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**FROM LORD COKE TO INTERNET PRIVACY: THE PAST,  
PRESENT, AND FUTURE OF THE LAW OF ELECTRONIC  
CONTRACTING**

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I. INTRODUCTION

Contract law is applied countless times every day, in every manner of transaction large or small. Rarely are those transactions reflected in an agreement produced by a lawyer; quite the contrary, almost all contracts are concluded by persons with no legal training and often by persons who do not have a great deal of education.<sup>1</sup> In recent years, moreover, technological advances have provided novel methods of creating contracts.<sup>2</sup> Those facts present practitioners of contract law with an interesting conundrum: The law must be sensible and stable if parties are to have confidence in the security of their arrangements; but contract law also must be able to handle changing social and economic circumstances, changes that occur at an ever-increasing speed. Contract law, originally designed to handle agreements reached by persons familiar with one another, evolved over time to solve the problems posed by contract formation that was done at a distance—that is, contract law has developed to handle first pa-

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1. See Shmuel I. Becher, *Behavioral Science and Consumer Standard Form Contracts*, 68 LA. L. REV. 117, 118 (2007) (“Many of our most important personal and everyday relationships involve contracts or are governed by them.”); see also *infra* text accompanying notes 22–23.

2. See *infra* Parts II–III.

per, then telegraphic, and finally telephonic communications.<sup>3</sup> It has handled those changes very well.

In its present form, contract law can be traced back to the middle of the nineteenth century.<sup>4</sup> At that time, the new worlds of the telegraph and the railroad led to the adoption of such novel doctrines as the law of consequential damages<sup>5</sup> and the law of third-party beneficiaries.<sup>6</sup> It took a while to flesh out those and other new doctrines, but it is safe to say that between, say, 1932, when contract law was codified in the First Restatement,<sup>7</sup> and 2000, contract law changed little.<sup>8</sup> In other words, a student who could pass a contracts exam in 1932 could also pass the exam in 2000. The reasons for this quiescence in doctrine are easy to see in retrospect. Because there was no disruptive technology in the period from 1932 to 2000, the law did not have to respond to technological changes.<sup>9</sup>

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3. See *infra* Parts II–III.

4. Morton J. Horwitz, *The Historical Foundations of Modern Contract Law*, 87 HARV. L. REV. 917, 917 (1974).

5. See *Hadley v. Baxendale*, (1854) 156 Eng. Rep. 145 (Exch.) 145; 9 Ex. 341, 341 (holding that recoverable damages are those that arise naturally or those that are in the reasonable contemplation of the parties when they made the contract).

6. See *Lawrence v. Fox*, 20 N.Y. 268, 274 (1859) (illustrating the principle that when one person makes a promise to another for the benefit of a third person, that third person may maintain an action for its breach).

7. RESTATEMENT (FIRST) OF CONTRACTS (1932).

8. This is something of an overstatement, but not much of one. Doctrines like estoppel and unconscionability achieved prominence as Article 2 of the Uniform Commercial Code (“UCC”) and the Restatement (Second) of Contracts were circulated beginning in the 1960s, but they merely softened existing doctrine. U.C.C. § 2-302 (1957); RESTATEMENT (SECOND) OF CONTRACTS §§ 90, 208 (1979); see also Larry A. DiMatteo, *Equity’s Modification of Contract: An Analysis of the Twentieth Century’s Equitable Reformation of Contract Law*, 33 NEW ENG. L. REV. 265, 298 (1999) (“The expanded use of equitable principles and the infusion of good faith into contract law in the twentieth century has led to an equitable modification of contract.”). Those doctrines did not change the basic warp-and-wool of the law. See, e.g., C.M.A. McCauliff, *A Historical Approach to the Contractual Ties That Bind Parties Together*, 71 FORDHAM L. REV. 841, 864 (2002) (arguing that “[p]romissory estoppel is simply consideration, cloaked in a new name”).

9. Automobiles, television, and aviation certainly were disruptive in other areas of the law but those inventions led to no doctrinal changes in contracts. *But see* Raymond T. Nimmer, *Images and Contract Law—What Law Applies to Transactions in Information*, 36 HOUS. L. REV. 1, 3 (1999) (“The contract law developed in the 1940’s and 1950’s to accommodate sales of toasters, automobiles, and other wares . . .”).

In the 1990s, however, things began to change. The rise in computer use by individuals coupled with the advent of the World Wide Web gave rise to two parallel developments, both of which challenged the law of contract formation. Increased computer use created a demand for software programs designed for the consumer market, and those programs were commonly transferred to users by way of standard-form licenses that were packaged with the software and thus unavailable before the consumer paid for the software.<sup>10</sup> Also, parties in large numbers began to use electronic means—the computer—to enter into bargained-for relationships.<sup>11</sup> The turn of the millennium brought two electronic contracting statutes, the Electronic Signatures in Global and National Commerce Act (“E-Sign”)<sup>12</sup> and the Uniform Electronic Transactions Act (“UETA”),<sup>13</sup> which removed any doubts that contracts entered into electronically could satisfy the Statute of Frauds.<sup>14</sup> Encouraged by the certainty given by those statutes, Internet businesses started offering contract terms on their websites, asking customers to consent to terms by clicking an icon, or by not seeking express assent at all by presenting terms of use by hyperlink.<sup>15</sup>

These new methods of contracting spawned a rich body of case law and academic commentary. The 1990s brought numerous cases in which consumers who bought packaged software challenged the terms that came in the boxes containing the software. That led to celebrated decisions involving the terms of so-called “shrinkwrap”

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10. See Nancy S. Kim, *Contract's Adaptation and the Online Bargain*, 79 U. CIN. L. REV. 1327, 1335–37 (2011) (explaining the contract practices of software companies).

11. See Aashish Srivastava, *Legal Understanding and Issues with Electronic Signatures—An Empirical Study of Large Businesses*, 35 RUTGERS COMPUTER & TECH. L.J. 42, 42 (2008) (“The advent of the Internet transformed the world of commerce in the nineties.”). These were not the first “machine-made” contracts. In the 1950s and 1960s, some insurance companies sold flight insurance from vending machines. See *Steven v. Fid. & Cas. Co. of N.Y.*, 377 P.2d 284, 286 (Cal. 1962) (describing how an airline passenger purchased a life insurance policy from a vending machine); *Lachs v. Fid. & Cas. Co. of N.Y.*, 118 N.E.2d 555, 556 (N.Y. 1954) (same).

12. Electronic Signatures in Global and National Commerce Act, 15 U.S.C. §§ 7001–7031 (2006).

13. UNIF. ELEC. TRANSACTIONS ACT, §§ 1–21, 7A U.L.A. 211 (1999).

14. Juliet M. Moringiello, *Signals, Assent and Internet Contracting*, 57 RUTGERS L. REV. 1307, 1341 (2005).

15. *Id.* at 1317–19 (explaining the presentation of contract terms via “click-wrap” and “browse-wrap” agreements).

agreements.<sup>16</sup> At the same time, individuals tried to sue entities with which they had transacted electronically, only to find that their actions were barred by choice of forum and arbitration clauses found in online terms of service.<sup>17</sup> At first, these parallel developments led some to conflate the issues involved in shrinkwrap contracting and electronic contracting, giving rise to a belief that new rules were needed to deal with electronic contracting problems.<sup>18</sup> That belief gained a good deal of traction in academia and even among a few judges.<sup>19</sup> Briefly, it appeared that a new law might be created for electronic contracts.<sup>20</sup> Soon, however, the courts recognized that the legal problems posed by the new technology were no different than those that had been presented in the preceding century and, therefore, judges rejected efforts to change the basic law of contracts.<sup>21</sup>

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16. *See, e.g.*, *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1148–49 (7th Cir. 1997) (reasoning that “terms inside a box of software bind consumers who use the software after an opportunity to read the terms and to reject them by returning the product”); *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452–53 (7th Cir. 1996) (deeming the following arrangement permissible: a consumer “inspected the package, tried out the software, learned of the license, and did not reject the goods”); *Step-Saver Data Sys., Inc. v. Wyse Tech.*, 939 F.2d 91, 105 (3d Cir. 1991) (concluding that “an additional term detailed in the box-top license will not be incorporated into the [parties’] contract if the term’s addition to the contract would materially alter the [parties’] agreement”).

17. *See, e.g.*, *Forrest v. Verizon Commc’ns, Inc.*, 805 A.2d 1007, 1010 (D.C. 2002) (upholding the validity of a forum selection clause when the consumer was provided adequate notice of its existence); *Caspi v. Microsoft Network, L.L.C.*, 732 A.2d 528, 532–33 (N.J. Super. Ct. App. Div. 1999) (same).

18. *See* Juliet M. Moringiello & William L. Reynolds, *What’s Software Got to Do with It? The ALI Principles of the Law of Software Contracts*, 84 TUL. L. REV. 1541, 1542 (2010) [hereinafter Moringiello & Reynolds, *What’s Software Got to Do with It?*] (explaining some proponents’ belief that “the common law of contracts and Article 2 of the UCC [are] inappropriate bodies of law to govern software contracts”).

19. *See* Moringiello, *supra* note 14, at 1315 (explaining that, in earlier cases, courts thought that offerors in machine-delivered contracts had enhanced duties); *see also infra* notes 64–84 and accompanying text.

20. *See* Moringiello & Reynolds, *What’s Software Got to Do with It?*, *supra* note 18, at 1541–42 (discussing the attempt to add Article 2B to the UCC).

21. *See* Moringiello, *supra* note 14, at 1315 (“Today . . . courts apply the objective theory of contracts to terms delivered electronically without considering the differences between paper and electronic communications.”). Academics were a bit slower in recognizing the continuity of contract law. Moringiello & Reynolds, *What’s Software Got to Do with It?*, *supra* note 18, at 1542–43, 1553.

In this Article, we will discuss the development of that case law and try to predict what the future will bring in the area of electronic contracting. We believe that, from a legal standpoint, electronic contracting is no different from face-to-face contracting. That said, as a *Wall Street Journal* writer recently observed, it is possible that we “make more legal agreements in a year than our grandparents made in a lifetime.”<sup>22</sup> Our grandparents made contracts, but often they were simple and unwritten. For example, someone who buys a book at Barnes & Noble enters into a contract, but it is a very simple deal for a specified book at a set price; it certainly is not anything like the 3,000-word Conditions of Use that Amazon.com deploys in an attempt to bind someone using its website.<sup>23</sup>

The ease of presenting terms comprised of thousands of words by an Internet hyperlink makes it easy for a vendor in its terms of use and terms of service to ask us to give up privacy rights<sup>24</sup> and intellectual property rights.<sup>25</sup> Modern communications technologies therefore make it easier for parties to engage in risky transactions.<sup>26</sup> Nevertheless, we believe that, with few exceptions, the common law of contracts is sufficiently malleable to address the problems arising out of that behavior, and where it is not, regulation of contract terms is appropriate.

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22. Eric Felten, *Are We All Online Criminals?*, WALL ST. J., Nov. 18, 2011, at D8.

23. *Conditions of Use*, AMAZON.COM, [http://www.amazon.com/gp/help/customer/display.html/ref=hp\\_200905880\\_conditions?nodeId=508088](http://www.amazon.com/gp/help/customer/display.html/ref=hp_200905880_conditions?nodeId=508088) (last visited Nov. 14, 2012).

24. For example, Amazon.com’s Privacy Notice (which Amazon.com appears to consider a contract because the first paragraph of the notice contains the statement “[b]y visiting Amazon.com, you are accepting the practices described in this Privacy Notice”), contains more than 3,000 words and informs customers that if they do not want Amazon.com to share certain information, it is up to them to adjust their advertising preferences. *Amazon.com Privacy Notice*, AMAZON.COM, [http://www.amazon.com/gp/help/customer/display.html/ref=footer\\_privacy?ie=UTF8&nodeId=468496](http://www.amazon.com/gp/help/customer/display.html/ref=footer_privacy?ie=UTF8&nodeId=468496) (last visited Nov. 14, 2012).

25. Facebook became embroiled in controversy in February 2009, when it changed its Terms of Service to give it “an irrevocable, perpetual, non-exclusive, transferable, fully paid, worldwide license (to) . . . use, copy, publish, stream, store, retain, publicly perform or display, transmit, scan, reformat, modify, edit, frame, translate, excerpt, adapt, create derivative works, and distribute” content posted by its users, even after a user canceled his Facebook account. See Caroline McCarthy, *Facebook Faces Furor over Content Rights*, CNN.COM/TECHNOLOGY (Feb. 18, 2009, 2:29 PM), <http://www.cnn.com/2009/TECH/02/17/facebook.terms.service/> (reporting the change to Facebook’s Terms of Service).

26. See Moringiello, *supra* note 14, at 1343–46 (discussing the different risks associated with remote and face-to-face transactions).

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This Article will examine how the common law of contracts has responded to the problems of electronic contracting. In Part II, we will analyze the developments in electronic contracting up to the present, and the reaction of judges and academics. We will pay particular attention to efforts to transform the common law of contracts in electronic situations. Part III will examine the current state of the law and reveal how courts have responded to claims of exceptionalism for electronic contracts. In Part IV, we will look at current problems in the field, including arbitration, privacy, and the Computer Fraud and Abuse Act. Finally, Part V will reflect on the developments discussed earlier; in particular, it will look at why some reform efforts have failed and some have succeeded; whether electronic contracts should be treated differently from other contracts; why academics have pushed for unsuccessful reforms; and the amazing resilience of standard contract law in the face of extraordinary technological change.

## II. THE PAST

The efforts to change the common law of contracts to accommodate the new world of technology centered on two areas: formalities and formation. In the first, change was effected by statutes swiftly promulgated and adopted.<sup>27</sup> In the second, contract formation, change was sought, unsuccessfully, through comprehensive reform involving statutory and common law changes.<sup>28</sup> These efforts were interesting in part because they singled out a separate area—contracts for information, many of which are formed electronically—as needing a different law from that applied to all other agreements.<sup>29</sup> That effort failed because information transactions were sufficiently new that there was no consensus as to the appropriate norms for such transactions.<sup>30</sup> In the end, the common law of contracts won out, and for-

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27. *See infra* Part II.A.

28. *See infra* Part II.B.

29. *See* UNIF. COMPUTER INFO. TRANSACTIONS ACT, 7 U.L.A. 199, introductory cmt. (2002) (stating that the Uniform Computer Information Transactions Act was designed to deal with transactions in computer information because they involve “different expectations, different industry practices, and different policies from transactions in goods”).

