TIME FOR A CHANGE:
THE SCHEMA OF CONTRACT IN THE
DIGITAL ERA

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INTRODUCTION: A TRADITIONAL SCHEMA OF CONTRACTING

Two businessmen enter a room. Wearing formal suits, they exchange a brief handshake, set their briefcases down, and sit at a table. They roll up their sleeves and begin to exchange words. The tones of their voices alternate rhythmically from excited, to angry, to conciliatory and back again. They hem and haw over small details and large sums, questions of quality and delivery, and, inevitably, the money that is to change hands. Over a series of hours, the gruff words begin to soften, and the negotiations slowly take on the form of an agreement. Soon enough, the room is silent except for the sound of pen on paper as terms are drawn up. At long last, the men sign the papers, stand up from the table, shake hands firmly one last time, and leave the building.

For many, the scenario above is a quintessential mental picture of what it means to contract. Two autonomous, reasoned individuals come together in a meeting of the minds to craft an agreement. Each party has something valuable to offer the other, and both benefit from the exchange. Unfortunately, in the digital era, this example of contracting—consisting of a bargained-for exchange and a meeting of the minds—can be dangerously misleading. The assumptions, sympathies, and goals engendered by such thinking create a divergence between the traditional schema of contractual analysis and the reality of digital-era transactions.

The common-law era schema of contractual analysis, while not explicit in many of today’s court decisions, nevertheless influences the thinking of legal professionals. This schema brings with it a number of assumptions that are outdated and implausible when applied to digital-era transactions, yet these assumptions maintain unwarranted influence in the courtroom. To ensure that digital-era transactions are not rubber-stamped with the binding authority of traditional contracts, courts must pay careful attention to the underlying reasons why written contracts have been historically binding, and place greater emphasis upon equitable principles of fair dealing.

Many authors have attacked adhesion contracts, click-through

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1. Schemas are mental categories for sorting information. See infra Section I.
2. Within this Note, the term “digital-era transaction” does not include all modern contracts. Instead, it is convenient shorthand for the numerous End User License Agreements (EULAs), Terms of Service Agreements, and Conditions of Use Agreements that populate the web, and the ubiquitous non-negotiable, mutable service contracts that exist in the consumer market. In particular, this term targets agreements that provide services for de minimis consideration.
3. Here, the term “common-law era schema” indicates a historical schema of contracts that formed (and still forms) the underpinning of American contractual analysis, a schema that dates back to early English history and times before.
4. See infra notes 92–95. For a discussion of relevant cases, see infra Section V.
agreements, and “shrinkwrap” terms prevalent in software. However, few scholars have recognized that today’s schema of written contracts, resting upon antiquated concepts, needs change. The schema of contractual analysis must be refocused to take into account the degree of forethought, preparation, and seriousness of the parties involved in digital-era transactions.

In Section I of this Note, I address the role of schemas and cognitive models in life and legal reasoning. Section II focuses upon the basis of the historical assumptions that guide today’s schema of contract. Section III explores the cultural and technological changes that have distanced the culture of today from that of the distant past. Section IV explains why the common-law era schema of contract no longer applies to modern scenarios of contracting. Finally, in Section V, I propose increased judicial scrutiny as a solution to this problem.

I. AN INTRODUCTION TO COGNITIVE MODELS

A cognitive model is a simplified concept of a real process or object, consisting of an organization of concepts and beliefs. Cognitive models are grounded in schemas, which are stereotyped sets of assumptions about actors, environments, and the way the world works. Schemas are neither intrinsically good nor bad, they are merely cognitive tools offering a trade-off. Schemas provide an efficient framework for information processing in exchange for a set of assumptions about a situation that may or may not be true. For example, a simple schema for a dinner table could involve glasses, plates, knives, forks, and napkins for each diner at the table. In most situations, this schema is a comfortable mental grouping that allows one to quickly set the table without wasted thought. However, the schema may quickly become inapplicable. If steak is served for dinner, special knives may be required. If sushi is on the menu, chopsticks will be necessary. The concepts within each schema are associated with each other, such that the thought of one draws up the other. Sharon Widmayer of George Mason University describes the situation thus:

5. For example, critics have noted that the silent-acceptance, “terms later” rules of many digital-era transactions encourages rent-seeking behavior by the party drafting the agreement. Critics have also hounded Judge Easterbrook for his decisions on the topic. For a detailed discussion, see Roger C. Bern, “Terms Later” Contracting: Bad Economics, Bad Morals, and a Bad Idea for a Uniform Law, Judge Easterbrook Notwithstanding, 12 J.L. & POL’Y 641 (2004).
7. Id. at 12–13.
9. See generally MICHENER ET AL., supra note 6, at 13.
Information that does not fit into [a] schema may not be comprehended [at all], or may not be comprehended correctly. This is the reason why readers have a difficult time comprehending a text on a subject they are not familiar with even if the person comprehends the meaning of the individual words in the passage.10

Schemas overlap, change with the passage of time, and interact in complex ways. Cognitive models and schemas form the basis of all legal reasoning. They are pervasive in the way that atoms are pervasive—existing everywhere, yet invisible to the naked eye. While schemas vary from person to person, they maintain a central, unifying, and cohesive core.11

In American jurisprudence, lawyers have similar schemas for many legal concepts because lawyers draw from the same cases and statutes to illustrate legal concepts. The “reasonable man” of criminal law and torts, the difference between criminal intent and criminal negligence, the definitions of “unconscionable” and “public policy” in contracts cases, all are defined by schemas. For example, in torts, *Palsgraf* fleshes out the schema for proximate causation.12 Legal schemas therefore powerfully frame an advocate’s style of thinking, forming the “box” of “in-the-box thinking” that occurs in the legal community.

