence”).

165. See *id.* at 1283 (“[A]s part of their ‘substantive unconscionability’ analysis, courts should examine whether the benefits of a low-quality term to the seller in the form of savings in production, distribution, and sales costs exceed the value of an alternative term to potential buyers.”).

purports to do), one must determine which party can most cheaply bear the risk being shifted.<sup>166</sup>

Courts rarely make this determination, but there are exceptions. For example, the court in *A&M Produce Co. v. FMC Corp.*<sup>167</sup> evaluated a disclaimer of all warranties for agricultural equipment. Noting that “risk of loss is most appropriately borne by the party best able to prevent its occurrence,” the court ruled that the disclaimer was substantively unconscionable, determining that the seller could bear the risk of its own equipment’s failings more efficiently than the inexperienced buyer.<sup>168</sup>

Granted, a cost–benefit analysis of this sort can be difficult. Even when a court knows that a boilerplate term is nonsalient, and has therefore already found procedural unconscionability, it will often be unclear whether a boilerplate term’s imposition of costs or risks on the consumer is efficient.<sup>169</sup> This means that the outcome will often depend on which party bears the burden of proof.

Korobkin suggests that the consumer should bear this burden (i.e., should have to prove that a boilerplate term is inefficient) because he is concerned that efficient terms might otherwise be thrown out—the danger of false positives.<sup>170</sup> Here, however, Korobkin and I disagree. Assigning burdens of proof generally is a function of two factors: (1) the probability of the event to be proved and (2) which party has better access to the

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166. *Id.* at 1283–84.

167. *A&M Produce Co. v. FMC Corp.*, 186 Cal. Rptr. 114 (Cal. Ct. App. 1982), *cited in* Korobkin, *supra* note 1, at 1277.

168. *A&M Produce Co.*, 186 Cal. Rptr. at 125 (“Rarely would the buyer be in a better position than the manufacturer-seller to evaluate the performance characteristics of a machine.”).

169. *See* Korobkin, *supra* note 1, at 1274–76 (revealing the complexities of such an inquiry through examples of arbitration clauses); *cf.* PUBLIC CITIZEN, THE ARBITRATION TRAP: HOW CREDIT CARD COMPANIES ENSNARE CONSUMERS 2 (2007) (arguing that credit-card arbitration agreements disfavor consumers).

170. *See* Korobkin, *supra* note 1, at 1285 (calling for an “implicit presumption against invalidating terms”).

relevant evidence.<sup>171</sup> Regarding the first factor, we simply do not know how frequently boilerplate contains inefficient terms. Korobkin is certainly right that there is a danger of false positives if sellers bear the admittedly difficult burden of proving efficiency.<sup>172</sup> But there is a danger of false negatives if the consumer bears the burden of proving inefficiency, and it is impossible to know which danger is greater.<sup>173</sup>

Given this uncertainty, the better basis for assignment of the burden is to look to the second factor: which party has better access to evidence about the matter to be proved?<sup>174</sup> In the boilerplate context, that party is the seller. After all, the seller is the party that drafted the term in question, and of the two parties it is the only one that fully internalizes the boilerplate's information costs. So the seller presumably had a reason for allocating costs and risks as it did. If the reason is that the chosen allocation increases the parties' joint wealth, then the seller can so demonstrate. If, however, the reason is that the lemons dynamic forced it to inefficiently offload costs on the consumer through nonsalient means, then forcing the seller to prove efficiency not only leads to the correct result in the case at hand, but it also helps solve the lemons problem going forward and thus increases overall market efficiency.

In sum, two changes to the unconscionability doctrine can help remedy the problems with boilerplate that this Article has identified. First, as always, the consumer must prove procedural unconscionability by showing that the disputed term was not

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171. 2 MCCORMICK ON EVIDENCE § 337 (John W. Strong gen'l ed., 5th ed. 1999); Bruce L. Hay and Kathryn E. Spier, *Burdens of Proof in Civil Litigation: An Economic Perspective*, 26 J. LEG. STUD. 413, 418–19 (1997).

172. See Korobkin, *supra* note 1, at 1285 (arguing that false positives occur because courts have difficulty weighing “industry-wide benefits and costs in the context of an individual dispute”).

173. See POSNER, *supra* note 8, at 827 (“[I]n the context of civil liability, there is no reason to prefer one danger over the other.”).