30. As a point of contrast, one of the original goals of the drafters of the UCC in the 1940s was to enforce trade norms in commercial law. *See* Allen R. Kamp, *Uptown Act: A History of the Uniform Commercial Code: 1940–49*, 51 S.M.U. L. REV. 275, 281–83 (1998) (explaining Karl Llewellyn’s goals in drafting Article 2 of the UCC).

mation issues in the digital world are handled by long-familiar lines of analysis.<sup>31</sup>

*A. Formalities*

Although traditional contract law was based on the assumption that parties negotiate and sign paper contracts in face-to-face transactions, or after the exchange of offer and acceptance through the regular mail, the law has long recognized less traditional forms of contracting. The Uniform Commercial Code (“UCC”), in its battle of the forms section, bestows contract status on an exchange of conflicting boilerplate forms.<sup>32</sup> Courts developed the reasonable communicativeness test to hold that standard-form terms are binding so long as the offeree has reasonable notice of those terms.<sup>33</sup> And the law has recognized that there does not have to be a “magic moment” when the contract springs into existence; it is enough that the parties’ conduct establishes the existence of a contract.<sup>34</sup> Even when the law has required that a contract have a “signature” to satisfy the Statute of Frauds, it has long been the case that marks such as a letterhead could suffice as a signature.<sup>35</sup>

Nevertheless, there was a sense at the very end of the twentieth century that something more was needed to ensure that contracts could be entered into in the electronic environment. Despite the fact that courts had held that contracts other than those written on paper and signed in ink could be enforced, numerous statutes requiring writings and signatures were thought to impose barriers to electronic

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31. See Moringiello, *supra* note 14, at 1320 (describing courts’ “zeal to treat paper and electronic contracts in an identical manner”).

32. U.C.C. § 2-207 (2011).

33. See, e.g., Wallis v. Princess Cruises, Inc., 306 F.3d 827, 835 (9th Cir. 2002) (employing the reasonable communicativeness test); Effron v. Sun Line Cruises, Inc., 67 F.3d 7, 9 (2d Cir. 1995) (same); Shankles v. Costa Armatori, S.P.A., 722 F.2d 861, 866–67 (1st Cir. 1983) (same); Silvestri v. Italia Società per Azioni di Navigazione, 388 F.2d 11, 17–18 (2d Cir. 1968) (same).

34. U.C.C. § 2-204 (2011).

35. See, e.g., Owen v. Kroger Co., 936 F. Supp. 579, 585 (S.D. Ind. 1996) (holding that preprinted wording on a memorandum form could constitute a signature for Statute of Frauds purposes); Durham v. Harbin, 530 So.2d 208, 210 (Ala. 1988) (recognizing that in the appropriate circumstances, letterhead could suffice as a signature).

commerce.<sup>36</sup> Several states responded by enacting digital signature statutes, which required the use of specific technologies and encryption standards to create a binding signature.<sup>37</sup> Because the marketplace did not embrace the standards mandated by those statutes, the statutes were viewed as failures.<sup>38</sup>

The end of the twentieth century saw the adoption of two electronic transactions statutes: UETA, promulgated by the National Conference of Commissioners on Uniform State Laws (“NCCUSL”) in 1999, and in effect in forty-seven states and the District of Columbia,<sup>39</sup> and E-Sign, passed by Congress and signed into law by President Clinton in 2000.<sup>40</sup> Both statutes were designed to eliminate barriers to electronic commerce.<sup>41</sup> These statutes are not identical twins, but E-Sign’s reverse pre-emption rule requires E-Sign to yield to state law if the state in question has adopted UETA in the form promulgated by NCCUSL.<sup>42</sup> Congress enacted E-Sign at the behest of financial institutions and high-tech companies, who were afraid that the failure of states to enact UETA in a rapid, uniform manner would stymie their businesses.<sup>43</sup>

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36. See Patricia Brumfield Fry, *Introduction to the Uniform Electronic Transactions Act: Principles, Policies and Provisions*, 37 IDAHO L. REV. 237, 241 (2001) (“Each local, state, or national law or regulation that requires a writing or signature, delivery, or production of an original record impairs electronic commerce.”).

37. See Robert A. Wittie & Jane K. Winn, *Electronic Signatures Under the Federal E-SIGN Legislation and the UETA*, 56 BUS. LAW. 293, 294–96 (2000) (discussing Utah’s use of asymmetric cryptography, a specific authentication technology for electronic signatures).

38. See Jane K. Winn, *The Emperor’s New Clothes: The Shocking Truth About Digital Signatures and Internet Commerce*, 37 IDAHO L. REV. 353, 379 (2001) (“Laws such as the Utah Digital Signature Act, which describe a specific implementation of asymmetric cryptography within a public key infrastructure, have been consigned to the margins of electronic commerce when the marketplace failed to embrace their vision of digital signatures.”).

39. *Electronic Transactions Act Summary*, UNIF. L. COMM’N, <http://uniformlaws.org/ActSummary.aspx?title=Electronic%20Transactions%20Act> (last visited Nov. 16, 2012); see also *Uniform Electronic Transactions Act*, NAT’L CONF. OF ST. LEGS., <http://www.ncsl.org/issues-research/telecom/uniform-electronic-transactions-acts.aspx> (last visited Nov. 16, 2012) (listing which states have enacted the UETA).

40. Michael J. Hays, Note, *The E-Sign Act of 2000: The Triumph of Function over Form in American Contract Law*, 76 NOTRE DAME L. REV. 1183, 1183 (2001).

41. UNIF. ELEC. TRANSACTIONS ACT, 7A U.L.A. 211, introductory cmt. (1999); see also Hays, *supra* note 40, at 1184 & n.6 (highlighting the significance of E-Sign).

42. 15 U.S.C. § 7002(a) (2006).

43. Wittie & Winn, *supra* note 37, at 296–97.



The primary impact of these statutes is in their pronouncement that a contract cannot be denied enforcement solely because it is in electronic form or signed electronically. The laws take a broad view of the concept of electronic signing by providing a technology-neutral definition of signature.<sup>44</sup> Importantly, these two statutes are not general contracting statutes.<sup>45</sup> Questions of formation, therefore, are untouched by UETA and E-Sign and are left to the common law of contracts.<sup>46</sup>

### B. Formation

Courts had little trouble resolving formation issues in the very early electronic contracting cases.<sup>47</sup> Confusion arose about a dozen years ago when academics developed a formation typology based on an artificial dichotomy between what became known as “clickwrap” and “browsewrap”;<sup>48</sup> some courts followed that typology. In more recent years, however, judges have rejected that false dichotomy and returned to the traditional formation test of reasonable communicativeness.<sup>49</sup> This Section tells the story of the rise and fall of the “wraps”—both click and browse.

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44. 15 U.S.C. § 7006(5) (2006); UNIF. ELEC. TRANSACTIONS ACT § 2(8), 7A U.L.A. 211 (1999).

45. Moringiello, *supra* note 14, at 1340–41.

46. *Id.* at 1343 (arguing that “[t]he statutes preserve the substantive law of contracts”).

47. See Moringiello & Reynolds, *What’s Software Got to Do with It?*, *supra* note 18, at 1550 (“Courts in the early cases often held, with little discussion, that an offeree could be contractually bound to electronic terms simply by clicking an ‘I agree’ icon on the Web site.”).

48. See, e.g., Robert A. Hillman & Jeffrey J. Rachlinski, *Standard-Form Contracting in the Electronic Age*, 77 N.Y.U. L. REV. 429, 464 (2002) (“Consumers enter into electronic contracts in two distinct ways: ‘browsewrap’ and ‘clickwrap’ contracts.”); Mark A. Lemley, *Terms of Use*, 91 MINN. L. REV. 459, 459–60 (2006) (describing the different judicial approaches to clickwrap and browsewrap terms); Robert L. Oakley, *Fairness in Electronic Contracting: Minimum Standards for Non-Negotiated Contracts*, 42 HOUS. L. REV. 1041, 1051–54 (2005) (discussing clickwrap and browsewrap as distinct methods of contract formation); Maureen A. O’Rourke, *Common Law and Statutory Restrictions on Access: Contract, Trespass, and the Computer Fraud and Abuse Act*, 2002 U. ILL. J.L. TECH. & POL’Y 295, 297–99 (2002) (explaining clickwrap and browsewrap methods of formation and noting that courts generally uphold clickwrap agreements and are split on the enforceability of browsewrap agreements).

49. See Moringiello & Reynolds, *What’s Software Got to Do with It?*, *supra* note 18, at 1550 (describing courts’ recognition that “the line between clickwrap and browsewrap can be

Contract law developed in a world of face-to-face exchanges among persons who knew one another, at least by reputation.<sup>50</sup> It evolved over the centuries to deal with the impersonal world of mass market transactions.<sup>51</sup> Mass market contracting has long been carried out using standard paper forms leaving little or no room for negotiation; these agreements are often called contracts of adhesion.<sup>52</sup> Some mass market contracts (for automobiles, for instance) require signatures, others (travel tickets) do not, but all share a boilerplate format, presented in a manner that discourages reading.<sup>53</sup> Mass market paper contract forms, in other words, have much in common with forms presented electronically.<sup>54</sup> One would imagine, therefore, that the two would be treated in similar fashion. Initially, it looked like that would be the case.

The first courts to hold that terms of service to which a buyer was required to agree by clicking an “I agree” button were enforceable never used the word “clickwrap.”<sup>55</sup> The plaintiff in *Groff v. America Online, Inc.*<sup>56</sup> was an experienced lawyer who argued that he should not be bound by AOL’s forum selection clause in its service agreement because he never saw, read, nor agreed to be bound by it.<sup>57</sup> The court, noting that the plaintiff could not have obtained AOL’s services without either clicking an “I agree” button next to a hyperlink that said “read now” or clicking an “I agree” button at the end of the terms, stressed the duty to read.<sup>58</sup> By clicking “I agree,” the plaintiff

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blurry”); *see also* Moringiello, *supra* note 14, at 1314 (stating that “judges have clung to traditional contract doctrine”).

50. *See* Moringiello, *supra* note 14, at 1311 (stating that “rules of traditional contract law” are “based on the ideal of two humans meeting in person to agree to terms”).

51. *Id.* at 1313–15.

52. *See* Oakley, *supra* note 48, at 1053 (providing the characteristics of contracts of adhesion).

53. *See* Moringiello, *supra* note 14, at 1313 (explaining that “[s]tandard form contracts take many forms”).

54. *Id.* at 1315.

55. The earliest cases dealt with terms offered by Internet service providers, such as America Online and Microsoft. *See, e.g.,* *Forrest v. Verizon Commc’ns, Inc.*, 805 A.2d 1007, 1010 (D.C. 2002) (holding valid a clickwrap agreement required to purchase Internet service); *Caspi v. Microsoft Network, L.L.C.*, 732 A.2d 528, 529–31 (N.J. Super. Ct. App. Div. 1999) (same).

56. No. PC 97-0331, 1998 R.I. Super. Ct. LEXIS 46 (R.I. Super. Ct. May 27, 1998).

57. *Id.* at \*12.

58. *Id.* at \*12–13.

effectively signed the terms of service, and “a party who signs an instrument manifests his assent to it and cannot later complain that he did not read the instrument or that he did not understand its contents.”<sup>59</sup>

Similarly, the court in *Caspi v. Microsoft Network, L.L.C.*,<sup>60</sup> another case challenging a forum selection clause, focused on the buyer’s opportunity to review the offered terms rather than any special characteristics of clickwrap contracts. Like the court in *Groff*, the court in *Caspi* never used the term “clickwrap.”<sup>61</sup> Rather, the court looked for evidence that the plaintiff had ample opportunity to read the presented terms and found that the challenged clause was not presented less conspicuously than other clauses.<sup>62</sup> Because the court found that the plaintiff had the opportunity to read the terms and refused to find a significant difference between terms presented on paper and terms presented electronically, the plaintiff was bound by the forum selection clause.<sup>63</sup>

Academics were not content with this state of affairs, however. They developed a typology based on clickwrap and browsewrap to analyze formation problems in electronic transactions. They did so in part because of their opposition to the Uniform Computer Information Transactions Act (“UCITA”),<sup>64</sup> a widely reviled project that spent part of its gestation period as the proposed Article 2B to the UCC.<sup>65</sup> The UCITA was designed as a comprehensive contracts code for computer information transactions, and its proponents believed that such a law was necessary to deal with the “widely diverse and rich array of methods for distributing and tailoring digital information to the modern marketplace.”<sup>66</sup> Among these new methods were shrink-wrap and clickwrap.

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59. *Id.* at \*13.

60. 732 A.2d 528 (N.J. Super. Ct. App. Div. 1999).

61. *Id.* at 528.

62. *Id.* at 532.

63. *Id.* at 532–33.

64. See UNIF. COMPUTER INFO. TRANSACTIONS ACT, 7 U.L.A. 199 (2002). We discuss UCITA in more detail later in this Article. See *infra* notes 73–76 and accompanying text.

65. See Richard E. Speidel, *Revising UCC Article 2: A View from the Trenches*, 52 HASTINGS L.J. 607, 607–10 (2001) (describing the process of revising Article 2 of the Uniform Commercial Code).

66. UNIF. COMPUTER INFO. TRANSACTIONS ACT, 7 U.L.A. 199, introductory cmt. (2002).

At first, there were some signs that such a regime would be put in place. Although there was little case law on point, academics and some courts tried to establish the outlines of that new order.<sup>67</sup> That effort was especially notable in the area of offer and acceptance where terms like “browsewrap” and “clickwrap” became quite common in discussions about electronic contracting.<sup>68</sup>

Commentators originally used the words “clickwrap” and “browsewrap” to refer to “pay now, terms later” presentations of contract terms.<sup>69</sup> Such a presentation offends the tenets of contract law—surely an offeree cannot accept terms of which she has no notice at the time of “acceptance.”<sup>70</sup> The etymology of browsewrap and clickwrap can be traced to shrinkwrap, a term used to refer to the license terms that could be found in a box of packaged software.<sup>71</sup> Scholars found a lot to dislike about shrinkwrap—not only did such a presentation fly in the face of traditional contract formation doctrine, the content of the shrinkwrap terms wreaked havoc on the balance struck by the federal intellectual property statutes.<sup>72</sup>

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67. See Katy Hull, *The Overlooked Concern with the Uniform Computer Information Transactions Act*, 51 HASTING L.J. 1391, 1394 (2000) (“Courts have had some difficulty in assessing these clickwrap and shrinkwrap contracts, and there is little case law thus far addressing the issue.”).

68. See, e.g., Oakley, *supra* note 48, at 1051–54 (discussing offer and acceptance through the browsewrap/clickwrap distinction).

69. See, e.g., Viva R. Moffat, *The Wrong Tool for the Job: The IP Problem with Noncompetition Agreements*, 52 WM. & MARY L. REV. 873, 890 (2010) (“[S]hrinkwrap and clickwrap contracts have presented a ‘pay now, terms later’ situation.”).

70. See Juliet M. Moringiello & William L. Reynolds, *Electronic Contracting Cases 2009–2010*, 66 BUS. LAW. 175, 176 (2010) (explaining what constitutes adequate notice for purposes of acceptance).

71. See, e.g., Robert Lee Dickens, *Finding Common Ground in the World of Electronic Contracts: The Consistency of Legal Reasoning in Clickwrap Cases*, 11 MARQ. INTELL. PROP. L. REV. 379, 381 (2007) (stating that “[t]he term ‘clickwrap’ evolved from the use of ‘shrinkwrap’ agreements”).

72. See Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. DAYTON L. REV. 511, 512–14 (1997) (explaining that although copyright law protects works of authorship, some elements of those works are left unprotected so that they can be freely used by future creators and that shrinkwrap contracts that restrict the rights of the public (including future creators) are inconsistent with copyright law); Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1240 (1995) (arguing that “shrinkwrap licenses should not be effective to alter the balance of rights created under federal law”).