II. THE ORIGIN OF THE MODERN SCHEMA OF CONTRACT

Today’s schema of contractual analysis is varied and complex, with roots based in theories and philosophies that go back hundreds, if not thousands of years.13 While the full history of such a topic is beyond the reach of this Note, a brief history of contracts provides an understanding of the foundations of today’s schema of contractual analysis.14

The power of the written word has historically been unquestionable.15 In the Middle Ages, books were extremely valuable, labor-intensive objects. Paper, ink, pen, binding, and written script were each crafted by hand. By way of example, even paper itself was crafted by

10. Widmeyer, supra note 8.
11. See Michener et al., supra note 6, at 335–37 (discussing the impact of group norms on cognitive frames of reference).
14. For an in-depth discussion of ancient contracts, see William H. Buckler, The Origin and History of Contract in Roman Law (Cambridge Univ. Press 1895) (noting that “Contract is the handmaid if not actually the child of Trade”).
15. Indeed, who can forget Edward Bulwer Lytton’s coined phrase, “The Pen is Mightier than the Sword.” Baron Edward Bulwer Lytton, Richelieu: Or, The Conspiracy 89 (Dodd, Mead & Co. 1896).
a complex, time-consuming process. Linen rags were sorted, washed, fermented for days, cut and beaten over and over again until they formed a pulp that was squeezed, pressed, glued, and cut into sheets.16 The paper was then polished with a stone to give it sheen.17 Carefully ruled lines and gilded images transformed each page of these books, even the words themselves, into works of art. The written word was labor intensive, and took the time of skilled, literate craftsmen. This was no small feat for the age.18 As such, the written word was so precious that its mere existence indicated the application of careful forethought.

Because of the expense of the written word, “the contracts enforced by the civil courts, even as late as Henry II, were few and simple.”19 Writing shrank the size of a given contract due to the scarcity and expense of scribes.20 The written contract had to epitomize clarity, and each term was written out carefully and succinctly. As such, parties were more likely to completely understand the scope and nature of the agreements they entered into by writing. For thousands of years, this concept held true. For example, a typical ancient Sumerian contract for the sale of real estate was summed up in a mere three sentences describing the thing purchased, its location, and price.21 With these factors in mind, it is perhaps no surprise that the written word held great influence over the judges of the ancient world who analyzed contracts. In contrast to the spoken word, the written word of ages past was immutable, expensive, and carefully considered. Because of these characteristics, a contract’s existence in writing sanctified and froze the terms of important agreements. Courts have historically recognized the power of writing by way of the Statute of Frauds and the Parol Evidence

17. Id.
18. In the case of a manuscript from the year 1517, the parchment and binding together cost less than a tenth of the cost of its scribes and illustrators. And, as mentioned above, parchment was not cheap. See JONATHAN JAMES GRAHAM ALEXANDER, MEDIEVAL ILLUMINATORS AND THEIR METHODS OF WORK 38 (Yale Univ. Press 1992).
20. The medieval literacy rate was atrociously low. See, e.g., JUDY ANN FORD, JOHN MIRK’S FESTIVAL: ORTHODOXY, LOLLARDY AND THE COMMON PEOPLE IN FOURTEENTH-CENTURY ENGLAND 27 (2006) (noting a 14th century literacy rate between 5 and 15 percent).
21. HALSALL, supra note 13 (“Sini-Ishtar, the son of Ilu-eribl, and Apil-Ili, his brother, have bought one third Shar of land with a house constructed, next the house of Sini-Ishtar, and next the house of Minani; one third Shar of arable land next the house of Sini-Ishtar, which fronts on the street; the property of Minani, the son of Migrat-Sin, from Minani, the son of Migrat-Sin. They have paid four and a half shekels of silver, the price agreed. Never shall further claim be made, on account of the house of Minani.”)
Historically, ritual has also played a major role in the formation of contracts. For example, the ritual of stamping a seal upon a written contract indicated the serious, binding consent of the parties. Each party would bring his unique seal to the place of the agreement and then stamp melted wax upon the document or physically stamp the document itself to leave a unique impression. This ritual act required affirmative, considered action on the part of the contracting parties. Oliver Wendell Holmes noted, in his work, The Common Law, that:

When seals came into use they obviously made the evidence of the charter better, in so far as the seal was more difficult to forge than a stroke of the pen. Seals acquired such importance, that, for a time, a man was bound by his seal, although it was affixed without his consent. At last a seal came to be required, in order that a charter should have its ancient effect.

The seal became such an important legal ritual that it evolved into the concept of consideration in modern contract law.

Rituals like the seal are effective social constructs because they provide a script for behavioral interactions. They focus the attention of the individual upon the act at hand, ensuring certainty and uniformity of purpose among all parties. For example, the ritual of a traditional wedding ceremony focuses the thoughts of the couple onto their relationship, resulting in a powerful emotional and spiritual commitment. By focusing attention, dictating behavior, and activating relevant schemas, rituals ensure the existence of a proper mindset for a given situation.

Rituals predominate the legal system. In the case of the courtroom,
the judge, robed in black, commands honor and respect. Her power in the courtroom stems from the fact that her audience acknowledges her as an arbiter of justice. In contracts of old, the legal rituals of the written contract and the seal served as subtextual cues indicating the importance of the agreement. The existence of such devices reminded the parties to take their agreement seriously, and to carefully consider the potential consequences.

Thus, several key characteristics of the common-law era contract set it apart from today’s digital-era transactions. The mere existence of a contract in writing had special significance, and seals imbued a sense of seriousness and importance to the transaction. In addition, the requirement that a contract be in writing served to create contracts that were concise and entered into with great forethought. The written word was also the immutable word, memorializing forever the exact terms that parties had agreed to. These historic properties of the written word, and the ritual nature of contracting, served to strongly enforce a schema that regarded writing as an indicator of a profoundly binding agreement. The next section of this Note describes how digital-era transactions often lack these traditional characteristics, making the common-law era schema of contracts ill-suited to analyze digital-era transactions.

