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Preventing a Zombie Contract Apocalypse with a Document-Engineered Approach to Standard Form Consumer Contracts (SFCCs)

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Preventing a Zombie Contract Apocalypse with a Document-Engineered Approach to Standard Form Consumer Contracts (SFCCs)

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Information Studies

by

Kristin Breanne Cornelius Way

2019
Standard form consumer contracts (SFCCs) between consumers and businesses are recognized as ‘standard form’ so as to increase the efficiency of transactions and save costs, which are ostensibly passed on to consumers. Since one party is generally less powerful in terms of access to information and resources, these contracts are often acknowledged as imbalanced. SFCCs in various forms (e.g., terms of terms of service agreements, data policies, copyright policies, acceptable use policies) have been implicated in the wrongdoing of many widely-used service platforms and thus have been at the center of concern for consumer rights in recent years. While some have characterized these issues as a lack of understanding by claiming adherents have a ‘duty to read,’ or as drafters’ responsibility for egregious terms and weak disclosures, this project suggests at least part of the issues exist from a lack of consideration of the document itself—and
a performance (or de-performance) of its physical characteristics to some end in a digital environment. It suggests that standardizing aspects of the document form of SFCCs, rather than relying on notions of standard practice that work against user psychology, would have beneficial effects for consumers toward evening out the power imbalance. It makes use of the disciplines that specialize in these topics, including document theory, library and information science, diplomatics, standards of records management, textual criticism and bibliography, and evidence to offer a revised perspective on SFCC issues. Ultimately, it concludes that current governance is not adequate to address the issues of these agreements and suggests three principles, or shifts in concept, that reflect its findings: 1) standardization, not standard practice 2) explanation, not notification; and 3) documentation, not integration. Additionally, it provides a proposal to develop a new set of standards that would afford SFCCs the following characteristics: a) Classifiable/Organizable; b) Preservable/Scrapable; c) Trackable/Stable; d) Authentic/Reliable; e) Processable (machine-readable). This standard could not only help extract necessary information from these documents and produce an ‘informed minority hypothesis,’ but also help stabilize the document for evidentiary reasons (e.g., dispute and discovery, burden of proof) and work against unnoticed changes (from unilateral modification).
The dissertation of Kristin Cornelius Way is approved.

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2019
DEDICATION

For my Henrick and my Cambria—to whom I cannot wait to explain someday why I spent so many hours staring at a white rectangle.
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VITA

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Chapter 1: Introduction

“With the decline of the free enterprise system due to the innate trend of competitive capitalism towards monopoly, the meaning of contract has changed radically. [...] Freedom of contract enables enterprisers to legislate by contract and, what is even more important, to legislate in a substantially authoritarian manner without using the appearance of authoritarian forms. Standard contracts in particular could thus become effective instruments in the hands of powerful industrial and commercial overlords enabling them to impose a new feudal order of their own making upon a vast host of vassals.”

-Legal scholar, Fredrich Kessler, 1943

“... consumers will lose their right to meaningfully participate in the formation and incorporation of meaningful provisions in consumer contracts. Over time, commercial institutions will gain complete control over this, and will, by implication, invert the value of contract over goods and services”

-Legal scholar Ronald C. Griffin, 1978

“New institutions, and new ways to formalize the relationships that make up these institutions, are now made possible by the digital revolution. I call these new contracts ‘smart’, because they are far more functional than their inanimate paper-based ancestors.”

-Nick Szabo (entrepreneur and founder of smart contract concept, 1996)

On January 14, 2019, a post on reddit.com asked the question: “What exists for the sole purpose of pissing people off?” It garnered a variety of answers and up to 28.8 thousand comments; one of the most popular answers read: “Recently I keep seeing websites give me warning overlays that take up half the page telling me about the website using cookies and I have to accept to get rid of it”\(^1\). Ironically, the familiar phenomenon described—a notification that a user must acknowledge by clicking ‘agree’—stems from recent regulatory measures\(^2\) meant to protect consumer-users, not annoy them. Previously, this information was only stated in a

\(^1\)https://www.reddit.com/r/AskReddit/comments/agnh1o/what_exists_for_the_sole_purpose_of_pissing/?sort=top

\(^2\)Federal Trade Commission Act (FTC Act) (15 USC §45) from 2004 that prohibits “unfair or deceptive acts or practices in or affecting commerce” and, even more recently, the General Data Protection Regulations (GDPR) put in place by the European Union (EU) in 2018 that promotes the notification to consumers about the behind-the-scenes activities such as the collection of personal data in which these platforms participate or even use as a business model, among others.
company’s service agreement, usually called ‘terms of service’ (ToS), “Terms and Conditions,” or simply ‘Terms’\(^3\), commonly found in the margins or footer of the website as a hyperlink. The fact that there was a consensus to this Reddit description—the comment had over 7,000 “karma points” (which is a mix of ‘upvotes’ and other support from the community through an unknown algorithmic calculation)—reveals either a lack of understanding on the part of the consumer (the adherent to the agreement), the corporate entity (the drafter of the agreement), the regulatory body (the enforcer of the agreement in case of dispute), or all three of these stakeholders as to the purpose and function of these notifications and the agreements to which they refer.

ToS agreements have been implicated in several of the egregious behaviors of popular service platforms that have been recently uncovered by leaks or other means. A New York Times report published March 2018 claimed the popular social media platform Facebook inadvertently provided Cambridge University academic Alexsandr Kogan with access to the data of over 50 million users names (later changed to 87 million) and other personally identifying information through the use of a quiz application that Kogan had created (Rosenberg, et. al, 2018). This information was then provided to the firm Cambridge Analytica (CA) whom had been hired by the Trump Campaign to profile users using this data for political influence through social media. In the aftermath that followed, including a Congressional hearing on April 10\(^{th}\) and 11\(^{th}\) in which CEO Mark Zuckerberg testified, questions surrounded Facebook’s knowledge of CA’s data collection activities. After all, it went beyond the targeted users of Facebook (i.e., those who used the application that collected the data) to friends of those users and even to the data of non-

\(^3\) The modern form of this type of contract is also commonly referred to as “fine print,” “boilerplate,” “consumer contract,” “End-User License Agreement” (EULA), and in this project, also “zombie contract” from Leib and Eigen (2017).
users. Facebook’s ToS agreement was highlighted throughout these hearings as it contained\(^4\) the data collection policies for users of the platform. About two weeks after the hearings, Facebook itself was asked if it had read the agreement laid out by CA in 2014 when it first allowed the firm to access its users’ data, to which the company's chief technology officer Mike Schroepfer answered: “we did not read all of the terms and conditions” (Romm, 2018). For obvious reasons, this became a comedic headline in the days that followed.

ToS agreements more broadly fit into the category of consumer standard form contracts (SFCCs) that also frequently contain privacy policies, copyright claims, labor terms, and dispute remedies including forum selection clauses (e.g., mandatory arbitration) that specify terms for consumers on a take-it-or-leave-it basis without negotiation. SFCCs are also implicated in free speech debates as often platforms make banning decisions based on the “acceptable use” portions of these agreements. As users are banned from Twitter, for instance, it is often reported that they have violated the platform’s ToS agreement (Bambrough, 2019). With nearly every service and application making use of some form of SFCC, the average user encounters and agrees to hundreds of thousands of words of these agreements each week, desensitizing users to their presence or to any disclosure efforts.

While some have characterized issues with SFCCs as a lack of understanding, on the part of the adherents, traditionally claiming it is their ‘duty to read’ (Calamari, 1974) or with the drafter (e.g., egregious terms, weak disclosures), they have not captured the whole picture. This project suggests at least part of the confusion exists from a lack of consideration of the document

\(^4\) This has since changed with recent regulatory measures that dictate that privacy policies must be listed as separate from the service’s ToS agreement (“Consent Order,” 2011; GDPR Article 2).
itself—and a performance (or de-performance) of its physical characteristics to some end—and how the digital environment has facilitated this interpretation.

1.1 State of the Question

Because of the asymmetric power imbalances behind their implementation, SFCCs agreements are a much-debated topic in legal literature, especially as they have become vital to the functioning of digital commerce in the past few decades. Its genre of contract, a ‘contract of adhesion’ or ‘standard form contract,’ on the other hand, has been discussed for almost two centuries in its modern form since it proliferated after the industrial revolution, and the concepts at stake in the legality of these types of agreements, including ‘freedom of contract,’ have been around much longer, for several hundred centuries (Kessler, 1943; Sales, 1953; Burke, 2000). The major traditional characteristics of concern in legitimate contract formation in the American law system and common law systems are: capacity to contract, mutual assent, and consideration (“Restatement,” 1981, Chapters 2, 3, and 4). These describe the way that a contract must produce a “meeting of the minds” of both the parties’ intentions and how agreement mechanisms and are necessary for a meaningful exchange in the terms of the bargain.

SFCCs, however, forgo some of these features in order to facilitate efficient transacting activity (Restatement, § 211 “Standardized Agreements”). Specifically, as long as the adherent “has reason to believe that like writings are regularly used to embody terms of agreements of the same type,” those terms will be “similarly situated [...] without regard to [the adherent’s] knowledge or understanding of the standard terms of the writing.” As estimates claim that

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5 In other forums they have been called “fine print” “boilerplate agreements’ and just simply “terms.” I will refer to them as either “SFCCs,” “digital SFCCs,” or “zombie contracts” throughout this project since these terms describe the specific phenomenon I wish to address with this analysis. Digital ToS agreements are just one instance of this genre, and in the future, it could very well include automated contracts, visualized contracts, and smart contracts (Cornelius, 2018).
SFCCs make up more than 99% of all contracts used in commercial and consumer transactions (Slawson, 1971; D’Agostino, 2015), discussants often argue that it is beneficial for the economy to not haggle over commonplace terms in simple exchanges when most adherents are neither aware of the terms as ‘standard’ nor would read them if the chance were provided (Griffin, 1978; Patterson, 2010; Marotta-Wurgler, 2011; Ben-Shahar and Schneider, 2014). Although these descriptions seem to either make assumptions about the adherent’s knowledge of the contract or else disregard it in the name of ‘standard practice,’ in the authoritative text the Restatement (Second) of Contracts, the third feature described of SFCCs allows for the nullification of a contract term if it might be considered ‘unexpected,’ which is defined in regard to adherent’s awareness of that term and what may have prevented them from assenting. Two other stipulations—whether the term affects a large number of consumers, and whether or not the consumer had the opportunity to access the terms prior to consent—are commonly scrutinized in this topic.

The common features of SFCCs more broadly include its presentation by a drafter (e.g., corporate entity) and acceptance by an adherent (e.g., consumer) without negotiation (Kessler, 1943). Most SFCCs are business-to-consumer (B2C), where the drafter is deemed ‘sophisticated’ due to their assumed knowledge and the adherent is considered ‘naïve’ for their lack thereof, rather than business-to-business contracts (B2B) with two parties that both have sophisticated knowledge and thus negotiate the terms (D’Agostino, 2015). SFCCs generally make use of regularized or commonly used clauses and are written by one party with the expectation of acceptance by the other, often without the latter actually reading the terms; the adherent’s reluctance to read remains consistent and perhaps even more problematic in a digital
environment where interface design choices such as discrete hyperlinks only promote this tendency (Obar and Oeldorf-Hirsch, 2016).

Current concerns with digital SFCCs have been colorfully characterized in the phrase “zombie contracts” by Ethan J. Leib and Zev J. Eigen (2017) in a recent article titled “Consumer Form Contracting in the Age of Mechanical Reproduction.” Zombie contracts are contrasted with what the authors describe as “archetypical exchange” contracts that are based on a “clear, meaningful, bilateral negotiation” between parties and have “both parties understand that an enforceable obligation is being undertaken” (p. 68). A typical example of a zombie contract is the ToS agreement that is used on nearly every online service platform, but could also take the form of any type of SFCC, including car or home lease contracts, credit card terms and conditions, insurance contracts, employment contracts, and financial contracts, among others that regularly occur in the digital, globally connected, online environment and that are repeatedly ignored or at least not read by the majority of users.

In line with recurring warnings about this specific genre of contract throughout the history of legal discourse (Issacs, 1917; Kessler, 1943; Leff, 1967; Gilmore, 1974), Leib and Eigen predict “a zombie contract apocalypse” should these contracts continue to permeate every aspect of our digital lives without further regulation. The authors describe how zombie contracts [...] don the skin of contract, routinely get taken for contract, and at the same time, live by consuming contract's soul. Yet, it is exceedingly difficult to kill the undead, as any zombie scholarship will tell you. It is hard to kill zombies because they look so much like the real, living thing that has been killed to use as a host. (p. 70)

This description highlights how zombie contracts appear as contracts and may be held up in court as contracts in most cases providing them the ‘life’ that other contracts are afforded, but
have been argued are generally not understood as ‘contracts’ by a large segment of the consumer population and possibly do not fulfill the requirements to be considered contracts at all (Radin, 2012; Kim, 2013). In other words, to the vast majority of users/adherents, they are effectively dead, even if they routinely contain clauses to great material effect (i.e., data collection and privacy, labor terms, copyright, acceptable use).

The current zombie contract phenomenon is a result of various types of governance that permitted SFCCs to proliferate in the digital global marketplace. In this inter-jurisdictional environment, much of the traditional contracting process has been streamlined, and the notions of literacy, engagement, and consent that have been grappled with in traditional contract doctrine are often redefined in the name of efficiency and business. In the thread of what I will call “zombie contract scholarship” that led up to Leib and Eigen’s article, various remedies have been discussed to address the issues with the recently emerging form of ubiquitous digital SFCCs. Before isolating this thread, however, I will briefly situate it within a historical-theoretical perspective of more general discourse on contract governance to identify and contextualize some of the pertinent issues with these agreements and the underlying philosophies of law they espouse. I will also identify the authoritative texts that correspond to these theoretical movements, including the Restatement (Second) of Contracts (“the Restatement”), the Uniform Commercial Code (“the Code”), and the most relevant text, the controversial forthcoming Restatement of Consumer Contracts (“the Draft”) that was approved by the council of the American Law Institute (ALI) last fall and is up for a vote with the entire membership this year.

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6 Leib and Eigen (2017), for instance, cite a difference in two distinctive cohorts’ (i.e., those under 35 and those over 35) perception of zombie contracts: for people under thirty-five years old, they are more familiar with hyperlinks in footers than the little pamphlets of papers that dictated the privacy policies previously mailed periodically with each credit card.
These authoritative texts along with supplemental material regarding SFCCs then become the governance that is examined throughout the analysis of this project.

In recent decades, legal scholarship has trended toward critical studies that attend to some aspects of previously marginalized thought by incorporating the work of other disciplines, such as psychology, behavioral science, and others (Spann, 1989). While this interdisciplinary work is vital to a general broadening of legal scholarship, it has yet to be able to rectify many of the issues with this one specific genre, digital SFCCs. One of the main issues with the governance and scholarship around these contracts is that notions of freedom of contract, efficiency for industry, and rhetorical performances of convenience reign supreme and are used to justify the practices behind the legitimacy of these contracts; while this underlying ideology is tied to the beneficial nature of the form of these contracts, users’ rights are often sacrificed in the name of these motives.

ToS agreements are currently one of the most ubiquitous forms of SFCCs in the digital environment and also one of the most egregious. A study undertaken in 2016 by a partnership between the Dynamic Coalition on Platform Responsibility (DCPR) and the United Nation’s Internet Governance Forum, found that ToS agreements affect human rights significantly in the areas of freedom of speech, privacy, and due process, particularly for marginalized and low-income communities (Ventuini et. al, 2016). Another study proved what is already assumed—that ToS agreements are not read by the vast majority of users. Obar and Oeldorf-Hirsch (2016) tested 543 participants to see if they read and understood the ToS of a fictional website and empirically concluded that the “vast majority of participants completely missed a variety of potentially dangerous and life-changing clauses.” Moreover, when it comes to consent, clickwrap over browsewrap only increases reading by a tiny margin of 0.36% (Marotta-Wurgler, 2011).
Mandatory disclosure methods have been well established as ineffective (Ben-Shahar, 2014 and Schneider), even if dictated throughout much regulatory discourse (e.g., UETA’s “posting rule,” GDPR’s transparency requirements).

Further, conservative legal scholars tend to favor the commonly used mandatory arbitration clause for its supposed efficiency, the non-negotiable quality of these contracts has also been reinforced by a liberal trend in judicial decisions that encourage courts to nullify contracts that infringe upon “substantive, jurisdictional, or constitutional interests,” which in turn prompts a response from drafters to continually amend the terms in a “private conversation” with the courts that effectively leaves out the voice or concerns of the user (Horton, 2009). One might think of “utilizing this one contract term [as] akin to using one wish to wish for infinite additional wishes,” with judicial decisions that nullify the initial contract granting the first wish (Preston and McCann, 2011).

Most recently, a damning study from April and May 2018 by the Norwegian Consumer Council found deceptive design practices on the interfaces of Google, Windows 10 and Facebook. This study concluded that these “dark patterns of design” such as illusions of control, misleading wording, and other design choices that are “meant to nudge users toward privacy intrusive options” are numerous and rampant on these platforms. The most prominent choices used on these platforms may particularly try to obscure users’ efforts to exercise their privacy rights, even if they are protected by regulatory measures (“Deceived,” 2018). Facebook, Google, and Microsoft each responded to the report, reaffirming their commitment to ensuring new consumer advocacy regulations such as GDPR and ironically pointing critics to their ever-legal

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7 For instance, they say it lightens the burden on courts, more economical for the company, which gets passed down to the consumer in savings (Horton, 2009).
ToS agreements as insurance for their practices. In the U.S. in June 2018, eight consumer advocacy groups, including Consumer Watchdog, Electronic Privacy Information Center, Campaign for a Commercial-Free Childhood, Center for Digital Democracy, Consumer Action, Consumer Federation of America, US PIRG, and Public Citizen have all requested that the Federal Trade Commission (FTC) investigate the conclusions of this report (Binder, 2018).

Combined, these studies confirm the case that these zombie contracts, while not without costs and arguably not even cost-efficient (Leib and Eigen, 2017), still at the very least have significant, proven ‘costs’ in the form of sacrificed individual rights for all users and lower-income, marginalized communities, in particular—a far cry from the equity that ‘freedom of contract’ is supposed to ensure. Perhaps we have reached the predicted zombie contract apocalypse with our world full of digital service agreements never read or understood, drafted by powerful parties that lay out the non-negotiable terms that regulate nearly every aspect of our lives. Or perhaps we are just enduring the first stages of a crisis that could still be averted through nuanced discussions of contract governance that involve stakeholders other than just industry and legal authority.

The term ‘governance’ is central to this project as I foremost seek to provide a conversation between disciplines that would be useful to the scholars and organizations that affect the texts and discourse that make up ‘contract governance’ (i.e., ALI, ULC). At this moment, especially with new publications of contract doctrine such as the Restatement of Consumer Contracts (“the Draft”), this is the conversation that affects the majority of average consumers. Put urgently, some of the more difficult issues to parse out in regard to these agreements, including substantive and procedural unconscionability, the parol evidence rule, unilateral modification, and mandatory arbitration have made the Draft quite controversial
Codifying these rules into a new Restatement has been accused by critics as reaffirming the interests of businesses and not advocating strong enough for consumer fairness. Letters to the ALI from consumer advocacy groups and other legal and industry minds that deal intimately with the contracting process have detailed in protest how this new Restatement unnecessarily limits the ‘teeth’ of the unconscionability provisions, reaffirms the integration of these contracts and the lack of strength of the parol evidence rule, and, most dire, allows for more lenient notions of assent (“Council Draft No. 4,” 2018, p. 1). One letter states: “Rather than contracts being ‘easy to make, easy to break,’ as the Reporters believe the grand bargain to be, we fear they are likely to become ‘easy to make, hard to break’ under real world conditions” (“Council Draft No. 2,” 2016, p. 2). This “Grand Bargain” referenced is laid out by one of the Reporters, zombie contract scholar Omri Ben-Shahar:

On the one hand, the draft endorses rules of assent that are fairly lenient; they do not require too many clicks for terms to be adopted, they do not require too many boxes to pop up when consumers surf on the Internet. Meaningful notices are enough for the terms to be adopted [...] (We also have) fairly strict limitations on how far businesses can go. We have adopted rules that have to do with unconscionability, what counts as unconscionable with deception, and how the promise that was made to the consumers, the representations that were made to the consumers that drove them to enter into the contract, how those can be vindicated and not be frustrated by the fine print. (Malfitano, 2018, par. 20).

Thus the “trade-off” being described for consumers is the restriction of corporate overreach through court’s scrutiny of egregious terms in favor of the convenience of lenient standards of agreement. The term has since been abandoned as a way to reference the heritage of realism and
Llewellyn that is meant to be flexible and reflect real-world practice, and also to succumb to at least one of the criticisms of the advocacy groups (“Reject Council,” 2018). If it seems as though the justifications for the conditions set forth in this new restatement do not add up, it is because Ben-Shahar claims he will be able to solve the issues of asymmetry in these contracts by describing forms and processes that already have proven negative outcomes for the adherents.

Ben-Shahar knows well the limits and failures of mandatory disclosure—he literally co-authored the book on the topic (Ben-Shahar and Schneider, 2014)—but while collectively (along with the other Reporters) claiming to be facilitating real-world practice, he is instead producing a black-letter doctrine⁸ that critics argue limits the bandwidth for past remedies and allowances for contextual information (“Reject Council,” 2018; “Council Draft No. 2,” 2016; “Council Draft N. 5,” 2018). The more troubling aspect of Ben-Shahar’s statement is that he characterizes the Draft’s restraint of these features—“too many boxes to pop up” and “too many clicks”—as being for the consumer. In the purview of efficiency and convenience, however, lack of engagement might be manipulative and further poor design choices that have proven to inhibit users from exercising their rights in regard to these policies (“Deception,” 2018), even if disclosure efforts are routine or benign. These choices are thus dependent on the opinions of three authors (the Reporters of the Draft), which speak to the politics of the governance issues behind the decisions that affect these contracts, and which have implications for such a large user population.

### 1.2 Research Questions and Project Design

This project focuses on answering the following questions, beginning with an assessment of the current governance of SFCCs:

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⁸ Ben-Shahar has been noted as writing against such realism in past work and argued for the flexibility of formalism (Kreitner, 2006; Ben-Shahar, 1999).
1) Are current contract governance efforts adequate to address the established issues of digital SFCCs such as ToS agreements and future iterations (e.g., automated contracts, smart contracts)?

2) Could disciplines that deal with documents and records (i.e., Document Theory and Diplomatics), social theories of information (i.e., Documentality), interpretation and performance (i.e., Rhetoric and Textual Studies) offer new ways of viewing the issues of SFCCs and thus offer new solutions?

3) Would a document-engineering solution for SFCCs, critically grounded by these disciplines, be a potential way to increase the informed minority amongst the general population of consumers? Might it help provide a stronger voice for consumers by aiding the work of activist groups, even if the knowledge of the general public remains minimal? Could this solution also possibly allow future regulation opportunities for these contracts?

‘Governance’ is often put in contrast to ‘government,’ which is described as “rule by direction” whereas the former is “rule by self-organizing networks” (Colebatch, 2016). Some critical governance scholars have argued that trends in late-stage capitalism have shifted over time toward affording the increasing ‘self-organizing networks’ with more authority as trust has been lost in monopolistic, corporate culture (Eagleton-Pierce, 2010). In a practical sense, the term ‘governance’ could be attached to a variety of terms to signify their disciplines (e.g., information governance, corporate governance, data governance), but this expanded, theoretical use encompasses studies of “macro shifts in the recent evolution of capitalism, the management of social critique, and, in general, methods of legitimation deployed within power relations.” This use allows for an exploration of the underlying motivations of the stakeholders, the power
relations between contractual parties, and the overall shifts that occur in a digital market society. In the case of this project, for instance, I mean the literal texts (i.e., the Code, the Restatements, judicial opinion, statements and guidelines from federal agencies), the authority granted to the stakeholders in producing this governance (i.e., ALI, ULC), and the general theories associated with the legality of digital SFCCs. I refer to this governance discourse as the Contract Perspective throughout this project.

A body of work from information, textual, and media scholars who have studied documents, their technical composition, and their engagement with users has also been compiled and is offered as an alternate approach to the study of contracts more generally, and to digital SFCCs particularly. It offers a vocabulary and heuristic for approaching the issues with standardized transactional interactions such as are memorialized by SFCCs, which are rampant in the digital environment. These studies include those that look at the text itself and its editing, archiving, and preservation practices from bibliography and textual criticism (e.g., Greg, 1950; Bowers, 1978; Tanselle, 1978; McGann, 1992). Other types of similar, relevant work that falls under the heading of Information Studies (I/S) includes ontological explications of documents (e.g., Briet, 1951/2006; Buckland, 1991; Ferraris, 2009; Frohmann, 2009; Smith, 2012) and fine-tuned practices of records and documentation (e.g., Duranti, 1989, 1994). Called the Theory Perspective, it includes ontological discussions of document and records from the European documentalists’ movement and conceptions of standardization from the standpoint of information organization and the systemization of knowledge. It also ventures into the legal world of the role of documents as evidence (placed in the Theory Perspective because it is not discussing contracts, specifically), and standards of the performance of certain qualities of documents in official domains such as described in the field of diplomatics. Further, it considers
the fields that study texts and meaning, including from literary theory and reader response
type, that describe various paradigms of interpretation and meaning. Lastly, it makes use of the
fields of rhetoric to inform notions of ‘performance’ and to help depict situational power
dynamics.

The research design of this dissertation project takes the discourse on contract
governance (the Contract Perspective) and the scholarship from the body of theoretical-critical
work (the Theory Perspective) and puts them into conversation with each other on topics relevant
to SFCCs, including on documents, interpretation and meaning, engagement with technology,
and rhetorical performances of power. While research question #1 has been answered and
problematicized over the past two centuries by certain groups such as legal scholars and consumer
advocates, I strive to explore an answer to the question with a different lens. A descriptive,
theoretical solution is offered as an answer to the second research question. Specifically, a study
of demateriality that comes from the line of textual, media, and information theorists, who
propose analyses of various aspects of the materiality of artifacts and cultural, technological
objects (i.e., forensic, formal, distributed, performative) (i.e., Kirshenbaum, 2008; Blanchette,
2011; Drucker, 2013), proves a useful apparatus for describing the phenomena of the
performance issues with SFCCs. Ultimately, the epistemologies and values of other disciplines
(e.g., economics, efficiency, convenience) have integrated into legal discourse so that the
acknowledged power balance of SFCCs and other digital documents is masked by streamlined
user experiences. An adoption of a more critical-theoretical approach aids in evening out these
digital interactions as it makes use of disciplines that are interested in users, accessibility, and
standards of documentation.
First, this dissertation summarizes the project design, the data collected, and overall findings revealed from an analysis of this data (Chapter 2, “Project Design, Data, and Findings”). Then, the following chapter outlines the main principles and contributions to both the legal conversation around SFCCs and the contributions to the field of information studies research (Chapter 3, “Principles and Contributions”). There are common themes throughout each of the chapters and they are organized accordingly. The two “perspectives” partitioned throughout are grouped artificially to produce a conversation between the two viewpoints. There is some overlap between these perspectives in certain contexts, however, separating the discourses into two conversing groups is useful to highlight differences and gaps in the governance around this genre of contract. The criteria for the two perspectives are described methodologically in the chapter on research design (Chapter 2). The contributions to each perspective are summarized in Chapter 3, and Chapters 4-6 provide demonstrations of each one, which correspond to a research question and provide a solution (i.e., Chapter 4 answers question #1, Chapter 5 answers question #2, and Chapter 6 answers #3). Chapter 4 also serves as a literature review for the project as it details a comprehensive survey of the background of each of the two perspectives. A descriptive analysis that demonstrates the usefulness of the Theory Perspective for the Contract Perspective in Chapter 5 reveals three Myths (Literacy, Engagement, and Equality) used by corporate entities and the legal world to explain, identify, or justify the issues of SFCC’s document form, their ability to communicate knowledge, and the power imbalances the inform the decisions of their design, presentation, and validity. The subsequent chapter (Chapter 6) provides an experiment brief that details a method for creating a solution in the form of a document-engineered contract.

In putting these disciplines in direct dialogue with each other with a respect for the ideological underpinnings of each discipline involved, it is in the truest sense, interdisciplinary.
Early on it was recognized that the benefits of choosing an interdisciplinary research method include using creative approaches to find productive solutions, which is “urgently needed” for socially relevant issues such as the zombie contract apocalypse (Vosskamp, 1986). It has been argued the limits of such a study include the claim it produces a superficial reading of each discourse or can take the conversation out of context (Benson, 1982). However, if one takes time to “nurture and foster” interdisciplinary collaboration and research, it may synergistically beneficial to both disciplines (Wachsmuth, 2016). This has been a goal of this project, with dedicated time devoted to understanding both the concepts and theoretical perspectives of each contract law, zombie contract scholarship, and each of the specific theoretical disciplines of the Theory Perspective. For contract law, it recognizes the shifts in jurisprudence and approaches to rule. For zombie contract specifically, it studies a collection of forty-two articles that were curated through linking citations in the scholarship, as well as the texts that are used as doctrine for many judicial opinions such as the Restatement (Second) of Contracts, the Draft (the Restatement of Consumer Contracts), and the Code (Uniform Commercial Code), and transcripts from contract scholars and practitioners. In terms of the Theory Perspective, this project makes an effort to contextualize the ideas and practices of each of the disciplines mentioned.

1.3 Findings

Three findings here summarize the answers to the research questions that are described in detail throughout and demonstrated in Chapters 4-6 of this dissertation:

1. Current SFCC governance is inadequate when viewed from the perspective of standards, theories, and practices of documents, records, and evidence.
2. A problem with SFCCs is a *dematerializing* of their document form, which can be demonstrated by using theories of documents, rhetoric, and diplomatics as points of analysis.

3. A document-engineered SFCC would help solve some issues for consumers, including instability, inaccessibility, and unreliability.

A new document standard (or set of standards) for SFCCs would provide them with the following characteristics:

   a. Classifiable/Organizable
   b. Preservable/Scrape-able
   c. Trackable/Stable
   d. Authentic/Reliable (in a diplomatic sense)
   e. Processable/Machine-readable (i.e., json, csv, xml)

Metadata or markup requirements that would aid in processing the document would allow for a controlled process of creation, classification, description and organization. These qualities would allow for the following consequences:

1. They could make SFCCs more accessible for consumer advocacy groups, which increases the chances of fulfilling the informed minority hypothesis.¹

2. They could help stabilize the document for evidentiary reasons (e.g., dispute, burden of proof) and work against unnoticed changes (from unilateral modification); they could also enable automatic download onto a user’s keychain for preservation.

¹ This theory claims that a group of informed consumers could provide a counterbalance to push back on any negative aspects of SFCCs (Schwartz and Wilde, 1979). Recent empirical studies claim to prove that the informed minority does not exist amongst the current consumer population (Bakos et. al, 2014).
3. They might help standardize the form of the content for future methods of novel disclosure such as counterfactual explanation (Wachter et. al, 2017) and decision provenance (Singh et. al, 2018), or probative evidentiary requirements (outside the four-corners of the contract). This might involve requiring that a few salient clauses link to additional information (e.g., documentation of contract formation, sample dataset that simulates the plausible, representative outcome of a clause), which could provide further explanatory purposes.

1.4 Principles

The document-engineered solution is motivated by three shifts in concept: 1) standardization, not standard practice; 2) documentation, not integration; and 3) explanation, not notification. Standardization in this sense relies on practices that have been fine-tuned over time and with informed decision-making regarding the effects of governance decisions. This is a change in ambiguous notions of standard practice that permeate contract discourse currently and are determined by the drafters, or those with the knowledge and resources to draft in their favor. Rather, the proposed approach promotes the idea that the expertise of a variety of stakeholders, including those who study user-consumers and documents, should be consulted. Documentation in this sense refers to a re-enlivening of the materiality of the contract document, with practices such as description and “bibliographical” information providing a critical design approach to display and presentation. This is a turn from the ‘integrated’ (in a legal sense) contract documents that are afforded ideal textual status as a “fully [...] final and complete expression of all the terms agreed upon between (or among) the parties” that allows SFCCs the official status they have acquired (Rowley, 2011, p. 2). Instead the document-engineered SFCC would be memorialized, authentic, and reliable in a diplomatic sense—a rematerialized image for the user-
consumer through its understandability, accessibility, and presence as a text in the digital
environment. This would potentially have effects for consumers (or advocates on their behalf) in
regard to their knowledge and engagement with these contracts. Lastly, explanation refers to an
actual engagement with reception and accessibility to knowledge based on alternate mechanisms
of notification and disclosure, including counterfactual explanation (Wachter et. al, 2017) or
decision provenance (Singh et. al, 2018). This is a move away from the current conventions of
disclosure and notification that have been proven to cause ‘blindness’ to their effect.

1.5 Contributions

This project takes on the issues of SFCCs with a new methodology to see if it can add to
the discussion and consider solutions that have yet to be explored sufficiently. Most discussions
have remained within the contract law theory community who have ventured into collaborations
with other disciplines such as economics, behavioral science, and psychology; this project
suggests that at least part of the problem with these contracts is documentary or textual and thus
the disciplines and research that studies those objects most rigorously should be considered.
Moreover, this project suggests that by understanding these agreements through the lens of
theories that have spoken to the nature and engagement with documents, medium, and
interpretation, new adherent-focused ways of approaching these issues may be had; however, this
implies a somewhat controversial shift in contract doctrine for this one type of contract. It makes
the case the SFCCs sacrifice certain tenets of contract formation, and therefore do not deserve
absolute freedom of contract, which requires a regulatory safeguard for the less powerful party of
the contract (i.e., the consumer). It proposes that the site of this regulatory safeguard be the
document form of the SFCC so as to allow for freedom to remain in the writing of the terms of
the content of the contract.
The other contribution that this project makes is to the field of Information Studies. Similar to the results of the document studies that preceded this project (e.g., McKenzie, 1986; Hull, 2013; Day, 2014), by placing the discussion of these contracts from the legal community into conversation with the theories that attempt to understand documents, this study can also highlight how users engage with documents and technology more broadly and provide an illuminating case study into how the material performance of a document, when misunderstood, can profoundly exacerbate power differences such as those between consumers and companies. It combines theories of materiality and rhetoric and offers a study of *demateriality*, or the projection of a lack of a document’s materiality to some end. SFCCs provide an illuminating example for a case study of this theory, but it could also be more widely applied to a larger range of digital documents.

At worst, our reliance on the free market capitalist system, particularly in the last three decades with the rapid development of technology, has allowed us to overlook the very mechanism that affords legality to the web of data collection, advertising models, and social platforms that now profoundly shape our lives (Tufecki, 2015, 2017). One might call this a type of networked surveillance that is occurring both governmentally and with the activities of corporate entities, which is made *legal* by these digital contracts that guarantee these rights. To hypothesize about the zombie contract apocalypse further as a thought experiment, one might consider what would happen if the predictive, quantitative methods that are about to be given authority in the new Draft end up being combined with smart contracts that automate transactions with behind-the-scenes algorithms (Cornelius, 2018). Qualitative analysis that had been the basis of law previously would all but be forgotten, and human judgment superseded by algorithms that possess a limited understanding of the human condition. Relying on precedent
does not guarantee the fairest outcome, especially with profoundly disruptive and transformative new technological innovations. Combined with the other aspects of the Draft that seem to favor the interests of business over consumers, which might push precedent further in that direction in the coming years, these predictive algorithms could leave consumers no room for recourse or perhaps even a basic understanding of what is happening. And lastly, if the Draft’s promotion of more lenient, more ‘convenient’ standards of assent become more prominent, any form of engagement with a service might legally count as agreement to its SFCC, and the user could be subject to the terms of a commercial transaction where they themselves are the product of the bargain without any awareness at all of the existence of the contract or transaction.

In lieu of consideration, which is a classic fundamental characteristic of contract formation, adherents need a trustworthy, multifaceted solution to ensure they can trust the terms of the bargain that these contracts memorialize. The three-part solution that makes up the ‘document-engineered approach’ I propose sacrifices some of the freedom contracts are generally afforded; yet I argue that this sacrifice has already been made for adherents by current SFCC governance and that the full effects of this sacrifice are far from being realized. The current state of this issue provides drafters with the ability to pick and choose the aspects of contract doctrine that serve them (e.g., presentation of terms, mechanisms of assent) without the effort to satisfy those that do not (e.g., consideration). More gently, the proposed solutions may be viewed as rectifying some of the non-traditional contractual aspects of SFCCs while still providing drafters or corporate entities the affordance of streamlined contract making. Moreover, none of the solutions proposed are costly (except in possibly reducing the egregious corporate practices that are profitable), but simply provide more power to groups that have interests in mind other than business. Of course, users may never know or understand these systems that
affect their lives in a profound manner, nor the terms of the contracts that govern these spaces, but wouldn’t you rather know that the keys in your pocket do not scratch the screen of your iPhone anyway?\textsuperscript{10}

\textsuperscript{10} This is a reference to Omri Ben-Shahar’s (2014) quote in “More than you wanted to know: The Failure of Mandated Disclosure” where he assumes users would rather know the features of a product such as the ability for an iPhone screen to not be scratched by keys rather than a piece of salient information in a SFCC such as the jurisdiction of the contract to which they agree. I would argue that this statement is very context-dependent and presents an unfair, reductive view of an adherent; should a consumer want to file a complaint against Apple, the jurisdiction of Apple’s ToS would be a highly desired piece of information, perhaps more so than the quality of their phone’s screen.
Chapter 2: Project Design, Data and Findings

This analysis of SFCCs and its corresponding discourse uses data from a collection of documents, excerpts from texts and scholarship, and supplementary interviews to make claims about how contracts function in a digital environment legally, socially, and ethically, and to think through potential solutions that have not yet been considered. In the spirit of other Information Studies (I/S) research, this project is mixed methods and interdisciplinary and makes use of several concepts from a variety of disciplines in order to explain a complex phenomenon.

Although emerging as a dominant research method in the past several decades, “interdisciplinarity” has been accused of overlooking potentially contrasting assumptions in each discipline promoting what was identified early on as “conceptual confusion” (Benson, 1982). This often occurs through the impetus to draw connections between the disciplines that may not exist contextually and can be remedied by explicit differentiation between the disciplines throughout the analysis (Vosskamp, 1986). This might include the motivation to find connections between legal discussions of documents and interpretation that rest on vastly different origins, history, object of study, and interest. On a basic level, legal scholars are concerned with the courts functioning properly, possibly the role of law, increasing business and the economy, and a host of other specialized concerns. The theoretical disciplines are interested in ontological discussions, textual editing, information organization, accessibility, and literacy. Thus, the main thrust of this project is to place two bodies of work in conversation with each other while respecting and identifying the underlying epistemologies within each one.

By broadening the ideas surrounding SFCCs documents with this analysis, my hope is that this study can then enrich both perspectives with the ideas of other disciplines. At the same time, I hope that a multi-faceted approach to tackling the issues of SFCCs can provide a revised
prospective to a conversation that I argue is just beginning, even if currently being codified in legal documents (i.e., the new draft of the Restatement of Consumer Contracts) as though consensus has been reached. This project focuses on answering the following questions:

1) Are current contract governance efforts adequate to address the established issues of digital SFCCs such as ToS agreements and future iterations (e.g., automated contracts, smart contracts)?

2) Could disciplines that deal with documents and records (i.e., Document Theory and Diplomatics), social theories of information (i.e., Documentality), interpretation and performance (i.e., Rhetoric and Textual Studies) offer new ways of viewing the issues of SFCCs and thus offer new solutions?

3) Would a document-engineering solution for SFCCs, critically grounded by these disciplines, be a potential way to increase the informed minority amongst the general population of consumers? Might it help provide a stronger voice for consumers by aiding the work of activist groups, even if the knowledge of the general public remains minimal? Could this solution also possibly allow future regulation opportunities for these contracts?