By 1999, the term “clickwrap” was common in academic parlance, particularly in articles discussing the UCC Article 2B (later UCITA) project.<sup>73</sup> The critics of Article 2B were concerned about a provision in the Act that specifically permitted formation of a contract by shrinkwrap or clickwrap. Mark Lemley warned that Article 2B would “redefine[] what constitutes a contract, abandoning the focus on offer and acceptance . . . in favor of a rule that the intellectual property owner’s standard form terms will be enforced, even if they are contained in a ‘shrinkwrap’ or ‘clickwrap’ license that the buyer cannot see until the transaction has already occurred.”<sup>74</sup> He went on to note that the Article 2B view was, at that time, held by a minority of courts.<sup>75</sup> In addition, there were questions about whether what became UCITA reflected established industry practices, questions that doomed its widespread enactment.<sup>76</sup>

So where did the term “clickwrap” come from and why did it start to gain significance in case law? The earliest judicial mention of the term was not in a contract formation opinion, but in a 1999 jurisdiction opinion.<sup>77</sup> The court in *Stomp v. NeatO*<sup>78</sup> explained that “the term ‘clickwrap agreement’ is borrowed from the idea of ‘shrinkwrap agreements,’ which are generally license agreements placed inside the cellophane ‘shrinkwrap’ of computer software boxes that, by their terms, become effective once the ‘shrinkwrap’ is opened.”<sup>79</sup>

The provenance of the term “clickwrap” is unfortunate for several reasons. First, today’s clickwrap terms are fundamentally different from the reviled “pure” shrinkwrap terms that become binding as

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73. See, e.g., A. Michael Froomkin, *Article 2B as Legal Software for Electronic Contracting—Operating System or Trojan Horse*, 13 BERKELEY TECH. L.J. 1023, 1052 (1998) (discussing how clickwrap may satisfy Article 2B of the UCC); Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CALIF. L. REV. 111, 119–20 (1999) [hereinafter Lemley, *Beyond Preemption*] (explaining how Article 2B of the UCC “redefines what constitutes a contract,” allowing a clickwrap agreement to be enforced).

74. Lemley, *Beyond Preemption*, *supra* note 73, at 119–20.

75. *Id.*

76. Amelia H. Boss, *Taking UCITA on the Road: What Lessons Have We Learned?*, 7 ROGER WILLIAMS U. L. REV. 167, 202–03 (2001).

77. The first academic reference to “clickwrap” apparently is Michel A. Jaccard, *Securing Copyright in Transnational Cyberspace: The Case for Contracting with Potential Infringers*, 35 COLUM. J. TRANSNAT’L L. 619, 633 & n.69 (1997).

78. 61 F. Supp. 2d 1074 (C.D. Cal. 1999)

79. *Id.* at 1080 n.11.

soon as a purchaser breaks the plastic enclosing the software box.<sup>80</sup> Pure shrinkwrap transactions are indeed “pay first, terms later” deals. In the early days of mass market software contracting, however, shrinkwrap and clickwrap were twin concepts. A buyer would purchase software in a box that contained paper terms that became binding when the buyer broke the shrinkwrap, and then when the buyer inserted the disk in her computer, a click-to-agree license would appear on the computer screen and the buyer would not be able to use the software until she clicked her assent.<sup>81</sup> In the early world of mass market software licenses, shrinkwrap and clickwrap were objectionable for the same reason: They were “pay first, terms later” methods of contract formation.

The term “clickwrap” as imported into the general world of today’s electronic contracts may appear, on the surface, to refer to a shrinkwrap-type transaction, but in fact the term refers to something very different. A transaction in which an offeree is asked to click her agreement either at the end of the terms or next to a hyperlink leading to the terms is not a “pay first, terms later” transaction because the buyer has the opportunity to review the terms before payment. In fact, some have noted that a person sitting at a computer might have more time to review standard terms than someone standing at a counter in a crowded store with a long line of impatient customers behind her.<sup>82</sup> Yet, the mere whiff of Article 2B or UCITA is like the smell of rotting garbage to the opponents of those proposed laws, so anything blessed by the drafters of those statutes must perforce be suspect, whether it is clickwrap in its traditional meaning of “pay first, terms later” or clickwrap as applied to terms that are prominently displayed before payment.<sup>83</sup> Therefore, in the minds of some commentators,

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80. See Dickens, *supra* note 71, at 381 (explaining that, while shrinkwrap terms “become effective following the expiration of a predefined return period,” clickwrap terms “typically pop up before a purchased software disc can be installed . . . or while a service is being requested on the Internet”).

81. This early method of software delivery is described in *i.Lan Systems, Inc. v. Netscout Service Level Corp.*, 183 F. Supp. 2d 328, 329 (D. Mass. 2002).

82. Hillman & Rachlinski, *supra* note 48, at 478.

83. See, e.g., Leo L. Clarke, *Performance Risk, Form Contracts and UCITA*, 7 MICH. TELECOMM. & TECH. L. REV. 1, 32 (2001) (“There is persuasive scholarship, employing both law and economics and conceptual approaches, holding that form terms in shrinkwraps and clickwraps should not be enforced. UCITA takes the opposite approach.”).

clickwrap was something both suspicious and exotic that begged to be dealt with differently.<sup>84</sup>

In the world of electronic contracts, however, clickwrap is a meaningless term. Click-to-agree transactions come in many flavors. Sometimes the click is at the end of the terms so that a reader must at least scroll through to reach the “I agree” icon, while other times the click is next to a hyperlink that leads to the terms, either in one click or in several.<sup>85</sup> Whether terms are classified as clickwrap says little about whether the offeree had notice of them. Yet some courts gave their stamp of approval to clickwrap terms simply because they were clickwrap terms: you click, you agree.<sup>86</sup> Courts eventually noticed the differences among the various types of clickwrap and began to avoid a general approval of clickwrap acceptances, asking instead whether the “click” satisfies the test of “reasonable communicativeness.”<sup>87</sup>

Browsewrap is burdened by a similarly unfortunate history. Early website terms of use were typically hidden behind a hyperlink in small print at the bottom of a web page and provided that use, or browsing, of the website constituted acceptance of the terms.<sup>88</sup> Classic browse-

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84. See *supra* note 48 and accompanying text.

85. See Hull, *supra* note 67, at 1392–93 (describing different methods of presenting clickwrap agreements).

86. See *DeJohn v. .TV Corp. Int'l*, 245 F. Supp. 2d 913, 919 (C.D. Ill. 2003) (finding no reason to distinguish the duty to read terms offered in an electronic format from the duty to read terms offered on paper); *i.Lan Sys.*, 183 F. Supp. 2d at 338 (“In short, i.LAN explicitly accepted the clickwrap license agreement when it clicked on the box stating ‘I agree.’”); *Forrest v. Verizon Commc’ns, Inc.*, 805 A.2d 1007, 1010 (D.C. 2002) (applying the rule that “one who signs a contract is bound by a contract which he has an opportunity to read whether he does so or not”). Some courts continue to find that clickwrap terms, merely because they are clickwrap terms, are reasonably communicated to their readers. See *TradeComet.com L.L.C. v. Google, Inc.*, 693 F. Supp. 2d 370, 377 (S.D.N.Y. 2010) (noting that “‘clickwrap’ agreements that require a user to accept the agreement before proceeding are ‘reasonably communicated’ to the user”), *aff’d*, 647 F.3d 472 (2d Cir. 2011).

87. See, e.g., *Fteja v. Facebook, Inc.*, 841 F. Supp. 2d 829, 835–41 (S.D.N.Y. 2012) (applying the reasonable communicativeness test); *Feldman v. Google, Inc.*, 513 F. Supp. 2d 229, 236 (E.D. Pa. 2007) (applying the reasonableness test to determine enforceability of a clickwrap agreement); *Hotels.com, L.P. v. Canales*, 195 S.W.3d 147, 156 (Tex. Ct. App. 2006) (analyzing whether an Internet consumer had “sufficient notice” of a contract’s terms); see also Moringiello, *supra* note 14, at 1330–32 (noting the problems with courts “holding that a click equals assent”).

88. Moringiello, *supra* note 14, at 1318.

wrap is the equivalent of a “pay now, terms later” transaction.<sup>89</sup> Naturally, in order to reach the terms, usually by a hyperlink from the site’s home page, the website user was required to use or browse the site. This model persists on many sites today, even when it is likely that the website owner is indifferent as to whether anyone pays attention to the terms.<sup>90</sup>

Courts sometimes used the clickwrap/browsewrap distinction to strike down browsewrap terms categorically. One commonly cited case was the United States Court of Appeals for the Second Circuit’s opinion in *Specht v. Netscape Communications Corp.*,<sup>91</sup> in which the court held that a software license that did not require a click for assent was unenforceable.<sup>92</sup> Although some pointed to this case as evidence that courts frowned on browsewrap,<sup>93</sup> the presentation of terms in *Specht* was particularly troubling. Not only did the link to the license terms appear “below the fold” of the computer screen, but also the button that the consumer was required to click said “Download” rather than “I agree” or something of similar import.<sup>94</sup>

It is not surprising, therefore, that the Second Circuit since *Specht* has made clear that it did not intend a blanket condemnation of browsewrap. The question in *Register.com, Inc. v. Verio, Inc.*,<sup>95</sup> was whether terms of use, which were only posted *after* a query had been

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89. See Florencia Marotta-Wurgler, *Some Realities of Online Contracting*, 19 SUP. CT. ECON. REV. 11, 12 (2011) (suggesting similarities between browsewrap and “pay now, terms later” contracts).

90. See, e.g., *Terms of Service*, N.Y.TIMES.COM, <http://www.nytimes.com/content/help/rights/terms/terms-of-service.html> (last visited Nov. 8, 2012) (stating that “[i]f you choose to use NYTimes.com . . . you will be agreeing to abide by all of the terms and conditions of these Terms of Service”); *Terms of Use*, GAWKER MEDIA, <http://advertising.gawker.com/legal/> (last visited Nov. 18, 2012) (asking users to “[p]lease read [the terms] carefully before proceeding to access any of the GM Sites or Gawker Media content. Your use of the GM Sites indicates your agreement to abide by the Terms of Use in effect”); see also *infra* notes 283–287 and accompanying text.

91. 306 F.3d 17 (2d Cir. 2002).

92. *Id.* at 35.

93. See Erin Ann O’Hara, *Choice of Law for Internet Transactions: The Uneasy Case for Online Consumer Protection*, 153 U. PA. L. REV. 1883, 1929–30 (2005) (citing *Specht* to support the position that “[c]ourts . . . have frowned on the enforcement of terms that are not made reasonably available to the purchaser”).

94. *Specht*, 306 F.3d at 35.

95. 356 F.3d 393 (2d Cir. 2004).



sent to the website, could be part of the contract.<sup>96</sup> Although that presentation clearly was not clickwrap, the court still found the user bound by the terms.<sup>97</sup> That holding rested on the fact that the user was a repeat visitor to the website and, therefore, at least after the first use, should have known of the terms.<sup>98</sup> In short, the terms had been reasonably communicated to the user.<sup>99</sup> Other courts have followed *Register.com*,<sup>100</sup> and it is safe to say today that questions of offer and acceptance will be analyzed the same whether the transaction is electronic, oral, or on paper.<sup>101</sup>

More recently, courts have rejected the clickwrap/browsewrap inquiry in favor of an unconscionability based approach to the enforceability of contract terms presented electronically.<sup>102</sup> Thus, courts increasingly have used procedural unconscionability to strike down arbitration and other choice of forum clauses.<sup>103</sup> This focus is a positive development, because it leads courts away from a focus on the meaningless clickwrap/browsewrap distinction and toward a discus-

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96. *Id.* at 430–31.

97. *See id.* at 401–04 (concluding that the user knew Register.com’s terms and was bound by them).

98. *Id.* at 401–02.

99. *See* Moringiello, *supra* note 14, at 1314 (indicating that, under the “reasonable communicativeness” test, notice of terms can substitute for the standard contract requirement of a meeting of the minds).

100. *See, e.g.,* Hines v. Overstock.com, Inc., 668 F. Supp. 2d 362, 366–67 (E.D.N.Y. 2009) (citing *Register.com* and focusing on whether the plaintiff had actual notice of a website’s terms), *aff’d*, 380 F. App’x 22 (2d Cir. 2010); Sw. Airlines Co. v. BoardFirst, L.L.C., No. 3:06-CV-0891-B, 2007 WL 4823761, at \*6–7 (N.D. Tex. Sept. 12, 2007) (same); Hotels.com, L.P. v. Canales, 195 S.W.3d 147, 155–56 (Tex. Ct. App. 2006) (same).

101. *See Hines*, 668 F. Supp. 2d at 366 (“The making of contracts over the internet has not fundamentally changed the principles of contract.” (citation omitted) (internal quotation marks omitted)).

102. *See, e.g.,* Feldman v. Google, Inc., 513 F. Supp. 2d 229, 232–33, 243 (E.D. Pa. 2007) (determining that an Internet agreement was not unconscionable); Comb v. PayPal, Inc., 218 F. Supp. 2d 1165, 1169–70, 1177 (N.D. Cal. 2002) (concluding that the user agreement, which was presented electronically, was substantively unconscionable).

103. Juliet M. Moringiello & William L. Reynolds, *Survey of the Law of Cyberspace: Electronic Contracting Cases 2006–2007*, 63 BUS. LAW. 219, 224–30 (2007) (discussing how courts applied the concept of procedural unconscionability).

sion of the actual presentation of the terms.<sup>104</sup> This is consistent with traditional contract law; the unconscionability doctrine protects consumers, at least theoretically, against “one-sided terms to which they did not subjectively agree.”<sup>105</sup> Procedural unconscionability alone is generally not enough to invalidate contract terms; some measure of substantive unconscionability is required as well.<sup>106</sup> Electronic contracting adds nothing new to the substantive unconscionability analysis; if terms are overly harsh or one-sided on paper, there is no reason that they should be more so in the online environment.<sup>107</sup> The procedural unconscionability analysis, however, focuses on the presentation of terms and asks whether there is any unfair surprise in the presentation.<sup>108</sup> Such unfair surprise is often found when terms are hidden in a document.<sup>109</sup> New technologies may make it easier to present terms clearly, but they can also make it more difficult for an offeree to find important terms.<sup>110</sup> Courts that strike down electronic contract terms on unconscionability grounds recognize this.<sup>111</sup>

After the initial flood of “you click, you agree” cases, courts seem to be drawing more nuanced distinctions between online terms. In 2006, we noted that some courts recognized that business-to-consumer electronic contracts should be treated differently from

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104. Hillman & Rachlinski, *supra* note 48, at 492 (asserting that “courts must continue to scrutinize the electronic environment for abusive contracting procedures and terms, just as in the paper world”).

105. Wayne R. Barnes, *Toward a Fairer Model of Consumer Assent to Standard Form Contracts: In Defense of Restatement Subsection 211(3)*, 82 WASH. L. REV. 227, 230 (2007).