174. JAMES FLEMING JR. ET AL., CIVIL PROCEDURE 344 (4th ed. 1992) (“The burden of proof traditionally is placed on the party having the readier access to knowledge about the fact in question.”); MCCORMICK, *supra* note 171, § 337 (“A doctrine often repeated by the courts is that where the facts with regard to an issue lie peculiarly in the knowledge of a party, that party has the burden of proving the issue.”).



salient—but this inquiry should take into account emerging empirical evidence and the full context of the overall transaction. Second, if the consumer satisfies this burden, then the burden on the issue of substantive unconscionability shifts to the seller, who must show that the term was efficient. Failure to do so means the term is unenforceable.

## 2. *Forced Salience*

Changing the unconscionability doctrine is an attractive approach to the boilerplate problem, not least because it works within an existing and familiar contract law construct. Its application, however, is likely to be infrequent because an unconscionability analysis arises only in those rare instances in which the parties have begun suing each other. In addition, its effect will be indirect because it encourages, rather than explicitly requires, boilerplate to be responsive to the market.

Is there a more direct and universal approach to boilerplate's information costs problem—one that would fix the marketplace rather than supplant it? Consider again the two aspects of the information costs problem: the acquisition cost and the processing cost. Reducing acquisition cost is a matter of making the boilerplate more immediately accessible to consumers, such as through a disclosure requirement, so that they are better able to make a rational decision.<sup>175</sup> Yet even when the acquisition cost is reduced to zero—i.e., even when the adhesive terms are readily

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175. A number of commentators have accordingly suggested solving the boilerplate problem through early, mandatory disclosure. See, e.g., Braucher, *Decision to Trust the Courts*, *supra* note 29, at 755–56 (criticizing “the practice of holding back terms for mass-market products . . . even when it would be easy to provide them in advance” and arguing that “[t]he customer has a right to know what the product is before deciding whether to order it); Braucher, *Delayed Disclosure*, *supra* note 78, at 1860–62 (calling for “require[d] disclosure of key terms in software licenses,” and presenting data that only 12.5% of surveyed software companies disclosed their license agreement prior to requiring payment online); Robert A. Hillman & Maureen O'Rourke, *Defending Disclosure in Software Licensing*, 78 U. CHI. L. REV. 95, 104 (2011) (describing mandatory disclosure as a “safe harbor” for sellers).

available—consumers still face the processing cost, which in a complex transaction can pose just as big a problem.<sup>176</sup>

Requiring early disclosure is therefore not enough; it is a necessary but not sufficient part of the solution whenever the transaction as a whole is complex enough to impose considerable information processing costs. Any solution must also reduce processing costs. And until scientists develop a way to improve human cognition, processing costs are going to remain a function of the total amount of information presented.<sup>177</sup> There is, however, a regulatory approach that would lower both acquisition and processing costs, and it is revealed by examining the verticality of the computer purchase described above.

The computer purchases involved plenty of product features, both contractual and noncontractual, that were not presented as take-it-or-leave-it propositions. For example, the Dell website guided me through an array of options on such matters as the amount of memory, size of the hard drive, shipping terms, in-home service plan, and extended warranty—with one web page dedicated to each such feature. Indeed, the website all but forced me to choose between those options, with corresponding costs or savings depending on the choices I made.<sup>178</sup>

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176. See *Ford Motor Credit Co. v. Milhollin*, 444 U.S. 555, 568 (1980) (“*Meaningful* disclosure does not mean *more* disclosure. Rather, it describes a balance between ‘competing considerations of complete disclosure . . . and the need to avoid . . . [informational overload.]’” (alterations in original) (quoting S. REP. NO. 96-73, at 3 (1979), *reprinted in* 1980 U.S.C.C.A.N. 280, 281)); Ben-Shahar & Schneider, *supra* note 41, at 688 (noting that “incomplete disclosure leaves people ignorant, but complete disclosure creates crushing overload problems”). Indeed, relying on disclosure as the sole solution to the information costs problem actually makes things worse because it blinds courts to the processing problem and prompts them to enforce any disclosed term, no matter how nonsalient it may be. See Hillman, *supra* note 1, at 839 (noting that increased disclosure “may backfire . . . because it may not increase reading or shopping for terms or motivate businesses to draft reasonable ones, but instead, may make heretofore suspect terms more likely enforceable”).

177. See Korobkin, *supra* note 1, at 1246 (“[C]ontractual inefficiency results primarily from suboptimal information processing rather than from incomplete information.”).