III. Changes in Culture Have Transformed the Written Word

Today’s world has changed dramatically from the historic common-law era. In particular, the value of the written word has undergone a profound and permanent transformation since the common-law era of contracts. First, the cost of paper in the digital era has been drastically reduced. In the physical world, writing is ubiquitous, available for mass consumption, and cheap enough that it often gets thrown out after reading. Newspapers and mass-printed books have brought the written word of famous authors and trusted reporters to the masses. Words are cheap, and they are everywhere. With the advent of the typewriter and the copy machine, anyone could write and publish at speeds unimagined by those of ages past. These advances allowed authors to write fast enough to keep up with their streams of conscious thought. As a case in point, Jack Kerouac’s book *On the Road*, written in 1957, was typed in a blistering three weeks. The written word began to embrace emotions, actions, and longings no more fleeting than a passing thought.

29. For example, a child could don a judge’s robes and make proclamations from the bench, but few people would follow her commands.
Therefore, written words came to represent not just careful argumentation, forethought, and studied research, but also the random musings of the common man.\textsuperscript{31}

The culture of the well reasoned, carefully considered word was celebrated by media theorist Neil Postman in his work, \textit{Amusing Ourselves to Death}.\textsuperscript{32} Postman argued for the rejection of television and a return to the written word, claiming that such a revival would usher in a return to a typographic mindset—a culture of carefully considered and selected prose.\textsuperscript{33} However, Postman believed that the written word, in and of itself, was what brought about the typographic mindset.\textsuperscript{34} What he failed to grasp was the reason \textit{why} the written word originally inspired the typographic mindset. Before the age of the typewriter, it was important for an author to carefully craft her argument in her head before transcribing it to paper. An author would have to hold a large set of concepts in his mind’s eye, revise them, and rehearse them before putting prose down on paper. Postman’s world of the typographic mind failed to re-appear with the coming of the Internet\textsuperscript{35} because the Internet is not a return to carefully written words, but rather a phenomenon that embraces and adopts writing in all forms.

In the digital era, words have come to represent scattered thoughts more than ever before.\textsuperscript{36} The electronic age allows users to transcribe their thoughts seamlessly to the screen. User services such as Twitter encourage the denizens of the Internet to write down each and every happening of their day, in bursts of 140 characters at a time.\textsuperscript{37} At the same time, blogs and social networking sites encourage users to write about anything and everything that may come to mind.\textsuperscript{38} As such, the presentation of words in written form has lost the ritual significance it used to convey. A word presented on the screen is no more sacred than a word spoken in passing. In contrast, in the ancient world, the mere

\textsuperscript{31} See infra note 36.


\textsuperscript{33} See POSTMAN, supra note 32, at 49–52.

\textsuperscript{34} Postman was famous for coining the phrase “the medium is the metaphor.” See, e.g., id. at 13–15.


\textsuperscript{36} The rise of the blogosphere has provided each and every Internet user with a personal soapbox from which to speak. See Measuring the Blogosphere, N.Y. TIMES, Aug. 5, 2005 at A14.

\textsuperscript{37} See About Twitter, http://twitter.com/about (last visited Mar. 24, 2010).

existence of words in writing indicated their importance.

The written word of the digital era is also vastly different than the traditional written word because it is mutable. Courts have given great deference to the written contract because writings have historically been immutable documents. Written agreements froze the negotiations of the parties, crystallizing a set of terms that both parties explicitly agreed to. In contrast, in the digital era, words posted on websites can flow and change like water—and they do. Perhaps no site exemplifies this principle more than Wikipedia.39 Hosting more than 2.5 million user-created articles in English alone,40 Wikipedia’s encyclopedic entries are constantly transformed as users strive to achieve the most accurate and thorough description possible.41 As a case in point, the Wikipedia entry on “Marmalade” was altered seventy five times over a ten-month span.42

It comes as no surprise that countless popular websites of the day have adopted the same mutability in their terms of service.43 Google states that it will change its terms of service without notice to its users,44 while Yahoo says it “may” provide notices of such changes.45 Apple “reserves the right . . . to impose new or additional rules,”46 and Facebook has previously reserved the right to change the terms of its user agreement at its own “sole discretion . . . without further notice.”47

40. Id.
43. Google Terms of Service, supra note 43.
44. Supposing it cares to provide such notice. Yahoo! Terms of Service, supra note 43.
45. Apple, supra note 43.
46. Facebook Terms of Use, supra note 43 (“We reserve the right, at our sole discretion, to change, modify, add, or delete portions of these Terms of Use at any time without further
only do these agreements place unilateral power to modify the transaction solely into the hands of the service provider, they often go so far as to allow these changes to be made without notice to users. These “submarine” agreements lurk beneath a consumer’s awareness, yet may suddenly change terms dramatically, going against consumer expectations of privacy or ownership. Such agreements, allowing unilateral changes without notice, are by no means restricted to de minimis terms of service agreements.

In the digital world, the devaluation of the written word has transformed text into a fluid, mutable, easy-to-create and easy-to-discard commodity. While this transformation creates a benefit by increasing the flow of information, it also devalues the binding power of the written word. It is not that the written word has suddenly become devoid of all meaning, or that no contract should be taken seriously in today’s world. Rather, the written word has moved away from being something that in and of itself symbolizes careful consideration, seriousness, forethought and planning in an agreement. Instead, the written word now often exists merely as another form of the spoken word—unrehearsed and informal. Thus, the mere existence of a contract in writing no longer prepares an individual to take the agreement seriously. Instead, more explicit cues, such as up-front financial expense, the presence of a lawyer, and the actual process of negotiation are now required to make a party carefully consider the terms of an agreement.