106. *See Doe v. SexSearch.com*, 502 F. Supp. 2d 719, 734 (N.D. Ohio 2007) (indicating that both procedural and substantive unconscionability must be found for a contract to be deemed unconscionable), *aff'd*, 551 F.3d 412 (6th Cir. 2008); *Comb*, 218 F. Supp. 2d at 1173 (noting that even if an agreement is procedurally unconscionable, “it may nonetheless be enforceable if the substantive terms are reasonable”).

107. *See* Hillman & Rachlinski, *supra* note 48, at 487 (suggesting that electronic contracts are governed by the same law as paper contracts).

108. *Nagrampa v. MailCoups, Inc.*, 469 F.3d 1257, 1280 (9th Cir. 2006); *Bragg v. Linden Res., Inc.*, 487 F. Supp. 2d 593, 605–06 (E.D. Pa. 2007).

109. *Nagrampa*, 469 F.3d at 1280; *Bragg*, 487 F. Supp. 2d at 605.

110. Hillman & Rachlinski, *supra* note 48, at 478–79 (explaining how the Internet has impacted consumers’ ability to understand agreement terms).

111. *See, e.g., Bragg*, 487 F. Supp. 2d at 606–07 (concluding that an arbitration provision in an online agreement was procedurally unconscionable when it was “buried . . . in a lengthy paragraph under the benign heading ‘GENERAL PROVISIONS’”).

business-to-business electronic contracts.<sup>112</sup> That should not be news to contracts buffs; these courts recognize that unconscionability is not a doctrine that lives only in law school casebooks.

It is now clear that the predictions of a new order were wrong. The common law of contracts proved more than resilient enough to handle the problems of the new era with ease.<sup>113</sup> In contract formation, for example, courts quickly discarded efforts to develop new categories based on where contract terms are placed on the screen.<sup>114</sup> Instead, the focus of the courts is where it always has been: Did the buyer have a reasonable opportunity to learn of the terms?<sup>115</sup>

### III. THE PRESENT

In the past couple of years, aggrieved parties have continued to argue that they are not bound by electronically presented terms, and courts have continued to analyze those terms using a notice/unconscionability framework rather than a clickwrap/browsewrap framework.<sup>116</sup> One court, recognizing the artificiality of a clickwrap/browsewrap dichotomy, described hyperlinked

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112. See Juliet M. Moringiello & William L. Reynolds, *Survey of the Law of Cyberspace: Electronic Contracting Cases 2005–2006*, 62 BUS. LAW. 195, 205 (2006) (discussing *Aral v. Earthlink, Inc.*, 36 Cal. Rptr. 3d 229 (Cal. Ct. App. 2005), in which the court refused to enforce a class action waiver and an arbitration clause on unconscionability grounds). For our discussion of consumer contracts, see *infra* notes 121–139 and accompanying text.

113. See John M. Norwood, *A Summary of Statutory and Case Law Associated with Contracting in the Electronic Universe*, 4 DEPAUL BUS. & COM. L.J. 415, 449 (2006) (summarizing how “courts have had no trouble applying well known legal principles to electronic contracts”).

114. See, e.g., *Specht v. Netscape Commc’ns Corp.*, 306 F.3d 17, 28–30 (2d Cir. 2002) (evaluating the enforceability of an electronic agreement by applying traditional contract principles of notice and manifestation of assent); *Forrest v. Verizon Commc’ns, Inc.*, 805 A.2d 1007, 1010 (D.C. 2002) (focusing on whether an electronic agreement was reasonably communicated to the plaintiff); *Caspi v. Microsoft Network, L.L.C.*, 732 A.2d 528, 532 (N.J. Super. Ct. App. Div. 1999) (affirming that “there is no significant distinction” between electronic and paper contracts).

115. See, e.g., *Forrest*, 805 A.2d at 1010 (analyzing whether a forum selection clause was reasonably communicated to the consumer); *Caspi*, 732 A.2d at 53 (determining whether plaintiffs had adequate notice of a forum selection clause).

116. *Swift v. Zynga Game Network, Inc.*, 805 F. Supp. 2d 904, 910–12 (N.D. Cal. 2011); *Hoffman v. Supplements Togo Mgmt., L.L.C.*, 18 A.3d 210, 214 (N.J. Super. Ct. App. Div. 2011).

terms combined with an “Allow” icon as “modified clickwrap.”<sup>117</sup> In another recent case, the court acknowledged the irrelevance of the clickwrap/browsewrap distinction and proceeded to “resolve the jurisdictional issue in the present case based upon more fundamental grounds: the absence of reasonable notice to consumers, and the manifestly unfair manner in which defendants’ website was structured.”<sup>118</sup> There are exceptions; some judges continue to state simply that “clickwrap agreements are valid and enforceable contracts” without analyzing whether the terms are presented in such a way that they are reasonably communicated to the offeree.<sup>119</sup> There is probably little harm in such an approach; after all, if an individual is asked to click to signify her assent to something, she is at least on notice to find out what that something is. Even so, today’s courts do not categorically dismiss browsewrap; rather, they stress that in order for a website user to assent to terms classified as browsewrap, that user must have actual or constructive notice of the terms.<sup>120</sup>

The more interesting recent cases have dealt with the modification of online terms. It is surprising that courts have had few opportunities to establish rules for the effective modification of online agreements, despite the proliferation of online terms that purport to allow the website owner to modify them at any time without any express consent on the part of the website user.<sup>121</sup> There have been very few reported cases (and one highly publicized controversy involving Facebook<sup>122</sup>) addressing modification.<sup>123</sup> Of course, the fact that case law on this issue is limited does not mean that all businesses are pre-

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117. *Swift*, 805 F. Supp. 2d at 910.

118. *Hoffman*, 18 A.3d at 220. The facts of this case are too good to ignore: The plaintiff was a lawyer who bought a male enhancement supplement through the defendant’s website. *Id.* at 212–13.

119. *Segal v. Amazon.com, Inc.*, 763 F. Supp. 2d 1367, 1369 (S.D. Fla. 2011) (citation omitted) (internal quotation marks omitted).

120. *See, e.g., Cvent, Inc. v. Eventbrite, Inc.*, 739 F. Supp. 2d 927, 936–37 (E.D. Va. 2010) (explaining that for a browsewrap agreement to be enforceable, the website user must have notice of the terms and conditions and assent to them).

121. *See infra* note 126 and accompanying text.

122. *See, e.g., Anita Ramasastry, Facebook Follies: Why Facebook’s Recent Change to Its User Agreement Was a Bad Move, and Will Likely Be Unenforceable*, FINDLAW (Feb. 24, 2009), <http://writ.lp.findlaw.com/ramasastry/20090224.html>.

123. *See Juliet M. Moringiello & William L. Reynolds, Electronic Contracting Cases 2008–2009*, 65 BUS. LAW. 317, 318 & n.8 (2009) (explaining that the first reported case on modification of an electronic contract was not until 2007).

senting contract terms that should pass muster in court. Despite the holding of the United States Court of Appeals for the Ninth Circuit in *Douglas v. U.S. District Court for the Central District of California*<sup>124</sup> that a service provider cannot unilaterally change online terms without notice,<sup>125</sup> well-established online vendors continue to provide in their terms that they can modify terms without notice and that use of the service after such a modification will constitute assent to the modified terms.<sup>126</sup>

In *Douglas*, the court concluded that a consumer was not bound by a modified electronic contract when the service provider changed the terms by posting a revised contract on its website.<sup>127</sup> The contract at issue in *Douglas* was for telephone service.<sup>128</sup> The customer had no reason to visit the service provider's website regularly, and the court stressed that even if the customer visited the site regularly, he could not be expected to engage in a word-by-word comparison of the original and modified contracts.<sup>129</sup>

Likewise, in *Roling v. E\*Trade Securities, L.L.C.*,<sup>130</sup> the United States District Court for the Northern District of California found that a modification clause that required periodic comparison of past and present terms to discover modifications would likely be unenforcea-

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124. 495 F.3d 1062 (9th Cir. 2007) (per curiam).

125. *Id.* at 1065–66.

126. See, e.g., *iTunes Store – Terms and Conditions*, APPLE, <http://www.apple.com/legal/itunes/us/terms.html#SERVICE> (last visited Nov. 19, 2012) (“Apple reserves the right at any time to modify this Agreement and to impose new or additional terms or conditions on your use of the iTunes Service. Such modifications and additional terms and conditions will be effective immediately and incorporated into this Agreement. Your continued use of the iTunes Service will be deemed acceptance thereof.”); *Terms*, GROUPON, <http://www.groupon.com/terms#modification-of-this-agreement> (last visited Nov. 19, 2012) (“We reserve the right at all times to discontinue or modify any part of this Agreement as we deem necessary or desirable. If we make changes that materially affect your use of the Site or our services we will notify you by sending you an e-mail to the e-mail address that is registered with your account and/or by posting notice of the change on the Site. . . . We suggest that you revisit our Terms of Use from time to time to ensure that you stay informed of any such notifications of changes to the Site.”).

127. *Douglas*, 495 F.3d at 1065, 1067.

128. *Id.* at 1065.

129. *Id.* at 1066.

130. 756 F. Supp. 2d 1179 (N.D. Cal. 2010).

ble.<sup>131</sup> This expands, correctly in our view, the rule in *Douglas*.<sup>132</sup> Even if a customer regularly visits a site (which an E\*Trade customer undoubtedly would do), the onus should not be on the customer to discover modifications unless something directs the customer's attention to the changes.

That said, the same court, several months later, implied that a regular website user should repeatedly check a website's terms of service for modifications. The plaintiff in *Swift v. Zynga Game Network, Inc.*<sup>133</sup> contended that she did not agree to the original contract terms because these terms were not displayed on the same page as the "Allow" button, but were accessible via a hyperlink adjacent to the button.<sup>134</sup> The original terms provided that Zynga could modify the terms and that continued use of the game would constitute acceptance of the new terms.<sup>135</sup> After the plaintiff registered for the game, Zynga replaced its terms of service.<sup>136</sup> Without discussing the modification issue, the court found that the plaintiff had agreed to the original terms, describing those terms as "modified clickwrap."<sup>137</sup>

It is unfortunate that the court in *Swift* glossed over the modification issue. It is clear from the opinion that the plaintiff had adequate notice of the original terms at the time she signed up to play the YoVille game on Facebook.<sup>138</sup> But the opinion does not discuss whether the link to the terms was easy to find after registration. A conclusion one could draw from the opinion is that an individual playing a game on Facebook should read the terms every time she enters the game.<sup>139</sup> Could this possibly be correct if we do not expect the same diligence from an individual trading stocks within E\*Trade?

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131. *See id.* at 1190–91 (concluding that "a contractual provision that allows a party to unilaterally change the terms of the contract without notice is unenforceable").

132. *See Douglas*, 495 F.3d at 1066 (implying that the customer has no obligation to conduct a detailed comparison of original and modified contracts).

133. 805 F. Supp. 2d 904 (N.D. Cal. 2011).

134. *Id.* at 910.

135. *Id.* at 907–08.

136. *Id.*

137. *Id.* at 912.

138. *See id.* at 908 (describing how the contract terms are presented when a user plays the YoVille game for the first time).

139. *See id.* at 906–08, 912 (upholding a modified arbitration clause when the plaintiff continued using the online game after the contract terms changed).

Methods of modification, and of contracting originally, are also changing. It is now well-established that an e-mail exchange can form and modify a contract.<sup>140</sup> A court recently held that an instant messaging conversation could modify a contract.<sup>141</sup> In the early days of electronic contracting, some decried the lack of formality of e-mail and feared that allowing an e-mail exchange to form a contract would lead people into unintentional deals.<sup>142</sup> Now that we have become accustomed to text messages and Twitter, should those methods of communication suffice to form binding agreements? Or should more “substance” be required of a communication before it becomes enforceable? We expect to see more modification cases in the future.

Recent years have brought another attempt to fashion rules to govern some technology transactions. This attempt, not in the form of a statute, is the American Law Institute’s *Principles of the Law of Software Contracts*.<sup>143</sup> Although limited to transactions in software, the *Principles*, like UCITA, sets forth some guidelines for determining whether electronically presented terms can result in a contract.<sup>144</sup> The project’s approach to electronically presented terms matured along with the judicial treatment of such terms; although an early draft blessed only terms that required a click to agree at the end of the standard form before payment,<sup>145</sup> the final version adopted the view that terms are enforceable so long as they are reasonably communicated to the offeree.<sup>146</sup> The old law of contract prevailed once again.

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140. See Stephanie Holmes, Stevens v. Publicis: *The Rise of “No E-Mail Modification” Clauses?*, 6 WASH. J.L. TECH. & ARTS 67, 68–70 (2010) (explaining how both statutes and case law support formation and modification of contracts via e-mail).

141. CX Digital Media, Inc. v. Smoking Everywhere, Inc., No. 09-62020-CIV, 2011 U.S. Dist. LEXIS 29999, at \*31–36 (S.D. Fla. Mar. 23, 2011).

142. See, e.g., Patrick A. Randolph Jr., *Has E-Sign Murdered the Statute of Frauds?*, 15 PROB. & PROP. 23, 25 (2001) (arguing that “E-sign legislation” may eliminate parties’ “chance to ‘think twice’”).

143. AM. L. INST., PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS (2009) [hereinafter PRINCIPLES].

144. *Id.* at §§ 2.01, 2.02.

145. AM. L. INST., PRINCIPLES OF THE LAW OF SOFTWARE CONTRACTS, Preliminary Draft No. 2, § 2.01(c) (Aug. 10, 2005).

146. PRINCIPLES, *supra* note 143, at § 2.02.

## IV. THE FUTURE

The developments discussed above settle some questions about electronic contracts, but leave many questions unresolved. In this Part, we discuss arbitration clauses,<sup>147</sup> privacy policies,<sup>148</sup> mobile devices,<sup>149</sup> the Computer Fraud and Abuse Act,<sup>150</sup> and intelligent agents.<sup>151</sup>

## A. Arbitration

Arbitration clauses are not unique to consumer electronic contracts, but there would probably be very little case law on the enforceability of electronic contract terms in their absence.<sup>152</sup> Most courts that have struck down such clauses have done so finding some measure of procedural, as well as substantive, unconscionability.<sup>153</sup> A notable exception has been courts applying California law, which requires very little evidence of procedural unconscionability when a form contract contains an arbitration clause that requires a consumer to give up her right to bring a class action.<sup>154</sup>

The recent Supreme Court of the United States decision in *AT&T Mobility L.L.C. v. Concepcion*,<sup>155</sup> while not an electronic contracting case, held that California's treatment of consumer arbitration

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147. See *infra* Part IV.A.

148. See *infra* Part IV.B.

149. See *infra* Part IV.C.

150. See *infra* Part IV.D.

151. See *infra* Part IV.E.

152. For examples of cases dealing with arbitration clauses in electronic contracts, see *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007); *Aral v. Earthlink, Inc.*, 36 Cal. Rptr. 3d 229 (Cal. Ct. App. 2005); *Hubbert v. Dell Corp.*, 835 N.E.2d 113 (Ill. App. Ct. 2005); *Stenzel v. Dell, Inc.*, 870 A.2d 133 (Me. 2005).