178. I was not literally forced to go through each and every feature because there was a “Finish[] Personalizing” option on each screen that would have skipped right to the order confirmation process—although even then I would have had to make choices with regard to terms such as shipping and payment.

Suppose that the law required Dell to force me to review all the contractual terms this way, rather than just the very few that it deemed worthy of inclusion up front? By making me confront each term before submitting any payment, Dell would be solving the information acquisition problem. And by not allowing me to skip the boilerplate, Dell would at least be increasing the odds that my attention would focus on the transaction's contractual features, thus addressing the information processing problem.<sup>179</sup>

One can imagine more or less intrusive versions of this requirement. For example, the law could merely require consumers to click "I agree" with regard to each individual contract term. Or the law could require sellers to offer options with real consequences (in terms of costs or savings) and force consumers to select among them. Those approaches, however, would likely produce little real increase in salience; a consumer overloaded with information would just mindlessly click through, selecting options without really making choices.<sup>180</sup> Information acquisition would occur, but information processing would not.

More effective would be to require the website to really force the consumer to read—e.g., by scrolling the text line by line, at a slow speed, or otherwise preventing the consumer from advancing to the next term until a set period of time had elapsed.<sup>181</sup> This approach, which I call "forced salience," helps solve the boilerplate problem in two ways. The most obvious is that by presenting each term up front and making the consumer confront

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179. There is some empirical evidence that offering a consumer options can increase the rate of acceptance of a contract. *E.g.*, Plaut & Bartlett, *supra* note 128, at 305.

180. See Hillman & Barakat, *supra* note 105, at 26 (speculating that "extra clicking would be cumbersome for little gain because consumers would simply click without digesting the disclaimer"); Hillman & O'Rourke, *supra* note 175, at 108 (considering a requirement that consumers click "I agree" but deciding that it "ultimately may not promote any additional reading anyway"); Korobkin, *supra* note 1, at 1246 (dismissing the "specific assent requirement").

181. One might combine this approach with a "plain English" requirement, so that the now unavoidable boilerplate could actually be comprehended. Masson and Waldron had some success in increasing consumer comprehension through simplified diction and sentence structure. See Masson & Waldron, *supra* note 84, at 71–72, 75–76 (finding a significant increase in study participants' ability to answer questions and correctly paraphrase prepositional phrases after reading the "plain-language" version of a contract).

it before moving on, it directly seeks to reduce the costs of information acquisition and information processing.<sup>182</sup> If this results in compensatory consumer decisionmaking, great; the boilerplate problem is solved and the market properly registers the consumer's preferences.

But would forced salience really result in significantly more reading of boilerplate? Perhaps not. Even if reading did not increase, however, this approach would address the boilerplate problem in a second, more subtle way. Consider that, as a consumer, your first reaction to forced salience is probably to scream in horror at the prospect of sitting through all of that boilerplate. It's the digital equivalent of Judge Easterbrook's "droning voice" that would "anesthetize rather than enlighten."<sup>183</sup> Yet this seeming liability is in fact an asset because, by adding new costs—i.e., time and frustration—to each contract term in the transaction, forced salience effectively imposes a tax on bloated boilerplate.<sup>184</sup> Sellers know that consumers have limited time, limited cognitive abilities, and low thresholds for

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182. Empirics suggest that reducing the length of click-wrap contracts increases comprehension and may increase readership. See Plaut & Bartlett, *supra* note 128, at 302–04 (finding 11% overall comprehension increase in all test contracts, but finding significant increase in readership time in only two of the six contracts). Reducing length also increases the likelihood that the consumer will reject the contract, suggesting that some expression of preferences due to increased comprehension might be occurring. See *id.* at 304–05 (suggesting that shorter contracts most likely allowed study participants to understand and analyze the terms). Note, however, that the contracts being tested by Plaut and Bartlett were associated with a free product. See *id.* at 301 (registering for and using online music website). Such contracts tend to have more readers than priced products. See Bakos et al., *supra* note 109, at 34 (pointing out that “consumers may fear that there is a ‘catch’ in products offered for free”).

183. *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1149 (7th Cir. 1997) (Easterbrook, J.).