48. Id.  
49. Consider the consumer outrage over Facebook.com’s “Beacon” application (no longer in operation), which acquired user information from third party websites and displayed that information on Facebook, without informing users. See Juan Carlos Perez, Facebook’s Beacon More Intrusive Than Previously Thought, PC WORLD, Nov. 30, 2007, http://www.pcworld.com/article/140182/facebook_beacon_more_intrusive_than_previously_thought.html. Here, consumer expectations of privacy were violated despite Beacon remaining within the scope of Facebook’s terms of service. Id.  
50. Reserving the right to unilaterally expand licensing rights to user-generated content allows one to acquire massive amounts of content at no cost. As a case in point, consider that Facebook recently attempted to change its terms of service, expanding its licenses to include content from deleted users’ accounts. See Caroline McCarthy, Facebook: Relax, We Won’t Sell Your Photos, CNET NEWS, Feb. 16, 2009, http://news.cnet.com/8301-13577_3-10165190-36.html. Facebook would have thereby acquired a perpetual license for all user content ever posted on the site. Id. With a single “submarine” attack, Facebook attempted to acquire billions of pieces of user content at no cost. Id. (As a rough calculation, Facebook had approximately 100 million users at the time, see infra, note 110, if each Facebook user had only ten pieces of user-generated content, the change in terms would have affected at least a billion pieces of user content.)  
51. See infra Section IV-A (discussing the terms of service for Amazon.com and Verizon).  
52. A casual glance at the text messaging history of most cellular phones, chat rooms, or instant-messaging programs illustrates this point.  
53. See generally Robert A. Hillman & Jeffrey J. Rachlinski, Standard-Form Contracting in
Thus, the written word has undergone a fundamental transformation. In the common-law era, contracts were concise. In the digital era, agreements for even minimal services are thousands of words long. In the ancient world, contracts had ritual significance that indicated intent to be bound. In the digital era, the typical Internet user may not even know that they are bound by a contract-like agreement. In the ancient world, written contracts were immutable. In the digital era, written agreements change constantly, even after they have been agreed to. Despite these many differences, courts still predominately evaluate digital-era transactions using the common-law era schema of contractual analysis.

IV. FLAWS IN THE CURRENT COGNITIVE SCHEMA OF CONTRACT STEMMING FROM CHANGES IN THE WRITTEN WORD

Schemas for contractual analysis are effective tools because they allow judges and lawyers to analyze complex fact patterns quickly and efficiently. For example, when a legal professional hears the word “consideration,” it may conjure up a number of factors, tests, and definitions for evaluating a legal scenario. Although these evaluative tools can be helpful, on occasion they require maintenance to scrub away the detritus of years past. This section discusses how the common-law era schema of contract creates inherent assumptions about contracting parties that can be misleading in today’s world, especially for digital-era transactions. Therefore, when a judge or legal professional analyzes a digital-era transaction, the activated schema may be rooted in an antiquated contracting scenario, one that is largely inapplicable today.

A. Writing No Longer Indicates a Concise, Immutable Agreement

The ever-present “terms of service” agreement, common on websites, is one example where the application of the common-law era schema of contractual analysis can be anachronistic. These agreements are both ubiquitous and lengthy. They can be found on social networking sites such as MySpace (5,307 words), photo sharing websites like Picasa...
and banking websites such as Bank of America (in Colorado, 16,131 words). Even “World of Warcraft,” an online videogame, has a lengthy legal agreement articulating the terms of use (4,712 words). These agreements also include clauses that allow the service provider to change its terms at any time, without the consent of the end-user. Unquestionably, these types of agreements are common in the digital era.

When compared with common-law era written contracts, terms of service agreements differ in several ways. First, these agreements are akin to adhesion contracts because they are non-negotiable, take-it or leave-it agreements. As such, they demand that any potential user relinquish her right to a bargained-for exchange in the classical sense of contracting. Additionally, these agreements are subject to change at the will of the contract drafter, at any time and for any reason, without the consent of the other party. Therefore, these agreements can be used as “submarine” contracts, waiting to strike the consumer at any time with the implementation of harsh terms.

On websites, terms of service agreements work essentially like this: a website offers services such as photo-sharing or social networking. Internet users who visit the site provide consideration by bringing advertising revenue to companies that host the sites. Terms of service are either displayed on one of the website’s pages, or exist as a prerequisite to creating a user account. These agreements are at the
boundaries of contract law because they offer to provide digital services, but user consent must be inferred, and there is only de minimis consideration. In this manner, these agreements seem to fit within the historic schema of common-law era written contracts—a schema that gives undue importance to a contract’s existence in writing. However, when one looks past the rigid application of writing as a stand-in for assent, the acceptance of the parties is ambiguous at best.

Unilateral, mutable contracts assault the very reasons why written contracts were binding in the common-law era—written contracts used to be immutable, clear, precise, and agreed-to by both parties. Additionally, clause that make contracts mutable require users to re-read, interpret, and analyze the entire contract every time they visit the site, or risk unknown liability. If someone read the terms of service for just the four sites described above on a daily basis, they would need to interpret 30,373 words of convoluted legalese per day just to keep appraised of the changing legal obligations. In contrast, the original Constitution, the keystone of the entire American legal system, weighs in at a mere 4,609 words.