This chapter on the project design, data and findings of this project is organized into three sections. The first section (titled “Project Structure”) details the project design rationale, including some background on the methods chosen and the terminology used throughout the analysis. The second section (titled “Data Collection”) details the types of data analyzed for this project and the process of collection for each type. The third section (titled “Findings”) summarizes the main findings from the analysis and the answers found for each of these research questions.
2.1 Project Structure

This dissertation answers the three research questions in three parts, each part detailed in a chapter that follows. Chapter 4 answers the first question by placing the discourse of each the Contract Perspective and the Theory Perspective in conversation with each other to test the adequacy of the current governance around SFCCs. This chapter also serves as a literature review for the project. Chapter 5 answers the second question by describing the issues with SFCCs in a revised fashion using the theories laid out in the Theory Perspective from the previous chapter. This chapter offers a new theoretical lens to describe and assess SFCCs (and possibly digital documents in general), called demateriality. The last chapter, Chapter 6, answers the third question by outlining an experiment brief that could be conducted, which would test the hypothesis that a document-engineered SFCC could solve some of the issues with this type of contract. This section will first detail the rationale for the project’s design, then it will acknowledge both the validity and limitations of the project, before describing in more detail how each of the following three chapters (Chapter 4-6) answer the three aforementioned research questions.

2.1.1. Mixed Methods. This dissertation makes use of a mixed methods design. Mixed methods design, in addition to collecting both quantitative and qualitative types of data, integrates these varied samples into its study, analysis, and results, and frames the research procedures within a framework of theory and philosophy (Creswell and Clark, 2017, p. 23). Convergent mixed methods projects specifically analyze both types of data concurrently as they typically have equal importance to the focus of the research questions. Each type of data is analyzed according to common methods for that type of data, and then the results are merged into one comprehensive analysis. This is opposed to sequential (i.e., exploratory or explanatory)
mixed methods designs that analyze each data set separately or in tandem. For convergent analyses, the merging of analysis of both types of data concurrently commonly could include directly comparing similar results for each analysis or transforming the results so that they can be related in further, additional analysis. Convergent mixed methods approaches are particularly well suited for theoretical analysis as the theory “may operate [...] by providing an umbrella theoretical or conceptual model that informs both the quantitative and qualitative data collection and analysis as well as the researcher’s approach to integrating the two sets of results” (p. 56). By framing the analysis explicitly with theories of documents, records, and contracts, this project provides a specific lens or model within which the data is studied.

The interdisciplinary project design chosen for this study seeks to combine the conceptual justifications from a few chosen fields in order to both highlight strengths and reveal differences among them and to assess what might be offered by this comparison for each perspective. Some of the advantages of interdisciplinary research that this project hopes to benefit from include some logistical advantages such as a wider audience and other, loftier goals such as possibly a more ‘normative’ conclusion (Glod, 2016). Towards the latter concern—producing more normative conclusions—it plays interestingly within the theoretical moves of jurisprudence that have struggled with the role of normative law (Eigen, 2014), as well as with the theoretical disciplines that reject normative descriptions of experience. Glod (2016) notes how interdiciplinarity, by combining fields of thought, might produce more normative conclusions that he considers to be more well-rounded, humane; he describes conclusions that consider “trade-offs” and “principles” including ethical concerns as well as the responses to the exigencies of the discipline, for instance. Thus, this interdisciplinary research design is also mixed methods in the sense that it proposes two solutions, one of which makes use of qualitative
methods to describe the phenomena under review (i.e., SFCCs) and the other that proposes a solution that makes use of quantitative and computational methods, including text analysis, topic modeling, and document-engineering.

2.1.2. Validity. Using a mixed methods design has many benefits for analyzing large and complex systems. According to Smith et. al (2016), “the benefits are derived from drawing on the strengths of qualitative methods to answer questions about how and why a phenomenon occurs and those of quantitative methods to examine how often a phenomenon occurs and establish generalizable, empirical associations between variables and outcomes.” In other words, this project gains validity from the close readings and deep critical analyses of SFCCs and their governance, which are then analyzed further by the quantification of some of the document components from actual examples. For this project specifically, my analysis of the excerpts from documents and interviews reveals certain ideals and values associated with digital SFCCs, while the measurements of the collected samples from actual digital contracts provides a dataset that allows for a bottom-up analysis of their components for a more complete analysis of the phenomena. The project will be successful not through depth or comprehension of each discipline or perspective, but rather by demonstrating the usefulness of one body of work for the other, and through its ability to outline a feasible solution.

2.1.3. Limitations. There are a few limitations to this study. The first, most obvious limitation is that the design of this study is primarily theoretical and not experimental in nature, and thus I only hypothesize about possible solutions, not test them. More work on these solutions should be undertaken and tested in the future, and the descriptions in this project are only meant to provide some threads that may be looked into more deeply in further research. That being said, however, the experiment brief and conclusions may also be viewed as more complete than
simply a purely theoretical analysis or quantitative experiment—in its current form, the project offers both a theoretical lens for studying the SFCC document, which provides a revised way of assessing their presentation, as well as a proposed experiment that makes use of both computational and quantitative methods. While not actually performed, this experiment is complete in its proposal and informed with a wide range of foundational and critical literature, as well as a thorough workflow.

2.1.4. Chapter 4. This chapter, called “The Conversation” serves both as a literature review for the project and a way of highlighting the differences in discourse amongst the Contract Perspective and Theory Perspective. Most critically, by placing these two bodies of literature in conversation with each other, it allows for an assessment of the first research question. As it seems the argument is being made by the legal community that a consensus exists on some of the issues with SFCCs, this conversation is important for revising that consensus to reveal how some of their issues might be revisited within the purview of different disciplinary contexts and standards of measurement. This allows for both a summation of each perspective and a conclusion that a comparative analysis is necessary. This chapter is described as a conversation, rather than a summary of literature, due to the fact that I am summarizing discourse from a variety of disciplines and contexts, with at least two varying perspectives on the topic (i.e., from the legal world and from the theory world). I do not wish to flatten the differences in these disciplines, but instead highlight them so as to note how varying contexts can read similar topics from distinct angles. From this conversation and summary of the ideas from the two perspectives, three shifts in concept are proposed as guiding principles for the discourse around SFCCs: standardization, not standard practice; documentation, not integration; and explanation, not notification.


2.1.5. **Chapter 5.** This chapter, called “The Demateriality of SFCCs,” answers the second research question by describing the phenomena of this type of contract and its current associated conventions through the lens of the Theory Perspective. This analysis revises the Contract Perspective by highlighting some of the justifications used in this discourse as ‘myths,’ thus bringing awareness to their implicit assumptions. It describes the use of three myths in the process: the Myth of Literacy, the Myth of Engagement, and the Myth of Equality. This analysis helps to strategize about new types of practices that could solve these issues from a revised perspective, namely how the issues of SFCCs might be framed as issues of document performance. Further, it outlines a way of describing the document performance of a SFCC as a rhetorical move—called demateriality—that is often justified by the myths in SFCC discourse rather than described as an intentional choice. Calling it out as a rhetorical move demonstrates the usefulness of the Theory Perspective for the legal discourse around SFCCs and disrupts the notion that consensus on these issues has been achieved. This makes the case that document performance and associated documentation practices are a useful point of study for SFCCs. Lastly, the analysis presented in this chapter and the study of demateriality is a useful apparatus offered for studying the rhetorical performance of a broad range of documents.

2.1.6. **Chapter 6.** The last chapter, called “Experiment Brief: A study of a document-engineered SFCC,” outlines an experiment for creating and assessing a document standard for digital SFCCs. While the study was not performed as part of this project, the detailed outline provides an informed example for a solution to the issues of SFCCs. This solution proposes a document-engineered SFCC that can then be processed and/or regulated in various ways over time. The most immediate benefit from this solution is a more meaningful interpretation from advocacy groups such as TOS;DR. At the very least, a document-engineered SFCC could
provide a voice for consumers and fulfill the potential of the informed minority hypothesis in the process. The proposed solution is not finite and exists on a spectrum of possible regulation, enforcement, and processing or documentation practices, and thus the range of its success might take time to emerge. This project is intended not to demonstrate this range, but rather that it might exist and is worth pursuing further. For instance, if the document standard is adopted, it might begin most minimally, and then expand to allow for regulation that affects the contract more granularly. Initially, it might allow for easier processing by activist groups, but over time, it might allow regulators to target egregious terms more appropriately, allow for the contract to be sustained as a reliable or authentic document for evidentiary purposes, and even allow for better explanation of its content for the average consumer.

2.2 Terms

The following paragraphs detail the reasoning behind the choices of a few of the important terms used throughout this project. The terms include Adherent, Perspective, Myth, and Governance that are used throughout the analysis and both solutions. The bodies of literature, codes, and discourse I call the “Contract Perspective” is made up of contract doctrine and what I term “zombie contract scholarship.” The other body of literature I call the “Theory Perspective” is made up of scholarship on documents, records, interpretation, meaning, and evidence. These terms and perspectives allow for a fruitful discussion of the issues of SFCCs and for the articulation of the analysis and solution of this project.

2.2.1. Adherent. The reasoning behind the word choice ‘adherent’ for the name of the proposed method, rather than “user” or “reader” or, the most commonly used, “consumer,” had to do with the technicality and connation of the word. The term “user” refers to users of a technology system, which does not apply in every case of SFCCs. The term “reader” might
perpetuate certain myths about literacy and engagement. “Consumer” might be the most accurate in some sense, however, it presupposes that the contract is an exchange of goods, which brings with it a certain set of requirements and practices that might not be beneficial to adherents (e.g., consider the implications as privacy policies increasingly are deemed contracts that exchange ‘goods’). The choice of the term “adherent” brings awareness to the contract dynamic specifically and the roles that each party plays by putting it in opposition with the term “drafter.” The word ‘adherent’ also has positive connotations (its synonyms\(^{11}\) are: “believer” “supporter” and “advocate”) that are true to the nature of the approach and this project; ultimately a successful implementation of the approach would allow the adherent to trust the contract and thus become a ‘supporter’ of the contract document. An adoption of the approach in general by legal discourse could provide an advocacy-type approach to these contracts in the name of adherents more generally. A few references to ‘consumer-adherent’ are used throughout instead of just ‘adherent,’ and this is simply to make clearer a consumer dynamic that is being highlighted for that specific segment.

2.2.2. Perspective. The first word that should be clarified is my use of the term “perspective” when referring to each of the interlocutors of the conversation. I chose this word to describe the “Contract Perspective” and the “Theory Perspective” rather than the word “side” for instance, as I intended to acknowledge that while there may be certain tensions among the various perspectives, there is much about their work that is not in opposition. By choosing this term, I intend to acknowledge that both perspectives are useful and possibly compatible, especially when placed within the context of the epistemologies of their disciplines. This is not to disregard that there are several differences between them, however. For instance, much of the

\(^{11}\) https://www.merriam-webster.com/dictionary/adherent
literature from the Contract Perspective contains reasoning that champions efficiency, industry, and court functionality, whereas the Theory Perspective, depending on discipline, is interested in accessibility for users, recognizing subjective experience, and/or becoming critically engaged with performative aspects of a text. Put in those terms, the differences are vast and possibly at odds with each other. Put in other terms, it could be said that I am artificially creating a divide in the motivations of the two perspectives in order to highlight their differences and assess whether or not a conversation between them might be useful. Much of the literature of the Contract Perspective also clearly states the issues that make digital SFCCs unfair for consumers/adherents such as asymmetrical knowledge and power between the parties (e.g., Horton, 2009; Patterson, 2010; Radin, 2012) or that that the majority of users do not read the terms (e.g., Marotta-Wurgler, 2011; Bakos 2014). It is also clearly acknowledged that efforts need to be made to remedy this situation in the name of consumers; in fact, the motivation behind writing many of the statutes, texts, and general doctrine has been stated as being for this very purpose (e.g., Sterkin, 2004; Wilkinson-Ryan, 2017). Thus, the task of this project is to first assess whether or not the governance or Contract Perspective has adequately achieved this specific goal, and then second, to try and approach that goal from a revised perspective. Perhaps it is the case that the negotiation implicit throughout the Contract Perspective that must be constantly acknowledged—between efficiency for industry and fairness for consumers—has had the effect of conflating the two sides with having the same goal, and, in turn, has rewritten this tension as efficiency for industry equals convenience for consumers. But convenience does not equal fairness, and thus my assumption is that another perspective, one that considers the interests of the user/subject/consumer only, could inform a new standard that might be of use in this overall assessment.
For the Contract Perspective, the ‘data’ collected includes the relevant sections of legal contract doctrine, scholarship, and legislation (e.g., federal and state statutes and requirements) that pertain to SFCCs. The Theory Perspective is a body of discourse that strives to understand how a document (i.e. a contract) comes into being technically, socially, and humanistically, including how individuals engage and perceive the document in question.

2.2.3. Myth. My use of the term ‘myth’ to identify some aspects of the reasoning behind the SFCC phenomenon invokes the work of the French anthropologist Claude Lévi-Strauss whose treatise on mythology produced a major shift in critical thought by introducing and expanding upon structuralist ideas raised from semiotics and linguistics that preceded him. ‘Myth’ in Lévi-Strauss sense claims that meaning can be found not in each part of the myth identified, which was an underlying premise of the symbolists that came before (e.g., Jung, 1981), but rather in the relations between each part and the story these parts come together to tell (Lévi-Strauss, 1979). Lévi-Strauss use of the term does not just point to an imaginary construction “alleged to have taken place [...] before the world was created, or during its first stages—anyway, long ago,” but rather more of an everlasting structure of patterns that can explain the past as well as the future (i.e., structuralism). These ‘everlasting structures’ are similar in construction to language, “made up of constituent units,” and must be understood in relation to each other, as a “bundle of relations.” Lévi-Strauss promotes the strength of his method as “having the advantage of bringing some kind of order to what was previously chaos” and it “enables us to perceive some basic logical processes which are at the root of mythical thought.” In this sense, studying myths might find its power in uncovering explanations of a phenomenon, rather than depicting imaginary, everlasting patterns.
Without adhering to Lévi-Strauss’ formal, structuralist method, the essence of his use of the term myth is useful in my analysis as a way of describing the explanations and reasoning behind SFCCs on the part of legal scholars and corporate entities. In fact, many of the theories that make up the Theory Perspective side of the conversation are considered poststructuralist and work toward destabilizing and undermining the permanence of any discovered patterns by emphasizing their relational aspects, rather than finding through them a stable, consistent meaning (e.g., McGann, 2001; Frohmann, 2004; Day, 2014; Drucker, 2009, 2013; Buckland, 2013). These theories offer a way to interrogate the culture surrounding these explanations that rely on Myths of Literacy, Engagement, and Equality and that work throughout the contract discourse, interwoven into the fabric of the ever-shifting doctrine, rather than rely on their terms that presume or describe certain characteristics of adherents or contracts (e.g., ‘duty to read,’ ‘no-reading problem,’ ‘unilateral modification’). In order to identify the motivations behind this doctrine, it becomes necessary to understand how these myths are related to each other and form the basis of thought through their underlying ideologies and presumptions. It is not so much that these patterns are everlasting, although some might argue that contract doctrine more broadly has stood the test of time (Moringiello and Reynolds, 2013), but rather how the specific flavor of this discourse that applies to SFCCs provides explanations that work together to overlook other possible perspectives and even some of the traditional tenets of Contract. In this way, I look with both a critical and skeptical eye toward the ability of these scholars and entities to fully articulate the nature of the adherent’s position in regard to this specific genre.

2.2.4. Governance. The next term to tease out is the project’s use of the word ‘governance’ as a way of describing the outcome of the Contract Perspective. As discussed in the Introduction, this term can mean different things for different groups. One common use is
‘corporate governance,’ for instance, which originates in use in the 1970s and generally refers to how the internal management of documents and records, including contracts, are managed within a corporate system. This type of governance speaks to the stakeholders of a company, including the shareholders, the employees, and any internal workings of a company. It can reference outside governance such as best practices, compliance statutes, and efficiency or profit-maximizing solutions that affects the corporation’s choices, but the term nevertheless refers to the internal governance system of the business itself. (Subramanian, 2015)

Another use of the term, however, refers to this “outside governance” and can include the statutes and discourse that influences not only businesses, but also a much broader range of activities that may fall under its purview. Contract governance, in this sense, includes laws such as the UETA, and secondary texts such as the Restatement of Contracts and zombie contract scholarship. Precedent set by courts and judicial opinion also fall into this category as well as the documents published by federal agencies (e.g., FTC) that lay out rules for transactions and commercial activity. Certain forms of SFCCs such as financial contracts have additional types of governance and a wider swath of agencies (e.g., US Department of the Treasury, Internal Revenue Service [IRS]) that provide governance requirements. The primary purpose of this type of governance is, in effect, to govern for ‘the greater good,’ although what this looks like in doctrine and in practice is complicated, as indicated by the shifts in jurisprudence throughout legal study (Duxbury, 2001). Even within this use of the term governance, there are varying perspectives that can reference the actors involved and the methods or medium of dissemination. For instance, in one sense, the object of analysis of this type of contract governance is the various groups that are involved in its creation. In this sense, I will study the organizations that write the discourse that governs contracts, including the ALI and the ULC for example, to see the
politics, ideologies, and motivations of the voices that are contributing to this conversation. In another sense, the object of study is the discourse itself that contributes to making a contract legal or otherwise.

Most descriptively, this project’s use of the term governance tends to intentionally fall within the “warm but fuzzy” usage outlined by Colebatch (2014). Colebatch conveys that this usage is admittedly a construct, if perhaps a useful tool, and would benefit from a focus on the “social construction of rule, the way in which social actors (including government officials and political leaders) order their practice and draw upon the discourses and practices of government (and other realms of practice) as part of this ordering.” In this way, the use of the term is “warm” in that it recognizes that governing involves many entities and stakeholders, and is “grounded in interaction rather than direction,” a “continuing process marked by indeterminacy and ambiguity.” This recognition allows that “direction” is not the same as the process by which it is accomplished, nor the exigencies to which it claims to respond. I prefer this “warm but fuzzy” usage of the term as it encapsulates the spectrum of output that plays a role in governing contracts and recognizes that prescription can be far from a description of what actually occurs in practice. Further, it provides the critical bent that acknowledges how certain prescriptions might further promote future descriptions made in their likeness, such as occurs with texts including the Restatements that perpetuate various practices with its doctrine.

In order to study this phenomenon and explore these questions, this project looks at data from primary documents (i.e., sample of digital SFCCs) and secondary documents including excerpts from legal opinions and scholarship, statues and regulations, white papers from various contract communities and industry (i.e., smart contracts, business and finance sectors). Additionally, unstructured interviews with experts who have intimate knowledge of the drafting,
documentation, and regulation of SFCCs supplement this analysis, including contract lawyers, contract repository maintainers, and representatives from regulatory bodies such as the Internal Revenue Service (IRS). This section is divided into four subsections: “contract doctrine,” “zombie scholarship,” “supplemental interviews and information,” and “sample of SFCCs,” which altogether make up the Contract Perspective side of the conversation.

2.2.5. Contract Perspective. The Contract Perspective is made up of two types of discourse (see Appendix A). The first group I call “Statutes and Authority” which is made up of both primary literature (e.g., statutes, laws, orders) and authoritative texts (e.g., the Restatements). The texts in this group that are authoritative, even if secondary, have a large impact on contract governance. This includes the Restatements put out by the American Law Institute (ALI) that are commonly adopted by judges when writing case opinions, which are not law themselves, but are interpreted in a similar fashion. The other group of literature I call “zombie contract scholarship.” This group encompasses a thread of legal scholarship that deals specifically with digital SFCCs, and a few pieces that are foundational in informing this body of work.

The body of work that makes up what I call “Statutes and Authority” for this project includes the two main texts that affect contract doctrine—the Code and the Restatement—as well as other doctrinal statues, guidelines, standards, and even best practices that affect the way contracts are justified as legitimate and upheld in court. This discourse includes Section 211 of the Restatement (Second) of Contracts that defines “standardized agreements” and the conditions under which the parties will be bound. It also includes Article 2 of the Code (UCC) that governs the sales of goods as well as determinations of unconscionability. A few international statutes such as the U.K. Unfair Terms Directive of 1999 are included as they provide a contrast and
have been adopted by large international bodies such as the E.U., which makes them highly influential.

Additionally, this project considers more top-down approaches from other types of systems (e.g., civil law in the E.U.) as many of the platforms that draft SFCCs operate within multiple jurisdictions and thus are subject to each of those location’s specific doctrine. This includes the recently implemented GDPR that outlines, among other principles, an accountability mechanism referred to as “the right to know.” This includes corporate responsibility to inform consumers about the workings of algorithmic code that could affect them when using a service. Clarity of information for the public and especially to minors is one of the major principles of GDPR and requires a transparency of the contracts that govern the way information is handled on third-party services, although it has yet to be determined exactly how it will function and how consumers will directly benefit (Wachter et. al, 2017).

The primary location overall of the contract doctrine analyzed is the United States and common law system. While not every law from every jurisdiction can be discussed, I chose those that are most present in a survey of the literature around the topic and thus are assumed to be the most widely influential. An attempt is made, however, to place each of the doctrines within the context and epistemology of the system from where it originated as an effort to be cognizant of its ideology and motivation.

The body of work that I used to parse out the issues with digital SFCCs I refer to as “zombie contract scholarship” throughout the project. The term “zombie contract” comes specifically from Leib and Eigen’s 2017 article titled “Consumer Form Contracting in the Age of Mechanical Reproduction,” but theirs is only one of the forty-two articles chosen (out of many more) that address the topic of SFCCs. The literature was chosen based on five criteria: 1) it was
written by legal scholars and/or published in a scholarly legal publication, 2) one of the primary
topics addressed in the article was the issues with SFCCs, 3) it was cited by at least two of the
other authors, 4) the main author published at least two articles or a book on the specific topic of
SFCCs, and 5) it cited and built upon the work of a few of the major authors that have completed
books and/or major studies on the topic. One helpful source in deciding the literature to study
was Professor Oren Bar-Gill’s and Florencia Marotta-Wurgler’s “Consumer Contracts Seminar”
syllabus, which revealed the authors and articles these two zombie contract scholars find most
important (“Seminar”). This curated list of resources also included relevant cases and statutes
that provided additional guidance, which allowed me to articulate the conversation that was
happening with this scholarship so as to be able to enter with another perspective.

The list of articles range in topic, although all related to SFCCs, from ‘duty to read’ to
standardized contracts in Section 211 of the Restatement (Second) of Contracts, to digital form
consumer contracts and methods of assent (e.g., clickwrap, browsewrap). It begins with Nathan
Issacs’ (1886-1941) historical exploration of contract and standardization to the classic piece on
adhesion contracts by Fredrich Kessler (1901-1998) in 1943 (McNulty, 1994). Some of the
authors also have doctorates in economics (Ben-Shahar, Marotta-Wurgler, Ben-Gill), in addition
to their JDs, and some in other disciplines (Wilkinson-Ryan in Psychology; Klass in Sociology
of Economics). Most of the articles have an economic focus in line with the trend in the 1990s
where legal scholarship adopted much of the concepts in economics (DeLong, 2001). There are a
few books on the list (e.g., Radin, 2012; Kim, 2013; Ben-Shahar and Schneider, 2014) that have
discussed the topic most comprehensively. Prominent on the list is work from the three authors
of the new Restatement of Consumer Contracts (i.e., Ben-Shahar, Bar-Gill, and Marotta-
Wurgler) and a few articles about the Draft specifically. Ultimately, the common theme
throughout this body of work is the *issues* with SFCCs, digital or otherwise, which is why it is called “zombie contract scholarship” and not just “consumer contract scholarship,” for instance. Each of the articles chosen grapples with some negative aspect of these contracts and attempts to either theorize about it or offer a solution.

From this body of work, I produced a list of forty-two articles that fit these criteria. This list includes a few outlier articles by authors that do not fit the criteria, but where the author has one influential article cited quite often, or a specific article not as influential, but useful for this project. This includes “The Limits of Cognition and the Limits of Contract” by Melvin Aron Eisenberg (1995), to which zombie contract scholars often refer and which discusses relevant cognitive and psychological theories for SFCCs. It also includes the Gregory Klass (2017, 2018) article in which Klass describes the methodology of the new Restatement of Consumer Contracts.

While most of the work was written post-1990 due to the proliferation of these types of agreements, I also included some articles that were regularly cited from earlier decades (e.g. Nathan Isaacs “The Standardizing of Contracts” and “Fredrich Kessler’s “Contracts of Adhesion”) that appeared seminal to this body of work, even if they were not able address digital SFCC issues particularly. This literature helped delineate the specific issues related to digital SFCCs (and the foundational thought behind SFCCs more generally) and the corresponding doctrines that are cited in their reasonings. It also provided a snapshot of the current discourse on the topic in the scholarly legal community.

**2.2.6. Theory Perspective.** The Theoretical Perspective is made up of forty-five articles of scholarship from a variety of relevant critical disciplines. The criteria for choosing the scholarship that informs this perspective was that, in general, the topic of the piece had to be
about documents, texts, or information. This was broadly conceived to include several different types of texts, including cultural and literary artifacts, official records, and evidence, in order to contribute to the conversation a wide-ranging set of concerns and considerations. Additionally, the pieces chosen had to have the motivation of concern for the user/reader/audience rather than the creator/author/speaker, to the end of access, literacy, and to some extent, organization and efficiency, but towards a general, public good. My reasoning behind this choice was that literature from this perspective might balance out the industry-minded epistemology (i.e., efficiency of transaction) that often underlies current constructions of contracts.

This body of scholarship is also split into two sections (see Appendix B), “Document and Records Standards” and “Document, Text, and Information Scholarship.” The first section is made up of document and records statutes, standards, and practices—none of which apply to consumer contracts specifically. Instead, these standards apply to general business documents and contracts, and provide a contrast and different way to assess the document form of SFCCs. While these texts are not theoretical per se, they provide a type of measurement in the form of a standard or compliance requirement that depends on notions of an ideal document or record.

The second section is made up of literature from the disciplines that deal with documents, information, and texts, including Bibliography, Document and Information theory (from Information Studies and Library Science), Reader Response Theory, Rhetoric, and Diplomatics. It includes forty-five articles and books that are interested in the boundaries of a document/text/information object, its performance or presentation, its interpretation by a user or reader, its organization, and authenticity. This claim is highly generalized to emphasize the thematic connections between the fields, and each field highlights specific themes more dramatically. But
these elements form a nearly complete analysis of a document, and so these fields were chosen together for their treatment of each of these issues.

While many of the pieces are relatively contemporary, some background pieces on literary and textual theory and bibliography were included. For instance, I.A. Richard’s work on rhetoric and formal criticism, as well as the canonical W.W. Greg’s “The Rationale of Copy-Text,” provide some of the foundational thinking in modern textual criticism were included to provide context. Other pieces were included that conceived of a text more broadly, to encompass digital interfaces, technical infrastructure, and user experience as part of the critical analysis, including Johanna Drucker’s work on performative materiality and J.F. Blanchette’s piece on distributed materiality. The selection is not meant to be comprehensive of these bodies of literature; rather, the goal is to provide a detailed picture of the thoughts on these topics from a variety of disciplines that study issues similar to those of SFCCs.

Thus, this project design is intended to produce a useful dialogue between two bodies of work while recognizing the contingencies associated with the act of doing so. Its design is not meant to meet standards of validity; rather, it is an exploration of ideas juxtaposed against one another in order to introduce and revise certain concepts already being discussed in contract governance. It is tested with the argument made throughout the analysis whether this juxtaposition is beneficial for its own sake, in the spirit that if lawyers and other associated with contract governance actually do want to make it fairer for users/consumers, then considering the scholarship of those that advocate on their behalf makes sense in the most literal way. Certain efforts were made to recognize the project design’s limitations, however, and the choices made in regard to the data collected will be discussed in the next section.

2.3 Data Collected
This section details the data collected that were studied throughout the project. It includes two samples of SFCCs—one collected by for this project and one collected by the TOSBack.org consumer advocacy group. It also describes the supplemental interviews that informed the analysis throughout.

**2.3.1. Samples of SFCCs.** Terms of Service (ToS) agreements and similar contracts are the most egregious offenders of consumer rights—they are the mechanism by which users supposedly give up privacy rights, ownership of material, and agree to acceptable use dictates (Ventuini et al., 2016). Two sets of these types of SFCCs were collected. The first set I collected over two years using copy and paste and screenshots. This both provided me a firsthand look at the difficulty of accessing these contracts for the average person, but also allowed me to preserve some of the visual elements with which consumers are often presented. The second sample was downloaded from the TOSBack.org corpus offered on their github page\(^\text{12}\). This set is a group of over 330 plain text documents of terms of use, privacy policies, and other such agreements that were scraped using their web crawling tool. This second set allowed for the production of a few sample topic models using the visualization tool MALLET and the What Everyone Says (WE1S) workflow.

The first sample that I collected was from the top ten ranked sites in the United States\(^\text{13}\):

1. Google.com
2. Youtube.com
3. Facebook.com
4. Reddit.com
5. Amazon.com
6. Wikipedia.org
7. Yahoo.com
8. Twitter.com
9. Ebay.com

\(^\text{12}\) https://github.com/tosdr/edit.tosdr.org/wiki/database

\(^\text{13}\) According to their Alexa ranking (a trusted ranking web service) on May 17, 2018.
These sites, while not providing a range in popularity, consist of a diverse set of service platforms (i.e. social media and communication, education, search, aggregated videos/news, and marketing and sales). In choosing from the most popular sites, rather than a sample across a spectrum of popularity, this project looks at the contracts that affect the largest population of users and thus the contracts (and conventions) that are most likely to be coded into standardized future implementations.

Two sets of these documents were collected, one prior to the implementation of the General Data Protection Regulation (GDPR) laws put in place by the European Union on May 25th, 2018 and one set after they were put in place. This set of laws had an effect on the way these agreements were written and many of the contracts were updated, even in the United States, to reflect this change. Clarity of information to the public, and especially to minors, is one of the major principles of GDPR and requires a transparency of the contracts that govern the way information is handled on third-party services (Wachter et. al, 2017). Increasingly, the public has become aware of the ways in which data are collected and used to profile consumers in digital spaces. While GDPR has had many effects on the substantive content of ToS and Privacy Policies particularly, increasing transparency efforts can also be affected by increasing an awareness of the document and procedural issues of these agreements.

To clarify, the boundaries for collecting the sample of ToS used in this study included the documents that were provided by each service that had the title closest to “Terms of Service” or whose title provided the most general, ‘master’ agreement to which users must agree in order to use the service. In most cases they were called “Terms” (i.e., Google, Youtube, Facebook, Yahoo, Twitter, and Instagram), but in others it was listed as “User Agreement” (i.e., Reddit, eBay), “Conditions of Use,” or “Terms of Use” (i.e., Amazon, Wikipedia). Also, in most cases
Privacy Policies were separate documents that were listed both adjacent to (as a hyperlink in the margin) or within the ToS. Whether or not privacy policies are considered as a linked part of the contract, their own contract, or not a contract at all is one of the issues in zombie contract scholarship.

The second set of SFCCs was taken from the github page of the consumer advocacy group TOSBack.org. Their tool makes use of a webs crawler that daily scrapes the standard html of about 100 of the major web services, a dataset that originated with the work of the Electronic Frontier Foundation (EFF) in 2013 from which the ToSBack.org and TOS;DR projects originated. Some web service providers’ contracts were not included because they had a CAPTCHA feature that prevented the crawler\textsuperscript{14}. From the archive downloaded in a zip archive from TOSBack.org’s github page, 335 plain text contracts were analyzed from the folder titled “crawl reviewed.” Some corporate entities had multiple items, including thirty-four items that were scraped from Amazon, only twenty-eight of which were ultimately used. Six were not used because they were either designed as “Frequently Asked Questions” (FAQs), so therefore not a contract, or because they were too specific (i.e., referred to a special offer) and thus were not representative of the types of documents I sought to analyze. Also, some of the licenses were business-to-business (B2B) in nature, rather than consumer facing. These choices pared down the 335 items to 326 items total. These plain text documents were analyzed at the sentence-level with topic modeling tools (e.g. Lexos or WE1S) to find word frequency, saliency and relevance, and topic distance that would inform a machine-readable document schema.

2.3.2. Supplemental Interviews and Information. Lastly, interviews with relevant experts on contracts supplement the analysis of this data as needed. The interviews were not

\textsuperscript{14} Michiel, de Jong, Personal Interview, April 11, 2019
chosen to provide a comprehensive picture such as the sample of ToS agreements, the literature, and the doctrine intended to accomplish, but rather to answer specific questions that arose in the writing of this project. The interviews and supplemental information were used to clarify particularities of practice, for instance, or to gauge the ways some of the issues with SFCCs are being solved in various groups with future iterations such as smart contracts and the crypto-community. By giving a voice to these communities, it provided for a more nuanced analysis of the ways these types of contracts are handled in practice, allowing for the exploration of practical solutions.

Interviewees that were vital in helping me form the research design of the project included Michiel de Jong, one of the administrators of TOS;DR and Dr. Scott Kleinman, a professor at California State University, Northridge and one of the developers of the text analysis projects Lexos and What Everyone Says (WE1S). de Jong provided me with the perspective of a consumer activist so that my solutions would speak to their needs, since they are the primary audience for the document-engineering solution. I make use of the database schema that was crowd-sourced from TOS;DR, and de Jong was able to provide me some background information on that work. I also spoke with Nasir Safdari, a machine-learning engineer from Rochester Institute of Technology (RIT), about the possibilities of using this technology for automatically tagging parts of SFFCs.

Interviewees that specialize in contracts included a strategic planning media executive, Albhy Galuten, who has participated in the writing process of these contracts and can speak to the decisions that go into how they are presented, Professor Sarah Korobkin, a legal contract scholar at UCLA whose expertise is in contracts and the drafting process, and Jeffery Carlisle, a partner of the Los Angeles law firm Lynberg & Watkins, who specializes in insurance contracts
and litigation. Lastly, a criminal investigator from the Internal Revenue Service (IRS) was interviewed in order to garner information on how contracts might be used as evidence in a criminal investigation, which is important when thinking ahead to future iterations of SFCCs. While some of these areas of knowledge may seem tangential to digital SFCCs specifically, these interviews were able to provide me with a more nuanced picture on how contracts function, the differences in drafting B2C and B2B contracts, and the attitudes of the drafters in colloquial terms. The questions asked referred to the drafting process, the digital environment, and the differences that occur for different levels of knowledge per each interviewee depending on their expertise (see Appendix C for questions).

2.3.3. Data Security and Analysis Statement. In order to meet the requirements of the Institutional Review Board (IRB) for the University of California, Los Angeles (UCLA), efforts will be taken to ensure all data related to the observations and interviews for this study remain confidential. Since this project deals with the prospective, ethnographic, systematic investigation of the behavior and attitudes of human subjects to find generalizable conclusions, some responsible precautions need to be made. All responses will be separated from identifying information and will be reported in coded language within my writing, observation notes, and transcripts to guarantee anonymity. Additionally, all activities will abide by UCLA’s IRB human subject research protocol, which requires an informed consent form (that ensures the subject confidentiality in managing and processing their sensitive data) be requested and obtained from each research subject all identities will be coded. A minimal risk consent form consistent with IRB standards (Appendix D) will be provided to all interviewees prior to the start of the interview.

2.4 Findings
This section briefly describes my findings in summarized form. These findings are outlined in more detail in the next chapter as Principles and Contributions (Chapter 3), and then demonstrated as analytic tools and solutions in Chapters 4-6.

2.4.1. Governance. The first finding, and the answer to research question #1, is that current SFCC governance is inadequate. The ineffectiveness of current solutions has been proven by recent empirical studies in legal scholarship (Marotta-Wurgler, 2011; Bakos, et al, 2014; Ben-Shahar and Schneider, 2014), yet these solutions are still often used as minimal notification requirements to satisfy courts and various enforcement statutes/orders (“Consent,” 2011)—a method which has been questioned by several legal scholars (Hillman, 2006; Radin, 2012; Kim, 2013; Leib and Eigen, 2017). Further, these same minimal requirements are currently being confirmed in authoritative documents such as the new Restatement of Consumer Contracts in the U.S. produced by the American Law Institute (Klass, 2017).

When viewed from the perspectives of other disciplines that study documents, records, and evidence, SFCCs fall short of measuring up to the standards offered by the professional practices that designate an assessment of these types of artifacts. Additionally, presumptions of knowledge and meaning on the part of adherents are insufficient in addressing the complexity of interpretation and engagement with texts that other disciplines have theorized about for decades. Lastly, and most vitally, issues of power are not adequately informed by notions of design, rhetoric, and performance, and rather rely on superficial renderings of the dynamic between the two parties of these contracts.

2.4.2. Usefulness. The second finding, and the answer to research question #2, is that a problem with SFCCs is a dematerializing of their document form, which can be described by the theories of documents, records, rhetoric, and diplomatics. This demonstrates the usefulness of the
discourse in the Theory Perspective to revise some of the conceptions in the Contract Perspective. While many of the issues around SFCCs are established as power and knowledge imbalances, egregious terms, and corporate overreach, the document form of this type of contract is often relegated to procedural issues. To satisfy these requirements in the legal arena, minimal presentation, including simply the ‘opportunity to read’ the contract or actions ‘consistent with consent,’ are allowed. Combined with affordances like unilateral modification, it leads to contracts that can be changed at any time, hidden in the margins, and agreed to simply by browsing. As the burden of proof to provide evidence in cases of dispute now rests on consumers (in terms of the Draft), whom are unlikely to document their engagement when forming the bargain, a lack of attention to the document form of SFCCs could produce the ‘perfect storm’ of corporate control of the presentation, version, and evidentiary information of these contracts. This leaves consumers without adequate awareness or recourse for the egregious practices. The document form of the contract is what is at play in these issues, and as an object of study, it provides an illuminating case of how the performance of a document can be used to some benefit. This leads to a theory of demateriality, or the rhetorical performance of the lack of documentary form that is used towards a beneficial end for the drafter of a document. This could range, even for a single type of document such as a SFCC, from deceptive design practices that are more intentional to seemingly benign bureaucratic processes that de-emphasize the importance of a text. This practice is a worthwhile area of study for digital SFCCs and other types of documents that benefit from its use.

2.3.3. A Document-Engineered SFCC. This finding, and the answer to research question #3, is that a document-engineered SFCC that is standardized through systematic processes and informed by a variety of disciplines and stakeholders, is likely to help solve some
issues for consumers. An informed experiment brief is provided that would demonstrate how SFCCs would benefit from a document-engineered standard, including in terms of its instability, inaccessibility, and unreliability.

A new standard or set of standards for SFCCs would provide them with the following characteristics:

a. Classifiable/Organizable
b. Preservable/Scrape-able
c. Trackable/Stable
d. Authentic/Reliable (in a diplomatic sense)
e. Processable/Machine-readable (i.e., json, csv, xml)

Metadata or markup requirements would aid in processing the document and allow for a controlled process of creation, classification, description and organization. These qualities would allow for the following consequences:

1. They could make SFCCs more accessible for consumer advocacy groups, which increases the chances of fulfilling the informed minority hypothesis\(^{15}\).

2. They could help stabilize the document for evidentiary reasons (e.g., dispute, burden of proof) and work against unnoticed changes (from unilateral modification); they could also enable automatic download onto a user’s keychain for preservation.

3. They might help standardize the form of the content for future methods of novel disclosure such as counterfactual explanation (Wachter et al, 2017) or probative requirements (outside the four-corners of the contract) in a Ricardian contractual sense.

\(^{15}\) This theory claims that a group of informed consumers could provide a counterbalance to push back on any negative aspects of SFCCs (Schwartz and Wilde, 1979). Recent empirical studies claim to prove that the informed minority does not exist amongst the current consumer population (Bakos et. al, 2014).
This might involve requiring that a few salient clauses link to additional information (e.g., documentation of contract formation, sample dataset that simulates the plausible, representative outcome of a clause) that could provide further explanatory purposes.