153. See, e.g., *Bragg*, 487 F. Supp. 2d at 611 (finding an arbitration clause in an online agreement procedurally and substantively unconscionable); *Comb v. PayPal, Inc.*, 218 F. Supp. 2d 1165, 1172–77 (N.D. Cal. 2002) (same).

154. See *Ting v. AT&T*, 319 F.3d 1126, 1149 (9th Cir. 2003) (agreeing with the lower court that an agreement, which contained an arbitration provision, was procedurally unconscionable when it imposed terms on consumers on a “take-it-or-leave-it basis”). We discuss the California approach in Juliet M. Moringiello & William L. Reynolds, *Survey of the Law of Cyberspace: Electronic Contracting Cases 2007–2008*, 64 BUS. LAW. 199, 213–17 (2008) [hereinafter Moringiello & Reynolds, *Survey 2007–2008*].

155. 131 S. Ct. 1740 (2011).



clauses violated the Federal Arbitration Act.<sup>156</sup> The Court conceded in a footnote that although a state cannot proclaim all arbitration clauses unconscionable, a state may provide that arbitration clauses must be presented in a prescribed manner, such as in bold type or in highlighted print.<sup>157</sup> *Concepcion* presents lower courts with two options. On the one hand, they may decide that a bold presentation of an arbitration clause is required; that requirement, of course, runs the risk of the Supreme Court saying that the language in *Concepcion* is only a footnote.<sup>158</sup> On the other hand, courts may decide that the Supreme Court did not mean to defer to state rulings on unconscionability;<sup>159</sup> if so, then the resolution of consumer disputes will be left entirely in the hands of one-sided arbitration clauses.

### B. Privacy

Today, individuals take care of all sorts of personal matters electronically; they shop, pay bills, reconnect with old friends from high school, and even find potential mates. Websites allow individuals to transact their personal business from anywhere at any time of day. These sites also allow their operators to collect detailed personal information about their users.<sup>160</sup> Today's online convenience comes with an enormous risk that personal information will get into the hands of people who can use it for nefarious purposes such as identity theft.<sup>161</sup> Every website on which a consumer transacts her personal business has some kind of privacy policy, sometimes one mandated by

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156. *Id.* at 1748, 1753.

157. *Id.* at 1750 n.6.

158. *Id.* ("Of course States remain free to take steps addressing the concerns that attend contracts of adhesion—for example, requiring class-action-waiver provisions in adhesive arbitration agreements to be highlighted. Such steps cannot, however, conflict with the FAA or frustrate its purpose to ensure that private arbitration agreements are enforced according to their terms.").

159. *See id.* at 1747 (explaining that state law must give way when it conflicts with the Federal Arbitration Act).

160. *See* Eugene Yannon, *On-Line Purchasing*, 35 MD. B.J. 40, 42 (2002) (stating that "information gathering technologies," such as cookies and spyware, enable companies to gather personal information about Internet users).

161. *See id.* at 43 (mentioning that "new information and e-commerce technologies increase the risks to privacy exponentially").

law.<sup>162</sup> These privacy policies are presented in the same fashion as website terms of use: They tend to be behind a hyperlink at the bottom of a webpage, presented in a way that does not encourage readership.<sup>163</sup>

The United States lacks a general national privacy law. Privacy legislation is sector-specific, with laws governing the confidentiality of financial information<sup>164</sup> and health care information.<sup>165</sup> The Federal Trade Commission (“FTC”) has the power to prohibit “unfair or deceptive acts or practices in or affecting commerce,”<sup>166</sup> and it has used this power to police privacy policies in several high-profile cases.<sup>167</sup> Thus, in 2009, the FTC charged Sears with failing to disclose adequately the scope of consumers’ personal information that it collected by a downloadable software application.<sup>168</sup> The complaint arose out of a Sears market research program.<sup>169</sup> To join, prospective members were asked to click their agreement to an online “Privacy Statement and User License Agreement” (“PSULA”) that was presented in a scroll box.<sup>170</sup> The consent that Sears requested was more robust than that requested by the vast majority of clickwrap terms.<sup>171</sup> Sears pro-

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162. For example, the Gramm-Leach-Bliley Act requires that every financial institution provide a “clear and conspicuous disclosure” of its privacy policy to its customers. 15 U.S.C. § 6803(a) (2006).

163. See Woodrow Hartzog, *Website Design as Contract*, 60 AM. U. L. REV. 1635, 1664–70 (2011) (discussing features of website design that hinder understanding of privacy policies).

164. See, e.g., 15 U.S.C. § 6801(a) (2006) (“[E]ach financial institution has an affirmative and continuing obligation to respect the privacy of its customers . . .”).

165. See 45 C.F.R. § 164.501(6)(v)(2) (2011) (defining “protected health information”).

166. 15 U.S.C. § 45(a)(1) (2006).

167. See, e.g., Dee Pridgen, *Consumer Privacy in the Digital Marketplace: Federal Initiatives*, 33 WYO. LAW. 14, 15–16 (2010) (describing charges FTC brought against Twitter, whose “lax security practices” permitted hackers to access Barack Obama’s account).

168. Complaint at 5, *In re Sears Holdings Mgmt. Corp.*, FTC File No. 0823099 [hereinafter *Complaint*], available at <http://www.ftc.gov/os/caselist/0823099/090604searscomplaint.pdf> (last visited Nov. 20, 2012).

169. *Id.* at 1.

170. *Id.* at 3.

171. Compare *id.* at 3–5 (alleging that Sears presented the PSULA in a scrollbox, which displayed ten lines at a time, and then asked registrants to click (1) the checkbox next to a statement that he agreed to the terms and (2) the “Next” button), with *i.Lan Sys., Inc. v.*

vided a link to a printable version of the terms and required the registrants to click a checkbox next to the statement, "I am the authorized user of this computer and I have read, agree to, and have obtained the agreement of all computer users to the terms and conditions of the Privacy Statement and User License Agreement."<sup>172</sup> After clicking the checkbox, the registrants were required to click "Next" to obtain the application.<sup>173</sup>

Hundreds of years of contract law have taught us that parties have the duty to read terms that are presented to them.<sup>174</sup> Over a decade of electronic contracting law has implied that this is the case regardless of the number of screens that the terms occupy.<sup>175</sup> The Sears terms were not unusually long; they occupied only eleven computer screens.<sup>176</sup> The participants in the Sears program, however, were installing software that tracked their Internet behavior, capturing, among other things, online drug prescription records and online

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Netscout Serv. Level Corp., 183 F. Supp. 2d 328, 338 (D. Mass. 2002) (finding that i.Lan accepted the clickwrap agreement simply by clicking "I agree").

172. Complaint, *supra* note 168, at 4–5.

173. *Id.* at 5.

174. See John D. Calamari, *Duty to Read—A Changing Concept*, 43 FORDHAM L. REV. 341, 341 (1974) ("Every lawyer learned early in the course on contracts that a party may be bound by an instrument which he has not read."); Stewart Macaulay, *Private Legislation and the Duty to Read—Business Run by IBM Machine, the Law of Contracts and Credit Cards*, 19 VAND. L. REV. 1051, 1051 (1966) (noting the common "rallying cry" that a man cannot enter into a contract and then try to get out of its terms by claiming he did not read them). This rule has many critics. See, e.g., Alan M. White & Cathy Lesser Mansfield, *Literacy and Contract*, 13 STAN. L. & POL'Y REV. 233, 234 (2002) (using literacy research to explain that a large percentage of American adults would not understand contract documents and disclosures even if they read them).

175. See, e.g., *Feldman v. Google, Inc.*, 513 F. Supp. 2d 229, 236–38 (E.D. Pa. 2007) (holding that the plaintiff had the duty to read terms that were presented in a scroll box and required a click to agree and, therefore, the fact that the entire contract was not visible in the scroll box was irrelevant); *Barnett v. Network Solutions, Inc.*, 38 S.W.3d 200, 204 (Tex. Ct. App. 2001) ("Parties to a written contract have the obligation to read what they sign . . . . The same rule applies to contracts which appear in electronic format."); *Scarcella v. Am. Online*, No. 1168/04, 2004 N.Y. Misc. LEXIS 1578, at \*5 (N.Y. Civ. Ct. Sept. 8, 2004) (stating that although the long series of screens could induce a "trance of lethargy and inattentiveness," the "law does not treat prolixity as evidence of deception"), *aff'd*, 811 N.Y.S.2d 858 (N.Y. App. Div. 2005).

176. Complaint, *supra* note 168, at Exhibit E.

banking statements.<sup>177</sup> Although the FTC complaint stated that the software application functioned as described in the PSULA, it noted that a description of the software's tracking function did not appear until the seventy-fifth line of the terms.<sup>178</sup> Because Sears disclosed this function "[o]nly in a lengthy user license agreement, available to consumers at the end of a multi-step registration process," the FTC charged that it failed to disclose adequately the tracking software and thus engaged in a deceptive practice violating the FTC Act.<sup>179</sup> Sears and the FTC ultimately settled the dispute.<sup>180</sup>

In the *Sears* dispute, the question was not whether a contract was formed; it was whether Sears deceived the participants in its market research.<sup>181</sup> In other words, even if a contract exists, some of its terms may violate some public policy. Judicial intervention becomes important in such cases because modern communications allow consumers to enter into very risky transactions from which public policy might intervene to protect them. We have seen the use of public policy to protect consumers from forum selection clauses; in *Scarcella v. America Online*,<sup>182</sup> for example, a small claims court in New York found that although the consumer plaintiff had agreed to AOL's Terms of Service, presented in ninety-one computer screens, enforcing the forum selection clause would have required the plaintiff to travel from New York to Virginia to adjudicate his claim and, therefore, would violate the public policy behind small claims procedures.<sup>183</sup>

Application of public policy is not unique to electronic transactions.<sup>184</sup> Consumer protection may be more important in electronic contracting, however, because electronic communications make it easier for consumers to transact with companies in far-flung locations

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177. *Id.* at 4.

178. *Id.* at 3, 5. The scroll box displayed only ten lines at a time. *Id.* at 3.

179. *Sears Settles FTC Charges Regarding Tracking Software*, FED. TRADE COMM'N, <http://www.ftc.gov/opa/2009/06/sears.shtml> (June 4, 2009) [hereinafter *Sears Settles*].

180. *Id.* For a more detailed discussion of the FTC action against Sears, see Susan E. Gindin, *Nobody Reads Your Privacy Policy or Online Contract? Lessons Learned and Questions Raised by the FTC's Action Against Sears*, 8 NW. J. TECH. & INTELL. PROP. 1 (2009).

181. *Sears Settles*, *supra* note 179.

182. No. 1168/04, 2004 N.Y. Misc. LEXIS 1578 (N.Y. Civ. Ct. Sept. 8, 2004), *aff'd*, 811 N.Y.S.2d 858 (N.Y. App. Div. 2005).

183. *Id.* at \*3-4, \*8, \*11-13.

184. See, e.g., *Licitra v. Gateway, Inc.*, 189 Misc. 2d 721, 732-33 (N.Y. Civ. Ct. 2001) (refusing to enforce an arbitration clause in paper terms because to do so would contravene small claims court policy).

and to give up sensitive personal information without realizing that they are doing so.

*C. Do Smartphones Change the Game?*

Today, many consumer transactions are entered into not at a computer, but by use of mobile devices such as smartphones.<sup>185</sup> Today's smartphones are not only telephones, but are also handheld computers.<sup>186</sup> Does a contract presented to a consumer by smartphone present any novel issues? The distinguishing feature of mobile devices is their size. Contract terms presented by smartphone are necessarily presented on a smaller screen than those presented on a computer. For those terms to be readable, they must be "mobile-optimized;" in other words, they must appear in readable font on the mobile device.<sup>187</sup> A recent survey for TRUSTe, a privacy solutions provider, revealed that only two percent of mobile websites have a mobile-optimized privacy policy.<sup>188</sup> If terms cannot be read on a smartphone, they are not reasonably communicated and, therefore, should not be part of the agreement.

Once again, there is no need for new law but, of course, different factual scenarios might well require some creative judicial application of settled law to the new facts. That process, of course, is how the common law adapts to meet changing conditions.<sup>189</sup>

The mobile contracting regime, like the statutes governing electronic signatures generally, may be shaped by the financial services community.<sup>190</sup> Today, mobile payments proliferate in many countries

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185. See Timothy R. McTaggart & David W. Freese, *Regulation of Mobile Payments*, 127 *BANKING L.J.* 485, 485 (2010) (stating that millions of people use their phones to pay for goods and services and to transfer funds).

186. *Id.*

187. Cheryl Hall, *Moving Up with Mobility*, *DALL. MORNING NEWS*, Sept. 22, 2010, at D1 (describing a website "optimized for mobile").

188. *Press Release: TRUSTe Privacy Index Reveals Alarming Trends*, TRUSTE (Dec. 8, 2011), [http://www.truste.com/about-TRUSTe/press-room/news\\_truste\\_2011\\_web\\_privacy\\_index](http://www.truste.com/about-TRUSTe/press-room/news_truste_2011_web_privacy_index).

189. Dennis J. Sweeney, *The Common Law Process: A New Look at an Ancient Value Delivery System*, 79 *WASH. L. REV.* 251, 284 (2004) ("The common law has the capacity to adapt to new technologies. Of concern here is the way in which it adapts.").

190. The most popular type of mobile commerce applications are mobile banking and payment applications. See E.W.T. Ngai & A. Gunasekaran, *A Review for Mobile Commerce Re-*

around the world but not in the United States.<sup>191</sup> Perhaps a regulatory regime will grow up around those transactions, and that regime will be imposed on the wider community of mobile device contracting. If not, the concerns associated with informal dealings on mobile devices may be influenced by an understanding of how consumers react to the informality of those devices.

*D. The Computer Fraud and Abuse Act*

Another important issue for the future will involve the relationship between electronic contracts and the Computer Fraud and Abuse Act (“CFAA”). The CFAA, enacted to combat computer hacking, makes it a crime to “intentionally access[] a computer without authorization or exceed[] authorized access” and thereby obtain information from a computer used in interstate communication.<sup>192</sup> What is unauthorized access? Is it access that is obtained by the breach of a code-based restriction on access?<sup>193</sup> Or is it any access that violates a website’s terms of use?<sup>194</sup> The CFAA provides no answer to these questions, so it will be up to the courts to decide the scope of the conduct prohibited by the CFAA.<sup>195</sup>

Although Congress originally enacted the CFAA in 1984 to criminalize computer hacking, today’s CFAA appears to do much more

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*search and Applications*, 43 DECISION SUPPORT SYS. 3, 10 (2007) (“Currently, it seems that the most popular m[obile]-commerce application is that supporting financial activities.”).

191. See Jongho Kim, *Ubiquitous Money and Walking Banks: Environment, Technology, and Competition in Mobile Banking*, 8 RICH. J. GLOBAL L. & BUS. 37, 102–03 (2008) (discussing the use of mobile payment technology in South Korea); Arnold S. Rosenberg, *Better Than Cash? Global Proliferation of Payment Cards and Consumer Protection Policy*, 44 COLUM. J. TRANSNAT’L L. 520, 548–52 (2006) (explaining the increasing use of mobile payment technology in Brazil, southern Africa, and South Korea).