Agreements allowing unilateral changes without notice are by no means restricted to de minimis terms of service agreements. Amazon.com reserves the right to make unilateral changes to auctions already in-progress on its site. Verizon’s cellular plans charge an early termination

66. Such as the hosting of a photograph online. See, e.g., Flickr, www.flickr.com (last visited Apr. 22, 2010).
67. Often via “browswrap” or “clickwrap” agreements, wherein the click of a mouse substitutes for binding consent to a plethora of terms. For example, Flickr utilizes a browswrap style of agreement. See id. While Microsoft’s Internet explorer uses a clickwrap agreement. See Microsoft Internet Explorer, http://www.microsoft.com/Windows/internet-explorer/ (last visited March 29, 2010) (Proceeding through the install process leads to the clickwrap agreement).
68. For example, the consumer’s use of the website may provide another “eyeball” to drive advertising revenue on the website.
69. To illustrate the power of the written contract, consider how a contract’s mere existence in writing can make its terms become binding regardless of whether the drafting party ever provides the contract to the other party. See, e.g., Schwartz v. Comcast Corp., 256 F. App’x 515, 518 (3d Cir. 2007) (concluding as a matter of law that a man who never received the terms of an adhesion contract, nevertheless, was bound to the entirety of the contract’s terms because “where an offer is contained in a writing [a party] may, without reading the writing, manifest assent to it and bind himself without knowing its terms” (quoting RESTATEMENT (SECOND) OF CONTRACTS § 23 (1981))).
70. See supra notes 58–60, 62. This word count does not include the websites’ separate privacy policies.
71. These agreements are several times larger than the size of the original version of the U.S. Constitution. See U.S. CONST. (as originally enacted), available at The National Archives, The U.S. Constitution, http://www.archives.gov/exhibits/charters/constitution_transcript.html (last visited Apr. 22, 2010).
fee if a subscriber cancels a plan before two years of service, yet also state that Verizon can “change prices or any other term of your Service or this agreement at any time” via written notice.73

In the common-law era, writing indicated clarity and understanding of important terms. In contrast, the service agreements of today’s websites are filled with impenetrable legal language that is complex for even a lawyer to understand, let alone a layperson. The expense of the written word used to require terms that were more concise and precise than oral agreements. In a bizarre turn-around, the presentation of information in a textual format now allows service providers to create vastly more complicated, confusing agreements than oral presentation would allow. Furthermore, mutable terms make a contract’s existence in writing immaterial, and stymie consumers’ attempts to understand the metes and bounds of their obligations. Unfortunately, today’s schema for contractual analysis has failed to keep up with these fundamental changes in the nature of the written word.

B. Many Digital-Era Transactions are No Longer Bargained-For

Many digital-era transactions lack a bargained-for exchange; therefore, they bear great similarity to adhesion contracts. When entering into complex agreements for products and services, consumers tend to focus on important terms such as price and quantity and typically assume that remaining terms are meant for unlikely contingencies.74 Even when consumers read these terms, they are unlikely to understand them.75 In these situations, any discomfort about unknown terms takes a back seat to the desire or need for the product or service.76 As an example, many people see their cellular phones as a necessity and enter into complex service agreements, but they are unlikely to exhaustively analyze the accompanying large booklet filled with terms and conditions.77
Additionally, consumers realize that the agents they deal with (be it a customer service representative or website) lack the authority to bargain over terms.\footnote{Hillman & Rachlinski, \textit{supra} note 53, at 446.} The consumer must therefore “take it or leave it.” Also, consumers typically see no benefit from shopping for terms because these terms are often uniform across a given industry.\footnote{Id.}

Social pressures often also play a role in encouraging consumers to sign contracts that they do not completely understand. For example, a consumer at the front desk of a car rental agency is unlikely to carefully read the terms of the rental agreement for fear of facing scorn and derision from agents and other customers.\footnote{See \textit{id.} at 448.} Further, reading the terms of form contracts is considered an act of suspicion and distrust.\footnote{Id.} It also holds up the line.\footnote{An almost unforgivable sin in modern times.} This environment induces consumers to contract, even when they don’t know the precise terms of an agreement.

Finally, in the digital era of contract, enforcing a marginally valuable contract’s aggressive terms may penalize rational consumer behavior. For a digital drafter of terms, individual consumer interactions may be valued at less than a penny, but the overall revenue stream represented by millions of users will be significant.\footnote{See \textit{infra} note 110.} Because the transactions governed by these contracts represent a large income stream, a rational economic digital drafter has the incentive and resources to draft large, complex agreements to govern the activities of users. A rational economic consumer encountering such an agreement is confronted with the opposite scenario. The transaction costs of analyzing such a contract, even without a lawyer, significantly outweigh the potential marginal benefit of the services provided to the individual consumer. Because the transaction costs of interpreting the contract outweigh its potential value, a rational economic consumer must either accept or reject the agreement \textit{without analyzing the contract}. Here, strict enforcement of such contracts penalizes rational economic consumer action.

Consequently, these transactions erase all notion of a bargained-for exchange. Without a bargained-for exchange, these transactions lack one of the key pillars that hold up a written contract’s integrity. Despite this problem, today’s schema of contractual analysis, using assumptions that stem from antiquated historical scenarios, may make the transaction binding solely because it is in writing.
C. Many Digital-Era Transactions are No Longer Ritualized to Ensure Binding Consent

Instead of the rituals that accompany traditional contracting—the seal of the past, the signing ceremony, or the handshake—no ritual in digital-era transactions activates schemas that ensure careful forethought before providing consent. Users in the online world are surrounded by cues that indicate security, comfort, safety, and instant gratification. This lack of ritual raises serious concerns about the scope of consent at issue in digital-era transactions.

Picture a college student, casually sitting in his pajamas next to the bed late at night, deciding to sign up on Facebook to post pictures of his latest road trip. The site’s “terms of service” are meant to govern all of the transactions between Facebook and the user. Undoubtedly, posting photos online is a significant transaction. Intensely personal private information is exchanged for a messaging, posting, and advertising service. If photos posted on the site were to get into the wrong hands, they could arguably harm the student’s chances at a job or even lead to identity theft.