Other types of contracts (e.g., Qualified Financial Contracts [QFCs], insurance contracts, and many other business-to-business [B2B] contracts) have designated documentation requirements, so it only makes sense that a type of contract that has been critiqued for its inherent unfairness is subject to the same treatment. The job of a standards technical committee in this context would be to explore previous models of this genre, revise and pull schema from these and other examples of contracts, as well as previously developed standards for SFCCs (e.g. OAISIS eContracts standard from 2007\textsuperscript{16}).

\textsuperscript{16} http://docs.oasis-open.org/legalxml-econtracts/CS01/legalxml-econtracts-specification-1.0.html
Appendix A—Contract Perspective

Statutes and Authority


“Restatement of the Law, Contracts.” (1932). American Law Institute


Zombie Contract Scholarship


Appendix B—Theory Perspective

Documents and Records Standards


Document, Text, and Information Scholarship


Appendix C

Questions on B2B contract law (Prof. Sarah Korobkin and Jeff Carlisle)

1. With regard to contracts, how, in your opinion, has agreement changed/not changed in the digital environment?

2. How has the concept of meeting of the minds changed/not changed?

3. How has the concept of freedom of contract changed/not changed?

4. How have aspects of procedure (in terms of procedural unconscionability) changed/not changed?

5. How has ‘genuine effort’ of communicativeness changed/not changed?

6. In general terms, what are the major differences between how two informed parties might draft a contract versus one informed party and one naïve party?

7. In general terms, for contracts with one informed party and one naïve party, how are levels of awareness or understanding conceived/measured? How do they come into the drafting of the contract?

8. Do standard form contracts (or boilerplate provisions) have any advantages or disadvantages in the digital environment?
Questions for on Document Engineering (Dr. Scott Kleinman and Michiel de Jong):

1. How many documents are needed to form a useful corpus for processing?

2. What might be the parameters for this corpus collection?

3. What are the most useful markup languages, machine-readable document formats, or other standards for processing and interpreting a corpus of documents?

4. What would be a possible workflow from the language processing tools to the automated tagging and implementation of a schema?
OpenZeppelin Questions (Santiago Palladino, 12/12/17)

1. What features of the contracts do you use to organize the documentation on the library/repository? (this page-- http://zeppelin-solidity.readthedocs.io/en/latest/)
2. Do you consider previous forms of standard form contracts when identifying or verifying your contracts? Does this idea come into play at all in its documentation or organization? Do you think this comparison would help translate some of the ideas of the contracts or make them more confusing?
3. Do you consider smart contracts to be a wholly different type of ‘document’ than previous types of contracts? Could you explain to me (in general) what you think are the similarities or differences?
4. On your home page, you state “Reduce the risk of vulnerabilities in your applications by using standard, tested and community-reviewed code”—could you define “standard,” “tested,” and “community-reviewed” for me in this context? What about “industry standard” (used elsewhere)?
5. What documentation features should a consumer/user of smart contracts be aware of when shopping for authentic or secure code for a contract? What knowledge bases (code, financial transactions, smart contracts specifically) would someone need to posses in order to be able to write or verify a contract? What rhetorical features—what do you use to signify that your contracts are better, for instance—should they be able to recognize?
6. When validating your contracts, is it mostly code debugging? Do recordkeeping practices, like compliance efforts, ever factor in at all? Are ideas like retention/preservation of the record, custodianship, life cycle, etc ever considered?
7. Do you view yourself as a curator of the code? Or are you simply facilitating a platform that uses a community and practice to verify the code?
8. Are any codes or best practices considered when creating the library or documentation for it? From what disciplinary areas (computer science, law, recordkeeping, etc) is expertise utilized?
Appendix D

IRB Minimal Risk Form

University of California, Los Angeles

CONSENT TO PARTICIPATE IN RESEARCH

Preventing a Zombie Contract Apocalypse with an Document-Engineered Approach

Kristin Cornelius Way from the Information Studies department at the University of California, Los Angeles (UCLA) is conducting a research study.

You were selected as a possible participant in this study because of your working knowledge and expertise with the documentation of standardized contracts. Your participation in this research study is voluntary.

1. Why is this study being done?

To better understand the records management, documentation, and evidence requirements for standard contracts to see if their inherent qualities measure up to current standards.

2. What will happen if I take part in this research study?

If you volunteer to participate in this study, the researcher will ask you to do the following:

- One time participation in an interview that will be conducted by the researcher of this study.
- 1-2 possible follow up interviews.
- The interviews will each last approximately 45 minutes.
- The researcher will come to a location of your choice to conduct the interview.
- The questions will be about your (possible) ways of working with smart contracts in your field.

3. How long will I be in the research study?

Participation will take a total of about 1 hour for the initial interview. Follow-up interviews may be suggested.

4. Are there any potential risks or discomforts that I can expect from this study?

None

Are there any potential benefits if I participate?
You may benefit from the study by gaining a better awareness of the documentation and evidence needs for contract technology as they integrate into our current information systems and regulatory institutions.

The results of the research may help inform scholars of technology and law about some methods for studying standard form contracts, as well as some regulators about some possible regulations and standards going forward.

**Will information about me and my participation be kept confidential?**

Any information that is obtained in connection with this study and that can identify you will remain confidential. It will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of coding interview transcripts with encryption strategies.

**What are my rights if I take part in this study?**

- You can choose whether or not you want to be in this study, and you may withdraw your consent and discontinue participation at any time.
- Whatever decision you make, there will be no penalty to you, and no loss of benefits to which you were otherwise entitled.
- You may refuse to answer any questions that you do not want to answer and still remain in the study.

**Who can I contact if I have questions about this study?**

If you have any questions, comments or concerns about the research, you can talk to the one of the researchers. Please contact:

Kristin Cornelius Way at (805)908-1836 or krisbcorn@ucla.edu

- UCLA Office of the Human Research Protection Program (OHRPP):

  If you have questions about your rights as a research subject, or you have concerns or suggestions and you want to talk to someone other than the researchers, you may contact the UCLA OHRPP by phone: (310) 206-2040; by email: participants@research.ucla.edu or by mail: Box 951406, Los Angeles, CA 90095-1406.

*You will be given a copy of this information to keep for your records.*

**SIGNATURE OF STUDY PARTICIPANT**

_________________________________________________________________________________
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**SIGNATURE OF PERSON OBTAINING CONSENT**

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Chapter 3: Principles and Contributions

A spectrum of contracts might fall under the broad categories ‘standard form’ and ‘consumer contract,’ with the boundaries between these and other specific genres overlapping to varying degrees. Succinctly, the typical features of a standard form contract include one drafter and many adherents, with limited negotiation between parties as one has substantially more knowledge, resources, and power than the other. This practice is justified by the conventional use of similar contracts, convenience and efficiency, and the freedom of contract principle, as discussed in more detail in other chapters. Consumer contracts could be put in contrast with business-to-business contracts that have two ‘sophisticated’ parties, and thus more negotiation and careful drafting, to highlight their one-sidedness and minimal presentation conventions; however, even though each distinct manifestation of a SFCC might express these features to different extents, the same concepts and discourse applies. For instance, the degree to which one party has more knowledge and resources changes with the conventions associated with each type of contract. A car purchase might make use of standard form terms yet point out one or two salient pieces of information through disclosures such as car loan terms and payment amounts. There is a higher degree of communication and negotiation with this specific type of consumer contract than a Terms of Service (ToS) agreement on a web platform primarily due to the fact that consumers expect to know these pieces of information before they make their purchase. Despite these differences, both types of contracts are governed by the same concerns—did the adherent have the chance to know the terms? Were there terms that were unexpected? Were notification and agreement choices clear? Thus, the test of this project is to consider whether the governance that surrounds this type of contract is adequate for its many now digital forms.
This project proposes two contributions to this conversation around SFCCs: 1) I make an argument that confirms, as others have suggested (Radin, 2012; Kim, 2013), that this one type of contract, the SFCC, subverts some of the foundational tenets of contract doctrine and thus needs some additional type of safeguard that may sacrifice sacred contract principles such as ‘freedom of contract’; and, 2) I argue that the discourse around these contracts would benefit from being revised by the theories on documents, records, evidence, and user engagement. This second contribution includes a theoretical term that is useful in articulating the issues not only with SFCCs, but also more broadly across the spectrum of digital documents. This term—

demateriality—is situated in studies of textual materiality and describes the rhetorical move that makes use of a projection of immateriality to some benefit for the author. This analysis ultimately includes rethinking the format, documentation and presentation, markup, metadata, and potentially some aspects of language or extra supplemental information of the genre of SFCC.

Additionally, in making these contributions and the describing the problems with these types of contracts in their current state, I provide a third contribution for consumers as an early solution: 3) a proposal for the creation of a document-engineered SFCC that would create a more stable, more reliable, and more processable memorialization of the bargain for the party (i.e., the adherent) that is at a disadvantage.

Altogether, these three contributions deliver a confirmation of the issues with SFCCs, a revised way to describe these issues that points to the design and documentation practices of the drafter, and a set of regulatory solutions that are standardized by a variety of stakeholders and with the outcome of a new potential for an informed minority. They are based on three shifts in
concept from some of the issues presented in the Contract Perspective, called Principles, explained next.

3.1 Principles

3.1.1. More standardization, less ‘standard practice.’ Standardization in this sense relies on practices in regard to documents, information, and organization that have been fine-tuned over time and has accessibility and knowledge for the general public in mind. This is a change in ambiguous notions of ‘standard practice’ that permeate contract discourse currently and are determined by the drafters and corporate entities, or those with the knowledge and resources to draft in their favor. Rather, the approach proposed by this project would make use of the expertise of a variety of stakeholders, including those who study user-consumers and documents, and would standardize so that those organization that have the impetus to safeguard these contracts for consumers are serviced. This would allow for more information to be gleaned from these documents from those interested parties such as consumer advocacy groups in order to provide a voice for consumers. It could also increase consumer trust both in these contracts particularly and the service provider more generally.

3.1.2. More documentation, less integration. Documentation in this sense refers to a re-enlivening of the materiality of the contract document, with practices such as description, “bibliographical” information, with a critical design approach to display and presentation. This is a turn from the ‘integrated’ (in a legal sense) contract documents that are afforded ideal textual status as a “fully [...] final and complete expression of all the terms agreed upon between (or among) the parties,” which allows SFCCs to be in the form the drafter prefers (Rowley, 2011, p. 2). Instead the document-engineered SFCC would be documented—a rematerialized image for the user-consumer through its understandability, accessibility, and presence as a text in the
digital environment. This includes documenting changes and modifications in more practiced and developed manners than obscure and ineffective notifications, the parameters and criteria for which are also determined by drafters. It also includes a range of practices that could have benefits for consumers, including putting the contract into a form that allows for processing and granular documentation, with markup that relays semantic information and has the potential for pinpointing areas of the contract that need further regulation.

3.1.3. More explanation, less notification. Explanation refers to an actual engagement with reception and accessibility to knowledge based on alternate approaches, including counterfactual explanations that narratively explain a set of complex information through the relationship of two variables (Wachter et. al, 2017), or decision provenance that shows a history of decisions made by an artificial intelligence (AI) system, which could be useful for certain types of contracts (Singh et. al, 2018). This is a move away from the conventional sense of notification that has been proven to cause ‘blindness’ to its effect for the average consumer population. Explanatory mechanisms would be made possible through the documentation efforts of SFCCs that could prompt drafter compliance, in terms of identifying the clauses that need further information to enact these explanations, which would allow regulators to locate only those terms so problematic that most consumers would not agree in the first place. Although this is already supposed to be a safeguard for these contracts, most consumer-adherents do not actually understand the terms or are deceived by minimal presentation efforts such as deceptive language that nudge them toward privacy intrusive options (“Deceived by Design,” 2018). Rather, more novel types of communication and explanation should be produced so that consumers or groups who actually want to understand have the opportunity, and notions such as ‘unexpected terms’ more accurately reflect consumer knowledge.
3.2 Contribution #1: To the Contract Perspective

This project makes two intertwined contributions to the Contract Perspective. The first contribution is a solution for the issues of SFCCs in the form of a document-engineered standard, which makes sense given the imbalance of power and resources of the two parties. Ensuring the stability, authenticity, and reliability for this document is of utmost importance toward evening out this imbalance. The second contribution is a more radical argument that claims that this certain type of document would benefit from not only a standardized form, but also standardized language and terms that could be identified and then regulated based on a markup schema that must be complied with on the part of the service provider or drafter. It is also possible that compliance is not needed if a technology is created that can automatically identify and tag the language of these documents after the fact. Regardless, freedom of contract is sacrificed to some extent when aspects of the contract are regulated, and even more so if the language itself is standardized. This argument is controversial due to the sacred right of freedom to contract that is viewed by many in the legal sphere as a cornerstone of democracy. However, since this is a document that performs as standard anyway, these solutions do not seem so unbelievable.

Similar types of regulation and standardization processes are had for other types of contracts (e.g., B2B, insurance, finance); thus, it makes sense that this one type that has a noted set of issues that hinder a large population of consumers also be subject to similar processes.

Essentially by comparing the discourse around SFCCs with that of the disciplines that study documents, records, evidence, interpretation, meaning, rhetoric, and performance, it is revealed that three ‘myths’ are at play in the Contract Perspective (i.e., Myth of Literacy, Myth of Engagement, and Myth of Equality). Identifying these myths is another contribution to this
perspective because it allows for these explanations to be revised in light of revised methods for assessing these contracts and for explorations into new solutions that would benefit consumers.

Several times a week, we click ‘agree,’ “spawning” and contributing to the standard practice of zombie contracts online and in digital environments. According to Leib and Eigen’s (2017) article, although these zombie contracts may appear as archetypal contracts on the surface, they have “several distinct features that sit in very deep tension with contract [doctrine]” (p. 82) Interpretation and presumptions of knowledge have an interesting history with SFCCs—sometimes these assumptions are the only considerable factor, and other times, adherent knowledge does not seem to matter at all. For instance, procedural checklists, including basic design as presentation (e.g., hyperlink in the margins), and consent mechanisms (e.g., “I Agree” button) have stood in for actual knowledge of the terms of the contract. The concepts ‘duty’ or ‘opportunity’ to read and minimal standards of agreement have been considered sufficient in many cases (Hillman, 2010).

This project claims that by highlighting that the inconsistencies around the discourse on SFCCs, including myths that are perpetuated to varying degrees, we can see that this discourse is far from settled, and no consensus has actually been reached. Thus, the reasoning goes that since the discourse around these contracts does not sufficiently assess consumer knowledge, and when it does address the issue does not adequately account for a safeguard where it is lacking, some of the vital tenets of contract formation—meaningful choice, consideration—are not met. The digital memorialization of SFCCs only exacerbates the issue because it facilitates minimal presentation requirements in the digital environment and is situated for convenience, rather than trust. Therefore, for these contracts to still be legitimated as contracts, a solution needs to be had that would ultimately safeguard against drafter overreach. I am not the first researcher to note
this paradigm, and my contribution to this conversation begins with an identification of the Myths so that the discourse can be more easily understood outside the realm of legal scholarship.

However, the more significant contribution to the legal conversation is that the contract form should be regulated. This is where I differ from many legal scholars who support minimal presentation requirements and those who suggest conventional notification or disclosure methods. My solution of document-engineering is novel in that it suggests that the contract should be treated as a document, a record, and as a piece of evidence in the most standardized, rigorous sense. This includes looking at other types of document and records standards that promote a set of compliance requirements or at least best practices, as well as looking at performances of rhetorical authority and reliability. It considers the process of creation, the ability to document changes, its ability to be retained or preserved, and other documentation efforts, such as markup or metadata standards, that would allow for the information to be organized and understood more fully. It suggests that regulating this one aspect of this type of contract, although sacrificing some of the freedom that most contracts are generally allowed, would ultimately benefit consumers and make them fairer for this disadvantaged party. Further, this regulation is warranted as some aspects of contract formation are missing in this situation. Knowledge of the terms, formation based on a mutual agreement, meaningful engagement and memorialization, and exchange are traditionally needed for valid contract formation, for instance.

Ultimately, I argue the tenets of contract doctrine that have been refined and studied over many centuries should not be abandoned in favor of new types of contracts. Moringiello and Reynolds (2013) claim that traditional contract law is sufficient to handle new forms of contracting such as digital SFCCs. The authors, for instance, claim:
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. (p. 499)

This statement can be viewed in two ways, interestingly. In one sense, it may seem naïve or even neglectful to assume that contract doctrine must not change in order to accommodate new iterations of zombie contracts that have proven detrimental effects for consumers. In another sense, however, if the law changes in such a way that they are accommodated, such as has been claimed in regard to the new Restatement of Consumer Contracts, some of the issues with SFCCs might be codified further and exacerbated in the future. Many of the governance decisions that afforded them legality were out of a perceived need to prevent a commerce apocalypse that might have occurred with inefficient digital contracting; without a rigorous consideration of the other party, however, and of the document form, these contracts can become dangerous, data-eating zombies, ever powerful, surviving off of the flesh of the unknowing adherent.

3.3 Contribution #2: To the Theory Perspective

This section describes the contribution made to the disciplines that make up the Theory Perspective. This perspective includes document and textual studies, information studies, bibliography, rhetoric, diplomatics, and materiality studies. It describes the contribution as a theoretical apparatus that is part of a lineage of studies of textual-materiality specifically, and also offers SFCCs as a site of analysis for implementing theories of documents, records, and evidence, as well as the organization of information and knowledge, and interactions with users.
This theoretical apparatus is most useful for those scholars that research technology and text, organization and documentation, and the social implications of these practices. It might also be of interest to scholars of rhetoric and record keeping. The critical lens offered studies the rhetorical practice of demateriality, which identifies the move of minimizing a document’s material performance to some end—a move that is seen in the study of SFCCs, but that also may apply more broadly to the study of many different types of documents in varying contexts.

This theory of demateriality is situated in materiality studies of technology and cultural artifacts (Drucker, 2009), and more specifically compliments the lineage of textual materiality (Kirschenbaum, 2008; Blanchette, 2011; Drucker, 2013) that argues for a return to certain tangible or embodied aspects of the text against tropes of immateriality that appeared after the digital age. While conceptually, it is most similar to theories of materiality, and rhetorical performance, the practice of demateriality becomes most apparent under the lens of disciplines that are concerned with documents and their performances of authority:

- a. Diplomastics assesses the authenticity and reliability of an official document, and articulates the various channels and practices by which it gains legitimacy (e.g., Duranti, 1989, 1994);
- b. Bibliography and textual criticism offer standards of editing and related documentation practices (e.g., Greg, 1950; Bowers, 1978; Tanselle, 1978; McGann, 1992);
- c. Records management provides compliance requirements and measures of quality (e.g., International Standards Organization [ISO] 15489 standard for digital business documents);
d. Theories of evidence allows for practical specifications in cases of dispute e.g., Furner, 2004; Yeo, 2007; Anderson and Twining, 1991;

e. Theories of documents and information help with documenting contracts appropriately by type, with the most useful and ethical classificatory and descriptive elements (e.g., Briet, 1951/2006; Buckland, 1991; Day 2001, 2014).

In other words, these theories and practices become the standard by which the rhetoric of demateriality can be assessed. Since these theories offer a measure of materiality to documents—they include ‘best practices’ that can provide the document with authenticity and reliability as a record, informativeness as data, stability as a catalogued item, and authority as evidence—they are also a place to start when assessing its rhetorical performance. More traditional practices of critical rhetoric theory, such as exigence and situation analysis, appeals to emotion and logic, and describing argument strategy, are also used in describing the process of demateriality.

For the SFCC document, a study of the practice of demateriality places the onus on drafters to revisit the idea of an authentic and reliable document, revealing its flawed performance in these regards as one of rhetoric—meaning its minimal documentation could be purposeful—and thus calls for a solution to re-materialize the document. This solution is presented next as “Contribution #3: For Consumers.” Describing performances of demateriality might also be useful in analyzing other types of digital documents that minimize their performance to some beneficial effect. This could range from revealing the way that important documents are overlooked or summarized, or the way that certain documents perform as authentic without the materialization of the signifiers that would deem it so. This could be used to describe many types of problematic documents on the internet, including fake news articles, redacted or summarized reports that are of public interest, doctored images, and others.
Since this project is toward a degree in Information studies (I/S), I will make the case for my contribution to this particular field explicit. I/S is an interdisciplinary field with topics spanning a range of disciplines and perspectives joined together through critical scholarship on information science primarily, but also includes the consideration of scholarship on technology, policy, and practice (e.g., Winner, 1980; Roberts, 2016, Cornelius, 2018), users and their engagement with technology (e.g., Agre, 1995, 1997), algorithmic criticism (e.g., Pasquale, 2015; Noble, 2018), and the effects of technology on society as a whole (e.g., Castells, 1996, 2007). More specifically, I/S looks critically at the organization, presentation, and representation of information, but current incarnations might study archives, museums, libraries, website platforms, or records management systems in terms of how users interact within these paradigms, how information is described and classified (Furner, 2011). As with most versions of disciplines that include “Studies” in their title, the department at UCLA additionally promotes an explicit social justice agenda with their criticism. This project fits that description as it promotes an approach that is centered on defending the rights of consumers and users in digital engagement with SFCCs. Put another way, this perspective that is situated in library sciences and is focused on accessibility of information for users more generally might be the most appropriate lens to balance out the legal scholarship and authoritative texts that tend to facilitate the needs of businesses with these asymmetric contracts.

As the discourse around SFCCs specifically addresses ideas of standardized knowledge, disclosure, and producing information about other, more detailed information (i.e., disclosure notices, salient versus non-salient information), exploring the theoretical issues of the concept of standardization and presentation of knowledge is an important lens for this discussion. It is also
useful to view standardization practices as a product of industry to uncover some of the motivations behind the governance of SFCCs.

Beyond the fact that the content of the current, common ToS agreement generally deals with information issues such as data collection, copyright claims, and acceptable use policies that are implicated in other types of information studies scholarship. ToS agreements are upheld as contracts and contract doctrine makes assumptions about knowledge (i.e., of the parties), of documents and documentation (i.e., determinations about what counts as the ‘text’ of a bargain), as well as engagement (i.e., about the process of encountering a contract, and the opportunity to read and familiarize oneself with it), which describes user behavior in a digital environment. In other words, both the study of the substance of the contract and the study of the contract as an object or document are of interest to information studies researchers.

For substance issues, such as interpretation, assumptions, and locations of knowledge, a useful exploration of these topics comes from the idea of a humanistic theory of interface studies laid out by textual theorist Johanna Drucker (2011, 2013). Drucker (2013) calls for a return to the humanistic attention to interpretation and promotes the idea of performative materiality wherein the production of a meaning of a text lies within the interpretation of a subject. Coming from the practice of textual criticism and materiality studies, where the formal properties of a text are the object of study, or its “apparent organization, composition, use of media and materials” and the study of the material elements and evidence of the text as object (par. 22). Drucker cites more recent scholarship such as that of fellow scholar of artifactual materiality Matthew Kirshenbaum (2009) that delineates between the formal and forensic composition of a text. The former refers to the organization of elements on a page that we recognize as a form, and the latter is the actual media (e.g., paper, digital bits) evident in its creation. Drucker warns that
when literal materiality that “suggests that the specific properties of material artifacts or media can be read as if meaning were a self-evident product of form,” it “falls short of providing an adequate basis for critical analysis of the ways materiality works” (par. 16). Viewing the user as a ‘subject’ that forms meaning through an interpretive event expands notions of interpretation to include the imagination—which is one of the beneficial aspects of humanistic inquiry (Gutting, 2012). These imagined readings presume the “specific structures and forms, substrates and organizational features, are probability conditions for the production of an interpretation” (Drucker, 2013, par. 17). Put a different way, the meaning of the object is located in its reading, although probability conditions provide potential outcomes for the reading and we can use these probability conditions to describe the imagined readings. A study of the practices of demateriality extends this project by additionally considering the exigencies and rhetoric of the entities that situationally promote certain types of readings. This study is a combination of concern for the interpretation of the reader and a type of absence of a reading. With SFCCs, it becomes clear that even if a reader is not aware of that absence, their interpretation or lack thereof is still enacted without their awareness and they are still subject to its consequences.

Interpretation is one of the topics of discussion concerning SFCCs in particular since it is well known that one party does not usually read the terms of the contract. The justification behind the allowance of terms that one party has not read is a determination that the terms will be interpreted as other similar terms in similar contracts as long as it is standard practice to use those certain terms. Moreover, “without regard to [the adherent’s] knowledge or understanding of the standard terms of the writing,” (“Restatement,” § 211, 1981) it is acceptable to use those terms. This argument becomes problematic when most of the dominant corporate entities that are the drafters of these contracts are monopolistic and thus lack the oversight competition would
Another possible solution called ‘the informed minority hypothesis’\(^{17}\) claims that even a small minority of adherents might be able to remedy unfair terms. Unfortunately, most imaginings of the adherent’s understanding either do not matter or are subsumed in the exigencies associated with efficient contracting.

Instead it might be possible to consider that engaging with and understanding the contract—seeing it as a ‘material’ object with consequences—could be a beneficial goal of contracts, even, and perhaps especially, for SFCCs. The potential transfer of salient information to the adherent if their probabilistic reading is considered might work toward reconciling the differences in capacity, literacy, and knowledge. In practice, this might mean that “meaningful disclosure,” for instance, works toward disrupting familiar forms such as the annoying cookie notification, and assent means understanding the contract within the context of other information. Drucker (2013) claims that “more attention to acts of producing and less emphasis on product” help promote “the creation of an interface that is meant to expose and support the activity of interpretations, rather than to display finished forms,” which might be “the antidote to the familiarity that blinds us” (par. 42).

A topic of concern in determining the validity of a contract is whether or not the contract is the literal text of the document or the facts and circumstances around the document that produce the bargain. Within this topic lie questions of documentation and theoretical questions about the ontological nature of ‘documents’ more generally. According to Ben-Shahar’s descriptions, the ‘dematerialization’ of the document is equivocated with convenience for the

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\(^{17}\) The informed minority hypothesis has been called the “cornerstone” to a law and economics approach to SFCCs and claims that if a small minority of users reads and understands a SFCCs, it would provide the oversight needed to ensure the fairness of these contracts. Issues with this hypothesis include that it is indeterminate what percentage need to be informed (D’Agostino, 2015), and regardless, studies (Bakos, et. al, 2013) have found that only one or two customers even attempt to read a ToS agreement as it is more rational and economical to find the information another way.
user, when the exact opposite should be true. If a document is going to legitimized and afforded the right to dictate the terms of a bargain, it should perform its materiality in such a way as to prove its presence to the reader; it should project authenticity and reliability according to standards of those characteristics that have been refined over centuries of records study (Duranti, 1989, 1994), and should project these characteristics appropriate to its affordances. I/S scholarship is a well-suited method to this task—document theorists have grappled with ontological depictions of documents, diplomatics and records management scholars have sought to understand the characteristics of documents and records that deem them authentic and reliable, and studies have been conducted on user engagement with documents in an information system.

Similar to Drucker’s return toward interpretation and the subject, a group of document theorists similarly revised the work of Otlet’s and Briet’s exploration of the question “what is a document?” The work of Michael Buckland (1991, 1997, 2013) for instance, locates the document in the subject’s process of becoming informed. Once the reader has absorbed the knowledge and their knowledge-state has changed, the document becomes a piece of ‘information.’ Other scholars (e.g., Frohmann, 2009; Smith, 2012, 2014; Ferraris, 2013) have viewed documents through their agency and affordances—as ‘social objects’ that respond to situations and exigencies within certain paradigms of practice. Locating the document in the interpretation of the user and critically viewing the forces that determine the boundaries of the document and transmission process of information from drafter to adherent becomes necessary practice toward solving the inequities of these contracts. Theories of rhetoric including a consideration of the rhetorical situation and the rhetorical man (versus the serious man) (e.g., Fish, 1989, 1990; Bazerman, 2003; 2012) provide a descriptive vocabulary for these analyses.
This body of work that I am coalescing under the heading I/S that deals with documents and their engagement with users in this context in effect is espousing upon consumer rights issues. In ignoring this body of work, the stakeholders with more power are justifying practices that are evidenced to either be ineffective at best and deceptive at worst for adherents. In the attention economy that is the networked internet, every second of ‘onsite time’ is quantified and commoditized, so the argument goes that users will not want to spend this precious time reading or understanding a contract; it is not ‘rational,’ claims Ben-Shahar and Schneider (2014), that consumers would spend their time reading these agreements. But with an ignorance of the body of work that might provide a clue towards how engagement might actually be a meaningful experience for users, it might be safe to say that true effort toward engagement and accessibility of information for users has not actually been put forth. Even if the vast majority of users cannot be reached, perhaps the informed minority hypothesis might be achieved, and that might provide a safeguard to the future egregiousness of these contracts.

3.4 Contribution #3: For Consumers

One potential solution might be some type of regulatory technology to provide more meaningful disclosures and safeguard against corporate overreach. A similar technology has been recently experimented with the researchers at the University of Oxford and the Turing Institute at University of Cambridge. Dr. Sandra Wachter, Dr. Chris Russell, and Dr. Brett Mittlestadt explain how artificial intelligence (AI) might be explained by “counterfactual models” that take various pieces of information and put them into play, allowing the user to engage with the terms of the contract to see how the salient variables result in different outcomes. Nodding toward the politics of disclosure and other efforts of corporate entities to explain AI, Russell explained at a recent talk how recourse is what companies want to give
people “without causing a riot,” but real explanations will often cause anger and show “something should change in the world”\(^ {18}\). In any regard, opportunity to engage with the contract might help revise the presumed idea of the adherent’s ‘knowledge’ or understanding of the terms. Regardless, as contracts move toward more ‘smart’ iterations, there will be room for further topics of research within I/S including a study of the schematics or organization of information that may be used in algorithmic transacting implementations.

A new standard or set of standards for SFCCs would provide them with the following characteristics:

a. Classifiable/Organizable

b. Preservable/Scrape-able

c. Trackable/Stable

d. Authentic/Reliable (in a diplomatic sense)

e. Processable/Machine-readable (i.e., json, csv, xml)

The ineffectiveness of current solutions has been proven by recent empirical studies in legal scholarship (Marotta-Wurgler, 2011; Bakos, et al, 2014; Ben-Shahar and Schneider, 2014), yet these solutions are still often used as minimal notification requirements to satisfy courts and various enforcement statutes/orders (“Consent,” 2011)—a method which has been questioned by several legal scholars (Hillman, 2006; Radin, 2012; Kim, 2013; Leib and Eigen, 2017). Further, these same minimal requirements are currently being codified in authoritative documents such as the new Restatement of Consumer Contracts in the U.S. produced by the American Law Institute (Klass, 2017). If this Restatement is as influential as the previous two (“Restatement,” 1932; “Restatement,” 1981; Murray, 1982), these new claims will be solidified as the measures against

\(^ {18}\) https://www.youtube.com/watch?v=iZM4_YNw4Mw
which most businesses will be assessed in order for valid contract formation. This matter is now urgent as the new Restatement was approved by its council members last October (2018) and will be voted on by the rest of the membership this coming May (2019).

Instead, metadata or markup requirements that would aid in processing the document would allow for a controlled process of creation, classification, description and organization. These qualities would allow for the following consequences:

1. They could make SFCCs more accessible for consumer advocacy groups, which increases the chances of fulfilling the informed minority hypothesis\(^{19}\).

2. They could help stabilize the document for evidentiary reasons (e.g., dispute, burden of proof) and work against unnoticed changes (from unilateral modification).

3. They might help standardize the form of the content for future methods of novel disclosure. This might involve requiring that a few salient clauses link to additional information (e.g., documentation of contract formation, sample dataset that simulates the plausible, representative outcome of a clause) that could provide further explanatory purposes.

Other types of contracts (e.g., Qualified Financial Contracts [QFCs], insurance contracts, and many other business-to-business [B2B] contracts) have designated documentation requirements, so it only makes sense that a type of contract that has been critiqued for its inherent unfairness is subject to the same treatment. The job of a standards technical committee in this context would be explore previous models of this genre, revise and pull schema from these and other examples of contracts, as well as previously developed standards for SFCCs (e.g. OAISIS eContracts

\(^{19}\) This theory claims that a group of informed consumers could provide a counterbalance to push back on any negative aspects of SFCCs (Schwartz and Wilde, 1979). Recent empirical studies claim to prove that the informed minority does not exist amongst the current consumer population (Bakos et. al, 2014).
standard from 2007\textsuperscript{20}). Schematics will additionally be formed bottom-up from the data analyzed from a corpus of SFCCs collected by TOSBack.org from 2013-2019\textsuperscript{21}.

Ultimately, this proposed set of standards would be a significant step forward toward future possible regulatory measures that would rectify egregious practices associated with SFCCs. Enforcement can rely on the standards created, and through documentation standardization, we can learn more about these ubiquitous documents that have so much influence in our lives. The regulation of any aspect of the contract, even just its document form, may seem to infringe upon notions of freedom of contract; however, it is suggested in this work and by others (Radin, 2012; Kim, 2013) that those aspects of contract have already been sacrificed in the SFCC arrangement. Thus, rather than confirm these sacrifices with dictums in the Restatement, this project offers solutions that work toward evening out this power imbalance by providing a type of ‘voice’ for the consumer/adherent in the form of accessible and standardized documents.

The specific phrase “freedom of contract” might originate from Sir Henry Sumner Maine’s well-known passage from Chapter V of \textit{Ancient Law} (1861), in which he characterizes the evolution from status (an ascribed position) to contract (a voluntary stipulation)\textsuperscript{22}. His lengthy description is worth quoting in full:

\begin{quote}
The movement of the progressive societies has been uniform in one respect. Through all its course it has been distinguished by the gradual dissolution of family dependency and the growth of individual obligation in its place. The Individual is steadily substituted for
\end{quote}

\textsuperscript{20} http://docs.oasis-open.org/legalxml-econtracts/CS01/legalxml-econtracts-specification-1.0.html

\textsuperscript{21} https://tosback.org/

\textsuperscript{22} http://www.gutenberg.org/files/22910/22910-h/22910-h.htm
the Family, as the unit of which civil laws take account. The advance has been accomplished at varying rates of celerity, and there are societies not absolutely stationary in which the collapse of the ancient [organization] can only be perceived by careful study of the phenomena they present. But, whatever its pace, the change has not been subject to reaction or recoil, and apparent retardations will be found to have been occasioned through the absorption of archaic ideas and customs from some entirely foreign source. Nor is it difficult to see what is the tie between man and man which replaces by degrees those forms of reciprocity in rights and duties which have their origin in the Family. It is Contract. (par. 100)

Maine’s description depicts the attitude towards contract during the 19th century in which the replacement of family and status obligations are replaced by the individual and obligations they freely choose to engage with.

In 1917, Nathan Issacs in the “first extended development of the adhesion doctrine" (Leff, 1967), argued against what he saw was an equating of ‘contract’ with ‘agency’ in an effort to counter the status-to-contract principle as a form of inevitable progress. He describes how the line from status to contract is not one that is simple, binaristic, or linear, as Maine suggests. Instead, he notes that what is actually being discussed is a progression from individualized relations23 to standardized relations, in which, throughout legal history, he states “has room not merely for one single line of progress in one direction or the other, but for a kind of pendulum movement back and forth between periods of standardization and periods of individualization.”

23 To clarify, the term “individualized” here is being used to describe the customized relationships within each status relationship, not the Individual that is associated with liberation by standardization.
In discussing standardization, he identifies the historical-progressive ideal of moving from status to contract as a myth, which is also worth quoting in full to provide a foil to Maine’s description:

That medieval hardening of relations known as feudalism was also, in its beginnings, a progress from contract to status. And those whose philosophy of history is a belief in the gradual development of liberty through the principle of contract have been forced to regard feudalism as a pause in human progress, an armistice in the war between two opposite ideas, status and contract—at best, a compromise, an exceptional, disturbing element in their whole scheme. Perhaps if we were able to go back to what we accept as standard family relations, we should find their basis, too, in the hardening of individual practices into rules. Perhaps even back of caste there was a progress from the individual non-standardized conduct to the standardized. (p. 40)

Standardized contracts, then, even more curiously fit within Issacs’ swinging pendulum model as they would seem to promote the utmost enforced equality through standardization, yet with the current state of modern SFCCs, the standardization benefits the powerful rather than those with less power, solidifying these discrepancies. At the time Issacs was writing, standardization was not viewed as a regulatory measure as it sometimes is today; instead, it was seen as a further push toward more accessible transacting for those with less power, where the freedoms and obligations of individuals are cemented as new ways of freely expressing their ability to transact. In this way, at this time, standardization was seen as an extension of individual liberty by further promoting equality—an act of standardizing relations for those with less power so that these relationships cannot inappropriately benefit one party over the other.

Issacs (1917) noticed very early on that this negotiation would be an issue in future contractual relationships. He noticed how these relationships were “being displaced by uniform
corporations organized under general laws” and how “corporate powers are purely affairs of status” (p. 45). Particularly interesting for this project, Issacs describes how an “ignoring of forms is the triumph of the contract principle within the history of contracts,” meaning that the freedom of contract principle has most importantly continuously obscured the form of the contract, which would attempt to provide some type of evidence for the intention of the parties, in favor of an idea of seeking the truth of the contract in “the meeting of free minds” supported by the “ideal of individual freedom in the negative sense of ‘absence of restraint’ or laissez faire” (p. 47). In other terms, freedom of contract has throughout history facilitated the ambiguous notion of truth in a contract rather than a move toward the standard practice of something concrete and based on documentary forms and practices. He invokes his pendulum model once again by showing how movement toward subjectivity/individualization and objectivity/standardization is not an extreme one way or the other, but rather a movement between the two; neither ‘status’ nor ‘contract’ (or ‘individualization’ or ‘standardization’) are naturally progressive, but the movement between the two, rather, seems to be associated with periods of ‘equity.’ “Neither is ‘progressing backward,’” as he put it (p. 47). As standardized contracts have become increasingly affiliated with corporate entities and businesses, this act of healthy negotiation needs to be revisited, and the document form is one meaningful space where this negotiation plays out in practice for consumers.
Chapter 4: The Conversation

This literature review is organized into three themes: Literacy, Engagement, and Equality that correspond to the Myths highlighted from the comparison of the discourse of the Contract Perspective and the critical thought of the Theory Perspective. In each theme, there are two labelled sections that correspond with the two perspectives presented throughout this project. The first viewpoint, called the “Contract Perspective,” describes some of the issues of SFCCs and the way these issues play out in the doctrine around these contracts, including in primary sources such as statutes and compliance orders and secondary sources such as scholarship and authoritative texts (see Chapter 2, Project Design for the selection criteria for this section). The issues covered include definitions of standard form contracts, as well as remedial concepts, including formation, unconscionability, agreement, and unilateral modification. The second viewpoint of this literature review, called the “Theory Perspective,” offers theories from the fields of document theory, textual-materiality studies, rhetoric, and bibliography. Together, both parts provide the necessary background to inform the next two chapters that offer solutions in the form of critical description (demonstrated with a case study in Chapter 5) and document engineering (demonstrated with an experiment brief in Chapter 6) for the SFCC.

For each of the themes, the Theory section is a revised look at these issues through other disciplinary lenses that deal with similar topics from different viewpoints. For instance, the first section of issues discusses the concepts of documents and records in regard to SFCC as a document and a record first from the standpoint of the legal scholars that study these contracts, and then in the second section, from the disciplines that study documents and records ontologically. This section first describes how legal scholars set boundaries on the SFCC document, and then summarizes the theories on boundaries of documents from textual studies,
information studies and library science, and recordkeeping to see if they offer a refreshed conception and revised set of values. The next set of issues describes problems with knowledge, meaning, and interpretation, how these problems are discussed in contract literature and legal scholarship, and then how these problems are discussed in reader response theory, bibliography, and rhetoric. The last set of issues describes power and design practices, how they play into the conversation of SFCCs and how they might be revised by theories of critical design and rhetorical performance.