192. 18 U.S.C. § 1030(a)(2) (2006).

193. See Patricia L. Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2253–54 (2004) (defining unauthorized access as “extend[ing] only to breaches of . . . code-based limitations”).

194. See *United States v. Drew*, 259 F.R.D. 449, 460 (C.D. Cal. 2009) (“[M]ost courts that have considered the issue have held that a conscious violation of a website’s terms of service/use will render the access unauthorized and/or cause it to exceed authorization.”).

195. See *id.* (analyzing courts’ varied approaches to “unauthorized use”).

than that.<sup>196</sup> Congress substantially modified the CFAA several times between its initial enactment and 2010, expanding the reach of the statute with each amendment.<sup>197</sup> Although the original statute was narrowly designed to criminalize only “federal interest computer crimes” such as the unauthorized acquisition of classified national security information or personal financial information, today’s CFAA could be read to regulate the use of every computer in the country.<sup>198</sup> That would be a bad reading; no one reads the terms of use<sup>199</sup> and it would be very wrong to criminalize behavior that lacks a scienter component.<sup>200</sup>

We believe that electronic contracting may permit or cause individuals to engage in risky transactions. Unknowingly giving up privacy or intellectual property rights is risky. Perhaps it is not unreasonable to expect people to read their terms to learn whether they are giving up those rights. Still, it seems unreasonable to impose criminal sanctions on those who engage in what seems to be universal behavior—violation of terms of use that no one bothers to read.<sup>201</sup> Surely, the criminal law can be refined to deal with serious bad behavior without making criminals of all of us due to our normal, everyday activities.

*United States v Drew*,<sup>202</sup> despite its awful facts, provides an example of how a wordy, never-read set of Internet terms can pose greater risks than most people can imagine. Most people know the sordid facts behind *Drew*: Lori Drew, a Missouri mother, created a fake MySpace profile to pose as a sixteen-year-old boy.<sup>203</sup> Using that profile, she communicated with a teenage girl, ultimately telling that girl that “he” was not interested in her and that “the world would be a better place without her in it.”<sup>204</sup> After receiving the message, the teenage girl

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196. Orin S. Kerr, *Vagueness Challenges to the Computer Fraud and Abuse Act*, 94 MINN. L. REV. 1561, 1561 (2010).

197. *Id.*

198. *Id.* at 1561–65.

199. *See infra* notes 300–304 and accompanying text.

200. *Drew*, 259 F.R.D. at 467 (explaining that, if every conscious breach of a website’s terms constituted unauthorized use of a computer, “[a]ll manner of situations will be covered from the more serious (*e.g.* posting child pornography) to the more trivial (*e.g.* posting a picture of friends without their permission). All can be prosecuted.”).

201. *See* 18 U.S.C. § 1030(c) (2006) (establishing fines and terms of imprisonment for exceeding authorized use of a computer).

202. 259 F.R.D. 449 (C.D. Cal. 2009).

203. *Id.* at 452.

204. *Id.*

killed herself and Ms. Drew was prosecuted for, and initially convicted of, violating the CFAA for accessing a computer without authorization.<sup>205</sup> Her conviction was overturned, with the court finding:

[I]f any conscious breach of a website's terms of service is held to be sufficient by itself to constitute accessing a computer without authorization or in excess of authorization, the result will be that [the CFAA] becomes a law that affords too much discretion to the police and too little notice to citizens who wish to use the [Internet].<sup>206</sup>

*Drew* did not close the door to contract-based CFAA prosecutions. Although the Department of Justice did not appeal the *Drew* ruling, it continues to take the position that conduct "exceeds authorized access" for CFAA purposes if the conduct violates a website's terms of use.<sup>207</sup> Such a position leads to the extraordinary result of allowing a website owner, who proffers terms of use comprising thousands of words and dozens of screens, to define criminal conduct.<sup>208</sup>

#### E. *Intelligent Agents*

Both E-Sign and UETA recognize that a contract may be formed by electronic agents. Under E-Sign, a contract may not be denied enforceability solely because it was formed by the actions of one or more electronic agents, so long as the action of such an electronic agent is attributable to the person sought to be bound.<sup>209</sup> The UETA sets forth a similar rule, stating that a contract may "be formed by the interaction of electronic agents of the parties, even if no individual was aware of or reviewed the electronic agents' actions or the resulting

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205. Jennifer Steinhauer, *Verdict in the MySpace Suicide Case*, N.Y. TIMES (Nov. 26, 2008), available at <http://www.nytimes.com/2008/11/27/us/27myspace.html>.

206. *Drew*, 259 F.R.D. at 467–68 (citation omitted) (internal quotations omitted).

207. See *Cyber Security: Protecting America's New Frontier: Hearing Before the Subcomm. on Crime, Terrorism and Homeland Security of the H. Comm. on the Judiciary*, 112th Cong. 38–39 (2011) (statement of Orin S. Kerr, Professor of Law, George Washington University) (explaining the Department of Justice's interpretation of the CFAA as including even mundane violations of a website's terms of service).

208. *Drew*, 259 F.R.D. at 465 (suggesting that, if a breach of a website's terms of service constitutes a violation of the CFAA, then the website owner "ultimately defines the criminal conduct").

209. Electronic Signatures in Global and National Commerce Act, 15 U.S.C. § 7001(h) (2006).



terms and agreements.”<sup>210</sup> These statutes are facilitative; they do not say that all agreements formed by electronic agents are enforceable, but they recognize that an agreement formed by electronic agents may be enforced.

These statutes were written over a decade ago.<sup>211</sup> Courts have decided several cases involving electronic agents but have rarely attached any significance to the involvement of electronic agents in the transactions.<sup>212</sup> A recent opinion from British Columbia addressed a dispute between the real estate company Century 21 and Zoocasa, a company that ran a real estate search engine.<sup>213</sup> To obtain its listings, Zoocasa accessed the Century 21 website daily, in contravention of the Century 21 Terms of Use.<sup>214</sup> The court addressed the significance of the fact that Century 21’s site was accessed repeatedly not by a human being, but by an automated program, and recognized that machine-made contracts are nothing new.<sup>215</sup> Ultimately the court held that the involvement of an automated program was irrelevant for two reasons: First, an employee reviewed the layout of the Century 21 website be-

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210. UNIF. ELEC. TRANSACTIONS ACT § 14(1), 7A U.L.A. 272 (1999).

211. See Anthony M. Balloon, Comment, *From Wax Seals to Hypertext: Electronic Signatures, Contract Formation, and a New Model for Consumer Protection in Internet Transactions*, 50 EMORY L.J. 905, 909 (2001) (stating that E-Sign was promulgated in 2000); see also Jennifer A. Puplava, *Use and Enforceability of Electronic Contracting: The State of Uniform Legislation Attempting to Regulate E-Commerce Transactions*, 16 MICH. ST. J. INT’L L. 153, 155 (2007) (noting that UETA was finalized in 1999).

212. See, e.g., *Register.com v. Verio, Inc.*, 356 F.3d 393, 396, 401–03 (2d Cir. 2004) (reasoning that although defendant accessed the plaintiff company’s site using an automated software program (or “robot”), it did not argue that it had no actual notice of plaintiff’s terms as a result of its access by robot). But see *Internet Archive v. Shell*, 505 F. Supp. 2d 755, 764–66 (D. Colo. 2007) (acknowledging that although the lack of human consent to terms might doom a party’s breach of contract claim, the defendant’s allegations of the existence of a contract, breach, and damages were sufficient to withstand the plaintiff’s motion to dismiss the defendant’s counterclaim for breach of contract).

213. *Century 21 Canada L.P. v. Rogers Commc’ns Inc.*, 2011 BCSC 1196.

214. *Id.* ¶ 37–40.

215. *Id.* ¶ 128. The court noted a 1971 English case involving a plaintiff who parked his car in an automated parking lot. *Id.* In that case, the court held that the contract offer was made when the proprietor of the parking lot held the machine out as being ready to accept the plaintiff’s money. Once the plaintiff inserted the money into the machine, the offer was accepted. *Id.*

fore any automated program indexed the website, and second, a human being programmed the automated indexing program.<sup>216</sup>

We question whether the involvement of humans in automated contracting will always be so clear. Today, the law views an electronic agent as a legal agent and holds the human responsible for the software as a principal.<sup>217</sup> This is the view reflected in UETA and E-Sign.<sup>218</sup> Computer programs that operate autonomously, meaning that they can learn through experience and modify their own behavior as a result of this experience, have been in existence for years.<sup>219</sup> Some have predicted that as autonomous agents develop, they will be able to exercise free will that is independent of their human developers.<sup>220</sup> Software agents of the future may be able to make choices and decisions in such a way that the humans for whom they act may have no knowledge of the identity of their trading partners.<sup>221</sup> If that is the case, there may not be a human to hold accountable when something goes wrong in a transaction consummated by the thinking software agent.<sup>222</sup>

At the end of the day, no new contract law will likely be necessary; after all, the automated agents will be making contracts for some legal person, who will be required to assume responsibility for its agent, even if that agent is not a human. If changes need to be made to the law at all, they will likely involve the legal definition of “person.”<sup>223</sup> Granting a computer program legal personhood might seem

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216. *Id.* ¶ 129–30.

217. *See supra* text accompanying notes 209–210.

218. *See supra* text accompanying notes 209–210.

219. *See* Tom Allen & Robin Widdison, *Can Computers Make Contracts?*, 9 HARV. J.L. & TECH. 25, 27 (1996) (observing, in 1996, that “computer systems are now emerging that can operate not just automatically but autonomously”); Stephen T. Middlebrook & John Muller, *Thoughts on Bots: The Emerging Law of Electronic Agents*, 56 BUS. LAW. 341, 346 (2000) (explaining, in 2000, that “technology exists or is in development to implement full trading bots that will make purchase decisions on behalf of users”).

220. Allen & Widdison, *supra* note 219, at 27; Bert-Jaap Koops et al., *Bridging the Accountability Gap: Rights for New Entities in the Information Society?*, 11 MINN. J. L. SCI. & TECH. 497, 508 (2010).

221. Allen & Widdison, *supra* note 219, at 28.

222. *See id.* at 28–29 (asking whether the law can cope with new technology enabling autonomous transactions); Koops et al., *supra* note 220, at 510 (same).

223. *See* Koops et al., *supra* note 220, at 517 (“If companies and associations can be legal persons, why not software agents, as well?”); *see also* Allen & Widdison, *supra* note 219, at 35 (discussing the possibility of the law conferring legal personhood on a computer).

like a bizarre science fiction ploy, but it may not be any more unthinkable than giving “person” status to a corporation or a ship.<sup>224</sup> The unresolved question from a contract perspective would then become not “who is liable?”, but “how will that person pay?” Perhaps businesses could be required to register their software agents in a public registry that would indicate both the extent of the agent’s liability and the party liable for that agent’s actions.<sup>225</sup> Such a registry would be similar to a state’s corporation records.<sup>226</sup>

The intelligent agent problem illustrates the beauty of facilitative statutes like UETA and E-Sign. Because of their technology-neutral nature, they can accommodate advances in computer technology.<sup>227</sup> Because they do not purport to be substantive contracting statutes, they assure us that a contract may not be denied enforceability solely because an electronic agent was used in its formation.<sup>228</sup> Of course, whether an intelligent agent has notice of terms will be an issue, but that issue is not new.<sup>229</sup> Because electronic agents act in ways intended by their programmers, courts determine whether a contract has been formed by looking to the notice given to the electronic agent’s owner.<sup>230</sup> If an electronic agent were to be held independently liable for its actions, courts would be required to determine whether ade-

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224. See Allen & Widdison, *supra* note 219, at 35 (discussing how contract law already recognizes ships and corporations as legal persons); Koops et al., *supra* note 220, at 516 (same).

225. See Steffen Wettig & Eberhard Zehendner, *A Legal Analysis of Human and Electronic Agents*, 12 ARTIFICIAL INTELLIGENCE & L. 111, 128 (2004) (proposing a register for electronic agents); see also Allen & Widdison, *supra* note 219, at 42 (suggesting a system of registration for electronic agents); Koops et al., *supra* note 220, at 539 (discussing Wettig’s and Zehendner’s suggestion).

226. Allen & Widdison, *supra* note 219, at 42.

227. See Janet P. Knaus & Timothy E. Folley, *Electronic Records and Signatures: The Federal E-Sign Act and Michigan UETA Place Them on Legal Par with Their Paper and Ink Counterparts*, 80 MICH. B.J. 39, 40 (2001) (stating that E-Sign and UETA are written in “technology-neutral terms”).

228. See *id.* at 41 (“Both laws are procedural, not substantive.”); see also *supra* text accompanying notes 209–210.

229. See *supra* note 33 and accompanying text.

230. See *Century 21 Canada L.P. v. Rogers Commc’ns Inc.*, 2011 BCSC 1196 (noting that an employee of the defendant reviewed the website of the plaintiff before employing the automated agent to index the website); James Grimmelmann, *The Structure of Search Engine Law*, 93 IOWA L. REV. 1, 25 (2007) (discussing how the Second Circuit imputed knowledge of contractual terms to a “spidering” program’s operator).

quate notice, in computer-readable form, had been given to the electronic agent. Computers have been communicating with each other for decades, so that will not be a difficult problem to solve.<sup>231</sup>

These are all important and interesting questions, of course, but we believe that courts will approach them using the same analytic tools they have developed over the past several centuries of looking at face-to-face transactions and then at increasingly distant transactions. As Lord Coke said, “out of the old Fields must spring and grow the new Corn.”<sup>232</sup>

## V. REFLECTIONS

These developments naturally lead any law professor to reflect on what did and did not happen and why. Here we consider four questions. First, why did some statutory solutions work when others did not?<sup>233</sup> Second, should there be a different law for online transactions?<sup>234</sup> Third, why did academics in particular want to change the common law in the Internet world?<sup>235</sup> Fourth, why is contract law so resilient, so adaptable, that it can accommodate effortlessly to a radically new and disruptive technology?<sup>236</sup>

### A. Statutes

It is interesting to consider the efforts at statutory reform of electronic contracting. There have been four serious efforts at nationwide reform. Two were successful and two were not. Earlier, we discussed two statutes, E-Sign and UETA, which were adopted swiftly almost everywhere.<sup>237</sup> But there also have been two major reform efforts, UCITA and the *Principles of the Law of Software Contracts*, that

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231. See Allen & Widdison, *supra* note 219, at 26 (describing, in 1996, how computers “can be programmed automatically to issue a standard offer and to both acknowledge and record acceptances from trading partners”).

232. *Preface to the First Part of the Reports of Sir Edward Coke Kt.* (E. & R. Nutt and R. Gosling, London, 1727).