Despite the potentially significant consequences of public distribution of the photos, countless cues indicate that users should not take the transaction seriously. First, posting pictures online seems less like a transaction and more like a personal outing with friends online. Next, the user’s surroundings and the informality of the situation indicate an aura of comfort and safety. The transaction doesn’t take place in an office, which would formalize the event and encourage the student to be on guard. The student also likely fails to comprehend the seriousness of the agreement or even that an agreement has been reached because the other contracting party is not present in person. The student has no chance to inquire about terms, nor any indication that he should do so. Even if these agreements had appropriate cues, users may be multitasking at the time of the event. It is not uncommon for users to be listening to music, chatting with a friend online, perhaps talking to a friend on the phone, and browsing multiple websites at the same time. This multitasking environment sharply hinders a user’s focus. In a recent study on multitasking, researchers noted that consumers have a limited pool of attention, and when they focus upon one thing, they pay less

84. For example, the photographs may indicate unfavorable political affiliations, alcohol consumption, or risk-taking behavior that would prevent an applicant from getting a job.

85. Photographs may inadvertently aid identity theft. For example, these photos may depict: birth dates, license plate numbers, home addresses, and methods of entry into the home, among others.

86. While these behaviors would be unheard-of and insulting in a traditional person-to-person bargained-for contract, they are the norm for many digital-era transactions.
attention to the others. With limited cognitive resources available during casual multi-tasking, it should come as no surprise when a layperson (or even a lawyer) fails to fully comprehend the significance of the provisions of a terms of service agreement.

Of course, the above scenario assumes that our hypothetical user even realizes that a website has terms of service. In the case of Facebook, the home page states, in the smallest size text displayed, “By clicking Sign Up, you are indicating that you have read and agree to the Terms of Use and Privacy Policy.” The text is located near the bottom corner of the page in light grey over a light blue background—not obscuring it, but certainly making it harder to notice. In such circumstances, it is unlikely that our hypothetical student would even realize he was agreeing to binding terms, terms that might even lock him out of the courts.

D. The Break between Today’s Schema of Contractual Analysis and Today’s Digital-Era Transactions

The “contract” of the digital era often bears little resemblance to the written contracts of times past. Despite this lack of resemblance, some courts have had no qualms about applying the common-law era schema of contractual analysis like a sledgehammer upon unwitting parties.


88. It is exceedingly rare for even attorneys to read these agreements. A recent American Bar Association article noted the following scenario:

At a recent legal presentation attended by prominent intellectual property lawyers and law professors, a loaded question was posed to the audience: “By a show of hands—and be honest, now—how many of you read the terms and conditions presented in an end-user license agreement [EULA]?” Of the nearly 100 people in the auditorium, not a single hand was raised. Elizabeth Bowles & Eran Kahana, The ‘Agreement’ That Sparked A Storm: A Click-through Goes Bad, BUS. L. TODAY, Jan.-Feb. 2007, at 55. If the intellectual property attorneys of the world—those intimately familiar with the significance and dangers of abuse inherent in terms of service agreements—fail to even read them, is it any surprise that laymen, who would be adrift in a sea of dense legal terms, also neglect to do this? See generally id. If it is a well-known fact that nobody, not even lawyers, read these documents, can they really be considered “agreements” having binding consent?

89. Welcome to Facebook!, http://www.facebook.com/ (last visited Oct. 10, 2008) (The text is displayed only after a user enters valid user information and clicks the “sign up” button).

90. See id.


Courts have historically enforced these contracts because the legal schema of the written contract was iron-plated by principles of mutual assent, immutability, bargained-for exchanges, and the meeting of the minds.\footnote{See, e.g., Hill v. Gateway 2000, 105 F.3d 1147 (7th Cir. 1997); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (both cases discussing the binding nature of “shrinkwrap” agreements).} Because the foundations of the written contract have eroded gradually, courts have been slow to realize the need for a change in today’s schema of contractual analysis.

Some courts have recently changed their view of digital-era transactions to account for some of these issues, refusing to enforce certain “browse-wrap” agreements formed on the Internet, wherein terms of service are provided via a link during a given transaction.\footnote{See Specht v. Netscape, 150 F. Supp. 2d 585, 587, 589 (S.D.N.Y. 2001). For an in-depth discussion of the Specht case, see 3-4A Computer Law § 4A.02[c][iii], “Computer Law,” Matthew Bender & Company (2008).} For example, in Specht v. Netscape, the court held that “an offer of a license agreement, made independently of freely offered software and not expressly accepted by a user of that software, [does not bind] the user to an arbitration clause contained in the license.”\footnote{Specht, 150 F. Supp. at 595.} In Specht, users of Netscape software downloaded a program called SmartDownload, which did not require any explicit assent to the terms of its license agreement.\footnote{Id. at 595.} SmartDownload’s terms were available, but they were nested ambiguously in Netscape’s website.\footnote{Id. at 596.} However, the SmartDownload program downloaded an Internet browser. This Internet browser indicated that users would be bound by the terms of the SmartDownload license, and provided a link to the license.\footnote{Id.} The court refused to extend consent to the browser’s contract to the SmartDownload license terms because “the individual obtaining SmartDownload is not made aware that he is entering into a contract.”\footnote{Id.}

Courts have been less willing to extend such magnanimity to the realm of clickwrap agreements.\footnote{Clickwrap agreements require that a user view terms of service and click on a button stating “I agree” before registering for a given service.} Courts routinely enforce these terms, even when the user is not aware of the terms or when the terms erode the
user’s bargaining position, simply because the contracts are in writing. In digital-era transactions that provide services for free, this makes writing serve as a stand-in for both consideration and consent. In Moore v. Microsoft Corp., the court held that users of a Microsoft program were bound to the terms of a clickwrap agreement because mere opportunity to read the contract stood in for binding consent. A meeting of the minds was not required, so long as there could have been such a meeting. In particular, the court noted that users were “required to indicate assent to the EULA by clicking on the ‘I agree’ icon . . . .” before downloading the program. With these facts in hand, the court proceeded to bar all of the plaintiffs’ deceptive trade practice claims. The Moore court’s acceptance of a single click as de facto, undisputable binding assent is troubling, yet it has been mirrored in recent cases. The District Court of New Jersey, in Davis v. Dell, recently bound a consumer to “click to agree” terms of service for a television ordered online. Also, the Texas Court of Appeals held that all provisions of a click-through contract were binding, whether or not the user read them. These rulings are consistent with the common-law era schema of contractual analysis, yet they fail to capture the realities of digital-era transactions.