184. Indeed, if one was interested only in this aspect of the forced salience approach, one could achieve it directly by taxing each word of boilerplate. (Thanks to Fred Yen for pointing this out.) One might also view forced salience as a classic formality, a “check against inconsiderate action,” which focuses parties’ attention on the legal consequences of their actions. See Baird, *supra* note 10, at 944 (“It is much cheaper to sign a document than to melt wax and use a signet ring. But this is the point.”); Lon L. Fuller, *Consideration and Form*, 41 COLUM. L. REV. 799, 800 (1941) (describing formalities’ “cautionary function”).

frustration. This means that sellers will respond to a forced salience requirement by reducing the overall volume of contract terms to the bare minimum, thus reducing information overload and increasing the chances that the remaining terms can truly be processed.<sup>185</sup>

In other words, forced salience makes consumers confront the reality of boilerplate's information costs, and the result is that sellers can no longer lade the transaction with as much boilerplate as they please. Instead, sellers will have to make a call about how badly they want each term to be part of the transaction. The inevitable paring of boilerplate to its essentials, and the resulting reduction in sheer volume of terms, would serve to make it easier for consumers to process those terms that survive. Even when forced salience fails, it succeeds.

Forced salience is an admittedly radical solution to the boilerplate problem. This Article has demonstrated, however, that the problem itself is radical and is radically underappreciated. Taking half-hearted measures will not restore integrity to so dysfunctional a market. Forcing the market to confront its dysfunction will.

## VI. Conclusion

Consumers do not encounter boilerplate in the abstract. They encounter it in the course of real-world transactions. And in the real world, the information costs of boilerplate loom large.

This Article has accordingly presented the results of a first-ever study of the information costs that boilerplate imposes on

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185. One might also seek to reduce complexity to more manageable levels by regulating the noncontractual features of a transaction and their associated information costs. In a sense, the law already does so through product liability, false advertising law, and similar consumer-oriented regulation. But contractual features are a low-hanging fruit; it is comparatively simple to reduce complexity by declaring a contract term unenforceable—or at least that is the sort of regulation in which the law routinely engages. It is a much different proposition to reduce complexity through regulation of noncontractual product features (for example, requiring computer vendors to offer hard drives in only one size or a set number of USB ports). See Grether et al., *supra* note 10, at 289 (“[T]o limit the number of products that firms could sell or the number of attributes that products could have would require a costly, complex regulatory process.”).

consumers as they make their way through an actual transaction—a fully contextualized, vertical experience. Its findings are that, in a typical computer purchase, those costs are so high as to be insuperable. They loom so large that real-world consumers have little choice but to disregard boilerplate entirely.

The solution to the information cost problem is neither to forbid all use of boilerplate nor to permit its indiscriminate use. Instead, the key lies in appreciating that, just as a contextualized analysis reveals the full scope of the problem, so can a contextualized solution solve it. The proper regulatory approaches thus involve changing existing contract doctrine to take into account the informational challenges that boilerplate actually presents, or incentivizing market actors to confront those costs and, by doing so, minimize them.

## VII: Appendix A—Summary of Results

Table 1: Summary of Results<sup>186</sup>

Seller	No. of Contracts	No. of Words . . .				
		. . . overall	. . . at purchase	. . . at computer startup	. . . at program startup	. . . per \$
Acer	12	33,128	9,135	23,993	0	47.1
Dell	29	78,203	9,765	24,165	44,273	84.7
HP	25	79,340	0	24,328	55,012	103.4
Toshiba	27	96,641	18,678	34,744	43,219	131.5
<b>Total</b>	93	287,312	37,578	107,230	142,504	
<b>Total Unique</b>	56	161,767	39,065 [24.1%]	38,225 [23.6%]	84,477 [52.2%]	
<b>Raw Average</b>	23.25	71,828	9,394	26,807	35,626	91.7
<b>Weighted Average</b>	24.75	74,897	7,698 [10.3%]	25,911 [34.6%]	41,286 [55.1%]	93.2

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186. Weighted averages are based on the market share set forth *supra* note 63.

VIII: APPENDIX B—BOILERPLATE BREAKDOWN

<u>ACER PURCHASE</u>				
	<b>Contract No.</b>	<b>Title</b>	<b>Word Count</b>	<b>When Encountered?</b>
<b>Acer</b>	1	Standard Terms of Sale	3,005	At purchase
	2	Limited Warranty Agreement	3,353	At purchase
	3	Legal	665	Incorporated in 1
	4	Products & Services	136	Incorporated in 3
	5	Privacy	1,972	Incorporated in 1
	6	Contacts	4	Incorporated in 5
	7	End User License Agreement	1,487	Computer startup
	<b>Acer Subtotal:</b>		<b>10,622</b>	<b>7 contracts</b>
<b>Microsoft</b>	8	License Terms, Windows 7 Home Premium	5,115	Computer startup
	9	Windows 7 Privacy Statement	784	Incorporated in 8
	10	Windows 7 Privacy Supplement	14,872	Incorporated in 8
	11	.NET Framework Benchmark Testing Terms	429	Incorporated in 10
	12	Privacy Statement for the Microsoft Error Reporting Service	1,306	Incorporated in 10
	<b>Microsoft Subtotal:</b>		<b>22,506</b>	<b>5 contracts</b>
<b>ACER PURCHASE TOTAL</b>			<b>33,128</b>	<b>12 contracts</b>