The issues discussed in zombie contract scholarship and in the discourse around SFCCs speak to larger movements in the theoretical study of law, referred to as ‘jurisprudence,’ although the term is admittedly complicated can mean different things to different groups (Duxbury, 2001). Regardless, one might roughly define three schools of thought in this exploration—natural law, analytical jurisprudence, and normative jurisprudence. Within each of these epistemologies that speak to questions such as “what is law?” and “what is the role of law?” is a theory that explains how contracts should be governed (if at all) and what form this governance will take. While ancient natural law relies on a self-evident, objective theory of rule, analytic jurisprudence rejects the view that there is a natural role for law, for what “ought to be,” and believes there is no necessary connection between morality and law (Posner, 1990).

A conventional history of American jurisprudence finds two major schools of thought—legal formalism and legal realism—and their reactions to each other or synthesis of each other’s concepts as underlying the body of legal scholarship (Duxbury, 2001). Typically, descriptions of American jurisprudence since the 1870s begin with legal formalism as a rejection of natural law. Both formalism and realism refer to the way that one might approach common law (i.e., what

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24 https://www.law.cornell.edu/wex/jurisprudence
aspects, the text of the statue or the surrounding facts of the case, should be considered).

Pragmatist legal scholar Richard Posner (1986) argued that these theories should only apply to common law and not to interpretation as prescriptively choosing a method cannot guarantee it will be the appropriate one to provide a correct answer. Regardless, these two polemics are often used in interpretive contexts. Posner provides a succinct contrast:

Formalism enables a commentator to pronounce the outcome of the case as being correct or incorrect, in approximately the same way that the solution to a mathematical problem can be pronounced correct or incorrect. By ‘realism’ I mean deciding a case so that its outcome best promotes public welfare in nonlegalistic terms; it is policy analysis. (p. 181)

The Contract Perspective outlines the various theories that have been informed by this split in jurisprudence as they relate to SFCCs; however, they are juxtaposed against several other lines of thinking that allow for another set of values and ideologies from the Theory Perspective to refresh the conclusions drawn by the legal community.

4.1 Literacy

Concepts of literacy are played out in the discussions of contracts around notions of adherent knowledge, awareness of the terms, of the document itself, and of the standard practice of similar contracts. This discussion asks the questions: How much do consumer-adherents know about the content of these contracts? What would it take to gain their knowledge? If it is not possible for them to know (i.e., not in their interest or outside their capacity), what other


25 A useful connotative and colloquial comparison is also provided by Posner: "'Formalist’ can mean narrow, conservative, hypocritical, resistant to change, casuistic, descriptively inaccurate (that is, ‘unrealistic’ in the ordinary-language sense of the word), ivory-towered, fallacious, callow, authoritarian-but also rigorous, modest, reasoned, faithful, self-denying, restrained. ‘Realist’ can mean cynical, reductionist, manipulative, hostile to law, political, left-wing, epistemologically naive-but also progressive, humane, candid, mature, clear-eyed.”
mechanisms might allow them to still rely on the content (i.e., what would increase trust)? How are standard terms conceptualized and what should be considered expected or unexpected knowledge? Are there some terms that are more important to ‘know’ than others? Often answers to these questions involve a determination of what constitutes the boundaries of the contract and the content of the bargain—is it simply the document or are there other factors that would contextualize the information (e.g., previous versions that could prove intentions)? Presumptions of what is included in the broader concept of the ‘contract’ or bargain, whether it is the four corners of the document memorialized or outside contextual information, are considered.

The conclusions of few major scholars that have contributed to the topic of SFCCs will be discussed first, including some of the main threads of thought that have been sustained in court opinion and will continue in future opinions that rely on the Draft. Alongside these discussions, the Theory Perspective will also be presented to provide a revised look at similar issues. The two main topics that inform topic of literacy include ‘Standardization and Knowledge’ and ‘Definitions and Ontology’ of documents, which describe the systemization of information in various forms to some communicative end.

The main issues with SFCCs stem from an imbalance of knowledge, power, and resources. Often the remedy in cases of dispute offered for issues of literacy or engagement is a claim of unconscionability. Unconscionability is offered in two forms: substantive and procedural. Claims of substantive unconscionability refer to the content of the contract, including egregious, unexpected terms. The procedural component looks at how clauses have been included into the contract and “cannot be determined by merely examining the face of a contract”; instead, they must be considered in terms of “the circumstances under which the contract was executed, its purpose, and effects” (D’Agostino, 2015). The spectrum of offenses ranges from the use of
boilerplate language and format, the consumer’s awareness or ignorance of the existence of some clauses in the contract (usually called “unfair surprise”) based on drafter’s notification efforts, and more generally the adhesive nature of the contract itself, which relies on processes of display, awareness, and agreement (Leff, 1967). Substantive and procedural unconscionability issues are difficult to parse out, with questions trying to determine whether or not the content of the contract was knowable based on how it was written, what was included, how it was presented and the method of consent (D’Agostino, 2015). Courts typically view issues of substantive and procedural unconscionability on a sliding scale—the more one is present, the less is needed of the other (Lonegrass, 2012).

Specifically for SFCCs, other related notions, including determinations such as the ‘plain language rule,’ and the ‘posting rule’ (UETA) that relate to the substance of the contract, presumptions of engagement and understanding, are requirements that attempt to remedy any ambiguities in this arena. The following questions arise in the context of claims of unconscionability: To what extent does the adherent-consumer really understand the content of the bargain, and if there is a misunderstanding, is it because of what was written in it or how it was written (and presented)? Does this lack of a “meeting of the minds” negate the authority of the contract? Is it possible to communicate this information effectively, predicting the bias and capacity of the adherent? Substantive unconscionability and related issues will be detailed further here as literacy is discussed, and procedural unconscionably in the next section on Engagement.

4.1.1. Standardization and Knowledge. This section looks at how notions of ‘standard practice’ and standardization have been viewed from each the Contract Perspective and the Theory Perspective. Often in discussions around SFCCs, their use is rationalized by the use of similar agreements from other services and presumptions of consumer-adherent knowledge. This
differs from notions of standardization in fields that deal with the systematic organization and documentation of knowledge for public use. These latter discussions are useful in revising the discourses around SFCCs as these contracts are often presented to large user populations, which might be equated with concepts of the ‘general public’ in terms of knowledge, convention, and capacity.

*Contract Perspective.* The primary authoritative texts on contracts in the US during the twentieth century have been the Restatement of Contracts (1932) and the Restatement (Second) of Contracts (1979-1981) written and published by the American Law Institute (ALI). These authoritative texts that reflect these shifts attitudes in jurisprudence are sets of rules that intend to highlight those rules that are “normatively desirable for courts to apply,” such as the Restatements from the ALI that are advisory and not legally binding (Murray, 1982). The first Restatement of Contracts published in 1932 was an attempt to restate and codify the common law and precedents that had formed contract doctrine up to that point. Professor Samuel Williston (1861-1963), who had been “elevated to oracular standing” at the time the first Restatement was written, was its primary author and lent it a “strong presumption of reliability,” which was fitting toward the voice of black-letter authority that legal formalism promoted (Murray, 1982).

The first Restatement of Contracts achieved the status of ‘classic’ according to some scholars (Murray, 1982), but was revised in the 1970s to include some of the thoughts of the response to formalist movement, legal realism. Realism rejected the perceived consistency and impartiality of judges that the Restatements tried to capture and stressed the need for more flexibility and inclusion of economic, social, moral, and ethical considerations (Posner, 1986). By gathering empirical data about the reality of legal situations, the Realists argued that they
could describe a “value-free” approach that could better predict how judges might act. One of the most well-known realists, Karl Llewellyn, wrote a manifesto in the 1930s that prompted the movement, invoking the use of “muddy” and “ferment” as metaphors to describe the “canal of stagnant words,” which is viewed as “placid, clear-seeming, [and] lifeless” even when “practice” continues on “muddy, turbulent, [and] vigorous” (Llewellyn, 1931). He suggested that legal doctrine should serve to provide direction for the “ferment” or “spontaneous progress” that occurs in practice (DeLong, 2001). With legal realism came new texts that sought to incorporate this practice into its dictum such as the Uniform Commercial Code (UCC) that was first published in 1943 (Danzig, 1975).

The Restatement of Contracts was re-published in 1979, called the “Restatement (Second) of Contracts,” with the integration of various aspects of the Code and legal realism. Formalists traditionally favor a “separation of law from life, of the meaning of the text from its context,” where a reliance on the text of private and public legislature is primary rather than the facts of a case (Ben-Shahar, 1999). For this republished Restatement, however, its culmination was characterized by “compromise and reconciliation” revealing the realist influence that became prominent in the time between publications (Murray, 1982). Even the organization that published the Restatement, the ALI, acknowledged the significant influence of other ‘realist texts’ such as the Code.

Standardized agreements were one important area of concern for the re-publishing of the Restatement (Murray, 1982). The first Restatement of Contracts (1932) defined basic concepts about contracts (i.e., “to make a contract one needs (i) parties with capacity, (ii) manifested assent, and (iii) consideration”) that can be used as a measurement by which contractual activity or any arising disputes can be judged (“Restatement,” 1981). The basis of traditional contract
formation can be referenced back to a 1773 decision in *Kingston v. Preston*, which has been quoted several times hence, that states that “mutual promises could be treated as dependent conditions precedent, even if the parties failed to use any words that hinted of such intent” (Preston and McCann, 2011). Prior to the writing of the Code, acceptance and offer must take similar forms. The Code brought with it the “battle of the forms” that overturned this prerequisite for the formation of a contract and allowed for a looser definition of offer and acceptance (Leff, 1970, p. 149). The original Restatement took the uncompromising position that except for fraud, mistake, or duress, both parties were bound by the terms of an agreement; it was not until a 1970 meeting of ‘reporters’ (i.e., the authors of the restatements) that the ALI began considering that the binding of parties to certain terms could present issues (Murray, 1982). Thus, the revised Restatement, under the purview of the Code, adopted a new section (§ 211) that stated the provisions in regard to standardized agreements.

The classic measure of standardized contract enforcement according to traditional contract law is *choice*; questions to the validity of a contract tend to center around whether or not the adherent had the “manifestation of volition” to enter into the contract, which relies on notions of context, literacy and capacity, and presentation (Slawson, 1971). Formalist doctrine might strictly wish to adhere to the text of the contract, rather than the circumstances around its presentation that might consider the adherent’s ability to choose, and this view has been called “flagellant” as it rests on the notion that if an adherent of a SFCC is held to terms that are egregious, the ‘pain’ of it will prevent them from signing unfamiliar agreements in the future (Murray, 1982). Section 211 takes this formalist, flagellant view in one sense as it subjects the adherent to the terms of the agreement even if they have not read the terms (“subsection 2”) and regardless of their knowledge (“subsection 3”) (“Restatement,” 1981, § 211). Additionally,
subsection 1 allows for the agreement to be ‘integrated,’ which precludes the adherent from introducing evidence of prior agreements or any other type of evidence that is inconsistent with the written form of the agreement in cases of dispute. While these two first subsections seem to favor the interests of the drafter pretty heavily, subsection 3 relates to which terms are “operational” and allows for adherents not to be bound in cases of “unexpected terms.”

In the period after legal realism flourished (i.e., circa 1930s-1970s), formalism had a re-emergence from the 1980s onward, termed by some as the “new formalism,” “new conservatism,” (Hillman, 1997) or "anti-antiformalism,” (Hillman, 1999). The parol evidence rule in the Code has been deemed part of the emergence of this new formalism as the work of a group of legal scholars referred to as the New Textualists (Ross and Trannen, 1995). This new formalism was “flavored by process and economics” and produced a trend that was seen as a rejection of “realist, context-sensitive standards of adjudication” in favor of formalist rules implemented by a more “mechanical jurisprudence” (DeLong, 2001, p. 15-6). Some critics have described this doctrinal shift as amiable to “laissez faire faith in unregulated market exchange” (Mooney qtd. in DeLong, 2001, p. 16).

Regardless of their differences in ideological underpinnings and even implementation, the Restatement and the Code (and subsequent acts such as the UETA) are efforts to rectify some of the ways in which contracts have been integrated into our lives and go directly against one of the foundational concepts of historical contract doctrine called ‘freedom of contract.’ In essence, all types of contract governance counter the freedom of contract principle as it supports the ability for individuals to transact and form contractual relationships freely. Freedom of contract has been noted as the cornerstone of a free market and is crystallized in the Fourteenth Amendment (Article 1, Section 10) of the Constitution that says states cannot interfere with the
transactions of individuals or obligations of contracts. Traditionally “contract systems” are in opposition to “status systems” as the latter establishes obligations and relationships by birth and class, whereas a “contract system” presumes that the individuals are free and equal to transact (D’Agostino, 2015). Contract law traditionally has thus embodied this tension between the freedom of contract principle and the ability or need for sovereign or third-party entities to intervene in their governance (Lonegrass, 2012).

Viewing standardization practices for SFCCs within the purview of freedom of contract explains how one type of standardization, the enforced banning of certain terms (such as the EU’s and UK’s Unfair Terms in Consumer Contracts Directive of 1993 and then 199926, superseded by the Consumer Rights Act of 201527), which includes a list of non-exhaustive terms courts will likely consider unfair in cases of ambiguity, is not allowed in the U.S., U.K. standards also contain a few dictums that specifically address substance and procedure, including one provision that states SFCC terms must be in “plain intelligible language” and that drafters must “provide copies of standard contracts” as well as “information about their use,” and does not allow a contract to be amended or modified unilaterally without sufficient reason.

Risks associated with standardization efforts for SFCCs such as those in the U.S. that are based on standard practice instead of nuanced and systemized standardization processes include disclosure and procedural practices that shape future SFCC practices in their image. If not done with care, however, once ‘standardized’ or put into ‘plain language,’ the effort toward encouraging actual engagement with the substance of SFCCs might decrease or feel falsely satisfied (Hillman, 2006). Moreover, courts can interpret the efforts to standardize (e.g., putting


27 http://www.legislation.gov.uk/ukpga/2015/15/contents/enacted
in plain language, providing explanations, notifications that simplify changes) as contributing to a type of ‘standard form’ that fills the doctrine that serves the efficiency and economics of minimal presentation. While this works for contracts that are actually standardized by a systematic process and by a variety of stakeholders, such as with some business-to-business contracts, SFCCs have yet to benefit from this process (Perillo, 2008). Industries that make use of this type of “neutralizing” standardization process include insurance, engineering, finance\(^{28}\) (e.g., swap and derivatives), and utilities (e.g., North American Energy Standards Board) (Scott, 2004; Perillo, 2008).

**Theory Perspective.** Standardization has been the science of many disciplines and its own study in the areas of library and information science since at least the late-nineteenth century, but as a general concept much longer (Rayward, 1994). Primarily concerned with the management (i.e. selection, collection, arrangement, indexing), retrieval, and dissemination of recorded knowledge, often with a pursuit of technical and systemic efficiency, documentation science studies the organization of documents and the creation of standards and other mechanisms that aid this organization (Svenonius, 2009).

The European strand of the documentalists’ movement began with Belgian lawyer Paul Otlet (1868-1944) and Henri La Fontaine’s work that, in the wake of the proliferation of records following the Industrial Revolution and the increasing number of publications of scientific and technical literature. This strand promoted the idea that for science to become a legitimate discipline, it needed a more efficient knowledge management system, especially in light of contemporary technological advances (Rayward, 1994). Otlet’s *Traité de Documentation*

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\(^{28}\) e.g., FEDERAL DEPOSIT INSURANCE CORPORATION, 12 CFR Part 371 RIN 3064–AE54 “Recordkeeping Requirements for Qualified Financial Contracts”
published in 1934 was the culmination of a lifetime of thinking about problems of improving systems of organized knowledge and was the first “systematic, modern discussion of general problems of organizing information,” and perhaps also the first information science textbook. This exploration of early documentation principles (describing what we now tend to call Information Storage and Retrieval) produced a functional view of what could be considered a document; a term traditionally reserved for “text-like records” in the systemization of knowledge organization, Otlet expanded the concept of document to include three-dimensional objects, including “sculpture, museum objects, and live animals” (Buckland, 1997). By the 1920s, documentation was increasingly seen as a general term to incorporate the work of “bibliography, scholarly information services, records management, and archival work.” At stake in these discussions are inquiries into what constitute knowledge and evidence and how this contributes to its accessibility, completeness, and ability to contribute to the transparency and accountability of an institution.

Following in the footsteps of Otlet, it was initially within a purview of utility and professionalism that librarian Suzanne Briet in the early twentieth century defined a ‘document’ as “any concrete or symbolic indication preserved or recorded, for reconstructing or for proving phenomenon, whether physical or mental.” Briet promoted the idea that objects become documents when they are processed for informational purposes (Briet qtd. in Buckland, 1991). Her famous example of this definition is of a wild antelope that becomes a document once documented and catalogued by a museum (Briet, 1951/2006). Within this definition is the notion that a document is so inasmuch as it is evidence for something, known through its relation to other documents, or other catalogued ‘phenomena.’ Its processes of standardization in turn make up its performance and interpretation as a document. In other words, Briet’s definition subscribes
not to the positivistic, self-evident description of evidence ("evidence [in the] sense of being an object or event that is proof for the existence of some factual question"), but rather appeals to philosophical and linguistic approaches of her time (i.e. semiotics) that suggest recognizing the *indexical relationships* of documents to each other and to other documentary representations (i.e. bibliographical records and metadata) (Day, 2001, p. 33). Her early work in library sciences and documentation influenced the document theorists that came before her and expanded her notion of the indexical, catalogued object or event as document. Briet believed professional documentary science should be more concerned with services for users and with “exchanging information materials within economies of cultural production” than with its traditional focus on “collection and canonical hermeneutics” (Day, 2001, p. 35). In this vein, Briet’s view of documentation intended to progressively improve the fulfillment of information needs in a scientific manner (Day, 2014). More specifically, she identifies documentary science as an “agent within a system of science”—a ‘metascience’ about science—and part of “the culture of postwar Western capitalist industrial societies” (Day, 2001, p. 24).

The study of documentation and information science from more recent critical theorists such as library science and information scholar Ronald Day (2001, 2014) notes how not only knowledge or knowledge practices are reified into technological systems, but also how these systems both create and mediate the subjects they document through a reductive and abstract process. Day refers to this current condition as the *modern documentary tradition*, which proceeds from Briet’s claims that standardization occurred progressively from “linguistic and educational standardization” to “documentary and communicational standardization” and lastly to “industrial standardization” (Day, 2001, p. 34). Day’s modern documentary tradition relies on the motivations of a political economy, viewed as a utilitarian logic which promotes specific
“socioeconomic norms and forms” that ultimately thin human experience and project every aspect of human experience reductively through the production and manipulation of documents and their organizational (indexical) systems. Day (2001) suggests caution in this regard: “One must ask the profession what responsibility it assumes in the dissemination of a language that leads to such a reification, and one must ask what types of histories [or social demands] are excluded by this mapping of cultural or social space into the future” (p. 25).

Comparison. The first difference between these two perspectives is disciplinary and contextual. The Contract Perspective allows for presumptions of knowledge based on ‘standard practice’ and ‘unexpected terms,’ meaning there is no preemptive mechanism in place to standardize the information in the contract—it is left up to the drafters to decide what to put into the contract and how to present the information. Although this is often an exercise in the freedom of contract principle, some scholars have noted that this prompts a trend of “rampant drafting isomorphism” wherein the drafters copy and paste any seemingly relevant clause from other similar agreements. Thus, it does not seem the case that “efficiency is a focal point at the drafting stage, and, therefore, unlikely that resulting from contracts can be described as efficiency maximizing machines.” In this view, everything is included in these contracts as a “exercise in risk aversion” and as a way to “keep them at the same cost level as their competitors” (p. 83). In other words, the “race to the bottom” has already occurred, so no future cost-savings can be expected to benefit the consumer (p. 83).

In the Theory Perspective, access to knowledge requires systematization and organization so that the knowledge is accessible. This includes creating meta-knowledge, or knowledge about

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29 There is evidence that “drafting isomorphism is prevalent, and that it results in over-drafting with duplicate clauses, inconsistent terms, and clauses retaining ‘ghosts’ of other contracts found in form contracts.” (Leib and Eigen, 2017)
other knowledge (e.g., a catalogue or index of knowledge), that allows the information to be viewed across a spectrum of and in relation to other types of information. Rather than efficiency and economics, which underlie the outcomes in the Contract Perspective, literacy, accessibility, and comprehension are the goals of the Theory Perspective outlined here. This changes the motivation from simply streamlining the process of presenting content to thinking critically about how to best present the content so that it makes sense. In this sense, the Contract Perspective promotes practices that contribute to the ‘modern documentary tradition’ that Day describes, which reduces information, simplifies experience, and provides reductive and abstract notions of knowledge. As language is simplified or copy and pasted for efficiency, it reduces the language to forms perhaps unrecognizable for consumer-adherents. Viewing SFCCs as both a product of ‘industrial standardization’ and the ‘modern documentary tradition’ can bring further awareness to the economic material concerns that underlie their increased facility as well as their interplay with the subjects (e.g., consumers, users, adherents) that are affected by this implementation. Rather, if documented and processed amongst a corpus of other similar documents as Briet suggested, a relational understanding of SFCCs might be had, and its projection and presumed transfer of self-evident ‘knowledge’ might be disrupted. Instead of abstract notions of standard practice, a systematic comparison of SFCCs could reveal their actual state of use and information or content.

4.1.2. Definitions and Ontology. As a contract is often memorialized in document form, although it does not have to be, questions surrounding the contract document and the boundaries of this form are necessary queries. In the legal discourse and research around SFCCs, this type of question may arise during the formation of the deal (e.g., what types document forms are required for valid contract formation?) or in a dispute (e.g., what is the correct version of the
contract for evidentiary reasons?). Similar questions around the meaning of the information of the deal are also commonly asked. Should outside, contextual information be considered, for instance? Or should only the written terms—the “four-corners” of the contract—be considered? Different legal jurisprudences and practices answer these questions differently. Questions in the Theory Perspective, although not related to contracts specifically, are asked of documents, including what should be considered a document in an information system? And when does a document become a document (e.g., when it is documented or catalogued? Is it ‘information’ only if it is also ‘knowledge’?). These perspectives will be compared next.

**Contract Perspective.** Charles Willard\(^30\), who was responsible for the formulation of subsection 3 in the Restatement (Second) of Contracts that allows for the nullification of the contract in the case of terms that are unexpected according to the adherent’s knowledge, claimed in the 1970s during the writing of the provision that it did not have to do with presumptions of adherents’ knowledge. Subsection 3 states that if an adherent would not have “manifested assent” had they knew the information in the contract, the contract is void. Willard describes his reasoning behind the addition:

> Whether it's unconscionable or not seems to me to depend on a whole series of value judgments that I wasn't able to get enough certainty on to include here, but I would hate to have that turn on the question whether [what] the party assumed [...] Assuming it's a perfectly legible provision and it has not been concealed in any way and he signs the card, and there it is, it seems to me the proper thing to pay attention to is whether the clause is oppressive in some way, and not this notion that it's unexpected at that point. (p. 765)

\(^{30}\) In Murray (1982), an interview with Willard in which he explains his reasoning is described.
Willard in this quote pulls apart the ‘sliding scale’ approach to unconscionability by focusing on the oppressiveness of a clause (i.e., a substantive claim) rather than notions of adherent knowledge, which he regards as “a whole series of value judgments,” or procedural claims that he disregards as long as it is “perfectly legible,” “not [...] concealed in any way,” and the adherent “signs the card,” as though these latter claims are simple and do not involve “value judgments” as well (p. 765). In lieu of trying to make determinations about the user’s knowledge, Willard favors measurements of unconscionability that rest on notions of process, standard practice, and regulation of the content of the contract. Notions of “value judgments” that are based on standard practice, or the determination of “oppressive clauses,” however, rely on presumed trajectories of the effects of the clauses and literacy of adherents in terms of how well they can predict these trajectories when forming the agreement. Regardless of Willard’s explanation, the text of the provision remained, and this became the standard for measuring the unconscionability for SFCCs (Murray, 1982; Garamello, 2015).

SFCCs present a unique rendition of interpretation issues in that there is a given knowledge difference between the parties in the vast majority of the manifestations of the agreements they create. Based on subsections 1 and 2 of the Restatement, adherent knowledge and understanding are not material determinations to the validity of a standardized contract, yet this does not mean that they should not be considered. A recent trend in paring economic and legal theory has prompted some ‘zombie contract scholars’ to argue that since it is accepted and not rational for consumers to read the terms, predicting bias or reasoning on the part of the consumer might produce even more ambiguous results that weigh down the autonomy of the contracting process (Ayers and Schwartz, 2014, p. 562-4).
By the time the Restatement was re-published in 1981, the authors were forced to confront the fact that SFCCs were becoming ubiquitous yet confirmed power and knowledge differences that did not allow for the individual choice that was viewed as a necessary part of contracting. The Code had its own way of reconciling this fact: as long as two factors were present, manifested intention and reasonable basis for remedy (i.e., a way to solve a dispute), the contract could be deemed valid. In some ways, this subverted traditional contract doctrine by considering ‘conduct’ as a signal of agreement and limiting the ‘parol evidence rule’ that allows for evidence outside the text of the contract to be considered in the case of dispute (Uniform Commercial Code § 2-207(l)). The primary motivation behind the writing of the Code was textualist and thus formalist as it was motivated to provide rules that minimalized contextual information and streamlined commercial transactions in the process. In an attempt to do so, it also reduced the concern of the courts to focus most urgently on the interests of the drafter, including the assurance that the even if assent by the adherent is not explicit or traditional, the drafter should be able act as though it is confirmed through the conduct of the adherent; this is discussed as ‘equivocal acceptance’ in the scholarship and comments of the Code that provide context to its rules (Ross and Trannen, 1995).

In 2013, legal scholar Margaret Radin wrote a book on the egregiousness of SFCCs that at the time was lauded as “groundbreaking” and “a great achievement” among other such praises, which claimed that assent is improperly degraded with these contracts in the area of voluntary consent. Radin’s argument cites a ‘social understanding’ of the terms present in a contract due to the need for sufficient meaning to be garnered from the terms that could only be understood through a context that is provided by an awareness of a community of discourse. Critiques of Radin’s thesis noted that no cases historically were found to make use of this social theory of
language when it comes to the interpretation of contracts, and that Radin’s conception ignores
the ‘duty to read’ doctrine, which determines the responsibility of understanding the contract and
the plain meaning rule that orders all private and public legislation to be written clearly and not
in legalese (Feldman, 2014). Critics also argued that Radin’s nullification of the digital SFCC is
too wide reaching and would encompass any type of adhesion contract, even those less
egregious.

The same year that Radin’s book was released, Nancy Kim (2013) also published an
influential treatise on the topic of digital SFCCs. Kim argued that unconscionability is a toothless
mechanism to address the issues with these agreements, stating that courts only view procedural
unconscionability as a threshold requirement – as long as “there was notice and an opportunity to
read the terms” – and not as a way to further communication efforts for actual users/consumers.
Kim argues further that when courts do consider the substance of these contracts, they tend to
rely too heavily on industry norms and thus on the agendas of those with more power and
information. Kim’s solution is to “reinvigorate” the unconscionability doctrine with a more
‘holistic’ assessment rather than one that is binary, where all SFCCs are presumed
unconscionable unless the specific terms in question are allowed by a legislative process or if
alternate terms are made available. However, Kim notes how issues of substantive
unconscionability are often overlooked or not afforded serious inquiry if all of the procedural
‘boxes’ are checked and acquiesces that her two procedural solutions would allow for a lack of
consideration of substantive issues. Although some responses to Radin reach similar conclusions
in terms of legislation that ensures fair terms (Bix, 2014), critiques of Kim’s thesis (e.g.,
Waisman, 2014) cite the flaw that the potential for corporate entities to ‘legalize’ certain terms or
concoct ways to satisfy the “alternative terms” requirement would leave adherents effectively without recourse.

Theory Perspective. A revival of some of the early ideas of documentation science by Otlet and Briet came about in the mid-1980s, especially with the work of Michael Buckland, who explored the concept of ‘document,’ and Boyd Rayward, who restored some of the history of Otlet’s work. Additionally, the concept was revised with the writing of scholars from fields other than information science such as philosopher Barry Smith’s work on documents as ‘social acts’ (2012, 2014). Under the umbrella of a shift in ideas about users, cognition, and language use and development that occurred during this period (Lund, 2009), these explorations considered the material, contextual (social and historical) aspects of documents, both in definition and performance. According to Buckland (2013), document theory overlaps with all of these other disciplines, such as paleography, archival theory, and bibliography, that “start with the notion of a document as its point of departure” presenting an ever-expanding “document-centric view of the universe” that “progressively connects with the other fields of study in which documents are important but not the central focus” (p. 1).

Buckland’s earlier work (1991, 1997, 1999) is in line with theorists who explored concepts and definitions of information in an attempt to define and expand the notion; in other words, trying to answer the question “With what form of phenomena are we concerned?” This question attempts to inform discussions of document boundaries. Recognizing the need careful examination of the ‘tangibles’ (e.g. documents, data, events) organized by the systemization of efficient accessible information, this research distinguishes between “entities and processes” and “intangibles and tangibles” by separating the concept of information into three categories: “information-as-process,” “information-as-knowledge,” and “information-as-thing.”
Information-as-process is the act of a change in knowledge state that occurs when a piece of information is told or heard. It might also be called “the process of becoming informed.”

Information-as-knowledge is the outcome of that act, or the knowledge communicated, whether it reduces or increases uncertainty. Information-as-thing is the tangible object that is seen as being informative, including data and documents, and is the primary concern of information systems as they deal with these objects directly (Buckland, 1991, 2013).

Information and media theorist Bernd Frohmann (2004) expanded on Buckland’s ideas, but locates the ‘informativeness’ of a document (and thus and definition of information itself) in its materiality, institutional embeddedness, and historical contingency, rather than in a theory that assumes an ‘intentional substance’ of a phenomenon. In other words, once all the social and political forces that configure documentary practices are considered, “the genie is out of the bottle: the informativeness of documents, when recognized as dependent on practices is also dependent on what shapes and configures them” (p. 405). In later pieces, Frohmann (2009) extends this idea, calling attention to the study of documentary agency, or the ability of documents to do something. Documentary agency, in this sense, has a particularity to it, increasing the capacity of the artifact to act; Frohmann is trying to look beyond the subjectivity of humans (users) and into the subjectivity of objects (documents)—looking not just at their formal qualities or material properties, but instead toward the affordances of the situatedness, circumstances, and actors involved. In a move away from explorations of defining documents, a study that seems to aim for “the precision and accuracy of a scientific representation of what documents and documentation might be,” Frohmann’s proposed analysis of documentary agency seeks to “enhance their power and force, with more concern for what they do than for what they mean or represent,” which takes place after they have been defined.
In more recent work, Buckland (2013), offers three ‘views’ that helpful towards understanding the various scholarship on documents: the conventional, material view (i.e. “the everyday conventional view of documents,” text on paper); the functional view (i.e. something that is made to serve as a document, constituting evidence of some sort; models, educational toys, Briet’s antelope); and the semiotic view (i.e. something intended to be a document/sign). Increasingly, these views consider how a document’s identity is dependent on its use and a shared understanding of its value and the contexts upon which this value is dependent.

Buckland’s “information-as-thing,” the material instantiation of the document, for instance, is seen as a vehicle for meaning for users—part of Buckland’s first view. For later Buckland and other scholars (Frohmann, 2004, 2009; Smith, 2012, 2014), the document’s functionality and use possess ‘informative’ agency for users, and therefore scholars should focus on the document and documentary practices to uncover its meaning.

Discourses from fields outside of documentation science and have studied document-type objects and concepts in various capacities, but with similar aims. For instance, Smith’s concept of ‘document acts’ looks at how people “do things with documents” in the same way that the Reinach-Austin-Searle theory of speech acts looks at how people do things with words (Austin, 1962). In this way, Smith proposes to look at how people “change the world by bringing into being new types of ownership relations, of legal accountability, of business organizations, and other creatures of modern economies, including mortgages, stocks, shares, insurance protection, and financial derivatives” (p. 8). Viewing documents as ‘acts’ also accommodates the idea that increasingly they have come to represent capital, as “individuals and institutions in different locations can trade unlimited quantities of physical items without the need for anything material to be moved from one place to another or altered physically in any way.” Another strand of
philosophical document theory, called ‘documentality’ promoted by philosopher Maurizio Ferraris (2013) also describes how documents exist as ‘social objects,’ which then makes documentality a ‘social theory,’ he argues. In comparison to studies of ‘natural objects’ that “exist in space and time independently from subjects,” or ‘ideal objects’ that “exist outside space and time and are independent of subjects,” social objects “exist in space and time and are dependent on subjects.”

Certain types of documents have their own ontologies, some of which come from the practices (social or otherwise) that create them. Notions of evidence, for instance, in legal research can be seen as being rooted in the work of scholar John Henry Wigmore (1863–1943), as well as in more practical doctrines such as the Federal Rules of Evidence, which specify which types of evidence are admissible in U.S. federal courts. Wigmore wrote about evidence and proof, producing influential textbooks on the topic in the early-to-mid twentieth century. His work emphasized the holistic and contextual nature of individual items of evidence, arguing “facts are evidence insofar as they play a role in a teleologically directed argument” (Anderson and Twining, 1991). Wigmore viewed evidentiary analysis as an interaction between law and facts through “a process of decomposition,” and found that the process of using evidence to prove a case required viewing it as three distinct layers of information: (1) as a proposition (hypothesis); (2) as specific elements of law that need to be satisfied; and (3) as material evidence and facts that make up the narrative of the case. Viewing evidence in this way resolved what Wigmore referred to as the “worn out legal system” of the nineteenth century that relied heavily on numerical systems and had “no understanding of the living process of belief.” Ultimately, Wigmore’s method puts into words the reasons why a total mass of evidence does or should persuade. This method asks the question – “can we work out a mental probative
equation?” – in a similar fashion to working out a mathematical equation. He believed there could be a method for solving a “complex mass of evidence in contentious litigation” as, from his research, the number of mental processes in dealing with evidence is strictly limited.

Wigmore thus distinguished the study of the principles of evidence into two categories. The first process is the aforementioned analysis that details the informal logic of reasoning and argumentation; Wigmore calls this the study of Proof (in the general sense) and it consists of the practice concerned with “the ratiocinative process of continuous persuasion.” The principles considered in this study include the “probative force” of a piece of evidence, which describes its tendency to support or to negate the first piece of information, the proposition or hypothesis. He describes two outcomes for a piece of evidence once it is interpreted in a trial: Proof or non-Proof. He calls this analysis a “probative science” and states it “must be […] independent of the artificial rules of procedure.” These “rules of procedure” make up the second category of study, which Wigmore calls Admissibility. They consist of the procedural rules developed by the law and based on “litigious experience and tradition, to guard the [jury] against erroneous persuasion.” Admissibility has come to be represented in documents such as the Federal Rules of Evidence, which govern the process of evidence discretion in trial court (e.g., “Title 3: Civil Rules,” 200731).

**Comparison.** Ultimately, through all of these explorations of what it means to be a document in an information system, we might be able to articulate some of the performances of documents such as SFCCs more granularly. We might say a SFCC is only a contract-document once known, in Buckland’s sense of information-as-knowledge, which is relevant to descriptions of adherents’ understandings of ‘standard terms’ or ‘unexpected terms.’ We might also regain

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materiality for the SFCC by arguing that SFCCs, rather than banal or benign, are *active* and *social* documents that are afforded quite a bit of materiality (e.g., in terms of profit, data ownership), which is understood in certain discourse communities and abstracted for others. And rather than writing off SFCCs to the margins as inconspicuous hyperlinks, we might also note how they exist within systems and relations of other types of similar contracts (i.e., privacy policies, acceptable use policies, labor terms, copyright terms) as well as within the confines and productions of interface display.

As far as the definitions of the document as a piece of evidence, the history and uses of evidence, and its many concepts and practices, a comparison might suggest that understandings of what comprises evidence are dependent upon the paradigm within which evidence is acquired, assessed, and introduced. Associated with logic and the scientific method, evidence in general is used to provide support to an argument; yet, in many respects, this practice could benefit from a reconsideration of the underlying epistemological assumptions that lead to its use as a testament to truth (Furner, 2004). Disciplinary expectations of evidence differ, for instance. Historians and archivists might be suspicious of evidence that claims to present self-evident facts or logical explanations, while in a legal context, the presentation of facts is sometimes contingent upon rules of admissibility or circumstantial evidence that can prove facts indirectly. Records have long been associated with the legal concept of evidence, although evidence can take many other forms and instantiations (Furner, 2004; Yeo, 2007).

With SFCCs, even subsection 3 that allows an escape route for adherents in cases of “unexpected terms,” the combination of use of the parol evidence rule in new draft of the

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32 The parol evidence rule governs the types of evidence that can be introduced when questioning a contract (Ross and Trannen, 1995).
Restatement of Consumer Contracts and the term “integrated contract” already in the Restatement (Second) of Contracts, places the burden of proof onto the adherent to prove that they were subject to an “unfair surprise.” Thus, the party with less power is the one supposed to make these “value judgments,” but has no recourse to do so. It would take an awareness of the presence of the contract, which can be difficult in some circumstances where browsing or ‘action consistent with consent’ is equated to consent and a presentation of the contract document is not required or minimal. Even if the contract was present, the adherent would have to document the circumstances of formation, which is another difficult expectation due to the fact that these contracts are commonplace, routinely brought up as steps in registration processes or as hyperlinks in the margins, encountered in mass on a weekly basis. To expect an adherent to document the circumstances of formation with a prediction of the service with which they may have a dispute in the future, is an irrational expectation when they do not understand that it is a contract document.

The distinctions made by Wigmore early on in regard to the study of principles of Proof, including argumentation, inference, and probative value, are not separated, but rather superficially codified into these contract procedure conceptions. A study that reinstates this early distinction by Wigmore, might provide a more rigorous method of inquiry that would benefit a study of performances of fact and law and how they are documented in current evidentiary paradigms in which this distinction is overlooked (Anderson and Twining, 1991).

4.2 Engagement

Engagement here describes theories and conclusions on how consumer-adherents interact and agree to SFCCs. Some discussions on SFCCs claim that consumer-adherents will engage or be able to engage with a contract simply if presented, and, if not, then actions considered
consistent with consent are sufficient. As mentioned previously, two major remedies for egregious SFCCs include claims of substantive and procedural unconscionability (Leff, 1967; Lonegrass, 2012; Gamarello, 2015). The substantive component of an unconscionability determination considers the content of the clauses and the procedural component of a SFCC looks at how clauses have been included into the contract and the circumstances of agreement—the process that was undertaken in order to document the contract and its corresponding assent. Substantive claims often deal with presumptions of adherent knowledge, including concepts such as ‘unexpected terms’ that were covered in the last section on Literacy. The procedural elements include the “Agree” or data control buttons presented to users, the material form of the contract, and its presentation as a document or hyperlink, and will be discussed here as Engagement.

4.2.1. Interpretation, Materiality, and Meaning. This section describes the issues in SFCC discourse around what constitutes valid contract formation and notions of consent. These notions deal with how a contract is presented and various predictions of interpretation of the content of the contract. The thoughts here range from various presumptions of agreement (e.g., handshake to signature to browsewrap/clickwrap), to types of notification and disclosure methods and the presentation of the contract. These types of actions lead to a contract being held up in court and the lack thereof can support claims of procedural unconscionability. For the Theory Perspective, these issues might be revised by the work on interpretation in regard to other types of texts and cultural objects, which has grappled with locations of meaning (i.e., in the minds of readers rather than the intentions of an author-figure). Also, as one of the primary issues with SFCCs is their various versions and changes, efforts to make the differences noticeable to adherents who are beholden to these changes with clauses such as unilateral modification are at issue. Discourse in the Theory Perspective could inform these concepts
through the practices of bibliography and textual criticism that document versions of text and editing practices. Additionally, theories on materiality might reframe these presentation issues as projections of different types of material presence or as tropes of immateriality.