Unfortunately, a single mouse click and a term in writing are hollow indicators of the binding mutual assent a contract is meant to memorialize. Clickwrap agreements, like browse-wrap agreements, are dangerous because they fail to alert the user to the serious nature of the agreement. Users are often not on guard when they “sign” these agreements because the “signing” takes place in informal, casual environments that promote only cursory inspection. In these informal, atypical contractual circumstances, the existence of the single click

102. Id.
103. Id. at 587. Naturally, a court must deal with concerns about plaintiffs in future cases claiming not to have read a contract’s terms, when in fact they have. Thus, the ruling could be considered as a way for the courts to avoid potential perjury from future plaintiffs. However, stiff criminal felony penalties already serve as a strong disincentive to perjury. See 18 U.S.C. § 1621 (2009) (setting forth the criminal penalties for perjury). Additionally, it seems strange that a court would expect a rational consumer to read and understand the entirety of a dense legal contract, when analyzing such a contract would be more expensive to the consumer than the potential benefit of the de minimis services. See supra Section IV-D.
104. Moore, 293 A.D.2d at 587.
105. Id. at 588.
108. The author uses this term with skepticism.
(taking less than one second), or a scroll to the bottom of the terms of an agreement, followed by a click (taking approximately one second) stand in for the entire process of bargaining, exchange, and meeting of the minds.

Furthermore, note that the click of a mouse is used to indicate almost anything on a computer. A click changes the font, visits a web page, closes a document, plays a video, cancels a program, scrolls down a page, and performs countless other actions. Because the mouse is a “universal button” that fulfills many roles, it lacks importance as an indicator of binding contractual assent. The click of the mouse button is an affirmative act; however, it carries none of the significance, ritual, or power that a written signature creates, or that the seal of ages past held. Computer users can easily average 10,000 mouse clicks per day. This routine and often meaningless act cannot stand in for the powerful binding significance of a signature because it fails to activate relevant contractual schemas. Yet many courts let this casual, mindless, and automatic action stand in for actual, informed consent because courts rely on an antiquated, common-law era schema of contractual analysis to analyze digital-era transactions.

V. STEPS ALONG THE ROAD: PROPOSED METHODS OF ADDRESSING THE PROBLEM

The break between the common-law era schema of contractual analysis and the reality of digital-era transactions has brought with it the need for change. In the common-law era, written contracts used to be sacred because they clearly indicated assent to binding, immutable, negotiated-for terms. In contrast, the transactions of the digital age are ubiquitous, long, non-negotiable, and subject to unilateral change on a whim. These digital-era transactions reign supreme, even when they use 5,000 words to govern transactions valued at significantly less than a penny.

Today, people lack the time, money, and motivation to evaluate the

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109. Calculated by the Author using the software tool “Clickr” and averaged over a two-day period of typical computer use. 10,278 average clicks per day.

110. This is a “back of the envelope” calculation. Social networking website Facebook has 100 million users, and projected $300 million in revenue for 2008. Scott Karp, Why Isn’t Facebook Making More Money? (Hint: Advertiser Value and User Value Are Not Aligned), PUBLISHING 2.0, Sept. 22, 2008, http://publishing2.com/2008/09/22/why-isnt-facebook-making-more-money-hint-advertiser-value-and-user-value-are-not-aligned/. Given that Facebook’s Vice President of Sales Mike Murphy recently noted that the average Facebook user visits the website four times per day, each on line browsing session is worth approximately one fiftieth of a cent to the company (Roughly $3 per year per user). Posting of Mitch Joel to TwistImage, Facebook Facts That Will Blow Your Marketing Mind, http://www.twistimage.com/blog/archives/facebook-facts-that-will-blow-your-marketing-mind/ (Oct. 27, 2007, 22:27).
many digital era contracts that they encounter on a daily basis. Furthermore, rational economic consumers are incentivized to ignore these contracts because the transaction costs of analyzing such fluid agreements outweigh the benefits to the consumer of the services offered. Today’s written contracts are often superficial indicators of the binding, immutable, and concise agreements they used to symbolize. Courts must focus the contours of the traditional common-law era schema of contracts by paying more careful attention to the reasons why written contracts have been traditionally binding, or by imparting greater emphasis upon equitable principles of fair dealing when reviewing terms.

A. Contractual analysis should focus on the factors that made writings binding, and accept that a contract’s existence in writing no longer stands in for such factors.

Courts must no longer view the written word as the sole indicator of a bargained-for-exchange. The writings of the digital age bear almost no resemblance to the writings that spawned the Statute of Frauds and the Parole Evidence Rule. Instead, today’s digital-era transactions are substantively different. Courts must be willing to look past whether a contract is in writing, and instead consider whether it was negotiable, whether it was entered into under circumstances that encourage forethought, whether the contract was immutable, and whether the parties clearly indicated an understanding and intent to be bound. These pillars give the written word its binding power. Courts must recognize that a contract’s existence in writing serves merely as a symbol of the foregoing factors.

B. The modern schema of contractual analysis should consider equitable principles.

In addition to focusing on the foregoing factors, courts should also place, to some degree, greater emphasis on equitable principles when analyzing digital-era transactions. Many digital-era transactions are also contracts of adhesion. Such agreements more closely resemble unilateral lists of demands than bargained-for exchanges. In many circumstances, rational economic actors have little motivation to read the terms of these agreements because they are mutable and the services may have little or no monetary value. Until a modern schema of contractual analysis considers the “facts on the ground” involved in digital-era transactions, legal analysis will fail to account for the realities of life in the digital age.