<u>DELL PURCHASE</u>				
	<b>Contract No.</b>	<b>Title</b>	<b>Word Count</b>	<b>When Encountered?</b>
<b>Dell</b>	1	Terms and Conditions of Sale	2,339	At purchase
	2	Return Policy	700	Incorporated in 1
	3	Site Terms	1,077	Incorporated in 1
	4	Warranties	5,649	Incorporated in 1
	5	Notice for Dell End User Software License Agreement	78	Computer startup
	6	Software License Agreement	1,581	Computer startup; incorporated in 7
	7	DataSafe Online: Terms and Conditions	2,799	DataSafe startup
	8	Privacy Policy	1,665	Incorporated in 7
	9	Change of Address/Request Catalog/Mailing List Removal	256	Incorporated in 8
	10	Security	1,051	Incorporated in 8
	<b>Dell Subtotal:</b>		<b>17,195</b>	<b>10 contracts</b>

[Dell Purchase continued on next page]



<b>DELL PURCHASE</b>				
<b>Contract No.</b>	<b>Title</b>	<b>Word Count</b>	<b>When Encountered?</b>	
<b>Microsoft</b>	11	License Terms, Windows 7 Home Premium	5,115	Computer startup
	12	Windows 7 Privacy Statement	784	Incorporated in 11
	13	Windows 7 Privacy Supplement	14,872	Incorporated in 11
	14	.NET Framework Benchmark Testing Terms	429	Incorporated in 11
	15	Privacy Statement for the Microsoft Error Reporting Service	1,306	Incorporated in 13
	16	Software License Terms—Office 2010 Desktop Application Software	2,819	Office Starter startup
	17	Genuine Microsoft Software Program Privacy Statement	911	Incorporated in 16
	18	Privacy Statement for Office 2010	4,994	Incorporated in 16
	19	Use of Microsoft Copyrighted Content	1,628	Incorporated in 16 and 22
	20	Privacy Supplement for Office Starter	455	Incorporated in 18
	21	Trademark Guidelines	47	Incorporated in 19
	22	Service Agreement	10,444	Internet Explorer startup; Incorporated in 19
	23	Online Privacy Statement	4,614	Incorporated in 22
	24	Anti-Spam Policy	464	Incorporated in 22
	25	Authorized 3rd Party Software and Services	130	Incorporated in 22
<b>Microsoft Subtotal:</b>		<b>49,012</b>	<b>15 contracts</b>	
<b>Adobe</b>	26	Warranty Disclaimer and Software License Agreement	3,438	Reader startup
	27	Online Privacy Policy	4,551	Incorporated in 26
	28	Adobe.com Opt-Out page	201	Incorporated in 27
<b>Adobe Subtotal:</b>		<b>8,190</b>	<b>3 contracts</b>	
<b>McAfee</b>	29	End User License Agreement	3,806	Anti-Virus startup
<b>McAfee Subtotal:</b>		<b>3,806</b>	<b>1 contract</b>	
<b>DELL PURCHASE TOTAL</b>		<b>78,203</b>	<b>29 contracts</b>	