**Contract Perspective.** Interpretation in a contractual context, then, refers to the identification of the “meaning of words or actions” in the contract, and the term “construction,” to the legal effect that these words might have should the contract be deemed valid. Formalists favor judicial interpretive theories such as textualism that claim nothing outside the legal text (either private or public) should be considered, barring any non-textual information from being part of the interpretation (Alstine, 1999). It is not the case that all notions of interpretation or intent are ambiguous; often, both parties are aware and clear of the meaning behind the contractual text. In these cases, the constructive effects of the agreement, and whether or not they are legal or abide by certain applicable regulations, are at issue. In many other cases, however, interpretation is not clear, with forms of knowledge and the burden of proof that compels one reading or another depending on the details of the transaction and the legal question that emerges. Disputes of this nature might aspire to determine “the plain meaning of the parties’ words,” those words’ “contextually determined use meaning,” its subjective or at objective meaning, or the “agreement’s apparent purpose or purposes, or at what the parties believed or intended” (Klass, 2018).

U.S. laws that came out of the Code such as the Uniform Electronic Transaction Act (UETA) and the E-Sign laws that were intended to streamline the process of digital transactions and to harmonize some of the discrepancies of transacting across state borders, however, might have subverted this debate and exacerbated the issues in some of the arguments for the unconscionability of SFCCs. With the UETA, there is no legal impetus for a company (other
than compliance) to retain evidence or documentation of their transactions and signatures, whereas previously, companies were required to retain copies and provide one to the consumer. It has been argued that with this statute, consumer rights were sacrificed for the greater good of the economy and, further, issues with SFCCs and unequal power balances were exacerbated (Patterson, 2010). Pragmatist legal scholar Richard Posner (1986) notes how too much flexibility with unconscionability standards, agreement, and definitions of contract documents, for instance, may cause the responsibility of egregiousness of SFCCs to be misplaced:

What should count as the essential, defining characteristics of contract is not a semantic question; it is a policy question. We may enforce any promise we want, and call it a contract, just as we can punish a drug dealer for his agent's possession of illegal drugs by saying that the dealer has ‘constructive’ possession. In the reward case, the question for the court should be (putting aside the issue of adherence to precedent): ought the unconscious acceptance be deemed to create a contract? [...] This happens to be a difficult question. (p. 183)

Due to the acknowledged difficulty “this question” presents, some have argued (“Letter to...”; n.d.) that the egregious effects caused by these contracts should be regulated, not the contracts themselves. One recent article (Ben-Shahar, 2019), for instance, cites ‘data pollution’ as an issue with ToS agreements, and proposes to regulate this one effect rather than the agreement itself.

By allowing commercial interests not to have to keep paper copies of their electronic documents as evidence of transactions, the UETA effectively gave legally binding status to electronic documents and signatures without requiring a paper component (Section 7 (c)). Other relevant sections include a determination that “a record or signature may not be denied legal effect or enforceability solely because it is in electronic form” and “a contract may not be denied
legal effect or enforceability solely because an electronic record was used in its formation” (Section 7 (a) and (b)). The E-Sign laws broadened the notions of agreement and awareness even further by claiming “the mere fact of use, or of behavior consistent with acceptance” is “sufficient to evidence that party’s willingness.” For SFCCs, often this was interpreted to mean that just engaging in the digital space could be affirmation of agreement. Called “browsewrap” agreements (as opposed to “clickwrap” agreements), users do not need to explicitly agree to these hyperlinks in the margins to be held liable for their contents; simply browsing a website provides contractual obligation. While over time clickwrap agreements have been the legally preferred method of clear-cut, explicit consent, provisions like the UETA and E-Sign laws have opened the door for various types of agreement and engagement with contracts in the digital environment.

One thread in zombie contract scholarship (Grether et.al, 1986; Ayers and Schwartz, 2014) claims that instead of regulating for this ‘market-imperfection’ (i.e., asymmetric knowledge33), evidence-based disclosure methods would be more helpful. In fact, mandatory disclosure remedies, including those that specify how disclosure should occur (e.g., the UETA’s ‘posting rule’) or how it should be written (e.g., notions of transparency, simplification, plain language rule), are currently the primary method used to remedy these agreements. For instance, the ‘posting rule’ specifies the timing and method of disclosures34. Some (Hillman, 2006) have responded to these claims by noting how disclosures might exacerbate the issues they try to solve.

33 Stiglitz (2000) identifies asymmetric information as one of the major departures from previous economic theory and the major market failure presented by the information age.

34 “The UETA contains a section entitled ‘Time and Place of Sending and Receipt’, which states that an electronic record is deemed to be sent when it is properly addressed or directed to another recipient, is in a form capable of being read by the other parties’ system and when it is out of the control of the sender […] Additionally, ‘an electronic record is deemed received when it enters an information processing system designated by the recipient for receiving such messages (e.g., home office), and it is in a form capable of being processed by that system.’” (Section 15 of the UETA) (Ibrahim et. al, 2007).
by seeming to satisfy notification requirements when, actually, they have the opposite effect for adherents and rather add to the issue of “information overload.” Other scholars (Marotta-Wurgler, 2011; Bakos et al., 2014; Ben-Shahar and Schneider, 2014) are on the more extreme end of the spectrum than the ‘disclosureites’ and have responded with studies that they believe have proven “entirely” that disclosure methods do not work. These studies rely on evidence that they argue proves adherents would not engage or try to understand the information even if made transparent by simple and clear presentation.

Citing the fact that courts have routinely relied upon the ‘duty to read’ doctrine with SFCCs that places the responsibility on the adherent to understand the contract (Calamari, 1974), Ayers and Schwartz (2014) offer a way of potentially informing consumers about the dangers that lie within. Based on another piece by Ayers (2012), they proposed an ‘altering rule’ for the higher Education Opportunity Act to inform students about their loans, which offered a disclosure solution that has drafters who choose to include certain terms be subject to stricter warning guidelines as a way of solving the “no reading problem” (Figure 1). The chosen terms that would prompt this extra step would be determined through a “term-substantiation” process in which adherents would identify the most unexpected terms for drafters. Based on advertisement substantiation, this process would include survey questions that test adherents’ knowledge about the terms of the contract, rather than knowledge of the factual claims made in advertisements. The results of these surveys would be reported to an agency such as the FTC, and a ‘warning duty’ would be triggered if a consensus majority (>50%) of consumers did not recognize a term.
Figure 1—photo taken from Schwartz (“Contract Law 33”)

Theory Perspective. In the twentieth century, the disciplines of textual and literary criticism faced related issues in determining the location of the meaning of a text, albeit for vastly different purposes and motivations—particularly in terms of the interpretation of literary or cultural objects (Greetham, 2002). One particular movement in the early 1920s called New Criticism, heralded by I.A. Richards (1926, 1929), believed in the “singularity and ontologically circumscribed nature of a text” (Greetham, 2002). The New Critics argued, in a similar fashion to legal formalists/textualists (Posner, 1986), that the meaning of a text should only rest with its actual words, the tension or connotation of those words, and the formal logic or metaphor associated with those words, not with any outside context or information. Richards (1936) in particular promoted a scientific study of language, noting how a continual synthesis of meaning enlives a conversation and arises from the way words function and respond to the needs of that situation.

Early formalist thought such as New Criticism recognized the “historicized author as a dangerous fallacy,” yet still subscribed to the “unifying consciousness of authoriality to resolve the tensions, ambiguities, ironies” that motivated the modernist explication of the text (Greetham, 2002). In later decades affected by the interpretive turn and poststructuralist and
postmodernist criticism (e.g., Derrida, 1967a, 1967b; Lyotard, 1979) that disfavored authoritarian grand narratives and structures, the ‘text’ is viewed as the catalyst for multiple readings, multiple interpretations, thus multiple new “texts” located in the minds of readers. This revised scholarly practice broadened the notion of ‘text’ to include cultural products and increased the interdisciplinarity of textual criticism and literary theory more generally (e.g., Barthes, 1957).

A reaction to New Criticism and its proposed formalist, scientific study of a text was reader-response theory, which negates the authority of the previously glorified author-figure and the stability of the meaning associated solely with a text (Fish, 1967). Through an analysis of a series of reader interpretations of John Milton’s *Paradise Lost*, Stanley Fish’s reader-response theory claims that the reader is an agent in creating meaning, actively imparting existence to each reading. Steven Mailloux (1990) explains reader-response another way through interpretive strategies and conventions “as a way of describing the process of interpretation rather than its textual object” and “emphasiz[ing] what the reader contributes to interpretation rather than what the text gives the reader to interpret” (p. 124). Mailloux’s model provides only a two-way transmission between creator and reader, and would conceptualize transmission as a singular event, even if it happens multiple times, aligning with Drucker’s (2013) problematizing of “formalist, intentionalist, and objectivist theories.” Yet his argument with some of these authors is that they “do not provide guarantees of correct interpretation or algorithms for resolving interpretive disputes”; they simply make available to the disputants some additional rhetorical tactics for continuing the arguments over meaning” (p.128). Here, Mailloux leaves the outcomes of the reader ambiguous, claiming that we can simply “continue the arguments over meaning.”
Although ever present as an intimate thread of textual and artifactual theories, a response to the profound shift from print to digital textuality has more emphatically, in recent decades, prompted a turn toward a sensitivity of the material circumstances of a text’s publication, creation, and reception as at least partly implicated in its production of meaning (Drucker, 2009a). Materiality studies views texts as products of their literal, material elements, but also the through a lens of historical and contextual circumstances of artifactual production, its life cycle, and the material, historical, and cultural reception impacted by the circumstances of the creator(s) (e.g., laborers, printers, coders) and reader(s) (e.g., consumers, users). Distinctions between the various material aspects and forms of a text are not always defined cleanly, however (Miller, 2005). Shifts in material epistemologies have broadly moved from an idealization of its self-evident, positivist or evidentiary qualities to recognition of that idea as reductive, abstract, and mis-representational. More specifically, in the twentieth century, paradigmatic shifts in materiality studies generally moved from a literal, evidentiary belief in tangible objects and ideal forms to distrust in this authority and a focus on the object’s ability to transcend these constraints. A return to the physical in the early twenty first century as a response to the promise of the immaterial from the digital age then prompted a return to the reader and attention to embodied performance and reception. (Drucker, 2009a; Miller, 2005)

Materiality has been suggested as a suitable method for Information Studies (I/S) research, and might touch on “current debates about the material quality of digital environments and artifacts” drawing from the traditional or critical theories of semiotics, bibliography, and cultural studies. Analyses of materiality have recently enlightened us to

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modes, methods and histories of production, the agency of mechanistic systems regardless of
human observation, and new ways of reading interfaces. Drucker notes that materiality should be
approached as a “fundamental theoretical problem at the core of interpretation of all cultural
artifacts” (p.1).

With the induction of the information age, theories on materiality began as a
“romanticism of the immaterial” with the digital environment and the promise it offered in terms
of its recognition of the contingent, the ephemeral, and the transcendent. In the literary textual
world, notable authors such as N. Katherine Hayles (1999) described digital information’s
promised potential for posthumanism in the form of embodied cognition separate from and
superior to the materiality that instantiates it. This affords digital information a freedom from the
restraints and limits of the material characteristics of which it is made, even suggesting we can
achieve a state of immortality resulting from such freedom. Hayles (2002) applied this model to
the electronic literary text, arguing that new forms of ‘print’ may be able to be seen with this
transformative digital state (Hayles qtd. in Blanchette, 2011, p. 1044).

Literary critic Marie-Laure Ryan (1999) described theories of postmodernism fulfilled in
hypertext as:

The open text. Meaning as reconfigurable network. The slipperiness of the signifier and
the deferral of meaning (symbolized by the system of links). Intertextuality. Reading as
‘exploding the text’ and as endless activity (You never know if you have seen the
lexemes, and travelled all the links of the hypertext.) Non-linearity. The death of the
author. The empowerment of the reader. (p. 100)

Some critics, however, such as poet and essayist Rachel Blau DuPlessis (2002) suggested that
textual theorists by placing immateriality on a pedestal were overlooking a text’s important
material qualities. DuPlessis suggested that these critics “should more fully explore the working conditions and workplace conditions that might illuminate social subjects and textual productions,” asking the question: “Is postmodern textuality a material luxury?” DuPlessis queries whether postmodern thought removes or ignores the realm of the actual material conditions by which texts are created, and disrupts the distinction between “text” and “work”:

Any document is a site of labor, an apparatus of production, the work of several hands on deck. It has a material configuration and material limits. [...] There are issues of the workplace or the class-and reward system of the workers (authors, helpers, editors, scholars) at the point of production or at the point of dissemination and textual reproduction. (p. 90)

A text, considered in this way, would take into account the motivations of the author, the intentionality behind the language of the document, and the material conditions and history that surround these aspects of the document.

This turn toward analyzing the materiality of a text, rather than only its interpretation, involves an understanding of the environment in which a text is produced. For digitally-born documents, it became important to remember that the cyberspace environment embodies:

1) A gigantic archive, constantly updated, serving as the depository of the known and as the incubator of knowledge, ‘where nothing is forgotten and yet everything changes’;
2) An ever expanding territory, whose frontiers are continually pushed back by the forward momentum of the inquiring mind: ‘Its horizon recedes in every direction; it breathes larger, it complexifies, it embraces and involves’;
3) A place of circulation, trading, speculation, and relentless activity—the dynamics of capitalism turned into a spectacle: ‘money flowing in river and capillaries; obligations, contracts, accumulating’ (Michael Benedikt qtd in Ryan, 2002, p. 83-4).

Digital texts are subject to the ever-shifting nature of the cyberspace environment and the various whims, facility, and display of authority (or lack thereof on all counts) by their producers. A study of postmodern textual materiality, however, still recognizes the text “is rich with the situational, the accidental, the contingent, [and] the relational” (DuPlessis, 2002, p. 86). Jean-François Blanchette (2011) notes that “philosophical commitments to immateriality should not be underestimated” in this environment, but notes that “even if a critical exercise were to corral the rhetorical efficacy of such a position, what alternative models exist?” (p. 1044)

What elements are gained/lost when a document when a document is digitized, rather than in paper form? Digitized documents have been thought of as a result of “the force of postmodern thought,” or “a force through which ideology would produce the proper tools to fulfill its ideas [by creating the possibility of] a feedback loop between the force of thought and the force of the technology” (Ryan, p. 102). Theorizing about digital documents, Buckland (2013) notes how “genres are culturally and historically situated combinations […] being digital affects directly only the physical medium, but the consequences are extensive” (p. 4).

DuPlessis describes texts as “something like a musical score performed at a certain time under a certain interpretive paradigm and changed at another, although the notes are the same (though never incontestably all there)” (p. 87). In discussing pacing and the reader’s ways of thinking when encountering electronic texts, Caws (2002) looks to an example of reception when

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36 Ryan (1999) cites eight points as outlined by Michael Benedikt, p. 83-4, but only these three are relevant to this discussion.
viewing modernist art. She describes two viewing experiences: the first, in analyzing how a viewer experiences an aspect of modern art, describes how the viewing requires, in “an effortful way,” to “forget” (p. 128). In order to “find something nonexistent, you have to stretch your mind in regard to seeing and not seeing, thinking and not thinking,” in this case familiar shapes and an instructive “ABOUT” panel (p. 128). Over subsequent viewings, the viewer learns to ignore these familiar objects, thus becoming “trained—self-trained, if you like—to disregard instructions” (p. 128). The second receptive viewing, Caws relates, involves a concept that Arakawa and Gins call “BLANK,” which becomes a manifestation of the “gaps in reception theory” that is “target whiteness and emptiness”—“the vanishing point in single-point perspective or a blind spot in an optical field.” BLANK ultimately prompts the user to think: “We just wanted to fill in the BLANK and get on with it”; “we didn’t know how to read it, and we didn’t want to take the time” (p.138). These various theories on reading, interpretation, and the material presentation of the text stem from a postmodern or poststructuralist perspective that disrupts production of meaning and can inform presumptions of engagement or knowledge from the legal community on the part of the readers of SFCCs.

Comparison. With contract law, the realist turn toward ‘outside information’ included considering the facts of a case, the circumstances of formation, and the capacity of the parties (Alstine, 1999); with textual and literary criticism, this forbidden outside information initially included the biography of the author, the author’s intention, and the reader’s emotions (Richards, 1936; Wimsatt and Beardsley, 1946). Rather than a superficial understanding of engagement with the contract that is supported by theories of ‘duty to read’ or ‘opportunity to read’ that do

37 In this case Shusaku Arakawa and Madeline Gins’ exhibit The Mechanism of Meaning, panel 5 “Reassembling” and panel 3 “Meaning of Intelligence.”
not translate to actual knowledge of the terms, these ideas might be disrupted by some of these theories that locate the meaning of the contract elsewhere, as in the many, subjective interpretations of the readers. Similarly, the arguments of ‘disclosurites,’ or those who claim presentation equals communication in the same way that notification or disclosure is supposed to transfer knowledge of changes to the contract, might be revised by the notion of BLANK or that convention and circumstance may negate this transfer. Just like the users of reddit.com discussed in the anecdote presented at the beginning of Chapter 1, these notifications are read as ‘annoying’ rather than informative, and possibly just as a step to remove an obstacle to the content underneath. In a broader sense, this adds another dimension to the legal theories that negotiate between the meaning of the contract existing within the four corners of the document or with contextual information. The meaning of a contract may be viewed as subjective and only in the minds of those involved, contingent upon the circumstances of experience, knowledge, culture, and social effects. From this revised standpoint, it becomes difficult to justify conventional disclosure methods as meaningful.

Additionally, the transformation from paper distribution of SFCCs to electronic presentation is problematic in that it “facilitates certain operations, favors certain structures, and promotes a certain type of reader and writer”—“a new subject, as [the technological medium] dictates compelling changes in our mode” (Ryan, p. 104). This new ‘subject’ has now learned to ignore the various mechanisms by which these agreements appear, for instance, whether as a hyperlink in the footer of a website or as a step in a registration process. This revised thinking reveals how habitual passive acceptance by consumer-adherents tends to rely on notions similar to “effortful forgetting” where users learned to not engage with these complicated contracts, not allowing their pace of reading or browsing to allow for what Caws calls a “temporal reading
adjustment” (p. 146). The SFCC has ceased to become a document in its own right, and instead exists as a task in a process or an item in the footer or marginalia. A zombie waiting to emerge from behind-the-scenes that is placated by an “Agree” button. Caws relates: “We may have learned to read surrealist texts rapidly, or poetic texts slowly; to scan grocery lists; to dramatize what needs it. Yet we have not learned […] to think through these texts on their own rhythm” (p. 146). In order for users to engage with SFCCs, they must change their ‘pace,’ recognizing that it is possible these documents require a different temporality than other web elements since they are afforded ‘document-ness’ and the high stakes with which that form is associated. Whether or not there are ways to facilitate this disruption will be discussed as possible solutions in the next chapters; it is first worth meditating about how this effectual blind spot and refusal to change pace on the part of readers creates a dangerous situation for a postmodern, seemingly immaterial document.

4.2.2. Versions and Modifications. One of the major issues acknowledged in regard to digital SFCCs is their ever-changing nature. Afforded by both their digital form and clauses such as unilateral modification (UM) that allows the text behind the hyperlink to change at any time, often without notice. When notice does occur, companies make use of disclosure conventions such emails or banners to which consumers have become accustomed. Concepts borrowed from more traditional strains of textual analysis that articulate differences in versions of manuscripts might be useful in enunciating how the ever-shifting nature of SFCCs might be handled. These theories include bibliographical studies and critical textual practices that describe processes of discovering and reproducing an ‘original text’ that takes into account the decisions of the editors and publishers of a text, and which can contribute to an authority associated early on with biblical criticism and the quest for the ideal biblical text (Greg, 1950).
**Contract Perspective.** Unilateral modification clauses, a commonly used clause in the U.S.\(^{38}\), make the other promises in the contract “completely illusory, as this term essentially asserts that the online service provider will only be bound to the terms in the ToS for as long as the online service provider decides not to change those terms” (Preston and McCann, 2011). In other words, for the user, the concept of the document as a stable entity that could be potentially understood is disrupted by the mere fact that the service provider could change the document at any time without their knowledge of this change. As Preston and McCann (2011) ask: “If the service provider can change the contract at will, why bother to call it a contract at all?”

On July 18, 2007, the Court, in its decision in *Douglas v. United States District Court for the Central District of California*, held that “merely posting a revised contract to one’s website was inadequate notice and the service provider’s customers were not bound by the revised terms” (Carver, 2007). This was the result of a class action lawsuit filed by Joe Douglas, a long-distance telephone service customer of Talk America (formerly America Online (AOL)), who charged Talk America with breach of contract and violations of several consumer protection statues after they revised its service contract without notifying him and which he allegedly tacitly ‘accepted’ by using the service. This case, however, did not set a precedent for the current UM clause, which gives service providers the right to modify its terms at any time without explicit agreement to the revisions by the consumer. When combined with other common clauses, including mandatory arbitration and class action waivers, these unstable, open, and slippery agreements can become dangerously one-sided for the consumer. Additionally, the non-negotiable quality of these contracts has been reinforced by a trend in judicial decisions that

encourage courts to nullify contracts that infringe upon “substantive, jurisdictional, or constitutional interests,” (the case for many these agreements), which in turn prompts a response from drafters to continually amend the terms in a “private conversation” with the courts that effectively leaves out the voice or concerns of the user (Horton, 2009).

The unilateral modification clause calls into question what awareness of the terms actually means, if anything (Moringiello and Reynolds, 2007). In one telling case, *McKee v. AT&T Corp* (2008), AT&T customer Michael McKee filed a complaint against the company claiming they overcharged him and several other customers in his area. He was first hit with a settlement defense by the company who alleged that his ToS agreement included a mandatory arbitration and class waiver clause, preventing the lawsuit in the first place. AT&T then dropped this defense in favor of a unilateral modification clause, claiming that soon after McKee had registered with its service, the company amended their agreement to include the new charges. Since McKee was still using the service throughout the case and thus was continually agreeing to the supposed unilateral modification clause and subsequent changes, AT&T decided to continually amend its agreement, perhaps up to five more times, having changed the document so drastically by the time they testified that its own lawyers were unsure of which version of the contract applied and perjured themselves on the stand (Horton, 2009).

In 2011, Preston and McCann acknowledged the new “truly unruly ToS,” referring to this new genre of contract as “a beast untied from the contexts in which form contracts gained (limited) legitimacy” and akin to the judges adopting a “wild horse while forgetting that such beasts were only originally allowed into civilized communities because they were in a corral” (p. 2). Put another way: the inherent physical restrictions on paper contracts that adjusted for some of their inherent inequalities have been removed in the digital environment for SFCCs, such as
the requirement to retain a copy of the agreement and provide it to the adherent, including the physical document of an ‘edited’ or changed version (Wittie and Winn, 2001; Randolph, Jr. 2001).

Additionally, unilateral modification clauses are not allowed without sufficient reason in the E.U.\textsuperscript{39}, which is not the case in the U.S. with unilateral modification being one of the more controversial affordances of the new Draft for consumers. Under the U.K. directive, terms in contracts cannot be “irrevocably binding [to] the consumer” if they “had no real opportunity of becoming acquainted [with them] before the conclusion of the contract,” which is a consistent standard across most contract doctrine, yet the details of this standard and how it plays out in the digital environment have yet to be parsed through sufficiently. In the U.S., more recently, a similar top-down standard was enacted for only one type of SFCC. The 2017 Bureau of Consumer Financial Protection’s regulation that prohibits the use of mandatory arbitration in financial service contracts, as they tend to prevent class action lawsuits for consumers\textsuperscript{40}.

Another important legal concept for SFCCs is the parol evidence rule, which governs the type of evidence allowed in cases of dispute, and it seems to help consumer-adherents because it does not allow for previous terms or other agreements besides the actual one to which adherents agreed to be considered. Generally, the type of evidence at issue includes “court evidence of a prior or contemporaneous agreement in order to modify, explain, or supplement the contract at issue”\textsuperscript{41}. Additionally, the parol evidence rule gives precedent to the written document over

\textsuperscript{39} Such as in the E.U. with the Unfair Terms in Consumer Contracts Directive of 1999 (which was superseded by the Consumer Rights Act of 2015).


\textsuperscript{41} https://www.law.cornell.edu/wex/parol_evidence_rule
other evidentiary information, such as an oral agreement or other outside promises (par. 3). Some agree with this change, including Klass (2017b) who notes, “the logic of the parol evidence rule falls apart when we know one side hasn’t read the writing in question” (par. 2). This is a turn from the ‘integrated’ (in a legal sense) contract documents that are afforded ideal textual status as a “fully [...] final and complete expression of all the terms agreed upon between (or among) the parties” that allows SFCCs the official status they have acquired (Rowley, 2011, p. 2).

Some (e.g., Judge Williston, legal formalists/textualists) have argued that only the text of the contract may be considered, thus supporting the parol evidence rule, others (e.g. Judge Corbin, legal realists,) have argued that extra facts and contextual information also be considered. Judge Williston argued along the lines of the formalists that “in order to have finality and to prevent endless litigation, the law must respect a final integration of terms in a contract” (“Parol Evidence Rule” par. 1). Judge Corbin and the legal realists, on the other hand, claimed that due to the complex and changing nature of the relationship between parties, “one can never be sure of when there is a complete expression of the agreement,” and thus should recognize any “negotiations that may modify, explain, or supplement the contract” (par. 4-5). The parol evidence rule currently is no longer favored in the majority of states, as parties are increasingly able to introduce other types of evidence at trial, especially in cases of deception and fraud.

Theory Perspective. Traditionally, there are two doctrines of textual analysis based on the romantic notion of an author and the observation that scribes or editors often simplify and ‘trivialize’ their intentions (Abbott and Williams, 2014). These two types, referred to as *difficilior lectio potior* and *brevior lectio potior* coordinate the extent that an editor stayed true to

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42 Recently, for instance, the California Supreme Court held in Riverisland Cold Storage v. Fresno-Madera Production Credit Ass’n (2013) that parol evidence is admissible when used to "claim that [a contract] should be voided because [the party/parties] were induced by fraud."
authorial intent based on the difficulty of the reading (i.e., the more difficult the reading the more likely it is to be authorial).

Textual critics and bibliographers have included various methodologies and epistemologies for producing ‘evidence’ that might contribute to the reproduction of a manuscript in the search for this authoritative text, including at times considering internal evidence (i.e., evidence from the text itself) or external evidence (i.e., evidence from the witnesses of a text, such as a contemporary scribe) (Abbott and Williams, 2014). Early versions of twentieth century criticism still viewed a text as stable and “self-identical” to its subsequent versions” (McGann, 1992). W.W. Greg’s (1950) ‘copy-text,’ for instance, described the text of a work that an editor would select as the basis of his own edits, and Greg Bowers’ (1978) expanded version described the concept of the ‘ideal text,’ which claimed that Greg’s copy text, in the editor’s vision, would produce as closely as possible a version of the text that is approximate to the author’s intentions. G. Thomas Tanselle also promoted this method, arguing that the primary purpose of textual criticism is to produce a text that is the closest to the author intended, even though he acknowledged that more than one authoritative version might be available. He claimed that edits should be recognized as two types: 1) vertical revision, or one that “aims at attempting to make a different sort of work,” and 2) horizontal, which “aims at intensifying, refining, or improving the work” (Tanselle, 1978). This lineage is often referred to as the Greg-Bowers-Tanselle method.

Similar to the interpretive turn’s effect on rhetoric and reader response theories, textual criticism and bibliography also had a turn away from authoritativeness, only it was from the authority of the text-object itself, rather than an author-person (although previous conceptions of the ‘original text’ rely on human and authorial judgment). Jerome McGann’s (1992) revision of
the notion of the authoritative text notes the slipperiness of versions of documents and the
inability for the notion of the authoritative, text to remain stable. Even as each copy of a text
seems to contain meaning self-evidently, he notes how “each version acts as “alien interventions
brought—paradoxically if not ludicrously—to reveal the truth about an original object that—
paradoxically if not mystically—seems difficult to access despite its clear integritas” (McGann,
2001).

DuPlessis (2002) notes the complicated role of bibliography studies and the textual critic
in the postmodern age:

the oddest thing […] is that in all instances of reception, dissemination, and textual
editing, it is the critic and not the putative author who benefits […] the critic solves,
heals, binds, and perfects the situation left by the contingencies and inadequacies of
authors […] the modern textual critics hold time off with their monuments; the
postmoderns jump into that sea and understand that their work is just one part of a
‘signifying chain’ of critics, textual events, publication events, and material practices. (p. 89)

Kirschenbaum (2002) similarly questions the role of textual criticism at the start of the
millennium, except with a slight nostalgia as he calls to return to some of the more traditional
elements of textual criticism and bibliography. Kirschenbaum claims that many textual theorists
turned to postmodern authors such as Derrida, Barthes, Deleuze, Guattari, and Cixous, rather
than some of the influential scholars in the field (circa 1980s-2000s), including D. C. Greetham,
Jerome J. McGann, D. F. McKenzie, and G. Thomas Tanselle, among others who he claims have
presented debates that have “energized the editorial theory community” (p. 16-19). His return to
textual criticism highlights certain material aspects when writing about electronic texts, including
“platform, interface, data standards, file formats, versioning, and so forth” (p. 16). He suggests that bibliography and textual criticism will work against the idealization of the immaterial by the postmodern critics (p. 19) and responds by acknowledging the permanence of digital texts in his memorable phrase: “Every contact leaves a trace” (Kirschenbaum, 2008, p. 1). Kirschenbaum’s project is to show that textual criticism and bibliography should be “recognized as among the most sophisticated branches of media studies we have evolved” and that these disciplines, although previously focused on physical books (e.g., parchment, paper), have much to say “to the new artifacts and technologies of the digital age” (2002, p. 26).

Bringing attention to the physical limitations of digital media, Kirschenbaum (2008) calls for an analysis of two characteristics of an artifact—its forensic and formal material elements. Kirschenbaum’s (2002) analysis stems from his original turn back toward textual criticism and bibliography, where he states his “point is not to denigrate the appeal of robust hypertext systems, only to point out that the presentation of the technology has been overtly aestheticized, and in a manner not always in keeping with its functional, ergonomic limitations” (p. 26, footnote 25).

Kirschenbaum’s proposed analysis of several types of digital texts in an attempt to work against literary and textual critics’ assumptions about the digital text—as ephemeral, malleable, unstable, and fundamentally immaterial (p. 39). His analysis alternately reveals the stubbornness of forensic or physical qualities, the underlying physical energy and effort that accompanies and produces the literal hardware and technological infrastructure (e.g., inscription, ‘pulses of light,’ or memory devices such as a hard drive or RAM) that works tirelessly underneath so much of this seemingly ‘immaterial activity.’ An acknowledgement of these types of material elements he refers to as forensic materiality, which is the actual media (e.g., paper, digital bits) evident in its
creation and the procedures of storage, preservation, and restitution of their material traces and inscriptions.

Kirschenbaum’s quite detailed analysis of these forensic elements is contrasted with what he calls the “formal” material aspects of a text, which bring attention to the organization of elements on a page that we recognize as a text. An analysis of the formal materiality of a text, then, reveals the constraints that provide technological instantiations recognizable ‘form’ (e.g., file formats such as PDF or JPEG), and which limit and perpetuate the types of inscriptions that can be had. Bibliographers’ tendency to see the transmission and reception of a text to the public as a linear history is problematic, according to this conception, and although some scholars have acknowledged it as “more or less complex” and “more of less fractured,” Kirschenbaum’s analysis reveals how certain physical and formal restrictions are ever present and provide a type of stability for digital information.

To explicate this point, Kirschenbaum (2002, 2008) makes an example of the digital poem Agrippa, by the science fiction writer William Gibson, which had a unique “lore” surrounding its transmission. Kirschenbaum notes how the multiplication of this artifact on the web has been “remediated to such an extent” that it has electronically created an “intricate synchronic system” with these multiple editions. He notes how the poem was published on a computer disk that comes packaged inside of a limited-edition artist's book entitled Agrippa, and printed by Dennis Ashbaugh in 1992, for instance (2002, p.15). While many who take up the bibliographer’s task of uncovering transmission history to find accidentals or other mutations of the text across editions presume that “the online text is morphing and mutating”—such as William Gibson himself who Kirschenbaum (2008) says claims his poem ‘decays’ more each

43 Kirschenbaum’s reading of Jerome McGann in Mechanisms, p. 214
year it stays online, that “it’s like it’s being cut and pasted by cyberspace itself”—Kirschenbaum describes how despite it being a “uniquely volatile electronic object—ephemeral by intent and design—‘Agrippa’ has proven to be remarkably persistent and stable over the years” (p. 237). He cites how “the myriad digital copies of the poem manifest perfect stability as they continue to appear and multiply around the network” (p. 239).

Kirschenbaum acknowledges the “social” domain of the preservation of texts throughout his analysis as a way of understanding how texts survive and become “stable” through user activity or persistence of socially maintained formats; yet, he does not look at the social domain of reading practices. This would be a shift in focus to the material conditions surrounding the reception of digital texts, rather than Kirschenbaum’s important look at the materiality and conditions of their production, their material substrates, traces, and effects (forensic materiality), the code work and engineering specifications that produced them, and the sets of conventions, procedures, and regimens imposed on the subject’s interaction with a data set or digital object.

Kirschenbaum’s charge for bibliographers is this: to study the “patterns of transmission and transformation as they are manifest in the documents and artifacts of the present” in order to see these traces rather than longing for some nostalgia of the formal qualities of past documents (p. 217). He claims there is a “strong argument to be made that digital information can best ensure its own longevity through its unprecedented capacity for proliferation, and textual theory must take this into account” (p. 240). By describing both the forensic and the formal, then, ultimately Kirschenbaum conceived of an approach that is able to justify how digital media is both read as “evanescent and ephemeral” in some discourses, and “remarkably, stubbornly, perniciously stable and persistent in others” (p. 27).
Comparison. The difference in perspectives between the idea of changes and versions as manifested in clauses such as unilateral modification and those in bibliography is quite vast. While the standards for documenting changes in SFCCs is most minimal (e.g., an email or a banner that simply states there was a change), in bibliographic practice, the documentation practices are much more nuanced and have been refined over centuries. Reading the drafter’s intentions into the difficulty of the legalese and the documentation choices could be a revealing practice and would view this authority skeptically, as did the eventual progression of textual critics in an effort to undermine the romance towards intentionality and authority over the meaning of a text. Moreover, as recently some of these ideas were complicated by a renewed thinking on the topic, including Kirschenbaum’s idea of the persistent text, conceptions around SFCCs from this viewpoint might be seen as daunting, even dangerous when applied to the affordances provided to these contracts. If the agreement persists through minimal documentation practices, consumers are beholden to these changes without an actual awareness of what they entail, the drafter or corporate entity has unlimited power to alter the terms as it sees fit. In this sense, the legal scholars that were cautious of these affordances such as unilateral modification clauses were right in their assessments.

Thus, both the terms used to articulate the concept of a stable text and the terms used to critically revise that concept as perpetually unstable might similarly provide a lens to describe the ‘stability’ of SFCCs. Previous descriptions of textual edits such as those described by the Greg-Bowers-Tanselle method, could be also be useful in articulating certain egregious displays of authority on the part of drafters and continual modifications, rather than romanticize (or ignore) authorial intention, could be viewed as dangerously persistent from the validity afforded by court opinion.
The concept of unilateral modification in the context of SFCCs allows for the continual modification of terms. As it stands right now in the U.S. and with new confirmations of contract doctrine such as the Draft, unilateral modification clauses and practices are mostly allowed; some jurisdictions require notification of changes, but very little other documentation is required (Horton, 2009). Compared with other legal systems such as the E.U. where this type of editing is forbidden entirely, a lack of attention to the continual ‘instability’ of these texts seems problematic; moreover, markers of the appearance of stability creates the illusion that the texts are either stable or immaterial (nonexistent), and thus these contracts and their drafters can have free rein to include any terms at will without an acknowledgement of the change, or else with the assurance that readers will ignore any notification efforts. Once this instability is recognized, however, certain bibliographic practices if implemented carefully, such as archiving, editing, and documenting using metadata schematics, might be offered in producing a more useful record for an adherent unfamiliar with its content.

Ultimately, viewing modifications as ‘edits’ in the textual sense broadens the notion of modification and allows for a more nuanced engagement with any changes to SFCCs. Rather than invisible behind-the-scenes changes with dull or annoying notification practices, it might be imagined that textual and bibliographic theories could offer a new vocabulary that could revise the understanding of this process for adherents, including delineating between vertical and horizontal revisions, for instance, and/or making determinations of ‘ideal texts’ that would make markers of authoritative or intentional power more explicit. Rather than just a functionality specification, strategic infrastructure model, or formal composition, texts as documents perform these and other characteristics—authenticity, reliability, and standards of admissible evidence.

What is the equivalent of an ‘ideal copy’ of the SFCC? How are the editing practices
documented? Who are the editors and who is the author (e.g., corporate entity or lawyers)? If conversations in the literary, knowledge organization, and theory worlds have addressed these issues granularly over many centuries for cultural artifacts, it seems worth considering from this perspective for contracts, which are more ‘official’ documents with significant material consequences and thus important in that sense for a large population of people.

The presentation and instability of the SFCC document might be viewed as simultaneously persistent, in the sense that Kirschenbaum’s conceptions disrupt notions of immateriality, but also begs the question: Who are the entities that benefit from this persistent image of immateriality? It could be argued that several types of materiality are being hidden—the physical traces that Kirschenbaum notes, as well as the material consequences that are associated with the material form of the document. In other words, the projections of materiality are intended for certain audiences only—the courts, the legal world, and the corporate drafters are having their own conversation and consumers are not meant to understand. This closed process is exacerbated by practices that could seem like convenience and democratic, participatory user experience, when in actuality there are only a few players behind-the-scenes controlling the outcome for the majority of people. Providing stability in the form of rigorous documentation practices is one way this can be revealed and reversed, with the added benefit of allowing consumers to take part in this conversation.

4.3 Equality

While the solutions to the unique issues presented with digital SFCCs are founded in the traditional ideologies and issues of contract doctrine, throughout each proposed solution, questions of authority and designations of power remain. The bodies and politics (e.g., ALI, ULC, and court opinions) behind the regulations, authoritative texts, and decisions that affect the
legality of these agreements have far-reaching implications for both behemoth corporate entities and the vast majority of the population that use these services. Thus, a third set of issues should be cordoned off and analyzed separately—those that relate to the inherent, asymmetric power difference between the parties of SFCCs. This section details these issues in two parts. The first part discusses the design choices that inform the governance of SFCCs and the way they are encountered. These design choices, while often seemingly benign, have implications in terms of the contracts’ validity and affordances. The second part discusses the entities behind these decisions—the entities with the power in the conversation around SFCCs—and how these various entities come together to perpetuate the current state of these contracts.

4.3.1. Design and Presentation. Since many of the issues of digital SFCCs involve their presentation in a digital environment, the design practices that designate the presentation choices should also be considered and studied critically. This includes studying the agreement requirements (e.g., agree buttons, scroll boxes), the notification practices (e.g., banners, pop-up boxes), and even the language choices, font decisions, and layout of the text. Each of these factors not only reference a part of legal discourse, but also signal to consumer-adherents a message about their genre, their validity, and their authenticity. Additionally, the power dynamics behind these design choices should be studied critically as they can seem routine, yet have far-reaching implications for both parties of the contract.