A counterargument can be made that any application of equitable

111. See supra Section IV-D
112. See supra Sections IV-A, IV-D.
principles to contractual analysis will harm the market. Equitable principles are more subjective than their bright-line counterparts, and market actors will be less capable of predicting the consequences of the contracts they write.\(^{113}\) Notwithstanding these concerns, equitable principles have never been entirely separated from contractual analysis.\(^{114}\) Even the common-law era schema of contracts took some effort to ensure that contracts were fairly considered and agreed to by the signing parties. Second, the terms of digital-era transactions are already somewhat unpredictable, as they are subject to varied interpretations across different jurisdictions.\(^{115}\) The use of equitable principles to evaluate digital-era transactions merely asks that a court dig deeper into the facts to make certain that justice is served by ensuring that contracting parties conform to both the letter and the spirit of the law.

A second counterargument can be made that negotiable terms are an administrative impossibility for businesses dealing with millions of consumers, and that unilateral power to modify a contract is essential because it keeps a business flexible. This is a valid concern, but the application of equitable principles does not prevent parties from modifying a contract’s terms, nor does it demand that each and every contract be negotiable. Rather, it requires a closer evaluation of fluid contracts, to see if they garner the acceptance and consideration that make them deserve the same treatment as armor-plated agreements. For de minimis or mutable “submarine” agreements, the presumption of the armor-plated written contract seems questionable at best. If terms cannot be practically negotiated, they should carry less weight. If terms are not important enough to be negotiated, they should not be given the benefit of a rigid interpretation, but rather a lesser standard of deference.

C. Courts stand in the best position to resolve the problems of digital-era transactions by adjusting the modern schema of contractual analysis.

The market is not in a position to correct the problems of digital-era transactions. Most digital providers are for-profit entities, and minimizing liability gives businesses a competitive edge. Because of this incentive structure, one-sided agreements are the status quo for many of

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\(^{115}\) For example, consider the great deal of conflicting case law regarding whether clickwrap agreements are enforceable. See NTS Am. Jur. 2D *Computers and the Internet* § 16 (2010) (enforceability of “clickwrap” or “shrinkwrap” agreements”).
today’s digital industries. An individual company that refrains from imposing harsh, mutable, or non-negotiable terms risks losing its competitive edge because negotiable terms increase transaction costs and increase potential liability for the company in comparison to its peers. Furthermore, it is common knowledge that most consumers do not read the terms of such digital-era transactions. Drafters who provide more palatable terms to consumers receive increase in market share for doing so, and therefore have no incentive to include negotiable terms or to make their terms immutable upon signing.

As discussed above, many courts have given websites and providers a carte blanche to write any terms they so desire, so long as a single click is provided to stand in for the agreement of the user. When such a simple act already serves as an armor-plated indicator of assent, contracting parties have no need to draft contracts that exhibit the traditional hallmarks of the written word. The symbol of the mouse click has come to stand in for the carefully considered consent it used to represent. Perversely, contract drafters are thereby incentivized to encourage consumers not to read the very contracts they are signing. The drafter benefits from the consumer’s lack of knowledge of the terms because many of the terms can be harmful to consumers. The drafter is also not penalized in court for these practices because a consumer’s knowledge of the terms is immaterial in deciding whether a contract’s terms are valid or not.

For the foregoing reasons, it is clear that any individual Internet or software provider is unlikely to implement greater fair-dealing in digital-era transactions. Such techniques are unnecessary for these parties because courts have given great leeway to any terms that exist in writing. Therefore, providers have no incentive to engage in different contracting practices. As such, no single company has an incentive to “make the leap” to a new form of digital-era contracting.

This type of a situation, where the public would benefit, but providers would be harmed for individually implementing new practices, is one that demands the attention of the courts. Courts should refuse to apply written terms aggressively merely because they are in writing. Instead, by looking for more binding, serious, and realistic indicators of a bargained-for exchange, courts can create a level playing field between service providers. Those who would tie damaging terms to tempting services would think twice, lest their agreements be held unenforceable. Drafters could seek to create more binding indicators of assent and clearer terms for consumers, or simply redact inequitable terms out of their contracts. In any case, there will be no detriment to competition,

because all providers will be impacted in the same manner. This will incentivize digital-era service providers to ensure that contracts are more than simple unilateral lists of demands.

The courts are uniquely situated to confront these complex questions. Legislatures often move slowly and sporadically in the face of complex issues. In the realm of digital-era transactions, which has seen, and will likely continue to see, significant legal and cultural change, the courts find themselves at a nexus whereby they can move flexibly to confront and head-off these issues before they become more serious than they already are. The courts need only to update today’s schema of the written contract to reflect the realities of the digital era.

CONCLUSION

Today’s schema of the written contract, based on assumptions of the era of the common-law contract, is often subject to false assumptions about digital-era transactions. These misconceptions are harmful because they give terms in writing a great deal of binding power, even when the hallmarks that made writings powerful no longer exist. Often in modern contract law, “opportunity” to read a contract masquerades as an incentive to read, an understanding of the agreement, and acceptance of the agreement all at the same time. In the modern digital contracting environment, such assumptions must be taken with more than just a grain of salt. Courts must consider the written word very carefully when enforcing the terms of digital-era transactions. They must focus more closely upon why written contracts were binding in times past, as opposed to focusing upon the mere fact of a contract’s existence in writing. While individual service providers have no incentive to change the way they draft digital-era transaction agreements, society as a whole would benefit from such techniques. As such, it remains up to the courts to reshape the significance of the written word in the world of digital-era transactions.