<b>HP PURCHASE</b>				
	<b>Contract No.</b>	<b>Title</b>	<b>Word Count</b>	<b>When Encountered?</b>
<b>HP</b>	1	End User License Agreement	1,822	Computer startup
	<b>HP Subtotal:</b>		<b>1,822</b>	<b>1 contract</b>
<b>Microsoft</b>	2	License Terms, Windows 7 Home Premium	5,115	Computer startup
	3	Windows 7 Privacy Statement	784	Incorporated in 2
	4	Windows 7 Privacy Supplement	14,872	Incorporated in 2
	5	.NET Framework Benchmark Testing Terms	429	Incorporated in 2
	6	Privacy Statement for the Microsoft Error Reporting Service	1,306	Incorporated in 4
	7	Software License Terms—Office 2010 Desktop Application Software	2,819	Office Starter startup
	8	Genuine Microsoft Software Program Privacy Statement	911	Incorporated in 7
	9	Privacy Statement for Office 2010	4,994	Incorporated in 7
	10	Use of Microsoft Copyrighted Content	1,628	Incorporated in 7 and 13
	11	Privacy Supplement for Office Starter	455	Incorporated in 9
	12	Trademark Guidelines	47	Incorporated in 10
	13	Service Agreement	10,444	Incorporated in 10
	14	Online Privacy Statement	4,614	Incorporated in 13
	15	Anti-Spam Policy	464	Incorporated in 13
	16	Authorized 3rd Party Software and Services	130	Incorporated in 13
	<b>Microsoft Subtotal:</b>		<b>49,012</b>	<b>15 contracts</b>
<b>Adobe</b>	17	Software License Agreement	9,217	Premiere Elements startup
	18	Privacy Policy	4,551	Incorporated in 17
	19	Adobe.com Opt-Out page	201	Incorporated in 18
	20	General Terms of Use	8,130	Incorporated in 17
	21	Trademark Information	1,300	Incorporated in 20
	22	Trademark Guidelines	3,001	Incorporated in 22
	23	Trademark Database for General Distribution	1,484	Incorporated in 22
	24	Fonts	101	Incorporated in 17
	25	Flash Runtime Distribution License	521	Incorporated in 17
<b>Adobe Subtotal:</b>		<b>28,506</b>	<b>9 contracts</b>	
<b>HP PURCHASE TOTAL</b>			<b>79,340</b>	<b>25 contracts</b>

<b>TOSHIBA PURCHASE</b>				
	<b>Contract No.</b>	<b>Title</b>	<b>Word Count</b>	<b>When Encountered?</b>
<b>Toshiba</b>	1	Terms and Conditions of Sale	2,175	At purchase
	2	NAF Code of Procedure	16,503	Incorporated in 1
	3	Notices	405	Shrinkwrap on computer
	4	Limited Warranty	2,522	Incorporated in 3
	5	JAMS Streamlined Arbitration Rules & Procedures	7,282	Incorporated in 4
	6	End User License Agreement	2,029	Computer startup
	7	Eco Utility	847	Eco Utility Startup
	<b>Toshiba Subtotal:</b>		<b>31,763</b>	<b>7 contracts</b>
<b>Microsoft</b>	8	License Terms, Windows 7 Home Premium	5,115	Computer startup
	9	Windows 7 Privacy Statement	784	Incorporated in 8
	10	Windows 7 Privacy Supplement	14,872	Incorporated in 8
	11	.NET Framework Benchmark Testing Terms	429	Incorporated in 8
	12	Privacy Statement for the Microsoft Error Reporting Service	1,306	Incorporated in 10
	13	Software License Terms—Office 2010 Desktop Application Software	2,819	Office Starter startup
	14	Genuine Microsoft Software Program Privacy Statement	911	Incorporated in 13
	15	Privacy Statement for Office 2010	4,994	Incorporated in 13
	16	Use of Microsoft Copyrighted Content	1,628	Incorporated in 13 and 19
	17	Privacy Supplement for Office Starter	455	Incorporated in 15
	18	Trademark Guidelines	47	Incorporated in 16
	19	Service Agreement	10,444	Incorporated in 16; Live Essentials startup
	20	Online Privacy Statement	4,614	Incorporated in 19
	21	Anti-Spam Policy	464	Incorporated in 19
	22	Authorized 3rd Party Software and Services	130	Incorporated in 19
	<b>Microsoft Subtotal:</b>		<b>49,012</b>	<b>15 contracts</b>
<b>Google</b>	23	Chrome Terms of Service	6,552	Chrome startup
	24	Google Privacy Policy	2,240	Incorporated in 26
	25	Key Terms	598	Incorporated in 27
	26	Google Chrome Privacy Notice	3,225	Incorporated in 26
	<b>Google Subtotal:</b>		<b>12,615</b>	<b>4 contracts</b>

[Toshiba Purchase continued on next page]

<u>TOSHIBA PURCHASE</u>			
Contract No.	Title	Word Count	When Encountered?
Norton	27	Norton License Agreement	3,251 Internet Security startup
	Norton Subtotal:		3,251 1 contract
TOSHIBA PURCHASE TOTAL		96,641	27 contracts