233. See *infra* Part V.A.

234. See *infra* Part V.B.

235. See *infra* Part V.C.

236. See *infra* Part V.D.

237. See *supra* notes 39–43 and accompanying text.

have failed.<sup>238</sup> These failed reform efforts focused on a specific type of contract, the contract for computer information, or software.<sup>239</sup> Computer information transactions involve myriad intellectual property issues.<sup>240</sup> For instance, software contracts raise a question as to the extent to which contracts can abrogate intellectual property rights granted by federal law.<sup>241</sup> In addition, many software transactions are labeled as licenses rather than sales, even when the transaction has many, if not all, the characteristics of a sale.<sup>242</sup> These intellectual property questions remain as controversial today as they were fifteen years ago.<sup>243</sup> Yet, because transfers of software are often accomplished by modern contracting methods, including shrinkwrap, clickwrap, and browsewrap, the proponents of these reform projects felt com-

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238. See Moringiello & Reynolds, *What's Software Got to Do with It?*, *supra* note 18, at 1541–42 (arguing that the *Principles* do not address the unique characteristics of software and noting that UCITA was adopted in only two states).

239. *Id.*; see also *supra* text accompanying note 66.

240. See Florencia Marotta-Wurgler, *Will Increased Disclosure Help? Evaluating the Recommendations of the ALI's "Principles of the Law of Software Contracts,"* 78 U. CHI. L. REV. 165, 169 (2011) (noting courts' struggle to resolve "contract and intellectual property law issues" in software transactions).

241. The Copyright Act governs "all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright . . . in works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright." 17 U.S.C. § 301(a) (2006). The tension between this provision and standard form contracts for information is explained in *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1454–55 (7th Cir. 1996). See also Boss, *supra* note 76, at 203–04 ("[L]icensors use licenses to get more than they are granted by intellectual property law . . . by placing limitations on the rights granted to licensees by applicable intellectual property law . . . and by creating limitations on use of information that is not even protected by intellectual property law."); David Nimmer et al., *The Metamorphosis of Contract into Expand*, 87 CALIF. L. REV. 17, 23 (1999) ("[B]y making provisions of software licenses presumptively enforceable while providing no limitations on overreaching contract terms that proprietors may unilaterally decide to impose, Article 2B facilitates known practices designed to alter the 'delicate balance' [of copyright law].").

242. See Kim, *supra* note 10, at 1328 (explaining that software companies chose to license, rather than sell, their products because of the ease of copying software).

243. See Marotta-Wurgler, *supra* note 240, at 166–66 (describing the controversy surrounding whether software license agreements "extend intellectual proections beyond those afforded by federal intellectual property laws").

pelled to address modern contracting issues in their products.<sup>244</sup> Any set of rules attempting to address both the intellectual property and contract issues was doomed to fail.

The UCITA was a dismal failure, with adoptions only in Virginia and Maryland.<sup>245</sup> It was a more ambitious statute than E-Sign and UETA because it attempted to revise a broad swath of contract law as applied to computer information transactions.<sup>246</sup> The failure was all the more spectacular because the American Law Institute, which had joined NCCUSL in the UCITA project, ultimately withdrew its support.<sup>247</sup> Finally, there is the *Principles of the Law of Software Contracts*, promulgated by the American Law Institute in 2009.<sup>248</sup> The *Principles*, carefully drafted over a long period by two very able Reporters, focused on software contracts, but in doing so addressed many areas of

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244. For a discussion of how UCITA and the *Principles* responded to address modern contracting issues, see Moringiello & Reynolds, *What's Software Got to Do with It?*, *supra* note 18, at 1547–52.

245. MD. CODE ANN., COM. LAW §§ 22-101 to 22-816 (LexisNexis 2005); VA. CODE ANN. §§ 59.1-501.1 to 59.1-509.2 (LexisNexis 2006). Several states passed “bomb shelter” statutes that forbade courts from enforcing UCITA if choice-of-law rules suggested that it should be deployed. Moringiello & Reynolds, *What's Software Got to Do with It?*, *supra* note 18, at 1541–42; *see, e.g.*, IOWA CODE ANN. § 554D.125 (West 2012); N.C. GEN. STAT. ANN. § 66–329 (LexisNexis 2011); W. VA. CODE ANN. § 55-8-15 (LexisNexis 2008).

UCITA was the product of a joint drafting committee of the NCCUSL and the American Law Institute, an impeccable partnership. *See* Press Release, Nat'l Conference of Comm'rs on Uniform State Laws & Am. Law. Inst., NCCUSL to Promulgate Freestanding Uniform Computer Information Transactions Act: ALI and NCCUSL Announce that Legal Rules for Computer Information Will Not Be Part of UCC, *available at* [http://www.uniformlaws.org/shared/docs/computer\\_information\\_transactions/pressrel499.htm](http://www.uniformlaws.org/shared/docs/computer_information_transactions/pressrel499.htm) (last visited Feb. 1, 2013) (describing the history of the partnership between the NCCUSL and the American Law Institute). Its failure cannot be attributed to its parentage.

246. *See* UNIF. COMPUTER INFO. TRANSACTIONS ACT § 114, 7 U.L.A. 280 cmt. n.1 (2009) (“This section deals with pre-transaction disclosures of contract terms in Internet transactions where the contract is formed on-line for an electronic delivery of information.”).

247. *See* James D. Hornbuckle, Comment, *The Uniform Computer Information Transaction Act: State Legislatures Should Take a Critical Look Before Clicking Away Consumer Protections*, 23 WHITTIER L. REV. 839, 847 (2002) (explaining that the American Law Institute withdrew its support from UCITA).

248. Moringiello & Reynolds, *What's Software Got to Do with It?*, *supra* note 18, at 1541.

electronic contracting.<sup>249</sup> Although it is too early to call the *Principles* a failure, it has received little attention from either courts or commentators.<sup>250</sup>

Why the difference in success among these four projects? The successful statutory fixes involved simple adjustments to well-settled law that were not at all controversial.<sup>251</sup> E-Sign and UETA merely made clear that electronic signatures were as valid as, say, a letterhead.<sup>252</sup> Although courts probably would have gotten there on their own,<sup>253</sup> the statutes were helpful in moving the process along. The important point is that the two laws were quick fixes to a readily understood problem.

In contrast, the unsuccessful fix, UCITA, attempted to reorganize the world of contracts for information.<sup>254</sup> Although contracts for information (such as software) may be made on paper, the

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249. See *id.* at 1542–43, 1547–52 (stating that the *Principles* addressed a range of contract issues, as well as offered guidance in solving software-specific problems).

250. Only one court has cited the *Principles*. *Conwell v. Gray Loon Outdoor Mktg. Grp., Inc.*, 906 N.E.2d 805, 811 & n.7 (Ind. 2009). It has done better in the law reviews, in part because of several symposia devoted to the project as well as several articles written by the Reporters. See, e.g., Robert A. Hillman, *Contract Law in Context: The Case of Software Contracts*, 45 WAKE FOREST L. REV. 669, 669 (2010) (citing the *Principles*); Robert A. Hillman & Maureen A. O'Rourke, *Principles of the Law of Software Contracts: Some Highlights*, 84 TUL. L. REV. 1519, 1519 (2010) (same); Marotta-Wurgler, *supra* note 240, at 165 (same); Moringiello & Reynolds, *What's Software Got to do With It?*, *supra* note 18, at 1542 (same).

251. See Amelia Rawls, *Contract Formation in an Internet Age*, 10 COLUM. SCI. & TECH. L. REV. 200, 208–09 (2009) (contrasting the controversial UCITA with the widely accepted UETA and E-Sign).

252. See *supra* text accompanying notes 12–14.

253. Courts long recognized, even before the enactment of UETA and E-Sign, that a signature need not be a handwritten name. See, e.g., *Owen v. Kroger Co.*, 936 F. Supp. 579, 585 (S.D. Ind. 1996) (holding that preprinted wording on a memorandum form could constitute a signature for Statute of Frauds purposes); *Durham v. Harbin*, 530 So. 2d 208, 210 (Ala. 1988) (recognizing that letterhead could suffice as a signature in the appropriate circumstances). As a result, courts did not shy away from holding that electronic signatures affixed to e-mail messages could satisfy the Statute of Frauds even with respect to contracts entered into before the enactment of UETA and E-Sign. See, e.g., *Cloud Corp. v. Hasbro, Inc.*, 314 F.3d 289, 295–96 (7th Cir. 2002) (“[W]e conclude without having to rely on [E-Sign] that the sender’s name on an e-mail satisfies the signature requirement of the statute of frauds.”).

254. See Boss, *supra* note 76, at 171–72 (describing how UCITA eventually shifted focus to “information policy issues”).

Article 2B/UCITA project unavoidably addressed electronic contract formation issues because the proliferation of computer technologies not only made information an important commodity, but also provided an important medium for the exchange of all things of value.<sup>255</sup> The effort was bound to fail because there were too many actors who tried to push the result in too many directions, even though there was no consensus that anything at all needed to be fixed.<sup>256</sup> In short, UCITA, was a solution in search of a problem.<sup>257</sup> Even groups as well-respected and experienced as NCCUSL and the American Law Institute could not compromise sufficiently to satisfy everyone. Thus, those unhappy with the result in the end were able to muster sufficient blocking power to ensure that the law was not adopted.<sup>258</sup> The lesson here is that efforts to pin down the future, as a comprehensive statute does, will meet resistance unless there is a strongly felt need for the change.

Similarly, the American Law Institute's project, *Principles of Software Contracts*, met with a lackluster response<sup>259</sup> because it too was driven by a reformist agenda when there was no consensus that anything needed to be reformed.<sup>260</sup> Again, failure—or at least neglect—can be attributed to the lack of a felt need for change and the absence of strong forces pushing for the change.

As a result of these two failures, there is no widely applicable American statute today that specifically addresses electronic contract formation. Absent a strong case for change, courts are seen as the in-

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255. See *id.* at 170–71 (noting the “commoditization of information” and describing demands on the law to adapt to this development).

256. See Nim Razook, *The Politics and Promise of UCITA*, 36 CREIGHTON L. REV. 643, 645–46 (2003) (explaining the initial opposition to UCITA).

257. See Michele C. Kane, *When Is a Computer Program Not a Computer Program? The Perplexing World Created by Proposed U.C.C. Article 2B*, 13 BERKELEY TECH. L.J. 1013, 1013 (1998) (asserting that Article 2B “mak[es] the simple complex” by “creat[ing] distinctions within computer programs”); Nimmer et al., *supra* note 241, at 19 (“[T]o the extent that Article 2B aspires to protect copyright owners from improper uses of copyrighted works, it solves a non-problem.”).

258. See *supra* note 245 and accompanying text.

259. Lackluster is perhaps not a strong enough term. See *supra* note text accompanying 250.

260. For a good discussion of whether specialized contract law is desirable, by the Reporter for the *Principles of the Law of Software Contracts*, see Hillman, *supra* note 249, at 669. At the first meeting of the Members' Consultative Group for the *Principles* project, one of us asked why the project was needed. No satisfactory explanation was ever offered.



stitution best suited to deal with whatever special problems might be presented by electronic contracting. And that makes enormous sense. Contract law represents centuries of judges pondering how to handle concrete problems. There must be a very good reason to strip them of that responsibility, and none has yet appeared. Lord Coke was right: The old fields do grow the new corn.<sup>261</sup>

*B. Different Laws for Different Folks?*

Whether courts should distinguish among types of agreements—paper, oral, or online—remains an open question. Of course, some differentiation is created by positive law. The most prominent example is Article 2 of the UCC, differentiating between the sale of goods and other contracts, although examples go back much farther, such as the Statute of Frauds passed in 1677.<sup>262</sup> Some online terms, such as those offered by financial institutions, are regulated by federal law.<sup>263</sup> The Gramm-Leach-Bliley Act, for example, requires that terms offered by financial institutions be conspicuous.<sup>264</sup>

But courts left to their own devices have treated most contract issues as controlled by the same law of “contract.” The real question, therefore, is whether there is anything peculiar to electronic contracting that would cause courts to treat it differently from other contracting problems. As we have explained, we believe that there is no reason to treat the two differently.<sup>265</sup> And courts and legislatures have agreed.

There is also the question of whether a new law of contracting should be created for separate classes of persons who contract electronically. The obvious candidate here is the class of consumers.<sup>266</sup> It is easy to argue that online contracting poses dangers to the average consumer even greater than those presented by paper contracts. While paper might impart a certain seriousness to a transaction, con-

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261. *Preface to the First Part of the Reports of Sir Edward Coke Kt.* (E. & R. Nutt and R. Gosling, London, 1727).

262. *See infra* note 311.

263. *See* 15 U.S.C. § 6803(a) (2006) (governing the confidentiality of financial information).

264. *Id.*

265. *See supra* Part I.

266. *See, e.g.,* Marotta-Wurgler, *supra* note 240, at 165–66 (articulating the concern that the use of shrinkwrap and browsewrap licenses “may not effectively put [consumers] on notice of the [contractual] terms” and, thus, consumers may be agreeing to unfair terms).

sumers, it can be argued, are so accustomed to instant gratification online that they pay little serious attention to the fact that they are actually entering into binding arrangements.<sup>267</sup> One study made in the context of the clickwrap/browsewrap debate found that no matter what form of assent was demanded of a buyer using a website, consumers spent seconds in agreeing to the proffered terms.<sup>268</sup> In other words, consumers simply paid no attention to the terms of the deal.<sup>269</sup>

Horrifying as these examples may be, it is not clear that consumers dealing with paper contracts are any more savvy than electronic consumers.<sup>270</sup> If that is so, then little reason exists to distinguish between online and paper agreements. In other words, although cogent reasons can be advanced for differentiating between consumer and other contracts, as the European Union has done,<sup>271</sup> that does not justify a special rule for online agreements.

Perhaps a better argument can be advanced in support of treating minors differently. After all, minors make up a sub-set of the consumers whom the law grants more protection than it does to adult consumers.<sup>272</sup> We only know of one case discussing minors and elec-

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267. *See id.* at 178 (suggesting that few consumers take the time to review and to understand online terms).

268. *Id.* at 178–79.

269. *See id.* at 182 (“[N]o matter how prominently [the terms] are disclosed, they are almost always ignored.”).

270. *Cf.* Robert A. Prentice, “Law and” *Gratuitous Promises*, 2007 U. ILL. L. REV. 881, 909 n.173 (2007) (stating that “[m]ost people do not read most of the form contracts they sign”).

271. *See, e.g.*, Directive 97/7/EC, of the European Parliament and of the Council of 20 May 1997 on the Protection of Consumers in Respect of Distance Contracts, 1997 O.J. (L 144) 19, 20–21 (extending consumer protection in all mail or electronic transactions other than financial services); Directive 1999/44/EC, of the European Parliament and of the Council of 25 May 1999 on Certain Aspects of the Sale of Consumer Goods and Associated Guarantees, 1999 O.J. (L 171) 12, 14 (providing uniformity in sale of consumer goods). It is unlikely that American law will accept this distinction in the foreseeable future; after all, that distinction was drawn in the proposed Article 2 revisions to the UCC, and it was one of the reasons that revision met with no success. *See supra* text accompanying notes 73–76.