Contract Perspective. The UETA, also created by the Uniform Law Commission (ULC) whose mission is to coordinate and integrate state law and who wrote the Code, was made into law in the early 2000s by the Clinton administration as a way of streamlining interstate transactions (Wittie and Winn, 2001). Some aspects of this law, including the broadening of the definitions of authoritative records to include both paper and digital records and of the concept
of ‘agreement’ to include other forms than the classic signature, in some ways go directly against traditional formation in the Restatement’s (1981) doctrine. The revised laws of the UETA were based on the actual business practices of newly digital companies that needed to be able to use digital records in their transactions, needed to not be required to retain paper copies, and needed new forms of agreement to increase efficiency; in these ways, the UETA seemed to serve the needs of businesses and to revise and update the law for pragmatic purposes. Criticisms of the Code, the ULC, and uniform codes in general include concerns that they do not promote the most optimal form of commercial governance for companies or consumers, and that they are not able to actually identify business norms and incorporate them accurately. Lastly, some have argued that they rely on assumptions of normative practices that do not in fact exist objectively (Ben-Shahar, 1999). It might also be argued that this revised doctrine (e.g., new forms of agreement) in turn also facilitated and promoted these business practices by ‘greasing the wheels,’ so to speak. By allowing for agreement practices such as ‘clickwrap,’ (i.e., a digital contract with an “I Agree” button), and ‘browsewrap’ (i.e., agreement through browsing or visiting a website), the concept and correlating practices of ‘agreement’ have been further redefined and reified as these new definitions.

According to Leib and Eigen (2017) presumptions of efficiency and cost-saving benefits either give too much credit to corporate entities in regard to how these documents are drafted or else attributes to them “unrealistically altruistic and charitable motives.” In the first case, it supposes the standardization of contracts though industrialization and the volume of transactions helps save costs by predicting legislation through a combination of the “social artifact of contractual enforcement” and the “traditional model of exchange.” This claim attributes too much banality to the process of drafting these contracts when instead it is much more likely that
corporate lawyers are tasked with coming up with a document that “protects the company from every possible occurrence.” This disproves the other assumption associated with these contacts that presumes the drafters have altruistic motives that will work toward making these contracts fairer for consumers. As notions of standard practice has already afforded these contracts the ability to contain egregious, all-encompassing terms, and with consumers being left with little choice not to utilize these services, in the current situation, there is no incentive for these contracts to evolve unless the companies want to do it themselves.

In practice, the conventional format, display, and location on the interface work against human psychology and behavior, yet still satisfy courts as the notification required. In a study of the user agreement that came with his new iPhone, for instance, type and print professor Brian Lawler (Cal State Polytechnical University) analyzed the documentation and formatting practices of the agreement that signify the authentic appearance of a contract. He notes how the 32-page pamphlet had margins of only about one-eighth of an inch, causes the page to read “like a big gray mass […] with hardly any white space (Sullivan, 2012, par. 3). With the characters' height at only 4.5 points, “a smidge taller than the thickness of a single dime,” Lawler states that we are dealing with some “seriously small” font as well as “painfully tight” spacing between the lines of the text at only “just past the minimum legible standard before the descenders (the bottoms of the j's and p's, for instance) in one line of text start to overlap with the ascenders (the tops of the h's and f's) in the next line.” And none of this is by accident—Lawler explains how “the world's best typesetters work on these documents, and most fine-print producers review the whole design with legal teams.” Thus, these signifiers of authenticity that render these agreements valid based on notions of procedure and ‘genuine effort’ are actually making them more difficult to read and understand for consumer-adherents.
Moreover, there is already proof these techniques could be effective if they relied on visualization techniques that worked with user comprehension, such as those used in business-to-business contracts (Barton et al., 2013). One study (Passera et al., 2016) performed on this topic found that “visualization could provide a personal touch to an otherwise sterile-looking contract document, and diminish the ‘otherness’ of legal terms,” and further, visual aids “decreased the ambiguity of information, so that it would be easier to understand alternatives [and] converge on a shared interpretation” (p. 91).

Even with this information, renderings of the presentation of SFCC as a hyperlink or scroll box is sometimes equated with past forms of paper documents. Judge Kimba Wood, for instance, in a ‘clickwrap’ case (Bar-Ayal v. Time Warner, 200644) noted that even though a user had to scroll through thirty ‘screens’ of the ToS agreement to find the clause at issue, it was still upheld as legal due to the fact that Wood believed “it is not significantly more arduous to scroll down to read an agreement on a computer screen than to turn the pages of a printed agreement” (Wood qtd. in Moringiello and Reynolds, 2007). Printed, the agreement would have been eight pages, which leaves open the question: for consumers, is it easier or different to scroll through thirty screens than to flip through eight pages? How does a pop-up window in a sign-up process on a website change the process of reading or comprehension by providing different types of situational frames or markers of authenticity for adherents?

It cannot be expected of adherents to read all of the terms—basic SFCC theory actually presumes adherents do not read them—as their length alone is unreasonable (Ben-Shahar and Schneider, 2014; Bakos et. al, 2017). Alex Hern (2015) of The Guardian, for instance, read all of the ToS agreements he came across in a week and ended up reading 146,000 words, which is not

44 https://jenner.com/system/assets/assets/3016/original/Bar-Ayal_v_Time_Warner.pdf?1319460897
feasible for most consumers, at least on a weekly basis. Thus, the solution provided by the legal community is that their presentation in a scroll box is expected to satisfy comprehension to the benefit of consumers who do not wish to be inconvenienced with them anyway.

Looking ahead, new laws such as the Nevada Senate Bill (No. 398)\textsuperscript{45} that are based on UETA provisions have begun to define new types of digital contracts, such as smart contracts made with blockchain technology, as legitimate, binding documents that produce “an electronic record created by the use of a decentralized method by multiple parties to verify and store a digital record of transactions which is secured by the use of a cryptographic hash of previous transaction information.” This interpretation has tended to more liberally define agreement mechanisms for technological forms of contracting and validate its properties as a record. While the intention behind this decision could help with streamlining future iterations of smart contract transactions for industry in the same way that it did for other types of transactions, the implications may be similar to how the definition of agreement changed with previous digitized contracts such as ToS agreements. For example, according to the Nevada bill’s interpretation, commitment to the blockchain can now signal agreement: “If a law requires a signature, submission of a blockchain which electronically contains the signature or verifies the intent of a person to provide the signature satisfies the law.” Several pieces of information must be gathered to fully interpret this definition, including what is meant by “intent” by both parties, especially since in certain situations it only takes one person to execute a record on the chain; however, it already seems that smart contracts, although initially disassociated with their contract predecessors (Werbach and Cornell, 2017), are still being provided the same affordances as other types of contracts.

\textsuperscript{45} https://www.leg.state.nv.us/Session/79th2017/Bills/SB/SB398.pdf
Theory Perspective. A study of the visual elements of a text, according to Drucker (2014), can prompt a reassigning of the creation of meaning and knowledge to the ways in which documents are transformed by their presentation and location within a digital interface. Drucker’s proposed approach of graphesis, or the “study of the visual production of knowledge” includes a close, critical analysis of the conventions of the graphical user interface (GUI) that “encode knowledge through the visual structures and rhetorics of representation.” These practices ultimately affect a subject’s interpretive engagement, including, for instance, how certain graphical forms carry with them epistemological assumptions about the information they present. Drucker notes how information arranged “statically” in certain visualizations such as “tabular form” can give the impression that it has been produced according to a “strict distinction of content types,” for instance, that are “neither mutable nor combinatoric” (p. 87); when viewed critically through the query of graphesis, these forms are produced according to certain values of statistics, business, and the empirically-based sciences. This lens is useful in describing how certain conventional visual elements are organized and presented to work toward producing certain readings and imparting specific types of knowledge.

Although a proponent of studies of the material in general, Drucker (2013) cautions that when literal materiality is presumed, as in Kirschenbaum’s and Blanchette’s work, the material elements are viewed as the fundamental, positivistic or evidentiary composition of a text, and material critiques can fall short of considering all of the elements that contribute to its performance or interpretation. She cites how Kirschenbaum is more interested in “ontology” than “performance” in regard to “the identity of material things resid[ing] in their properties and capacities,” and in terms of “what they are rather than what they do” (par. 4). Her added dimension of performative materiality suggests that texts or cultural artifacts be “understood in
terms of what it does, how it works within mechanic, systemic, and cultural domains” (par. 4). A performative reading, then, would necessarily augment any description or analysis by putting them in “a continuum of other evidence or read in relation to other texts, images, documents and the cultural codes of their composition” (par. 4).

Drucker (2002, 2013) further argues for the “nontriviality” of the materiality of the digitized text, which in its mistakenly perceived immaterial state gains abilities its paper predecessors, whose material state was more immediate, did not possess. Drucker’s search for the boundaries of the text stems from the trend in textual analysis that looks toward understanding the “textspace,” or “the confines that invite the appearance of text in any form at all,” including “the elemental formality that makes text possible” (McGann, 2001). These imagined readings stem from the “specific structures and forms, substrates and organizational features” that then become the probability conditions for the production of an interpretation (Drucker, 2013, par.17). One of Drucker’s recent projects reiterates a commitment to interpretation with a call to inject and transform current mechanistic interface design practices with humanistic values (Drucker, 2009b, 2011, 2013).

Performative materiality, in Drucker’s conception, builds on the poststructuralist shift toward engagement with the readerly production of texts to a probabilistic perspective that synthesizes theoretical-critical textual traditions with those of user experience. This view understands materiality as producing meaning as a “performance, just as any other ‘text’ is constituted through a reading.” These readings are embodied as interpretive acts or events that are “situated,” “partial,” and “non-repeatable” (Drucker, 2013, par. 11, 34-36). As an artist and art scholar, Drucker (2009a) makes use of concepts from aesthetics and suggests that projections of materiality “provoke” types of knowing—provocations that lead to varied expressions of
knowledge, “not a literal template transferred to the mind” (p. 15). Ultimately, however, in order to imagine the possibility of ‘reinventing’ an “understanding of our own processes,” we must recognize first that “indeed they are at work” (p. 15).

**Comparison.** The differences highlighted in the two perspectives on design note a distinct epistemological dissimilarity. In the Contract Perspective, economic efficiency is an explicit goal of the UETA and other similar laws that afford SFCCs legitimacy. This results in designs that are based on minimal presentation and projections of ‘convenience,’ not on actual established practices that promote awareness and knowledge, and thus actual consent.

From the Theory Perspective, rather than simply checking off procedural requirements, the design of SFCCs might be read as invoking a certain type of probabilistic reading—one that makes use of conventions and a subsequent blindness from a familiarity with these conventions. From this vantage point, these design practices might be argued to make use of these readings to some beneficial effect for drafters, not consumers. For instance, if the corporate entity can predict, even depend on the fact that no one will read the ToS agreement, then it can include whatever terms it wants and expect the corresponding conduct to then be legal. This is why many of the service providers, once called out for their deceptive practices, refer to these agreements that it feels legally provides a safeguard for its conduct.

The confirmation of allowances for minimal procedural/presentation standards in the Draft (2017) perpetuate less “affirmative gestures” of notification and agreement, which seems like a capitulation at this early stage of the debate on SFCCs. Future iterations of digital contracts could also benefit from these determinations and should be monitored so that the same types of inequities for consumers are not codified into this new technology. Moreover, since smart contracts are comprised of a set of algorithms and thus divorced from common understandings of
‘terms,’ it is not difficult to see how further projections of immateriality could be happening with manifestations of SFCCs in this form; if a set of algorithms are considered a contract, and agreement is equated with ‘use,’ contractual activity could proliferate into forms that are far removed from the memorialization of their paper predecessors.

4.3.2. Power. The freedom of contract principle that governs all contracting activity in the U.S. and elsewhere is a demonstration of one’s ability to engage in “private legislature” or “private ordering”46, which is distinguished from public ordering, or legislation that affects the general public. It is seen as a constitutional right both literally and metaphorically as an individual’s right to exert their own sense of power in their own dealings and relationships. Thus, the power dynamic of one that is free and equal to transact is most intimately integrated with contract doctrine (Schwartz and Scott, 1995; Klass, 2018). It is acknowledged that this power dynamic is subverted in the SFCC paradigm; however, the nuances of how this imbalance exerts its effects on the consumer-adherent, or at least how it provides a red herring for these consequences, is yet unstudied. Rather, because of freedom of contract and values of efficiency, convenience, and economics, contracts governance is remedial, and any issues of deception are only handled if brought to the attention of the party deceived. This includes the policies that afford these designs and practices legitimacy and the types of power that influence these policies.

Contract Perspective. Contract law generally has no complete descriptive or normative theory; instead, it is generally viewed as a remedial institution whose function is to adjudicate any issues that arise between two individuals or entities after transactional activity (Griffin, 1978). Ideologically, freedom of contract is supposed to promote the facility of individuals to

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46 Contracts are rules established between two people that are held up as private law (i.e., applies to an individual, group of individuals, or corporate entity) unless superseded by Public legislature (e.g., bills written by Congress). (“Legislation, Laws, Acts,” n.d.).
transact in the name of equity without the interference of oversight systems such as government institutions. Broadly, then, the goal of contract law is one of enabling self-governing parties to further shared objectives through contracting. But with SFCCs, one party drafts the terms and notions of ‘standardization’ are defined by ‘standard practice’ without a normative regulatory response to egregious terms. Further, as was seen with the critiques of Kim’s proposal of legislated terms, there are concerns that powerful players in the governance of SFCCs could take control of these regulatory mechanisms and ensure they result in their favor.

These fears are not new, however. The realist legal thought that influenced the writing of the Code in the 1940s-1960s expanded on notions of “performance practices” produced by the parties throughout the transaction as “a primary source for interpreting and supplementing their explicit contracts” (Ben-Shahar, 1999, p. 781). Proponents of formalism and critics of this expanded notion of contract claimed that the Code effectively allowed “unwritten commercial practices to vary and erode explicit contractual provisions” by affording “binding force” to the “course of performance, course of dealings, and customary trade usages” (p. 781). Put more succinctly, they argued the Code remodeled the incentives of the contracting parties through this description and thus formed and shaped future aspects of business practices. Regardless of their differences in ideological underpinnings and even implementation, the Restatement and the Code (and subsequent acts such as the UETA) are efforts to rectify some of the ways in which contracts have been integrated into our lives and go directly against one of the foundational concepts of historical contract doctrine (i.e., ‘freedom of contract’).

Freedom of contract, although made popular in the nineteenth century after the Industrial Revolution (Atiyah, 1985), has been attributed to an event around the “rediscovery of Roman law,” which is benchmarked at the founding of the University of Bologna around 1130/1140 AD
and the beginning of the scholastic study of law (Micklitz, 2015, p. 7). Prior, the conflict between Pope Gregory VII and Henry IV, the Holy Roman Emperor over the independence of the Church from the temporal power “heralded and triggered” the reestablishment contract law, along with the Crusades between the 11th to 13th centuries that reinvigorated an intellectual discussion around the split between “spiritual” and “temporal” power (p. 9). This conversation particularly brought attention to a concept that would later become known as freedom of contract.

American and British theories of contract and the freedom of contract principle developed from a somewhat different intellectual background than other Western countries such as France and Germany, and thus contract doctrine has manifested differently in each place. Current political systems are influenced not only by these ideas as part of their intellectual history, but also by their cultural values that provide different “flavors” of the freedom of contract principle in practice. Primary texts such as statutes as well as secondary texts such as the Restatement and legal scholarship can each either work toward either limiting or guaranteeing this freedom (Bernstein, 2008). For the U.K., for instance, at “the heart of” English contract law is the freedom and proliferation of contractual activity – a guarantee of minimal interference, rather than control of economic behavior, with an emphasis on utilitarian decisions perhaps influenced by Empiricism (Micklitz, 2015, p. 14). Statutory intervention sets out to solve concrete issues and is usually only acceptable in two areas: consumer law and labor concerns (p. 15).

Similarly, French Rationalism and German Idealism may have also influenced those systems’ views on contracts and regulation. The French view, for instance, can be directly traced back to the Revolution and a break with feudalism with its focus on individuals and equal rights.
Influenced by French Rationalism and René Descartes (1596–1650), the search for the “truth” of the agreement in the French system is more of a goal for interpreting contracts than simple the ability to form the agreement (p. 18). German contract law tends to favor both: the private autonomy of the individual and the necessary legislative activities to limit this freedom and protect those parties with less bargaining power (p. 17-9). The values behind the German conception include a favoring of the “will theory,” which makes a distinction between the will of an individual (similar to intent) and that individual’s declaration (the actual words of the agreement) (p. 12). The E.U.’s civil law system embodies both the enabling of freedom of contract and the statutory limitations that restrict it, usually sequentially by first broadening economic activities and then enacting protective standards to limit those activities (p. 2).

Sometimes this process works in reverse by first dismantling state monopolies with these restrictions and then establishing a market in the process.

This idea of contractual freedom promotes a focus on freedom of contract above all else, with contract-as-agency becoming the mantra for this ideology⁴⁷. Politically conservative programs such as libertarianism, for instance, still hold this view and see freedom of contract as the “expression of a ‘minimal state,’ in which people pursue their interests by themselves only” (D’Agostino, 2015). Toward the middle of the 20th century, Kessler notes how standard contracts are the fullest embodiment of the freedom of contract expression, in one sense, with “the ceremony necessary to vouch for the deliberate nature of a transaction” effectively “reduced to the absolute minimum” to oblige the business community—increasing efficiency and reducing

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⁴⁷ Kessler (1943) notes how courts prior to the 20th century were extremely hesitant to declare contracts void as against public policy “because if there is one thing which more than another public policy requires it is that men of full age and competent understanding shall have the utmost liberty of contracting, and that their contracts when entered into freely and voluntarily shall be held sacred and shall be enforced by Courts of justice. (Kessler citing Sir G. Jessel, M. R., in Printing and Numerical Registering Co. v. Sampson, (1875)).
costs, creating savings that are supposedly eventually passed on to the customer (Kessler, 1943, p. 629). This observation, however, assumes that “this ceremony,” which might include the documentation or agreement mechanisms of a contract, for instance, is controlled by an outside enforcement body. This is because with parties that do not have mutual trust, documentation of a transaction and an objective third party’s assessment of that documentation may be important to determining its validity. This connection may not be entirely necessary, however, as suggested by the crypto-libertarian community with recent technological developments such as smart contracts made with blockchain technology (Szabo, 1996). These new contracts consist of a series of algorithms that execute the terms of a contract or transaction automatically (Wall, 2016; Werbach and Cornell, 2017). Theoretically, due to the peer-to-peer infrastructure of a blockchain, this execution would produce immutable records that are copied onto each node of the chain, allowing for the trustworthy documentation of a transaction between two individuals, reducing or eliminating entirely the need for third-party enforcement. Smart contracts provide an illuminating study of the freedom of contract principle and SFCC discourse at play (Cornelius, 2018), however, their implementations have yet to be developed sufficiently to test the effectiveness of these goals.

The crystallization of ‘freedom of contract’ in the Constitution was used to defend the rights of contacts up until the Great Depression and the New Deal era when President F.D. Roosevelt appointed more favorable Supreme Court justices. Americans during this time blamed some of the economic issues on the laissez-faire policies of past administrations, and thus regulation that may have been considered unconstitutional previously was now being integrated into labor and consumer protections. This history reveals the tension between regulating contracts and the freedom of contract doctrine in another way—through regulation choices and
ideologies, rather than processes of drafting or assumptions of authority as suggested in the last paragraph. Often, this model of “top-down” regulation (e.g., prohibiting certain clauses, providing methods of transparency, disclosure as a way of anticipating the customer’s knowledge state) serves as a mechanism of enforcing equality.

Leib and Eigen, however, describe how zombie contracts (or digital SFCCs) seem rather to reinforce certain inequities between classes, not only through the types of clauses that are regulated, but also by the incentive toward who advocates for fairness with these contracts. Because of a difference of perception in regard to the legal system and the way one is affected by contracts in general, which varies among socio-economic class, some groups of consumers might be more willing to trust the given remedies because they have the means to utilize them should any egregious situation arise. Thus “elite customers” are less likely to advocate for the fairness of the agreement in general or on behalf of less well-off consumers, but instead are motivated to stop egregiousness only when it threatens them personally. This both reinforces a general distrust in the legal system for the lower classes as well as reactionary costs for the corporate entity such as evasion measures (e.g., piracy, hacking, misuse of services) that have undetermined costs. Should they be made aware of these costs, moreover, it is most likely that only those with the means and the influence will be the advocates to make changes, further solidifying the distance between the “haves” and “have nots” that is already promoted by these agreements (Ventuini et. al, 2016).

There is some evidence this has occurred in the decades since and with the integration of the Code into the Restatement (Second) of Contracts and with business process being further facilitated with the codification of these norms. Certain provisions provided by legislation such as the UETA laws authored by the ULC have promoted the use of new types of agreement,
including browsewrap and clickwrap, for instance. Additionally, as these contracts are given legitimacy, so is their text as a form of private legislation that has profound effects for consumers. One poignant example of this is the Computer Fraud and Abuse Act (CFAA)\(^{48}\) written in 1986 that allows for the dictums in ‘acceptable use’ portions of ToS agreements to be criminally prosecuted. This was just recently (January 2018) overturned in the federal court of appeals with a recent ninth circuit court case (Oracle v. Rimini), that set the new precedent that violations of a website’s ToS are not crimes (Williams, 2018). The original decision from 2012 claimed using automated methods to download information off of Oracle was a violation of the stated terms of use of the database software company. The consumer advocacy group, the Electronic Frontier Foundation (EFF), stepped in and put a stop to these determinations that have been endorsed by major technology sector players such as Larry Ellison, co-founder and chief technology officer of Oracle.\(^{49}\)

One tricky issue with SFCCs is that other “policies” are linked or integrated within their text, sometimes as a section, other times as a hyperlink. Often times the policy is on a separate document as dictated by more recent privacy protections and orders (“Consent Order,” 2011, p. 1-2). The Draft (2017) restatement includes privacy policies, if indeterminate on other types of policies, including “acceptable use policies,” labor terms, copyright policies, even it is only “referred” to within another document (p. 11). The exact definition of “referred” is not given, however, since it is a broad term, it can be assumed that it means linked, cited, or integrated. Another factor to consider in the defining of these as contracts is that much of the governance of

\(^{48}\) https://www.law.cornell.edu/uscode/text/18/1030

\(^{49}\) https://www.eff.org/deeplinks/2018/01/ninth-circuit-doubles-down-violating-websites-terms-service-not-crime
SFCCs relies on the U.C.C Code⁵⁰ that is intended for the sale of “goods,” not a “service.” It might be argued that many of the platforms that makes use of SFCCs are in fact exchanges of goods, but the argument that certain types of SFCCs such as privacy policies facilitate a sale of goods—and that consumers are aware that their data, which is what they are “selling”—might be considered a bit of a stretch.

To compound this issue, ubiquitous digital SFCCs often govern the behavior of minors on these sites, if perhaps accidentally. Underage contracting (>18 years old) is generally not allowed under the capacity to contract doctrine without a parent or guardian also consenting. The rules are a little more flexible for service platforms and digital SFCCs. Service platforms are prohibited from collecting data on anyone under 13 years of age by the Children's Online Privacy and Protection Act (COPPA),⁵¹ yet up until this year when Facebook implemented safeguards such as ID verification, millions of underage users were using the platform and being manipulated by the profiling algorithms (Constine, 2018). Previously, Facebook had only diverted the issue toward its ToS agreement that specified the users’ required age, or else that a parent or guardian must manage underage users’ accounts. As for users over 13, however, it is difficult to argue that this young population is aware of a SFCC that the majority of people older than them are not, and as well understands the data collection, profiling, and advertising behind-the-scenes activity to which they are subjected.

This dictum—that consumers under a certain age are not supposed to use a service—falls under the purview of ‘acceptable use policies’ that are also commonly contained within SFCCs. As described, up until recently, these policies held weight as criminally prosecutable legislation

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⁵⁰ https://uniformcommercialcode.uslegal.com/articles-of-the-ucc/

with laws such as the CFAA. The history of this statute is worth exploring in terms of its politics and power. Meant to protect “federal interest computers” connected to the early Advanced Research Projects Agency (ARPA) network in the 1980s, the CFAA was written to allow the prosecution of early hackers who tampered with these government-owned computers. Personal computer use changed considerably in subsequent decades, and the two phrases most noteworthy in this policy, “exceeds authorized access” and “protected computer,” now encompass a much wider scope of activities. An amendment to the CFAA in 1996 replaced the term "federal interest computer" with the revised wording “protected computer,” meaning:

(A) exclusively for the use of a financial institution or the United States Government, or, in the case of a computer not exclusively for such use, used by or for a financial institution or the United States Government and the conduct constituting the offense affects that use by or for the financial institution or the Government; or

(B) which is used in or affecting interstate or foreign commerce or communication, including a computer located outside the United States that is used in a manner that affects interstate or foreign commerce or communication of the United States (CFAA, e.2.A-B)

Definition (B) can be applied to every computer in the United States that is connected to the internet since all connected computers now make use of routing pathways that include “interstate or foreign commerce or communication,” and thus can be considered “protected computers.” Moreover, the phrase “exceeds authorized access” is ambiguously broad, and, in some districts, seems to rely on notions of “accepted use” as outlined in a website’s SFCC (Griffith, 1990; Skibell, 2003). Previously, this allowed regular users to be prosecuted for any activity that was considered a violation of this agreement, and essentially provided private companies with the
ability to write terms that translated into prosecutable criminal activities (McCullough, 2013). Even if not actually prosecuted, these terms still had a ‘chilling effect’ on certain users, which had negative (inhibitive) effects on productive behavior, including research activities. This was demonstrated in a recent case brought by the American Civil Liberties Union (ACLU), which aimed to protect researchers from being charged with normal research practices (e.g. data scraping and creating ‘test’ accounts), and which cited a chilling effect from contractual affordances provided by the CFAA (see Sandvig v. Lynch, 201652).

Media and communications scholar Stephanie Ricker Schulte (2008) described the motivations of the Reagan administration at the time of the creation of the CFAA as producing a solution to the supposed internet security threats of the time--a “preferable regulatory agent to the military” and, on governmental regulation, acting as “benevolently ‘parental’” rather than “punitively ‘big brother’” (p. 490). Producing America’s first-ever comprehensive legislation on the internet and computer crime, Reagan’s administration used its ‘parental’ role to hold subcommittee hearings on computer security in the early 1980s. Out of these meetings came policies, like the CFAA, that protected government computers, which were primarily the only computers online at the time, against hackers. The early notion of ‘hackers’ that prompted these hearings and subsequent policy stemmed from the images of young, computer savvy ‘punks,’ made popular by films such as WarGames (1983), which depicted a high school computer user (Matthew Broderick) wreaking havoc on systems of security and launching World War III by accessing nuclear codes. In fact, this film was so influential to this policy-making moment that Regan began each hearing with excerpts from the film; Wargames was, in some sense, the

52 https://www.aclu.org/legal-document/sandvig-v-lynch-complaint
public’s first exposure to the internet as a concept and became “both a vehicle and framework for [its] first widespread public discussion” (p. 489).

One particularly influential example in the history of the CFAA reveals how the statutes that influence design and agreement can be combined with other types of governance to produce a compromising situation for adherents. In 2011, hacker/activist Aaron Schwartz was arrested for downloading 4.5 million articles from the scholarly publisher JSTOR, an academic research repository, as part of his access through his university’s (Massachusetts Institute of Technology) subscription. He was charged with violating JSTOR’s ToS agreement, which claimed his downloading of the material constituted an instance of “unauthorized use” of a computer system and was a violation of the “unauthorized use” provision in the CFAA. Sadly, Aaron committed suicide before his case was settled; preceding his death, he was indicted by the Federal District Court on thirteen felony counts, the most significant of which was the violation of the CFAA, which brought with it a thirty-five-year prison term if convicted.

Schwartz’s life and death prompted a flurry of activism, including Aaron’s Law, a proposal to amend the CFAA to replace the phrase "exceeds authorized access" with "access without authorization," which is defined as “obtaining information on a protected computer that the accesser lacks authorization to obtain by knowingly circumventing one or more technological or physical measures that are designed to exclude or prevent unauthorized individuals from obtaining that information”53. The bill was drafted by Representative Zoe Lofgren, but failed to pass in 2014. This example shows the importance of having multiple voices in the conversation around these contracts as initially, the suggestions put forth by the research of the EFF on these

agreements through a series of whitepapers in 2013 were ignored in favor of voices from the stakeholders of the technological industry, such as Ellison, dominated the conversation.

Ironically, the presumptions that were meant to use contract doctrine to promote democratic ideals and ensure that status systems were not enforced did the exact opposite. The earliest zombie contract scholar, Nathan Issacs, wrote in 1917 how the language change that occurred in the 18th and 19th centuries from “master/servant” to “employer/employee” was a reference to the standardization of labor relations in contracts that came with the Industrial Revolution (p. 35). In the 20th century, this ‘progression’ is seen throughout scholarship as equivocating contracts with agency for the average individual (Kessler, 1943, p. 630, footnote 5). Issacs describes how rather than a progression, ‘freedom of contract’ has consistently been a “knife [that] can cut both ways” (p.47). He cites an example from the 1300s in which notions of status drove laborers to desire standardized relations (i.e., “status law”) such as contracts to ensure equal dealings, yet these same standardizations over time have been used to “force employers to a realization of their social duties” (p. 47). For example, during this period this standardization practically “created a maximum wage,” but in the early 20th century (and still to this day), they have become the “messenger of a minimum wage” (p. 47). While ToS agreements are generally not seen as labor contracts, many labor terms are now in digital SFCCs and copyright terms are regularly part of their substance. Issacs notes how “rights and remedies are obverse and reverse of the same coin; the standardizing of relations and the crystallization of law are aspects of the same movement” (p. 45).

Theory Perspective. Lloyd Bitzer’s and Richard E. Vatz’s well known theoretical conflict in the second half of the 20th century differentiated between the situational and prescriptive aspects of rhetorical theory at the time. An outline of their debate provides a useful detail of the
tension that arose in rhetorical theory after the trend toward an interpretative hermeneutics influenced theory more broadly in the 1970s. Bitzer’s initial idea from 1968 outlined a “rhetorical situation,” which argued for situational need, or “exigence,” that called for a specific response to that particular set of circumstances, the timing of which is called kairos, a classic rhetoric concept. Vatz responded in 1973 with the rebuttal that there is not a “situation [that] can have a nature independent of the perception of its interpreter or independent of the rhetoric with which he chooses to characterize it” (p. 154). In other words, Vatz acknowledges that the meaning of the text and corresponding argument is situated within the interpretation of the reader, not the situation. Bitzer disagrees with Vatz’s claim, however, arguing that rhetoric can be completely dependent on situation and “rhetorical works belong to the class of things which obtain their character from the circumstances of the historic context in which they occur” (p. 3). Several aspects of circumstance, including the time in which a text was made and the limitations of the technology available at that time, help shape any conventions of the form and technique of that text and those that follow in its discourse. The first to popularize notions of “exigence” as a necessary precursor to rhetorical effectiveness, Bitzer carefully considers the “imperfection” of a situation that creates a need to respond to it “urgently;” this becomes “something waiting to be done,” in effect, to which a rhetorical act responds. Bitzer’s belief in a pattern of techniques can be seen across different situations, presuming a kind of objective rhetorical form that can be comprised of observable techniques and devices.

One take on the rhetorical situation that straddles both Bitzer’s claim and Vatz’s challenge is to see the text as performing in this arena, in a similar vein to how Drucker (2013) made use of the concept. Charles Bazerman (2003) notes how “writing gains expressive force not by going down purely private subjective paths, but by gaining wider command of the
culturally available resources and by learning how to deploy these resources to create recognizable circumstances and enactments” (p. 390). While mostly discussing techniques of literary texts, Bazerman calls for a combination of the constructivist world that recognizes only individual reader interpretation and one that is simply an expression of conventions or ideals. He details:

These idealist worlds saturate our material existence so that we live in a built symbolic environment as much as we live in a built physical environment. That built physical environment in the modern world, moreover, is built out of plans and regulations just as it is built out of bricks and mortar. Even our relation to the received natural environment is reshaped by the symbolic world of textually mediated values, aesthetics, and science. Such observations of the mixing of the material and the ideal in human life return us to the study of activity. (p. 392)

Bazerman’s account of textual performance negotiates the needs of the rhetorical situation, the ideals an answer to its call would produce, and the perplexity of subjective reader interpretation. An example of this is seen in how he discusses the nature of the content that an author might utilize to appeal to a specific audience. This also means restraining from communicating in ways the audience would not comprehend. He argues that “in bringing unfamiliar or wide-ranging content to bear within typified realms, a writer is in danger of straining the sense-making of the audience, resulting in either unintelligibility or normalized, narrowed readings that miss the text's novelties” (Bazerman, 2003, p. 390). Put simply, the rhetor needs to articulate how to navigate the competencies and skill sets of readers that produce a diverse multiplicity of readings, and to decide how much of the argument he/she wants to be communicated. Much of this determination comes from surveying the intended audience (Richter, 2007, p. 3), and would involve projecting
notions of authenticity and reliability, officiality, and evidentiary characteristics. A turn towards those fields that have described how to assess documents in terms of these elements then is appropriate.

In the mid-1990s, Luciana Duranti published six successive articles in *Archivaria* on the theory of diplomatics, previously a study for medieval texts, which were later collected in the book *Diplomatics: New Uses for An Old Science* (1998). Duranti introduced this revived study to the modern archival community as a “fundamental theory” based on its being “a coherent system of concepts and principles focusing on the nature, form, structure and authority of records, and on their relationship with the functions and activities of the creator” (Duranti, 1990, 2015).

Initially, diplomatics was presented by Dom Jean Mabillon, a French Benedictine monk and scholar, with *De re Diplomatica Libre VI* (1681). Mabillon’s was one of the first studies of the systematization of records and their regulation, including the processes of “records creation, routing, storage, and preservation” (Lemieux, 2017, p. 2-3).

Diplomatics was developed more fully as a discipline in Germany during the 18th century, utilized in legal discourse to “educate the legal profession about the relationship between facts, acts and the records attesting to them and to assess records as reliable sources of evidence” (Duranti, 2015). In the nineteenth century in Austria, diplomatics was included as one of the “auxiliary disciplines of history” for its part in the critical study of documents as they are produced by individuals and organizations in the progression of their everyday and intellectual activities. Also, during this time, diplomatics became part of the curriculum of some of the first archival schools in Paris, Marburg, and Naples. When archival science became its own discipline in the 20th century throughout Europe, its body of knowledge integrated the concepts and methods of diplomatics; however, as a discipline, diplomatics remained tied to the identification
and analysis of medieval documents as historical sources until Duranti suggested it as a theory for records management in 1990. In the mid-1990s, Duranti’s suggestion was applied as the primary theoretical method for a collaborative research project between the University of British Columbia (UBC) and the US Department of Defense Records Management Task force, resulting in findings incorporated in the DoD 5015.2 standard for recordkeeping and the International Standards Organization (ISO) 15489 standard for digital business documents.

**Comparison.** Power in the U.S. is decentralized in some respects in that it is granted by various institutions and practices — i.e. legislative bodies, the court system and judges, authoritative texts—as the result of a common law system and concepts such as freedom of contract. Governance is made up of some complex combination of these institutions and their orders, statutes, practices, and interpretations, delegations, and the enforcement of these notions. For instance, it is the combination of an outdated law (i.e., the CFAA) that was written over three decades ago and promotes an outdated conception of current uses of computers, that gave legitimacy given to the ‘acceptable use’ policy portion of the ToS agreement, which allowed for Aaron Schwartz and others to be prosecuted as criminals for use of a web service. The agreement mechanisms afforded by the UETA laws also played a role here as the mechanism by which consent and Schwartz’s awareness of the contract terms were validated. Additionally, the ethos of the early proponents of the internet could have contributed to Schwartz’s actions. Technology as a quest for individual freedom more generally, including freedom to be anonymous, freedom to socialize, freedom to enact certain representations, sought the same limitlessness offered by unrestrained or unenforced libertarian action. Timothy C. May’s 1992 “Crypto Anarchist Manifesto,”[^54] for instance, states:

[^54]: https://www.activism.net/cypherpunk/crypto-anarchy.html
Just as the technology of printing altered and reduced the power of medieval guilds and the social power structure, so too will cryptologic methods fundamentally alter the nature of corporations and of government interference in economic transactions. [...] And just as a seemingly minor invention like barbed wire made possible the fencing-off of vast ranches and farms, thus altering forever the concepts of land and property rights in the frontier West, so too will the seemingly minor discovery out of an arcane branch of mathematics come to be the wire clippers which dismantle the barbed wire around intellectual property [...] Arise, you have nothing to lose but your barbed wire fences!
(par. 5-6)

Whether or not Schwartz’s actions could be constituted as criminal—there are those who might argue that information needs to be set free, and thus he is a hero fulfilling May’s vision, and others who might argue that he stole valuable, proprietary information for a company who was right to prosecute this theft—the role of the SFCC document, including its performance, its affordances, its authority, and its use were all affected by these various exertions of power. In line with Bitzer’s conception, then, it could be argued that the meaning of the SFCC cannot be fully understood simply from predicting the interpretation of the reader, although this practice could reveal important practices that would benefit consumers. Instead, the situation surrounding the document such as its performance and the affordances provided by those with power—in ways that consumers are not often even aware—can nevertheless have profound effects on their experience.

The comparison of the Contract and Theory perspectives also reveals differences in types and measures of power. There is the power that comes from more knowledge and resources (i.e., deceptive design practices), and the power that can be exerted through the use of more traditional
forms of governance (i.e., private and public legislation). But there is also another type of power that can be seen as an alternate type of governance: there is a power exerted through standardization processes. While the politics of standardization should be noted and viewed critically (Russell, 2014), with the voices of a variety of stakeholders from different epistemological viewpoints, a type of standardization might be had that can help to even out some power differences, including those inherent in the SFCC situation. Rather than laws such as UETA that govern sales of goods informing the governance of contracts, a group of stakeholders that understand what is at stake in these contracts, their nuances and complexities, and most importantly, implications for consumers, should be consulted.

Additionally, rather than minimal presentation requirements, standards of records and other types of documents are more useful markers for assessing the presentation of SFCCs. Considering the exigencies that prompted certain ‘markers’ of authenticity in official capacities, such as those studied in diplomatics or a critical reading of rhetorical performance, are more accurate measures of how well the document is communicating characteristics such as authenticity or reliability. Relying on ‘standard practice’ perpetuates seemingly recognizable markers of these qualities, including justified font, ALL CAPS, or legalese, yet the danger is that these markers only stand in for these characteristics, not actually guarantee them for adherents.

Thus, discussions of power should be a combination of a consideration of the event of interpretation in the mind of the reader (i.e., what is the actual interpretive act of the majority of readers based on probabilistic conditions?), as well as the implications of the decisions that exert presumptions of knowledge and use (or a lack thereof) on consumers. Acknowledging the tools of rhetoric allows for “seeing one's verbal productions from the outside, as they might affect others” (Bazerman, 2003, p. 390-1), which would be useful in working toward an understanding
of the spectrum of performances that a document such as a SFCC can enact together within the patchwork of governance and practices that produce their profound consequences.
Chapter 5: The Demateriality of Standard Form Consumer Contracts (SFCCs)

Ideally the result of all communicative actions, whether it is texting, talking, emailing, writing, presenting, or otherwise, is some type of meaningful engagement—an exchange of information—that happens between the interlocutors, or the two parties who are conversing. Several factors can affect whether or not the communication occurred, including frequency, memorialization in written or some other form, language choices, or other factors might help predict the outcome of whether or not the communication was successful.

With official communications, or those with higher stakes, this course of exchange and meaningful engagement is often more structured and procedural in order to develop some kind of standard by which its authenticity can be assessed in cases of dispute or miscommunication. Sometimes the procedure is made up of official dictums and other times it is made up of conventions. Often, especially with official communications, this process involves types of memorialization standards (i.e., document standards, notarization, authentication) that are vital to ensuring that the communication took place in cases of ambiguity. If one parent wishes to take a child out of the United States, for instance, a notarized letter from the other parent is required to ensure that both parents are on the same page. The traveling parent cannot simply tell authorities that a conversation occurred. There is an official process (i.e., a standard form, various pieces of information such as social security numbers, a notarized seal) to prove that the communication between the two parents occurred and was effective.

For contracts, which are a special type of communicative act that is traditionally only valid when a “meeting of the minds” between the two parties occurs, the procedure of proving or

officiating this exchange takes many forms. From a handshake to a digital “agree” button to a cryptographically sealed record and authenticated signature, the proof that there was a bargain or agreement between the parties lies on a spectrum of conventions and practices, many of which are held up as valid agreement or memorialization in cases of dispute. The test here is whether or not the memorialized form signals agreement between the two parties; certain factors such as incapacitation or age can nullify the agreement outright, for instance. In general, the query is whether or not the parties agreed and understood the terms at issue.

Traditionally, contracting has had a dependable scale for meaningful engagement and proof: broadly, the more meaningfully two parties engaged, the more proof there was in cases of dispute. If an agreement was recorded or memorialized in several different manners, over time, and with clear, explicit language, it was more likely to help validate a contract. Thus, there was a general incentive for both parties to memorialize the contract, or establish meaningful engagement, in as many ways as possible. Different laws and perspectives complicate these procedures (i.e., ‘integrated agreement’ burden of proof, parol evidence rule), and consider what types of memorialization can be held up in court, for instance, or which version of the agreement is most valid. Mostly, however, materializing the terms of the agreement has been dependably in the interest of both parties.

Technology is commonly viewed as aiding in this process by streamlining communications, offering security to traces of intention and negotiation, and authenticating signatures. Yet there is another role that technology, simply by its presence, can play in the contracting situation that is often unacknowledged. Technology might also confirm characteristics provided by documentation or memorialization that do not actually exist just by standing in for these official procedures; this misattribution can occur regardless of the actual
exchange of the information or success of the communication. ‘Officiality’ can be performed or de-performed, with the hierarchy of tangible, material practices that previously guaranteed authenticity or authority often now flattened or retreated behind-the-scenes in a digital environment. Thus, here this practice can more easily be done intentionally as a rhetorical move in order to gain some benefit. Revealing the implications of this practice is the topic of this chapter.

5.1. The Perfect Storm for SFCCs

Different types of contracts (and types of documents, more broadly) have distinct standards, practices, and conventions for proving agreement. Beyond just consent, awareness of the terms, expected knowledge about the contract content and different methods of officiating memorialization of the agreement all come together to prove shared knowledge and intention between the parties. Standard form contracts bend the rules in this respect and present a unique set of practices that challenge this traditional view. Negotiation, intentions, and shared understanding are of lesser importance, as, instead, their purpose is to increase efficiency for businesses, and, in the case of standard form contracts intended for consumers (SFCCs), increase convenience and user experience. These two values—efficiency and convenience—are paramount to any standard form contract situation. Otherwise, non-standard contracts would be used.

In some respects, efficiency and convenience work against complex memorialization. The more steps it takes to officiate a contract document or agreement, the less efficient the transaction is for the business (in terms of costs) and the less convenient it is for consumers (in terms of time and effort). Therefore, if these two values remain paramount, as is the case with these types of agreements, then memorialization practices—documentation, presentation,
explanation of intention—are minimized in their name. In other words, the practice of materializing the document is lessened to serve other means. This upsets the traditional balance upon which contract doctrine relies that depends on this incentive on the part of both parties for memorialization to ensure an agreement and a ‘meeting of the minds’ is achieved.

Some have argued that certain forms of SFCCs are not contracts at all (Radin, 2012; Kim, 2013), due to various reasons, including this negation; however, these arguments ultimately fail to describe how certain factors come together to create the perfect storm of issues that is currently brewing and that leaves customers afloat without any recourse. One of the parties—corporate entities (i.e., drafters, service providers) are not rewarded for documenting meaningful engagement in this situation, citing efficiency and convenience as incentives that require only minimal presentation requirements. Compounding this issue is a difference in resources and power between these two parties, which is often noted as problematic in legal discourse. It is less often noticed, however, that this results in this more powerful party having singular control over the lever that determines the degree of performance of the document form of the contract, which can be a determining factor in its validity.

Few authors have cited this lack of memorialization as the issue with standard form contracts, as this practice seems to be implicit in the values it promotes. Even fewer have cited the change in medium from paper to digital as exacerbating the problem. As it stands, many of the efforts to clarify ‘fine print’ apply to both paper and digital forms, with their basic notions of awareness, plain language, and summary of terms remaining consistent over decades of regulation. These regulations often do not specify the documentation practices that would

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56 Previous paper versions of SFCCS were often manifested as the fine print packets that came with credit cards or long documents filled with legalese that accompanied a big purchase. Various efforts have been made to compel or even force explanation in an attempt to make terms clearer, such as the Fair Credit Reporting Act of 1970.
produce these outcomes, however. When this lack of memorialization is described as a rhetorical move that breaks apart some of the necessary tenets of contract doctrine, not simply as implicit and benign presentation requirements, the issues for consumers come into view and the scope of the ‘storm’ is revealed. Moreover, as consensus is being determined on these very issues at this moment with authoritative texts such as the new Restatement of Consumer Contracts (the “Draft”), in the future, minimal documentation requirements could be further codified into the legal discourse on these contracts.

For the SFCC document, the change in medium that occurred through their digitization was also a change in convention. Although most consumer-users are now used to the clickwrap and browsewrap agreements that populate our everyday activities, the documentation and agreement practices associated with them are relatively brand new when considered against the history of contracts. Leib and Eigen (2017) hypothesized that those under 35 years old do not recognize SFCCs as contracts in the conventional sense at all, for instance. Even standard form contracts as a general genre are still new in this regard (Issacs, 1917; Kessler, 1943). Perhaps since this genre has shifted the traditional balance between contracts and their memorialization, which used to be in the interest of both parties, its revised conventions should be reconsidered in light of other disciplinary perspectives that provide an alternate set of documentation practices.

From the perspective of certain discourses, documents perform particular characteristics, including authenticity and official authority or reliability as a piece of evidence, and through these performances, invoke probable readings or interpretations. In other words, a specific reading of a document could be expected to occur based on the document’s performance and its ability to abide by the conventions that produce that reading. From this vantage point, a document is not simply reiterating commonplace design conventions, but rather making use of
these conventions to some purposeful effect. This is why the document’s performance might be considered rhetorical or providing the means to make an argument (Richter, 2007).

From a document performance standpoint, then, digital SFCCs fail to achieve the type of meaningful engagement and memorialization that was previously necessary for valid contract formation. Instead of materializing the intentions of both parties as in traditional contracting, only the intentions of only the drafters are presented. This is accepted as part of the process of standard form—presentation by one party on a take-it-or-leave-it basis. However, this should only be allowed if the other party can assume the content based on knowledge of other, similar contracts, as is stated much of the conversation that validates their use (“Restatement,” 1981). When a lack of this knowledge and any meaningful engagement is confirmed and still accepted (Bakos et. al, 2014), then documentation and presentation practices must stand in to notify consumers of any unexpected terms. Convention has allowed for ‘opportunity’ to read justifications and basic notification practices to still allow a contract validity, even in these circumstances. Yet, in the purview of the disciplines that study user engagement with documents, texts, and interfaces, it has been shown that these conventions do not in fact facilitate understanding; rather contrastingly, it might be argued that they cause blindness under the guise of efficiency and convenience (see Chapter 4 for a detailed comparison of these discourses).

This blindness is acknowledged in various ways in the legal discourse around SFCCs, but its dangers have yet to be described thoroughly and an adequate solution has yet to be presented. The study of the presentation of information has recently come to the attention of internet researchers and scholars for the sake of parsing out fake news practices or understanding ‘misinformation’ that perpetuates notions of ‘post-truth’ (e.g., Paul and Haddad, 2019). Luciana Duranti (2018), a proponent of diplomatics, recently connected this idea to the work of
agnotology, or the study of culturally induced ignorance or doubt, particularly the publication of inaccurate or misleading scientific data.

While these studies explore the misuse of markers of authority in order to invoke certain inappropriate readings, none describe the process of a document being made to appear less official to the point of an author betting on a complete absence of a reading. In practice, a document might appear non-existent, relegated to the margins and not meant to be read, or as a benign step, to which users routinely consent in order to access a service. When regulatory and legal measures cite this documentation practice as the validating factor of these contracts, and corporate entities (i.e., drafters) with more power and resources have control over both the contract’s content and presentation, adherents are both at their mercy and without recourse in cases of dispute. This is the storm that is currently brewing.

Document studies generally look at an object’s presentation critically and seek out the authority to be questioned—either through the practice of locating the meaning elsewhere (e.g., the reader or subject) or through disrupting projections of self-evident Truth. Revealing abuses of authority is a common goal, but these studies, in general, do not seek to re-authorize the object or provide trajectories for an assessment of this re-authorization. The next section outlines a critical practice that views authority as a rhetorical move, which could be used for either ill or towards some fairer end. It then provides ways of assessing and measuring this performance based on standards of documents and records that have been established and fine-tuned through practice over time.

First, a bit of foundational literature from diplomatics, rhetoric, and interface theory provide support for the heuristic offered: a critical look at the practice of demateriality. A few examples from the discourse around SFCCs are used as objects of study for this exercise and to
demonstrate the usefulness of this critical apparatus. Excerpts from Facebook’s Congressional Hearing from April 2018 reveal common sentiments promoted by corporate entities. Next, these same topics are explained as they are in the new Restatement of Consumer Contracts (“the Draft”), which, if approved, will likely be hugely influential for the governance of these contracts in the years to come. Then a critical analysis of the demateriality of SFCC is produced for each topic. As I work through these issues, I identify the legal justifications as ‘myths’ so as to call out the issues within the surrounding discourse, as well as provide descriptions of the issues with the performance of the document itself.

5.2 The Rhetoric of Documentation and Demateriality

Theories on rhetoric have been produced since ancient times, most notably in the foundational work of the Greek philosophers Gorgias, Plato (and Socrates), and Aristotle, among others (Richter, 2007). The study of rhetoric was, for much of its history, the study of persuasive speech, or else the study of Greek and Latin grammar, and classical literature (p. 1). The classical tradition of rhetoric studies the art of persuasion—the art of finding the means to make an argument—and the three logical appeals (ethos, pathos, logos) still commonly used today in college composition classes to write essays or to polish advertisements (Fish, 1990). The type of speech as defined by the classical system of rhetoric (i.e., Aristotle’s system expounded on by Cicero and Quintilian) might include one of three types: legal or forensic, which refers to past action, political or deliberative, which describes the future, or ceremonial or epideictic that strengthens shared beliefs about the present (Richter, 2007, p. 3).

Post nineteenth-century, this study extended its scope by looking at other uses of discourses that might be persuasive. Classical ideas of rhetoric in particular came under scrutiny during the interpretive turn that began in the 1970s, which again was a methodological change.
from a positivist perspective to one that favored a subjective, individualized hermeneutic (Mottier, 2005). Similar to other, contemporary critical literary studies of that moment (Greetham, 2002), this meant locating the meaning beyond the author’s intention to the reader’s interpretation. Fish (1989) says of rhetorical practice: “Whether the center of that vision is a personalized deity or an abstract geometric reason, rhetoric is the force that pulls us away from that center and into its own world of ever-shifting shapes and shimmering surfaces.” This ‘world’ is brought to the reader through the use of several techniques, of which the motivation, responsibility, and nature are at stake. Returning to classic rhetoric with the *Encomium of Helen* (c.a. 414 B.C.E.)\(^{57}\), we can see the reverence for persuasive speech early on. In this explanation of Helen of Troy’s abduction, Gorgias makes the case that she was not to blame for her disappearance, even if it seemed she went willingly: “speech is a powerful lord, which by means of the finest and most invisible body effects the divinest works: it can stop fear and banish grief and create joy and nurture pity” (Richter, 2007, p. 45).

But the ancient theorists of rhetoric were not concerned with all types of speech in this capacity, only the kinds that would affect the art of persuasion\(^{58}\). Questions regarding this art, the intentions of the orator/author, and the responsibilities associated with the skill were met with contention—the most extreme opinion of which fell upon the Sophists that were the most practiced and, perhaps, deceptive in the art. Upon asking whether it was the speech or the speaker that that should be put to task should the persuasion go awry, Gorgias answers: “for the orator is able, indeed, to speak against every one and on every question in such a way as to win

\(^{57}\) This story told by Gorgias debates the fate of Helen of Troy who was either abducted by Paris, a prince of Troy, or else persuaded fairly or unfairly against her will.

\(^{58}\) Socrates responds to Gorgias in the affirmative: “Then rhetoric is not concerned with all types of speech” (Richter, 2007, p. 89).
over the votes of the multitude [...] he must do so fairly [...] and in my opinion, if a man becomes a rhetorician and then uses his power and this art unfairly [...] [he] deserves to be hated and expelled and put to death” (p. 93). Gorgias’ distain for the misuse of persuasive language is palpable, but he also claimed knowledge was fragmented, limited, and provisional—inescapable qualities that come from the shared deception on which language use in general necessarily relies (p. 43). Plato (in Gorgias), however, blamed misuse of persuasive language on the orator (i.e., the Sophist) whom did not believe that people could “obtain absolute knowledge” and thus “concerned themselves only with probabilities” (p. 81). Rhetoric for Plato should be based on discourse that is “analytic, objective, and dialectical,” rather than “synthetic” or “emotional” (p. 81). Instead of producing “mere appearances of truth” like the Sophists, without regard for whether or not it is transcendentally true, Plato argued for a type of rhetoric that could distinguish the truth behind such appearances.

Lisa Gitelman (2014) notes how the word “document” descends from the Latin root docer, which means “to teach or show,” suggesting that documents help “define and are mutually defined by the know-show function” (p. 1). In this way, documenting fulfills its purpose and is an “epistemic practice: the kind of knowing that is all wrapped up with showing, and showing wrapped with knowing” (p. 1-2). Gitelman notes how “closely related to the know-show function of documents is the work of no show, since sometimes documents are documents merely by dint of their potential to show: they are flagged and filed away for the future, just in case” (p. 2). Gitelman notes how both “know show” and “no show” can rely on an “implied self-evidence that is intrinsically rhetorical,” as persuasion is implicit in documentation practices (p. 2-3). By making this persuasion and the motivations of the practitioners that perpetuate it more explicit, it can fulfill the “horizon of accountability” that is a shared expectation of documentation practices.
We might view documentation, in this way, as a site for the type of rhetoric that Plato suggests—without an analysis of his idealization of Truth. A study of demateriality does not need to ask that question, but rather asks: what is the truth being shown—what type of rhetoric is being had—and what are its material effects and for whom do they serve?

Standardization, when viewed as the both the process of producing information in a systematic manner—either as a type of information or information ‘about’ other information—could be seen through its documentation practice as an act of persuasion in the way Gitelman describes. While the power to name, classify, and standardize has been acknowledged as persuasive and political (Bowker and Star, 2000), its capacity to also work against acts of “no-show” might also be seen as just as powerful if done in an informed and socially-aware manner. Library and information science, with its motivation to provide access to information to the public, might be a place to look for this effect. This section provides an analytic framework within which the rhetoric of document performance may be assessed, and with the various measures of standardization, ontology, authenticity, reliability, and evidentiary qualities as its touchstone. If we are to accept that documentation is always necessarily an act of rhetoric in Gitelman’s show/no-show characterization, it might be considered that these studies are fulfilling Plato’s task of using rhetoric towards the task of distinguishing truthful information (for the public) through documentation practices.

5.2.1. Demateriality. As a study of demateriality would necessarily need to understand how tropes of immateriality are perpetuated throughout the digital space, and one place to look is at the work of scholars that have complicated this trope that is often associated with values of transience, ephemerality, or impermanence. A lineage of this kind of analysis, for instance, takes to task the forensic, formal, distributed, and performative elements of cultural and technical
artifacts and disrupts their seemingly immateriality presumptions (Kirschenbaum, 2008; Blanchette, 2011; Drucker, 2013). A study of demateriality, I propose, would complement this lineage and extend the criticism to include another dimension of material performance—a performance of its minimization, or at worst, a complete lack thereof.

Drucker (2013) isolates a thread of proposed analyses that work as different angles of the study of a textual or cultural object, including Matthew Kirschenbaum’s (2008) forensic/formal materiality, Jean-Francois’ (2011) distributed materiality, and her own performative materiality. All three authors present an argument against the trope of immateriality, each from a different perspective. Kirschenbaum brings awareness to a literal materiality (i.e., hard drives, inscription) and formal material elements (i.e., the composition and format elements of a text that give it both constricting and persistent shape). Blanchette highlights how rather than a seamless, holistic image of the immaterial, the actual modular, interoperable construction of information technology and the distributed materiality of many cultural artifacts prompt trade-offs that fundamentally impact our engagement with them. Drucker suggests a move away from analyzing the literal, material elements of an artifact, and instead looks toward the production of materiality in the interpretive act of reception as the source of these performances, shaped by the probability conditions provided by the design in which the artifact is situated.

Each author in this thread returns to a type of materialism as a way of shifting idealized attitudes regarding immateriality at the introduction of widespread digital texts. Kirschenbaum argues for a return to critical-textual engagement and some of its more literal practices as a way of acknowledging persistence and disrupting ideas of impermanence, ephemerality, and temporality. Blanchette calls for a return to an awareness of the negotiation of the physical, economic, and social aspects that are necessarily implicated in the infrastructural choices of
information and technology systems. Drucker aptly calls attention to the performative, the rhetorical, and the probable materialities that accompany visual interface design and events of subjective interpretation. A study of demateriality is not an alternate method, but rather might be seen as a corresponding analysis. It is also a study of rhetorical performance as in Drucker’s query, as well as the probabilistic conditions that provide the context and constraints for the performance, and possibly even the performance of the forensic, formal, and distributed elements. But a study of demateriality does not look at the reader’s interpretation, nor provides attention to the real, literal value of the mechanics. It sidesteps the question-of-the-real completely, and rather focuses a performance of the real or unreal on the part of the author to the effect of a minimization of the material elements of a text in order to gain some benefit. It is different from Drucker’s study of the performative since the interpretation of the reader is minimized (or lacking completely), and thus it may highlight an absence, rather than a presence of an embodied act of interpretation. This is not to say that the material is lacking in these instances; rather it is simply conveniently (for the author) masked. This study is of a type of rhetorical performance that either enacts a certain type of material reading or prompts this materiality to be overlooked. In this way, it is a turn back toward the author’s intentions, but without the romanticization previously afforded by early literary and textual critics—quite the opposite, in fact.

Demateriality is an analytical framework that draws on the classical rhetorical theories that identified and warned against persuasive practices of Sophistry as well as an awareness of methods and standards of documentation that might provide a standard against which the Sophist’s act may be measured. Classic rhetorical theory, which traditionally has dealt with issues that describe the means to making an argument, provides a way to identify the symbolic
and performative nature of the inscriptions of a document, paying special critical attention to the exigencies of the situation that prompt the contract’s performance as a response. Within the purview of a study of a rhetorical move of documentation, other methods help explicate the nuances of its performance, including those from document and information theory, textual criticism and bibliography, and diplomatics and records management. The philosophical concept of documentality, for instance, provides a heuristic that subscribes to documents as social objects, allowing for ‘document acts’ that recognize the agency of a document. Diplomatics, which has traditionally studied the means of authenticity and reliability for official texts, contributes conceptions of ‘authority markers’ for documents, providing a method for identifying the communication of legitimacy that also contributes directly to the legal notion of ‘genuine effort’ for contracts, as well as distinctions of different types of contracts. And lastly, interface theory provides the tools to help describe how design practices can invoke certain types of probabilistic readings, even if the ‘reading’ is one of not seeing the text or all of its affordances.

To first fully outline the basic elements of rhetoric, a binary drawn between the ‘rhetorical man’ and ‘serious man’ by Fish (1990) is useful. In his essay called “Rhetoric,” published in Critical Terms for Literary Study, Fish describes the rhetorical man as a modern Sophist who:

manipulates reality, establishing through his words the imperatives and urgencies to which he and his fellows must respond […] manipulat[ing] [and] fabricat[ing] himself, simultaneously conceiving of and occupying the roles that first become possible and then mandatory given the social structure his rhetoric has put in place. By exploring the available means of persuasion in a particular situation, he tries them on, and as they begin to suit him, he becomes them. (p. 208)
In contrast, serious man believes in a positivist, objective reality—striving to use science and facts to promote an ultimate Truth. He is Socrates in Gorgias—wanting only to find absolute Truth in every dialogic instance. The relationship between the two types is one of resistance; the “rhetorical man celebrates and incarnates” what the serious man fears, which is “the invasion of the fortress of essence by the contingent, the protean and the unpredictable.” A scrutiny of the author-drafter’s intentions in this framework assesses whether the acts of documentation are intentional, necessary, functional, and/or fair, and provides alternatives rather than justifications. Justifications in regard to SFCCs, for instance, might take the form of ‘myths’ about literacy, engagement, or equality. The main question in this type of analysis might be: Is the rhetorical performance being used toward efforts of transparency, accountability, and explanation, or is it being used to mask or re-constitute certain unfavorable practices? To assess this performance, a discipline that has studied the authenticity, reliability, and authority of documents is useful as a standard or measure.

Duranti (1989) explains the fundamental concepts of diplomatics by providing an example of a church that further explicates the notion of ‘forms’; both the physical and intellectual aspects that make up a document and help us understand its authenticity. A church can be identified because of its physical signifiers, or its shape, symbols, architecture, and other particular conventional features, such as a bell-tower, but we know a church, in its ‘full meaning’ and ‘particular context’ because of the way those elements are arranged and expressed, which Duranti calls its “intellectual form.” She explains further: “Like a building, a document has an external makeup which is its physical form, an internal articulation which is its intellectual form, and a message to transmit which is its content.” This combination of conventional and intellectual content comes together to identify a trustworthy entity and can be related to the study
of other entities, such as other, similar types of documents. Duranti identifies two concepts from
diplomatics that can be used to assess a document’s trustworthiness: its 
authenticity and reliability. According to Duranti’s (1989) revised reading of diplomatics theory, a document is
‘authentic’ when it presents all of the elements that are designed to provide it with an image of authenticity. This includes the elements that make up a document, including “rules of
representation” or forms that “reflect political, legal, administrative, and economic structures, culture, habits, [and] myths” that “formulate or condition the ideas or facts which we take to be the content of the documents.”

Duranti (1994) further defines a document as “genuine” or ‘reliable’ when it is truly what it purports to be. A reliable document has all of the components required for the “completeness of the record,” including the “attestation of the author, countersigner, and/or witness, as well as seals, special signs, and stamps affixed by delegates of the public authority.” Reliable documents have a truthfulness to them stemming from a “controlled procedure of creation” that comes from “part of a regular workflow” and contain no manipulation by an outside party during this process. Additionally, the concept of ‘chain of custody,’ or the documentation of links of ownership over time, is relevant in maintaining the reliability of the document after it has been created. Beyond just the physical and intellectual form of documents, Duranti also points to their circumstances, purpose (of creation), and subsequent consequences, which contribute to her revived study of diplomatics. Because she also intends her study to be applied to archival documents, she discusses the role of original documents, or those that are historically true and can be said to be historically authentic. She identifies documents as inauthentic when they provide all of the authentic signifiers, or the symbols and ‘rules of representation’ that make it
seem like a true document but fall short of actually being that document due to process of creation or otherwise.

Textuality itself has been associated with an apotheosis of modernity more generally, as the ability to document and represent is assumed to have contributed in a conventional sense to logical inscription as a product of rational, positivist thought (Reinfandt, 2011). David Greetham (2002) makes the case that print and textuality should be viewed as a type of rhetoric, rather than an expression of factual evidence or objective representation. Texts are seen then as a “continual weaving of text and its dispersal over the entire field of human activity and its ‘traces’ [...] [that has] cast off the securities of the modernist distinction between text and margin” (p. 31). In his described postmodern textual moment, it becomes ever impossible to discern where the text ends and the commentary begins; in the digital space, the boundaries of the text and the location of its meaning become ever obscured with a reorganization of forms and an emergence of new exigencies to which they must respond, including usability, functionality, and convenience.

Drucker’s (2009a) task fleshes out this idea of a type of assumed outcome of interpretation with her notion of probability conditions and interpretive ‘events’:

Like the weather produced in a system around a landmass, the shape of the reading has a codependent relation to the structure from which it arises. Probability is not free play. It is constrained play, with outcomes calculable with the complexity of the system and range of variable factors, and the combinatoric and transformative relations over time. A text is a highly complex system, containing a host of thermal sinks and basics of attraction. (p. 8)
An account of probability or “constrained play” suggests that certain outcomes of reading are more likely than others. This means that there exists not just the creator, message, and consumer, but also the conditions that generate these probable readings.

A probabilistic reading to Drucker makes use of “any text or image (or other aesthetic object—church, theater production, musical piece) [that] is performed when it is read, looked at, experienced (p. 13). The aesthetic object presents a set of constraints and possibilities—it can be read a certain number of ways, gives rise to a set of possible interpretations.” Accounting for probability then accepts that there are certain conditions (the “constraints” and “possibilities”) that affect the outcome of the event (the reader’s interpretive act). In an effort to describe the cognitive reception of a performative act, Drucker analogizes the interpretive event to a trauma response:

Trauma studies show, through the extreme case, that a physiological transformation occurs as the result of experience. Stimuli transform our capacities for perception, as surely as our predisposition to perceive selectively transforms the objects in our view. We do not see them, we have a neuronal response to the stimulation they provide. (p. 13)

For these stimuli, Drucker (2009a, 2013) turns to gestalt principles, including “emergence (putting together coherence from stimuli), reification (filling in, generating a coherent whole from implication or suggestion), multistability (ambiguity in play), invariance (some things stay the same no matter what the size, scale, location) and pragnanz or conciseness (the tendency to put things into order as much as possible, proximity, closure, similarity, symmetry, continuity)” (Drucker, 2009a, p. 14). Drucker equates the reading act as an interpretive event, defining an “event” as “the entire system of a reader, aesthetic object, and interpretation—but in that set of relations, in which the ‘text’ is constituted anew each time” (p. 8). Drucker also suggests that due
to these probable conditions, certain outcomes of readings can be measured—the readings
“cluster, as in any other statistically measured human experience, around a norm, with an error
distribution. Outliers will occur.”

Within the purview of an act of demateriality, then, one might ask: what would it mean to
have the capacity to enact or avoid the stimulating experience for a large number of people? To
leverage the ‘normally distributed’ reading of a document toward immateriality to the effect of
producing a type of “thermal sink” or blindness in place of a material reading? Additionally,
what would corresponding insurances against the power to use this lever look like? Drucker
(2002) noted that the digital text can relate to an “idea that appears to consciousness as a form
but without materiality”; a text is often misperceived as immaterial, when the opposite is true,
both in terms of its literal materiality (i.e., digital bits) and its material affordances and
consequences. When this ‘immaterial form’ is used beyond just as a trope full of potential, but
rather as a weapon against the many, appearing in the guise of banal, rote, or seemingly benign
bureaucratic process for the purpose of masking important information, steps should be taken to
further explicate its rhetoric and performance, as well as prevent its misuse.

Blanchette (2011) notes how digital information seems “immune from the economics and
logistics of analog media” but that “however immaterial it might appear, information cannot
exist outside of given instantiations in material forms” (p. 1042). I argue, however, that with
some types of documents immateriality can either ‘escape’ or ‘not escape’ the embodied material
limits based on the way the person/people projecting it intended it to be received. When
projected by those with more power, knowledge and resources, no matter how material they
actually are—in form, in physical matter, in infrastructure, or even in reception—those with the
power to control that projection, will also control just how material they are, both in the sense of
how ‘official’ a record and the types of material consequences they enact. A reading of demateriality acknowledges the importance of the bibliographic control of digital documents, not only from the standpoint of practice, including documentation, editing, or inscription, but also from an understanding of the probabilistic readings of both the reader/user/adherent and the knowledge of these readings by those in power (i.e., drafter, designer).

Demateriality is closest in nature to Drucker’s performative materiality in that it seeks to imagine the probabilistic readings a text would produce; however, it argues that with the seamlessness of the digital interface, those readings are granularly controlled by the author/coder/drafter/editor and the reception of the reader should not always be the only source of meaning production worthy of analysis. If this were the case, then acts of customization, individualization, and so on would seem to work toward allowing users the ability to control their subjective readings. The problem in the current digital climate is that the reader does not control those aspects of reception; document and information performance are often controlled by drafters/authors with more vastly more power and resources and so those readings are anticipated or expected, and also manipulated based on those presumptions. This is a claim of a rhetorical intention, not just a spontaneous, or even contingent reception. While reader response theory considers two types of readings—the author’s intention and the reader’s interpretation—a reading of demateriality would consider a third: the reading by the author on the part of the reader, of which the reader most likely is not aware of the full implications. Often these readings are justified in the name of economics, user experience, or customization. These projections are also tied up in epistemologies of engineering, computing—the digital abstract, and streamlining convenience. An official document such as a contract provides a discernible example of the
extreme embodiment of these values, especially when placed within the purview of the concerns of diplomatics and the practices that would grant is authority, reliability, and authenticity.

A study of demateriality recovers the material from an image of the immaterial with a similar motivation as previous theorists, however, it also poses the added questions: What if immateriality is not just a trope in discourse, but a tool in the practice of reifying power differences? What if we view projections of immateriality as neither simply correct nor incorrect, but rather work on a sliding scale at the benefit of the one who controls the lever? What if immateriality is not just a fallacy described in academic discourse, but rather a purposeful projection by a powerful few to manipulate many? And lastly, what if those few bet on the probabilistic interpretations of the many are also the same few that decide on the legitimacy of the text in question?

The example of SFCC documents and their dematerialized performances allow this rhetorical move to be explicitly called out. The implications of demateriality are not banal, nor benign, but instead affect a multitude of people in a vast array of digital contexts. A SFCC is the appropriate site for this analysis as its performance relies on both the literal, material inscription of a text, the contract itself, and the rhetorical performance of the presence of the text. The problem with SFCCs as postmodern documents is that the reader is not actually ‘empowered’ as the ‘death of the author’ only seems to take place by its successful projection of immateriality. In some sense, SFCCs are DuPlessis’ musical score—while still being rife with historical and legal precedents that have ‘written’ them in a previous time, nevertheless are “motivated and belong[ing] in certain ways to [their] own time, technology, and regimes,” void of ‘neutrality,’ and with an ever present “partisanship and appropriation” (DuPlessis, 2002, p. 87). The
corporate entity or “author” is not ‘dead,’ but instead acts as Fish’s Rhetorical Man, masking the implications of his presence by way of a seemingly negligible document performance.

5.3 The Myths

This section will demonstrate the practice of demateriality as it is played out in the governance and performance of SFCCs. It will make use of excerpts from the Congressional Facebook hearings from April 2018 as well as the new ‘consensus’ put forth by the ALI Draft. Thus, it provides an example of the contributions to the discourse coming from the voice of the corporate entity (i.e., Facebook), the legal contribution (i.e., the ALI Draft), and an analysis of the practice of demateriality that this discourse allows (i.e., Demateriality). Each Myth has a section for each voice to provide a complete picture of how that myth is perpetuated and performed, and a description and analysis that reveals how that myth is also deflected through an alternate justification (see Table 1).

5.3.1. The Myth of Literacy. This myth perpetuates the idea that enough consumers will have knowledge about the contract if presented the opportunity to read (i.e., through the means of other minimal presentation requirements) or because they are ‘standard practice.’ When presented with evidence that this is not the case (Bakos et. al, 2014), and that consumers do not read or know the terms, a deflection to the minimal presentation requirements as sufficient to fulfill their legal duty is often the line of argument from corporate drafters. It is based on the premise that the adherent has not read the terms, and thus assumes a body of knowledge of the adherent that would stand in for that reading.

Facebook. At the Congressional hearing April 2018, a question by Congressman Michael C. Burgess (R-TX) asked whether or not there were aspects of the ‘terms and conditions’ of Facebook that the CEO would encourage consumers to understand prior to using the service.
Invoking a Dilbert cartoon (Figure 1) that insightfully acknowledged the issue of the ‘shrink-wrap’ agreements and egregious terms early on in 1997, Congressman Burgess asked Zuckerberg:

Going back 21 years ago, when you took the shrinkwrap off of a piece of software that you bought, you were automatically agreeing to be bound by the terms and conditions. So we have gone a long way from taking the shrinkwrap off of an app. But I don't know that things have changed all that much. I guess, does Facebook have a position that you recommend for elements of a company's terms and conditions that you encourage consumers to look at before they click on the acceptance? (“Transcript,” p. 48)

Zuckerberg agreed that there were some terms more important (often called salient terms, versus non-salient) than others, even if he did not specify what they were. He also stated that he “think[s] that it is really important for this service that people understand what they are doing and signing up for and how this service works” (p. 48-9). When questioned further by Burgess, Zuckerberg claimed that he did not understand the question and that Facebook had “laid out all of what we do in the terms of service because that is what is legally required of us” (p. 49). Here, Zuckerberg fully articulates and relies on his simple duty to notify as his escape route. Finally, Burgess asked more directly, himself taking on the guilt of having been subject to the same process as the average consumer:

[...] can the average person, the average layperson look at the terms and conditions and make the evaluation, is this a strong enough protection for me to enter into this arrangement? Look, I am as bad as anyone else. I see an app. I want it. I download it. I breeze through the stuff. Just take me to the good stuff in the app. But if a consumer wanted to know, could they know? (p. 49)
Zuckerberg answered that the Congressman “rais[ed] and important point” and that “if someone wanted to know, they could” (p. 49-50). Additionally, he views the responsibility of the company “not as just legally complying with laying it out and getting that consent” but “actually trying to make sure that people understand what is happening throughout the product” (p. 50). Although it seems as though he is taking responsibility, he also places the responsibility of knowing what is in these agreements on the consumer since he cites that “a lot of people probably just accept terms of service without taking the time to read through it” (p. 50). He does however claim that Facebook is trying to solve the literacy issues with these agreements by providing real-time controls on the sharing of data “at the time that they are making those decisions,” not just “upfront” when they make a “one-time decision.” Burgess, perhaps either satisfied by the illusion of control described by Zuckerberg or else overwhelmed by the meaninglessness of it, replies: “Yeah. Let me move onto something else” (p. 50).

**All Draft.** The most common remedies for egregious SFCCs include substantive and procedural unconscionability. A look at the various readings of subsections 2 and 3 from the “Restatement” (1981) that deal with “unexpected terms,” *ex ante* and *ex post*, and legalese and information overload is beneficial to understanding how future courts might decide (Duxbury, 2001). Definitions of “Standard Contract Terms” in the Draft are as follows: “Terms in a consumer contract that have been drafted prior to the transaction by any party other than the consumer and govern transactions between the business and multiple consumers” (p. 8). Thus, the standard for ‘standard form’ or verbatim “Standard Contract Terms” relies on the timing of drafting (i.e., “prior to the transaction”) and must govern the transactions between one individual

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59 Since the Restatement itself is said to have this as its motivation, it makes sense to believe that it will shape and perpetuate these same conclusions going forward. This is especially dangerous because it is codifying law for which there is less of a consensus than ever before.
or an entity and “multiple customers.” The vagueness of this description and the premises it relies on is even further confused by the comment that attempts to clarify, which in essence allows for some “negotiation” amongst the entities should the adherent have a choice in terms or if the terms are “tailored per customer based on personal information known to the business” (p. 8). The caveat provided is that “such negotiated or tailored terms are considered ‘standard Contract Terms’ despite the absence of uniform multi-consumer application” (p. 8).

Two concepts—*ex ante* and *ex post*—are economic terms used commonly in contract doctrine to describe the timing of the scrutiny of certain elements of contracting such as contemplation and negotiation of terms. *Ex ante* is Latin for “after the fact” whereas *ex post* means “before the event”\(^\text{60}\); in terms of SFCCs, there are those who claim that adherents should be able to scrutinize terms prior to entering into the contract (*ex ante*), and others who argue this does not make sense for a SFCC that is not meant or expected to be read. Instead, this argument claims that certain egregious terms can be dealt with *ex post* should a dispute arise, possibly overtime through court decisions. The latter is currently proposed in the Draft as the remedy that would ‘weed out’ egregious terms. These are matters of unconscionability as they pinpoint when and where a contract should be read (prior to formation, or post-formation), and how the adherent of a standard-form contract should be able to access the text of the agreement, which relies on unconscionability determinations to remedy (i.e., opportunity to read, presentation of terms).

In the Restatement (Second) of Contracts (1981) that was and still is the authoritative doctrine on contract activity in the U.S., standardized contracts are given three sections of description. The first section describes how regardless of the adherent’s knowledge, the written

\(^{60}\) [https://www.investopedia.com/terms/e/expost.asp](https://www.investopedia.com/terms/e/expost.asp)
draft is the integrated agreement, or the text that is considered the fully completed terms of the bargain (“Restatement,” 1981, § 211). The safeguard against corporate or drafter overreach is stated in subsection 3, which allows for the nullification of a contract term in the event that it is deemed ‘unexpected,’ or a term that would have prevented the adherent from agreeing if its presence had been known. For over two decades, this provision has provided that either the adherent should have the opportunity to read the terms of the contract prior to consent (ex post) or file a complaint against an egregious contract after the fact (ex ante). The Draft takes a narrower position that courts should scrutinize terms ex post for adherents, since it is now accepted that adherents do not read the terms. The authors (called Reporters) of the Draft explain their reasoning in this regard:

The ex post scrutiny of permissible contracting is not intended to be (nor can feasibly operate as) a replacement of private ordering. Parties are allowed to design their transactions and agree even to bargain-basement terms, if they so wish, and for the right price. The ex post scrutiny is only intended to uproot terms that are so extreme that they would be unlikely to survive in an environment of meaningful free choice, or that deceptively peel off the value that consumers bargained for. (p. 4)

In other words, because ‘banning’ certain terms works against the fundamental notion of freedom of contract in the U.S. common law system, the Reporters suggest that a similar type of prohibition through court opinion might prevent certain objectively egregious terms to not perpetuate throughout these agreements. Praise has been given to the authors of the Draft for trying to more permanently limit drafters’ ability to include certain terms over time (Klass, 2017b, par. 2); however, several aspects of this plan are difficult to implement including determinations of “terms that are so extreme that they would be unlikely to survive.”
The Draft invokes the unconscionability doctrine substantively. If a term is unexpected and can affect a large population of consumers, it can be deemed unconscionable by the court and that term of the contract will be null and void, if the rest of the contract remains (p. 4). Traditionally, the unconscionability doctrine is used by the adherent as a defense should the drafter bring action against them; in other words, if a consumer defaults on a payment, for instance, the corporate entity can sue and the consumer might be able to defend themselves with the unconscionability clause (“Council Draft No. 4,” 2018, p. 3). In the Draft, however, the black letter of the text states that the unconscionability defense may only be raised by adherents in cases of defense, not in order to seek affirmative declarations. Some (“Council Draft No. 4,” 2018) have suggest that a proper counterbalance to this narrower definition would be to include a comment that states that adherents can also raise unconscionability “affirmatively and defensively by seeking a declaration that the contract is void in part or in its entirety, providing for restitution for the costs incurred by virtue of the void provisions, and allowing class action relief” (p. 4).