272. *See* Cheryl B. Preston, *CyberInfants*, 39 PEPP. L. REV. 225, 227 (2012) (explaining the infancy doctrine); Victoria Slade, Note, *The Infancy Defense in the Modern Contract Age: A Useful Vestige*, 34 U. SEATTLE L. REV. 613, 616–17 (2011) (discussing how the infancy law doctrine is meant to protect minors from forming contracts with “crafty adults who would take advantage of them in the market place” (quoting *Halbman v. Lemke*, 99 Wis. 2d 243, 245 (1980))).

tronic contracts, *A.V. v. iParadigms, L.L.C.*<sup>273</sup> The facts there are fairly simple. A high school required its students to submit papers to a company called Turnitin to have them checked for plagiarism.<sup>274</sup> The company did so by comparing submitted papers with other papers it had in its archives; it then reported the results back to the school.<sup>275</sup> To submit their papers, the students had to click their agreement to Turnitin's terms, which included a disclaimer.<sup>276</sup> Although the students clicked their assent, they wrote on the submitted papers that they did not want Turnitin to archive their work.<sup>277</sup> The students then sued for copyright infringement.<sup>278</sup> The court held for the defendant: Although a minor generally cannot enter into a contract, an agreement is binding when she receives and retains a benefit.<sup>279</sup> Here, the benefit was passing the course.<sup>280</sup>

Assuming the decision correctly stated contract law for adults,<sup>281</sup> should there have been a different rule adopted for minors operating in an electronic world? Is there something about minors' inexperience, inattention, or perhaps that they are especially targeted by sellers that should assure them more protection when they enter into online agreements?<sup>282</sup> We do not know the answers to these questions, but we suspect that contract law will not change to reflect them. There is an awful lot of room for courts to achieve just results when

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273. 544 F. Supp. 2d 473 (E.D. Va. 2008), *aff'd in part, rev'd in part*, 562 F.3d 630 (4th Cir. 2009). We discussed the case in Moringiello & Reynolds, *Survey 2007–2008*, *supra* note 154, at 211–12.

274. *iParadigms*, 544 F. Supp. 2d at 477–78.

275. *Id.*

276. *Id.* at 478.

277. *Id.*

278. *Id.* at 477–78.

279. *Id.* at 481.

280. *Id.* Although this may be a strained notion of benefit, it is hard to find much sympathy for plaintiffs who apparently had access to sophisticated legal advice.

281. *See i.Lan Sys., Inc. v. Netscout Serv. Level Corp.*, 183 F. Supp. 2d 328, 338–39 (D. Mass. 2002) (holding that a contract was formed when the buyer clicked on box stating “I Accept,” even though the buyer also attempted to bargain for other terms).

282. These arguments and others are made in Slade, *supra* note 272, at 628–37. It could also be argued that minors need more protection because their technological expertise might lead them to be over-confident. *See id.* at 623 n.64 (“Today, a new generation of computer-savvy minors sits confidently in front of their computer screens fearlessly and effortlessly initiating a multitude of contracts in cyberspace.”).

they use terms like “benefit” or “unjust.” That is the beauty of contract law, after all—the combination of a rigid rule (minors cannot enter into contracts) with fuzzy escape devices (unless they have retained a benefit).

For instance, one study of cases involving terms of use concluded that passive media users are less likely to be bound to terms of use than those who interact more directly with websites.<sup>283</sup> Another study showed that individuals spent seconds in agreeing to the proffered terms.<sup>284</sup> In other words, consumers simply paid no attention to the terms of the deal.<sup>285</sup> Perhaps the terms offered to those former users are not enforceable at all, as one author concluded as a result of an empirical study of seventy-five websites’ terms of use and privacy policies.<sup>286</sup> Maybe no one cares; after all, how likely will there be a conflict over the NYTimes.com terms of use involving someone who visits the site only to read articles and not to comment on them? Moreover, some terms that are deemed important by vendors and purchasers are offered not behind links but prominently on a web page. For example, the hospitality industry literature is rich with research regarding the prominence of terms such as price and cancellation policies.<sup>287</sup>

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283. See Woodrow Hartzog, *The New Price to Play: Are Passive Online Media Users Bound by Terms of Use?*, 15 COMM. L. & POL’Y 405, 424–30 (2010) (concluding that passive media users may not be bound to terms of use because “they often lack notice, are typically less sophisticated than businesses, and might lack the intent to contract”).

284. Marotta-Wurgler, *supra* note 240, at 178.

285. *Id.* at 182.

286. Andrea M. Matwyshyn, *Mutually Assured Protection: Toward Development of Relational Internet Data Security and Privacy Contracting Norms*, in SECURING PRIVACY IN THE INTERNET AGE 73, 80 (Anupam Chander et al. eds., 2008) (finding that “a traditional browsewrap format . . . does not provide the requisite notice to users”).

287. See, e.g., Robert H. Wilson, *Internet Hotel Reservations: Recent Changes and Trends in the Enforcement of Click Wrap and Browse Wrap “Terms and Conditions/Terms of Use”*, 52 CORNELL HOSPITALITY Q. 190, 192–93 (2011) (explaining that hotel sites ask users to click their agreement to terms involving cancellation policies and that the browsewrap terms of use are directed sometimes at third-party commercial use of the sites); see also Rob Law & Rachel Wong, *Analysing Room Rates and Terms and Conditions for the Online Booking of Hotel Rooms*, 15 ASIA PAC. J. OF TOURISM RES. 43, 53 (2010) (explaining that users of hotel websites are most concerned with information such as room prices and cancellation policies).

*C. Academics*

The institutional question is why academics preferred long discussions of the virtues and vices of clickwrap and browsewrap instead of relying on the glories of the common law of contracts. Part of the answer is the incredible hostility that UCITA engendered.<sup>288</sup> Anything that UCITA approved necessarily had to be bad and thus the intensely hostile reaction among academics.

Beyond that, however, the popularity of special rules for clickwrap and browsewrap says a lot about how academics operate. It is unlikely that many articles would have been written about how electronic contracting problems would be solved under the existing rules of contract. After all, if you believe that the new technology does not need new rules, you are unlikely to write an article saying so.<sup>289</sup> In other words, little academic credit goes to those who say merely that the old stuff works. Tenure committees look for dramatic, game-changing pieces, and an article that merely extols the old ways is not going to set racing the pulse of a senior professor. In a similar vein, law review editors are much more likely to be impressed by those who proffer a new paradigm than by those who say nothing new is needed.<sup>290</sup> In other words, academic writing tends to the novel because novelty is its own reward.

Law professors also like to “complexify.”<sup>291</sup> That is, they like to devise tests that are complicated enough to show their intellect. It is not enough to use terms like “reasonable”; rather, the quest is to identify test criteria that lead to very specific results, even in complex situations. The various “wrap” distinctions lent themselves perfectly to this innate desire to “complexify”—a most unfortunate development.

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288. See *supra* note 83 and accompanying text.

289. But see Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 208 (providing a prophetic account of the uselessness of a special law of computers).

290. See Jordan H. Leibman & James P. White, *How the Student-Edited Law Journals Make Their Publication Decisions*, 39 J. LEGAL EDUC. 387, 414 (1989) (stating that in making publication decisions, law review editors consider whether a manuscript “break[s] new ground or is . . . duplicative”).

291. The term was first used in a promotions committee meeting at one of our schools; the professor under review wrote in a very difficult fashion. One of the professor’s defenders remarked that anyone can simplify, but it is a challenge to “complexify.” We reject that analysis.

Finally, the neat classification of electronic contracts into a tripartite world (like Caesar's Gaul) seems to satisfy an innate urge for law professors to classify legal problems into reasonably defined bundles in order to limit judicial discretion. Judicial discretion does not sit well in the academy; perhaps professors view all judges as intent on creating evil.<sup>292</sup> Judges, by contrast, adore discretion; they do not like to be cabined by rules.<sup>293</sup> To them, "reasonably communicated" is a perfect test because it gives judge and jury considerable leeway to do justice as they see fit.<sup>294</sup>

That said, electronic contracting has given some academics the opportunity to reexamine some timeless contract questions in creative ways. The nature of the standard form contract has been debated endlessly.<sup>295</sup> Standard form terms shatter the very paradigm on which contract law is based: assent by knowledgeable parties.<sup>296</sup> Should standard form contracts be governed by traditional offer and acceptance rules? One does not need to be a legal scholar to know that very few people read the standard form terms.<sup>297</sup> Despite that fact, courts hew to the rule that so long as terms are reasonably communi-

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292. This can be noted in many areas. One example is choice of law, where the professoriate has tried to replace the very open methods of the RESTATEMENT (SECOND) OF CONFLICT OF LAWS § 6 (1971), with complex rules designed expressly to limit discretion. See WILLIAM M. RICHMAN & WILLIAM L. REYNOLDS, UNDERSTANDING CONFLICT OF LAWS 266–68 (3d ed. 2002) (explaining academics' desire to limit judicial discretion by offering rules for conflict of laws questions).

293. See Anthony T. Kronman, *The Problem of Judicial Discretion*, 36 J. LEGAL EDUC. 481, 481 (1986) (discussing how judges have "discretionary space" where they enjoy "freedom of movement").

294. See Larry A. DiMatteo, *Counterpoise of Contracts: The Reasonable Person Standard and the Subjectivity of Judgment*, 48 S.C. L. REV. 293, 347–48 (1997) (discussing how discretion is a "necessary ingredient" in contract law to suit the "judicial sentiment of wanting to do justice in a particular case").

295. See, e.g., David Zaring, *CFIUS as a Congressional Notification Service*, 83 S. CAL. L. REV. 81, 112 n.133 (2009) (describing the debate on whether "boilerplate is a sign of bargaining power and, potentially, oppression by the drafter").

296. Hillman & O'Rourke, *supra* note 250, at 1529 ("It is common knowledge (and well-documented) that people do not read their standard forms before signing them and that the electronic age has not mitigated the problem, but may have exacerbated it.").

297. This fact was recognized long before online terms became common. See, e.g., Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 STAN. L. REV. 211, 213 (1995) (explaining that individuals rarely act according to the standard economic model of rational choice because of the various limits on cognition).

cated from the offeror to the offeree, they can result in a contract.<sup>298</sup> As a result, efforts to reform the law of contracts have been geared towards increasing disclosure, not towards regulating terms.<sup>299</sup>

Although it is easy to surmise that no one reads standard form terms, electronic contracting methods enable researchers to learn more about the behavior of individuals who purchase items online. Researchers can use clickstream data to determine how much time a reader spends on a web page,<sup>300</sup> and they can easily manipulate the presentation of terms to determine whether particular presentation formats can affect readership.<sup>301</sup> Studies in which researchers have done so indicate that individuals spend very little time reading online terms,<sup>302</sup> and they believe that such terms are too long and time-consuming, that they all say the same thing, and that they offer consumers no choice but to accept or reject all of the terms.<sup>303</sup> All of these factors increase the probability that those who enter into these contracts will put their own rights at risk without knowing that they are doing so. One such study showed, however, that readership increased when the terms were presented in a short form, when the reader was notified at the beginning that the form contained unique terms, and when the terms indicated that they could be modified.<sup>304</sup> Such research can provide valuable information to policymakers as they try to determine the best way to regulate contracts of both the

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298. *See supra* note 87.

299. Consumer protection legislation provides an example of the disclosure approach. For example, the Truth in Lending Act mandates and regulates disclosure of loan terms, not the loan terms themselves. 15 U.S.C. § 1631 (2000).

300. *See* Marotta-Wurgler, *supra* note 240, at 173–82 (describing a study of the Internet browsing habits of 47,399 households).

301. Victoria C. Plaut & Robert P. Bartlett III, *Blind Consent? A Social Psychological Investigation of Non-Readership of Click-Through Agreements*, LAW & HUM. BEHAV. (June 16, 2011), available at <http://www.springerlink.com/content/738545421585t3g6/fulltext.pdf> (describing a study in which the authors presented terms in various formats to determine whether presentation format affects the amount of time that individuals spend reading terms).

302. *See* Marotta-Wurgler, *supra* note 240, at 178–79 (presenting the results of a study that showed that the median time spent on end user license agreements presented in a clickwrap format was sixty-one seconds despite the fact that the median length of these agreements is 2,300 words).

303. *See* Plaut & Bartlett, *supra* note 301 (describing a study in which the authors asked study participants the reasons why they do not read online terms).

304. *Id.*

paper and electronic varieties. Maybe eventually, American policy-makers will reach the conclusion that disclosure alone is not sufficient.

*D. Resilience, or Handle with Care*

Contract law is precious stuff, easily mishandled but hardy enough to survive for hundreds of years. It must be definite enough to give predictability to costly transactions that might last for many years, and it must be supple enough to let the parties do what they want, within broad limits, and yet indefinite enough also to permit judges to do their job—to provide justice. Our law of contracts often amazes and frustrates students because it so often giveth with the one hand and taketh with the other. There are rules and counter-rules. Thus, students are told that express conditions must be literally complied with,<sup>305</sup> and then they learn that the harshness of that rule is softened with the mushiness of doctrines such as waiver,<sup>306</sup> substantial performance,<sup>307</sup> and “the law abhors a forfeiture.”<sup>308</sup>

That mushiness is, of course, what makes contracts work. A party contemplating breach of an express condition knows that harsh results may follow unless she can convince the court that the other party has waived performance of the condition.<sup>309</sup> The expectations about performance are clear, in other words, and so are the grounds under which performance will be excused. What is not clear is which will prevail. Because the firm rule favors plaintiffs and the excusing rule favors defendants, however, the burden of proof favors plaintiffs.<sup>310</sup> Potential defendants, therefore, know theirs is the more difficult path by far.

That flexibility has enabled contract law to survive for half a millennium. Not only has contract law rejected hard-and-fast rules, but when legislators have attempted to codify some of those rules, the courts have softened them.<sup>311</sup> Contract law has survived because it is

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305. E. ALLAN FARNSWORTH, *CONTRACTS* § 8.3, at 510 (4th ed. 2004).

306. *Id.* § 8.5, at 523.

307. *Id.* § 8.12, at 547.

308. *Id.* § 8.7, at 530–31.

309. *See id.* § 8.3, at 510 (explaining the rule of “strict compliance”).

310. Ralph Anzivino, *A Warehouse’s Burden of Proof*, 36 UCC L.J. 4 (2004) (stating that, in contract law, “[t]he burden of proof of affirmative defenses is on the defendant”).

311. The Statute of Frauds provides the perfect example. Soon after its inception in 1677, courts began tinkering with it to make it work better (that is, to make it less onerous



firm enough to give guidance to those who use it to order their daily lives, and flexible enough to permit change when needed. And by resisting specialization it accumulates enough experience to provide a great deal of guidance. It is truly a marvelous doctrine. No wonder it survived efforts to create a special rule for electronic contracts.

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to satisfy). Andrew N. Adler, *Can Formalism Convey Justice?—Oaths, "Deeds," and Other Legal Speech Acts in Four English Renaissance Plays*, 72 ST. JOHN'S L. REV. 237, 289 (1998). The process of evisceration was almost completed when RESTATEMENT (SECOND) OF CONTRACTS § 139 (1981) imported estoppel principles into the field.