The Draft’s new narrower definition puts the adherent in a tough position—if substantive issues are supposed to be decided by courts ex post, and consumers are generally disqualified from raising unconscionability claims on their own except in narrowly defined circumstances, then it leaves it solely up to the drafter to decide when to litigate. If the drafter is the only one who has the impetus to prompt litigation, it is even more unlikely that those extremely egregious terms will emerge for prohibition through litigation. “Businesses will be well aware that they have little to fear from consumers,” as one rejection letter against the Draft described (p. 3).

Demateriality. The primary dematerialization occurring in this example directly correlates with the Myth of Literacy, wherein the adherent is presumed to have a certain set of
knowledge based on notions of duty to read, as promoted by Zuckerberg in the hearings. This myth is continually perpetuated through claims such as the ‘plain meaning rule,’ when court opinion and other justifications traditionally have placed the onus on consumers to take advantage of the possibility of accessing the contract prior to entering into the contract (Calamari, 1974). Curiously, the consensus also paradoxically claims that adherents do not have a rational impetus to actually read the terms (Ben-Shahar, 2014 and Schneider; Obar and Oeldorf-Hirsch, 2016), as backed up by studies that prove they do not in practice, at least in their current form (Bakos et. al, 2017).

The Myth of Literacy is also present in Zuckerberg’s deflection of the efforts of Burgess to address the ability for users to control their information. Zuckerberg cites the ability for users to have the “relevant controls” over their data at the time of posting content\(^6\). Users decide who they share information with, Zuckerberg notes, at the time of posting, not in the contract that they agree with at the time of signing. The Facebook consumer base might assume those controls actually change the uses of their data to the full extent that it is used; instead, the controls only change who gets to see the immediate post (e.g., friends only, friends of friends, general public), not how their data is actually sold to data brokers, or companies that collect data from a variety of sources to profile consumers, the largest of which brags about possessing a dossier of over 3,000 data points on each US consumer (“Data Brokers,” 2014).

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\(^{6}\) Zuckerberg’s actual statement from this part of the hearing states: “You know, every day, about 100 billion times a day, people come to one of our products, whether it is Facebook or Messenger or Instagram or WhatsApp, to put in a piece of content, whether it is a photo that they want to share or a message they want to send someone, and every time there is a control right there about who you want to share it with. Do you want to share it publicly to broadcast it out to everyone? Do you want to share it with your friends, a specific group of people? Do you want to message it to just one person or a couple of people? That is the most important thing that we do, and I think that in the product that is quite clear.”
Users who are unfamiliar how a social media platform works probably are not able to imagine all of the uses of their data. This understanding is overlooked in the name of the provision in subsection 3 of the Restatement that claims an adherent can nullify the contract in the case of unexpected terms; the term “unexpected” is exceedingly difficult to claim when the actual meaning of the clause—the corporate activities and proprietary algorithms—are solidly inaccessible (“Restatement,” 1981). Never has there been a time when users were so profoundly shaped by networked technological activities, so we do not possess the ability to imagine their nature or effects and therefore cannot meaningfully enter into these contracts.

Facebook claims that it does not ‘sell’ user data, but a widely shared opinion piece from Michal Kosinski (12 Dec 2018), an assistant professor at Stanford’s Graduate School of Business, warns not to be fooled by these claims. An excerpt from his piece in the New York Times is worth quoting in full:

When the company argues that it is not selling data, but rather selling targeted advertising, it’s luring you into a semantic trap, encouraging you to imagine that the only way of selling data is to send advertisers a file filled with user information. Congress may have fallen for this trap set up by Mr. Zuckerberg, but that doesn’t mean you have to. The fact that your data is not disclosed in an Excel spreadsheet but through a click on a targeted ad is irrelevant. Data still changes hands and goes to the advertiser. [...] Facebook’s claiming that it is not selling user data is like a bar’s giving away a free martini with every $12 bag of peanuts and then claiming that it’s not selling drinks. Rich user data is Facebook’s most prized possession, and the company sure isn’t throwing it in for free. (par. 9)
It is possible the process of these agreements or relevant data controls serves as a ruse to distract from what is actually happening and allow the users to feel just enough control. Psychologists have been keenly aware of the effects of these types of ‘red herrings’ for at least fifty years; the oil, eggs, and water we add to Betty Crocker cake mix is the result of studies that showed consumers were happier if they are given the appearance of control, relieving their guilt, even if it the ‘control’ is not real or substantial (Boyd, 2014). This correlates with the theory of blindness or BLANK described in Drucker’s work and in Chapter 4. The practice of dematerialization relies on this conditioning and uses it to hide egregious clauses in contracts drafters know users will not read or understand. Drafters also know that when presented with the complexity or the illusion of control, users will often either feel satisfied and/or give up, similar to how Burgess changed the topic once Zuckerberg cited the privacy controls.

The new determination by the Draft to implement a scrutiny of terms ex post, or within the courts rather than provide a meaningful presentation of the contract for ex post by the consumer, uniquely dematerializes the contract for the adherent. Not only does it acquiesce to a complete removal of the idea of a text or interpretation by a reader, but also usurps any effort toward that type of performative power that would validate adherent’s ability to scrutinize. For instance, a common practice is to put the terms in a hyperlink (see Figure 2); from Yahoo’s homepage it is easy to see why this would be an issue. The hyperlink is light grey, on the bottom of the page, and difficult to notice against the other, flashier content. The courts and the businesses will decide the egregiousness of the terms, they argue, to save the customers time, reading, and effort, but also will remove any safeguard that those activities would afford and allow for these practices to become commonplace.
If consumers are generally accepted to not know the terms of an agreement, and the agreements are hidden in the margin, which in effect promotes the ‘reading’ that they should be ignored as marginalia, it is logical to assume that consumer pushback in the form of complaints and lawsuits will not change egregious terms through legal proceedings. Further, in a digital marketplace that supports monolithic, monopolistic corporations such as Google, Facebook, or Twitter, relying on these terms to emerge from competition does not seem feasible without at least an informed minority of users. The rhetorical move here is to minimize the contract’s presentation and then justify this performance through a safeguard that robs the consumer of their right to understand the terms and acts as though the courts will take on their burden. Further, in order for a consumer to want to file a complaint, the trajectory of the implications of these contracts must be at least partially understood, yet several features of the document performance suggest that this would not be the case.

A practice that makes use of the Myth of Literacy through repetitive dematerialization is the use of linked or referred contracts. This is the practice of hyperlinking several contracts throughout a contract, all of the terms of which the consumer is additionally beholden. I found two common design practices for these linked contracts, “in line” with the other text (see Figure 3a) and as its own set of bullet points (see Figure 3b). Not only is a consumer-adherent supposed to have knowledge of the terms of the main agreement, they are also supposed to have knowledge of these many contracts referred to throughout. However, there is some evidence (Eigen, 2008, 2014) that differences in education, income, and “skill” can change the attitudes toward SFCCs, for instance, with the lower end of this group assuming the contracts are more enforceable, whereas those with a higher income and access to resources believing the contracts are more likely unenforceable.
Certain terms and clauses of common digital SFCCs should be officially standardized through adherent-focused negotiation by a variety of stakeholders and enforced through public legislation. Measures of ‘standardization’ for digital SFCCs should not only rely on notions of ‘standard practice’ established by drafters, and notions of consideration for adherents should not only rely on ‘convenience’ or ‘costs saved,’ but rather on a rigorous understanding of adherents’ actual knowledge and sacrifice from a lack thereof from experts familiar with corporate activities. To preserve a semblance of freedom of contract, this standardization may only apply to ‘salient’ and/or ‘unexpected’ terms, the designation of which can be negotiated by these stakeholders, including consumer (adherent) advocate groups. A study of diplomatics can provide the means by which these contracts can be made more authentic and reliable (see Chapter 6) and increase trust among users that they have actually been standardized.

In an effort to satisfy the political economy of “socioeconomic norms and forms,” standardization efforts can work towards reducing subjects and their representations to modernist, utilitarian arrangements (Day, 2014). The depiction of the adherent as a reader of this contract is similarly reduced—provided only the validation of an abstract form without knowledge, capacity, or desire for either. Another way of understanding or predicting consumer literacy might come in the form of Buckland’s (1991) terms, with the information of the contract considered as a process of knowing, located with an act of communication meant toward the consumer-adherent, and not in the sense of the drafter’s and the court’s ‘knowing.’ If terms were only allowed based only on actual informed adherents’ acceptance or rejection of certain terms (this might be done through a survey, such as suggested by Ayers and Schwartz, 2014), it might locate an understanding of the contract in the actual informed-ness of the adherent, and the terms would more accurately reflect the majority of consumers’ knowledge base and comprehension.
This would help determine that consumer-adherents do not understand the full implications of their engagement with these contracts, and with their current, confusing documentation, might not identify them as contracts at all. Lastly, part of this process could involve making the contract available in many languages, especially since many of the top service providers have a large international user base. Wikipedia is one example of this practice (see Figure 4), whose language choices are quite extensive. Other companies such as Facebook provide terms in a few other languages, but others, such as Twitter, do not. Rather, Twitter’s contract can only be downloaded in English. This provides a boundary to the content and knowledge of its content that cannot be overcome easily, and thus a large population of the users of Twitter could not understand the terms in their current form. Thus, for these users, Zuckerberg’s explanation that they could if they wanted to is a perpetuation of this myth.

5.3.3. The Myth of Engagement. This myth claims that information in the agreement is accessible because it is presented in a certain conventional manner, and if it is not accessible, users still have control over their experience with granular design mechanisms. It lacks the nuance of how users actually engage with information systems and would benefit from interface theory that suggests certain expected readings might promote a lack of engagement, rather than a successful communication. It also relies on the notion that engagement equals meaningful bargaining, without the documentation that has traditionally been a part of the contracting process.

Facebook. When Congressman Gene Green (D-TX) questioned Zuckerberg about the newly implemented GDPR laws, he describes the motivation of this regulation as that which “requires that the company's request for user consent to be requested in a clear and concise way, using language that is understandable, and be clearly distinguishable from other pieces of
information including terms and conditions” (“Transcript,” p. 52). Green is referring to the GDPR laws that went into effect on May 25, 2018 as a result of the data policies of Facebook and similar companies.

Zuckerberg’s answer to his question directed the congressman to the data policy controls that he mentioned in an earlier answer. This answer shifted the focus on how a user will be able to control who see their data (in terms of friends and friends of friends), not how their data will be shared behind-the-scenes with other third parties. Specifically, Zuckerberg said “we are going to put at the top of everyone's app when they sign in a tool that walks people through the settings and gives people the choices and asks them to make decisions on how they want their settings set” (p. 53). For Facebook, the corporate entity and drafter, being able to define terms such as “relevant controls” or “improper use of data” for which they are liable helps them tremendously; however, it leads to situations where both the lawmakers and regulatory committee are not able to parse out the different meanings and the question went effectively unanswered. Facebook ultimately controls what is regulated, how it is done, and what consumers know about these processes. Other senators at the Facebook hearing similarly noted some of the difficulties presented with these dictums in both the ToS and privacy agreements that together are over 5000 words. Senator Lindsey Graham (R-SC) noted after reading a section of Facebook’s privacy policy: “I’m a lawyer, I have no idea what that means.”

Pushed further on the topic of GDPR, Green asked about a few of its other provisions, including whether or not users can export their data and see the ways in which it is used:

Mr. Green: Does that download file include all the information Facebook has collected about any given individual? In other words, if I download my Facebook information, is there other information accessible to you within Facebook that I wouldn't see on that
document, such as browsing history or other inferences that Facebook has drawn from users for advertising purposes?

Mr. Zuckerberg: Congressman, I believe all of your information is in that file.

Mr. Green: Okay. GDPR also gives users the right to object to the processing of their personal data for marketing purposes, which, according to Facebook's website, includes custom microtargeting audiences for advertising. Will the same right to object be available to Facebook users in the United States, and how will that be implemented?

Mr. Zuckerberg: Congressman, I am not sure how we are going to implement that yet. Let me follow up with you on that. (p. 53-4)

In this exchange, not only does Zuckerberg knowingly mis-describe the information provided by the data import—it does not in fact show you “browsing history or other inferences that Facebook has drawn from users for advertising purposes.” It provides a .csv file that is a report of all of your posts, not the correlations and inferences about the consumer; keep in mind this would be a significant task to convey in a report such as this as it involves a network of over thousands of data points and several data brokers. However, Green seemed satisfied with this answer and reminded the committee that Facebook made an effort to help small businesses in his community a few years prior. In other words, even though Green pressed Zuckerberg harder for a more specific answer regarding his efforts toward transparency, accountability, and disclosure, he was satisfied and even praised Zuckerberg, revealing a lack of sufficient pressure on these companies to change practices that have become standard, rather than standardized through some

62 An investigative report of the business of data brokers undertaken in 2014 found they “typically collect, manipulate, and share information about consumers without interacting directly with them. Consumers are largely unaware that data brokers are engaging in these practices and, to the extent that data brokers offer consumers explanations and choices about how the data brokers use their data, that information may be difficult to find and understand.” (“Data Brokers”, FTC, 2014, p. 3)
systematic and perhaps more equitable process. Reed Albergotti, of The Wall Street Journal’s notes how

Facebook has amassed the largest store of data, of personalized information about people, in the history of the world. Nobody, not even the NSA, has this much data stored on servers about people. So I think that’s one of the reasons these privacy concerns flare up about Facebook from time to time - because I don't think most people realize really what they're giving up. (Cornish and Ben-Shahar, 2014)

In the four years since this was stated on a National Public Radio broadcast (npr.org), the image of promised, democratic freedom these online services espoused been vastly altered. The networked, internet environment initially promoted the impression that users have a certain amount of autonomy and participation in the nature of their experience—an assumption that Zuckerberg is still flaunting in order to justify the unraveling image of the practices engaged by his platform.

**ALI Draft.** While a few of the determinations in the Draft are intended to serve adherents of SFCCs, such as the negation of the parol evidence rule and the discouraging of mandatory arbitration clauses (p. 4), they lose their beneficial quality when combined with other determinations. One such determination is the Draft’s statement regarding burden of proof. The burden of proof refers to the onus to “prove that a term was deceptive, when a business makes a false affirmation, for instance, or promise that is later undone or qualifies in a less conspicuous manner—cannot make a promise that is changed by the contract” (“Draft,” 2017, § 6 “Deception”).
This burden of proof was placed on the adherent after having been shifted in an earlier version of the Draft to the corporate entity. Should the Draft add a comment to the unconscionability determination as suggested (“Council Draft No. 4,” 2018, p. 3), its statement on burden of proof would place the onus to prove the clause on the adherent. In 2017, an initial Draft provided a comment that clarified that the burden of proof was to be placed on the business to prove a term was not substantively unconscionable. A term is deemed substantively unconscionable if it “can affect the contracting decisions of a substantial number of customers” (“Burden of proof,” “Draft” 2017, p. 68). Producing proof in this regard then might mean surveying a number of customers to show that the term was not unexpected nor affected their decision to enter into the agreement; the design of that survey might need to be controlled, however, so that customers actually understood what it meant or else the survey would be another insurance for the drafter and entirely meaningless to the adherent. On this topic, the rejection letter notes:

Regarding procedural unconscionability related to a contract term, the Draft takes the position that a consumer must show that the term did not affect the contracting decisions of a substantial group of consumers, i.e., the term is not salient. To meet this burden a consumer would have to commission a study of consumers—an unrealistic task for a consumer to perform given the cost involved. Such a study lacks validity in any event because, if conducted by consumers once unconscionability has become an issue, the study would take place well after consummation of the contract, rather than at the time of contracting. (p. 5)

63 The Draft accessed from ALI’s website is from 2017. The rejection letters (CITE) reference this change in 2018. Because I do not have access to the 2018 version, I do not know if this comment has been restored. Regardless, it is a useful example of the scope and negotiated demateriality that can occur with a SFCC document.
However, according to a letter of rejection from a group of advisors and consumer advocate groups written a year later (10 Jan 2018), the comment that specified the burden of proof was removed, placing the onus back on the adherent, which the letter called “a big step backwards” for consumers (p. 5). This goes for both substantive and procedural unconscionability. To the former, proof of the materiality and effects of the term in question must be proven. To the latter, the circumstances of bargain formation might also need to be proven. Both are problematic and place undue burden on the adherent, who has much less access to resources to accomplish these tasks. For instance, a rejection letter specifies:

According to the Draft, the consumer bears the initial burden of proving the elements of unconscionability. Businesses, however, have access to nearly all of the relevant evidence. For example, only businesses are ‘recording this call to for quality assurance,’ and therefore control the recordings which would show that telemarketers pressure and deceive consumers into agreeing to bad deals. Only businesses draft the contracts and only they know ‘the commercial setting, purpose, and effect of the terms they impose on consumers. (“Council Draft No. 4,” 2018, p. 5)

Even if mandatory arbitration clauses, which have been shown to inhibit adherent’s ability to exercise their rights (Horton, 2009), are discouraged or even banned completely, and consumer-adherents were able to litigate freely not just defensively, if they are required to produce evidence of the circumstances of their engagement with a SFCC in the current digital environment, the benefits are lost. Placing the burden of proof on adherents puts them at an unfair disadvantage, perhaps to their detriment.

Demateriality. The dematerialization of the contract document in the case of the parol evidence rule and the unilateral modification clause is perhaps the most obvious case. It is the
most related sense to the trope of immateriality perpetuated by textual critics in the early 2000s that Kirschenbaum highlighted and disrupted. It is subverted in the sense, however, since regardless of its material or formal persistence, the ever-changing ‘integrated’ agreement does not materialize in the mind of the adherent, and is rather minimally presented, shifting behind-the-scenes of projected banality. In the case of SFCCs this act of demateriality is being used against consumers to allow for the continual editing of a fundamentally unstable document, at the behest of the adherent who is often not aware of the changes or the nature of the changes involved. Efforts toward disclosure and notification of these changes have only served to confirm already established ineffective practices (Ben-Shahar and Schneider, 2014). Further, if consumers are meant to document the moment of contract formation due to the burden of proof provision, combined with another statement in the Draft (i.e., the discouragement of mandatory arbitration), it removes any benefit the latter would provide. Ultimately, it is a futile mission for an adherent to file a complaint if they are unable to produce the evidence sufficient to prove their case. Additionally, from the information that Facebook provides in the download required by GDPR, standards of proof are not yet met, especially for a document that changes regularly without notice.

From another perspective, because of their importance as a record, it may be possible to ‘re-materialize’ the material image of the SFCC document through recordkeeping practices. By imposing practices that ensure authenticity and reliability, this document might have a more controlled process of creation and might be reasonably assessed as a certain genre of document, rather than a Frankenstein-ish agreement that contains a variety of non-standardized clauses, with its only persisting formal and reliably-inducing characteristics its familiar blocks of capitals and justified text. Its formal elements signify its reliability as trustful to adherents, when in
actuality very few safeguards that would earn this trust are provided. For instance, an example from Twitter (see Figure 5) shows how the layers of genres of contract can be disguised within the text of a contract. Often, digital SFCCs specify the terms of various roles of users; this can include labor terms or copyright terms, which can have various material implications depending on how one uses the service. In this example, a ‘developer’ who is not an employee of the company, but rather someone that makes use of a piece of its technology for another platform, is still subject to some of these terms. Their role differs from the average consumer-adherent, and thus documentation should separate these terms from the other contracts for regular users, and not exist as nested, linked contracts within the larger document.

Textual critics, in an effort to stay true to a romantic notion of an author and (mainly) his intentions, sought to identify an ‘ideal copy’ that was a compilation of the edited versions through the eyes of an informed editor. McGann disrupted this romance so that the author’s intentions were a mere shimmering performance that did not deserve such glorified attention, and rather found more significant meaning in the interpretation of the reader in a similar vein to other interpretive theories. With this in mind, the ever-shifting content of the hidden document might be framed as producing an ideal copy by the author (the drafter) and the courts (the editor who serves industry more broadly). A shift toward a readerly copy might make these edits more explicit, not simply through flattened, familiar, notifications and emails, but rather through meaningful explanation describes the types of edits. Perhaps, editing terms such as ‘horizontal’ or ‘vertical’ can be repurposed for SFCCs, with horizontal edits, or those intended to change the nature of the contract, requiring more documentation. Documentation choices also might include not just simple notifications, but an automatic copy saved on each computer to serve as evidence in cases of dispute, documented appropriately according to bibliographic conventions that are
practiced in organizing texts and their versions. Rather than as homage to the author figure, then, it uses documentation and bibliographic practice to disrupt his rhetorical performance and force a safeguard against presumed and imposed readings. One example of a platform that attempts to archive and document previous versions of their terms includes Twitter’s “Previous Terms of Use” page (see Figures 6a and 6b). Twitter’s display has more documentation effort than most, however there is no guarantee that the hyperlinks on this page (Figure 6b) are reliable and there is no notation on the actual changes between versions. It would be much more helpful for Twitter and other services to provide a record of that information, and perhaps even label the changes as vertical (affecting the whole document) or horizontal (affecting only a sentence or term). Further, this page of archived terms is only available as a link on the bottom of the main terms page (Figure 6a), which is not easily findable. It should be noted that Twitter’s efforts are far more comprehensive than anything offered by other major services, and they also allow for an easy download in PDF format, although they only provide an English version.

For these procedural issues, including mechanisms of assent, more meaningful contract formation and unilateral modification, theories from textual criticism and critical design studies are useful and work toward disrupting the Myth of Engagement. For unilateral modification, under the lens of textual criticism, it seems as though due to these uninhibited, continual edits, without adequate documentation by one party and comprehension by the other, we are still very much in the wild, wild west of a textual understanding of these agreements. In their current form, a critical view of the probabilistic readings most likely produced indicates they are generally not seen as contractual agreements and their continual changes are not actually understood.

5.3.3. The Myth of Equality. This myth makes use of a feigned ignorance of the content of the agreement on the part of corporate drafters. When responsibility is taken, often a
commitment (or recommitment) to some principle (e.g., privacy) is stated without meaningful change as a deflection of this responsibility. Although power differences are accepted as part of SFCCs and the contracting process more generally, perpetuating the myth that there can be an equal ground on which the parties understand each other and communicate the terms of the contract is deceiving and affords these agreements more power than they deserve. The reality is that the drafters expect this lack of comprehension and its accommodations, including the fact that the regulations and requirements supposed to provide more information and remedy this power difference are not ultimately effective. Further, the collective expression of the individual players in contract governance is situated with social position, underlying motivations, and mechanisms of effective regulation, which are often engineered to leave little recourse for adherents.

*Facebook.* During Zuckerberg’s hearing, Congressman Leonard Lance (R-NJ) asked the CEO:

[...] regarding Cambridge Analytica, the fact that 300,000 individuals or so gave consent but that certainly didn't mean they gave consent to 87 million friends, do you believe that that action violated your consent agreement with the Federal Trade Commission [FTC]? (“Transcript,” 2018, p. 98)

In this question, Lance asked Zuckerberg directly if the ‘agreement’ to which Facebook consumers consent when registering with the platform matched their expectations. In this case with Cambridge Analytica (CA), this question intended to uncover whether users of the platform were aware that their consent allowed for 87 million people to see their data. Zuckerberg answered negatively, admitting that the platform itself was also unaware of CA’s agreement, and yet he felt they did not violate their FTC agreement. The agreement referenced, called a
“Consent Order” was created between the FTC and Facebook in 2011 after an investigation into the company’s practices with consent and agreement in relation to their ToS agreement (“Consent,” 2011). This agreement lays out the necessary compliance that Facebook must attain as part of a commitment to protecting the privacy of its consumers. This includes a directive in which Facebook agrees they “shall not misrepresent in any manner, expressly or by implication, the extent to which it maintains the privacy or security of covered information.” The activities covered include the collection or disclosure of this information, as well as the extent to which it is accessible to third parties such as data brokers. Further, the specific directions on how it should be disclosed detail that the platform should:

A. clearly and prominently disclose to the user, separate and apart from any “privacy policy,” “data use policy,” “statement of rights and responsibilities” page, or other similar document: (1) the categories of nonpublic user information that will be disclosed to such third parties, (2) the identity or specific categories of such third parties, and (3) that such sharing exceeds the restrictions imposed by the privacy setting(s) in effect for the user; and

B. obtain the user’s affirmative express consent. (Section II.A)

In other words, Facebook must notify users of what will happen to their data and who will have access to it. Additionally, a directive at the end of this section of the agreement points Facebook to 15 U.S.C. §45(b) to “address relevant developments that affect compliance with this Part, including, but not limited to, technological changes and changes in methods of obtaining affirmative express consent.” Most descriptively, this section of the U.S. Code states that companies should not engage in “unfair or deceptive acts or practices” that would “cause or are likely to cause reasonably foreseeable injury within the United States.”
After Zuckerberg disagreed with Congressman Lance that it violated its FTC agreement, Lance simply answered: “Thank you. I think it may have violated the agreement with the Federal Trade Commission, and I am sure that will be determined in the future.” As of writing this, almost a year after the hearing, Facebook has yet to be officially punished for the breach, although recently (February 14, 2019) it was reported that the company is in negotiations with the FTC to receive a multi-billion dollar punishment (Romm, 2019). This would effectively raise the standard of consequence for platform data misuse and breaches, whereas previously, similar activities only garnered penalties in the millions\textsuperscript{64}. Regardless, even if the penalty is substantial and damages the company, until these practices are regulated more granularly, it stands that another company may be able to get away with the same egregious practices.

\textit{ALI Draft.} The Draft notes how “Restatements are primarily addressed to courts. They aim at clear formulations of common law and its statutory elements or variations and reflect the law as it presently stands or might appropriately be stated by a court” (p. x). The issue with this statement is that there is not a consensus in terms of the status of much of the law around SFCCs (Levitin et. al, 2019). By claiming to have found a consensus with untested, quantitative methods and a flawed data set, it is reifying some of the practices mentioned in this analysis that may be harmful to adherents going forward. And with new manifestations of digital contracts such as smart contracts on the horizon, and their early adoption into UETA standards, they might have further ramifications yet to be fully anticipated.

However, the authors of the Draft also note how there are two steps to making this determination: “to ascertain the nature of the majority rule” and “ascertain trends in the law.” If

\textsuperscript{64} Google was fined $22.5 million in 2012 over a data breach, for instance, which is presumably not a material punishment for a company that made $50 billion dollars that year (Romm, 2019; “Google 2012”).
some courts go against majority rule, then the Restatement must make a determination. The Reporters allow that “perhaps the majority rule is now widely regarded as outmoded or undesirable. If Restatements were not to pay attention to trends, the ALI would be a roadblock to change, rather than a ‘law reform’ organization.” It follows then that the last two steps are to determine whether a rule fits within the larger body of law and to “ascertain the relative desirability of competing rules” (p. 10-11). To this last task, the reporters cite “social-science evidence and empirical analysis” as “helpful” (p. xi).

The Draft makes use of quantitative methods to address some of the more complicated questions around digital SFCCs. The six quantitative case law studies in the Draft address several topics including: (1) “whether and when a business can modify a contract without express consumer consent; and (2) “whether a business’s privacy policy is part of its contract with a consumer; and whether and when clickwrap terms, browsewrap terms, or shrinkwrap terms become part of the contract”; (4) and applications of the parol evidence rule to standard terms in consumer contracts (Klass, 2018). Future quantitative methods favored by the authors of the Draft might include technological consensus mechanisms such as natural language voting systems favored by Ben-Shahar and fellow reporter Florencia Marotta-Wurgler (2011) that attempt to “solve” the ambiguity of language. While these methods might show some promise toward exploring solutions, codifying them at this early stage of the ‘zombie contract conversation’ should be done with the utmost care, or with “respect and tenderness” as was done with the revision of the classic Restatement (1932) to the Restatement (Second) of Contracts (1981). Critics of the Draft have argued that this doctrine is inappropriately being deemed a

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65 Recently (13 June 2018) Ben-Shahar endorsed on Twitter a study by Stephen C. Mouritsen (2017) on solving problems of interpretation through voting and consensus measure that make use of a corpus linguistics, attempting to clarify notions of the multiple meanings of language, and determinations of its conventional and contemporary usage.
Restatement rather than a set of aspirational principles (i.e., as “Principles of the Law” also published by the ALI) that are more normative and not claiming to be descriptive (Malfitano, 2018).

Other studies (Klass, 2018) have tried to reproduce these results found in the Draft to no avail using the methodology outlined in a recent article (i.e., Bar-Gill et. al, 2017) by the Reporters. Rather than releasing their full methodology, in this article the reporters describe: “We emphasize the importance of transparency, and we will make our databases, search criteria, and coding decisions publicly available once the Restatement is published.” Critics (Klass, 2018) have noted that this is not a research project, but rather a codifying of concepts that will affect court decisions for years to come once published; they have “significant persuasive authority—much more than the average law review article.” By not releasing their data upfront, it does not allow for adequate review of their very novel method (Levitin et. al, 2019).

If quantitative analyses are to be used as a method for supporting the desirability of “competing rules,” it makes sense that their ‘desirability’ be assessed, and the methods used are aware of multiple perspectives. The self-determined method of the Draft and its secrecy until after publication then should be contested, as others have mentioned (Klass, 2017b). Moreover, the current method of determining a consensus for this authoritative text was found by other legal scholars to have several errors, with some of the cases analyzed not being even about contacts at all (Levitin et. al, 2019). While previous methods such as a qualitative survey of several court opinions might be prone to bias, the complexities of language might be more appropriate for such a task if an analysis of this sort is deemed necessary to make determinations about contested legal opinion.
Demateriality. The spectrum of demateriality in the examples of the Myth of Equality have to do with the conflating of types of agreements, distributed throughout a single holistic image of a single, benign document. Blanchette’s distributed materiality might be important to this analysis, as it pulls apart the pieces nested within a ‘digitally abstracted’ immaterial persistence. As certain recent regulations have recognized this move of demateriality and attempted rematerialize by requiring that privacy policies of many of SFCCs be presented separately (“Consent Order,” 2011; GDPR, Article 2). Identifying the genre, purpose, function, and process of creation of these documents works toward informing consumer-adherents of their presence and thus make this information accessible a larger segment of this population. The failure on the part of Facebook to satisfy certain notification and consent requirements could be attributed to standard practice that has been established and confirmed by several powerful entities: the platforms, the legal community, and even the regulators whose requirements have proven ultimately toothless to safeguard those without a voice.

Further, with the determinations in the new Draft, there is no impetus or enforcement mechanism to prove otherwise. The rejection letters cited throughout were ignored by the authors of the Draft, and Klass’ (2017a, 2018) failure to reproduce the results that provided consensus to their conclusions were failed to be addressed adequately (Levitin et al, 2019). Further, a recent article by the Faculty Foundation noted how the ALI, as an unelected body of legal individuals that must pay and be given a membership (i.e., special privilege), has “limited competence and no special authority to make major innovations in matters of public policy” (Levitin et. al, 2019, p.449). Rather, they describe how its “authority derives rather from its competence in drafting precise and internally consistent articulations of law” (p. xii). Instead of this type of governance arrangement, it seems that one where a variety of stakeholders whom are actually heard and
considered is more appropriate for a situation where consumers are at a natural disadvantage and vulnerable populations are made even more vulnerable by their determinations (Ventuini, et. al, 2016). Some legal scholars have suggested that academic researchers, who tend to be more objective on this topic, be a part of this research and conversation (Leib andEigen, 2017).

Often, practices of dematerialization can be seen in design practices. The Norwegian Consumer Council’s (NCC) recent report on deceptive design found that major platforms (i.e., Facebook, Microsoft Windows 10, and Google) “use a vast array of user design techniques in order to nudge users toward clicking and choosing certain options.” Further, they found the use of “exploitative design choices” or ‘dark patterns’ that are “arguably an unethical attempt to push consumers toward choices that benefit the service provider” (“Deceived,” 2018, p. 4). This report on deceptive interface practice might be viewed as a way to assess how probability conditions can predict the readings of adherents, which then might make these choices more difficult to justify the Myths of Engagement or Literacy. These ‘deceptive design practices,’ include “hidden privacy defaults,” and cumbersome or illusory privacy options (p. 18-9, 31-4), “positive and negative wording” that frames privacy-invasive options as convenience (i.e., “if you keep face recognition turned off, we won’t be able to use this technology if a stranger uses your photo to impersonate you”) (p. 22-5), and reward-punishment systems that favor privacy-intrusiveness (p. 25-7).

An example of how the Myth of Equality plays out as an act of dematerialization can be seen in contrasting “Acceptable Use Policies,” sampled over two decades apart (Figures 8a, 8b, 8c and 9). There are several differences between these examples, from their language to their documentation to their political implications. The more recent example (Figure 8a) from Facebook (sampled May 24th, 2018) lays out the use policy in “positive language” that has been
found to deceptively nudge users toward privacy intrusive options (“Deceived,” 2018, p. 4). This wording can also be seen as Facebook lays out the benefits of their service earlier in the agreement. Facebook’s ‘acceptable use policy’ also falls under the heading, “Your Commitments to Facebook and Our Community,” a third item in a list of items that occurs after four screens of scrolling through the benefits of using the service (Figure 8c). While stating the goals and mission of the corporate entity does often appear in these contracts, a major portion of space in Facebook’s agreement is dedicated to this practice (i.e., about three times longer than the ‘use’ portion). It is not until much further down on the page that it outlines some of the prohibited provisions (such as age and illegal activity) succinctly (Figure 8a) and refers consumers to other linked contracts that outline these policies more descriptively. The policy then correlates this forbidden activity, which has been previously prosecutable by law under the CFAA, with the information users must provide as part of a commitment to using the service, again which is very long and detailed (Figure 8b). Put simply, right alongside the prosecutable use dictums in this section of its agreement, Facebook describes the vast access to user data from which it profits greatly and poses it as a similar type of ‘commitment’ to help fulfill the company’s ‘mission’ (Figure 8b). The contract being presented reads first as a list of the benefits of Facebook, then as a very short portion dedicated to ‘use,’ and a much longer section dedicated to permissions.

What is the contract to which users are beholden? Where are the descriptive labels that would familiarize users with a specific genre of contract (i.e., Acceptable Use)? Why are consumers presented with detailed, descriptive explanations of what Facebook supposedly provides them alongside what they must provide Facebook, yet in order to compile the actual policy, must search out further documents nested as hyperlinks?
To provide a contrast, an example (Figure 9) was taken from an “Acceptable Use Policy” from JvNCnet (John von Neuman Computer Network), which was a regional network of the NSFNET that was hosted at Princeton University in the early 1990s (Messmer, 1992). This latter example of a use policy is from a network that had not yet been commercialized or subject to any more recent laws that dictate clarity and explanation. The wording is negative in tone (i.e., “It is not acceptable...”)—appropriate for an agreement that is listing possible violations—and clearly stating what is allowed and what is not allowed, which provides the appearance of a recognizable set of rules. Although the CFAA had been written prior to the JvNCnet example, its current uses of prosecuting users as criminals for violations of these agreements was not yet commonplace. Even still, the material presence of the ‘contract’ genre is more palpable than Facebook’s ‘use terms,’ which come off as just a set of dismantled, piecemeal ‘best practices,” and where the actual boundaries of the contract are very difficult to parse out. Alternately, the earlier JvNCnet example clearly labels the policy as “Acceptable Use,” does not equate the prosecutable behavior with the data provided to its benefit. Within the purview of laws such as the CFAA, Acceptable Use Policies are clear example of ‘private ordering,’ or an expression of law written by individuals (including corporate ‘individuals). Facebook’s dematerialization of this agreement so far as to make it unrecognizable as this type of contract, further proves that uninitiated users are unlikely to find egregious terms or file complaints, and thus the Draft’s idea of ex post seems doomed to fail in these conditions. This practice is seen elsewhere with other services placing acceptable use terms hidden in “Community Guidelines” or “FAQs.”

66 See United States vs. Morris (1991); United States vs. Lori Drew (2008); United States vs. Aaron Schwartz (2011)
To provide a contrast, Professor Sarah Korobkin, a contract professor at UCLA who teaches courses on business-to-business drafting for contracts describes how the organization of these types of contracts involves many drafted versions, with each nuance being parsed out in sections. “Major action sections” that describe what is “being bought, sold, rented right to use” are generally presented right up front, as the first terms of the contract in the most direct form possible. Korobkin also describes how a technology such as a simple ‘word search’ might obscure the meaning of a term as it takes it out of context. Removing this term might change the “weight of what it is trying to do” for business drafters such as Korobkin, who takes care to make the language as clear and concise as possible. Moreover, in these contracts, lawyers say the same thing three or four different ways, she notes. Repeating a clause in different ways is just one example of an effort that is taken to lessen the ambiguity of language for the parties of a contract and these drafting examples reveal efforts to clarify, rather than to hide the terms of a contract.

5.4 Conclusions

A combination of ‘freedom of contract’ and economics dominates the discussion of SFCCs, with those more sensitive to the concerns of consumers seeming more at a loss than actually coming up with productive solutions. The solutions provided in the new Draft (2017) are not based on user-focused methods, which is problematic for contracts of this sort that are both written by and enforced by those invested in economic concerns. Measures of standardization necessarily precipitates the need for a safeguard against corporate overreach, and the method and conclusions drawn from the analysis in the Draft does not provide adequate protection for the less-privileged (in terms of knowledge, resources) party of the contract. If an idea of knowledge

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67 Korobkin, Sarah. (05 May 2018). Personal interview.
is to be assumed (i.e., based on a notion of ‘standard practice’) or ignored completely (Chapter 2, 3 of the Restatement [Second]), then some measure to ensure trust for the consumer-adherent must be put in place. And the onus for creating and implementing solutions that ensure that trust should be on businesses because they are the ones benefitting most materially. A regulatory safeguard needs to be formed, and the current practices of SFCCs and the corresponding statements in the Draft do not constitute an effective paradigm. It may be the place to start—an area of focus—but it is not fully developed, and instead, I would argue, quite chaotic in its current form from a documentation standpoint. We need curators of the information—this might look like information professionals, document theorists, practitioners of user-engagement studies, as well as creative and productive solutions that actually try to get users to engage with the substance of the contract in an effort to, at the very least, fulfill the informed minority hypothesis.

One of the most influential articles on standard form contracts from Fredrich Kessler (1943) noted how freedom of contract has traditionally allowed “the business community the ceremony necessary to vouch for the deliberate nature of a transaction has to be reduced to the absolute minimum,” as long as the rules of the common law remain and the parities of these contracts do not fail to regulate for their consequences (p. 629). If these regulation needs are satisfied, then the law must not venture further and has to “delegate legislation to the contracting parties” (p. 629). He cites this tension between freedom of contract and the need to regulate as jus dispositivum--a “phrase of the Romans” that notes how regulating contract “has to depend on the intention of the parties or on their neglect to rule otherwise” (p. 629, emphasis mine).

If we start to organize this wild west of contracts where only the drafters and their lawyers and perhaps the courts really understand what is happening, then future iterations can be
brought about with a tighter regulatory standard, some level of transparency might be achieved, and any adherents who wish to engage with these contracts will at least have the chance to achieve some level of literacy. These are not modest goals, but the effects would be substantial. And it is what adherents deserve as their part of the former “grand bargain”—some level of assurance that someone is keeping track of the specifics of these ‘standard’ agreements so they can trust their (anticipated) lack of expertise in a variety of legal spheres (e.g., privacy law, copyright law, labor law). Future iterations of technological innovations then might be able to continually parse out the organization, archival activity, or standard clauses to help create a more advanced system of regulation and accountability. Vague notions of ‘standard practice,’ and presumptions about adherent expectations, knowledge, and capacity to engage are not sufficient to address the issues with these contracts and these reductive explanations exacerbate an already complex issue. These solutions might provide an alternate to demateriality—a ‘re-materiality’ of certain texts, that, I argue, might have untapped potential for consumer-users. On the contrary, the authors of the Draft have concluded: “Courts have recognized that, in a world of lengthy standard forms, more restrictive assent rules that demand more thorough advance disclosures and more meaningful consent would increase transaction costs without producing substantial benefit” (p. 3, emphasis mine).

In addition to these solutions, my approach recommends an injection of vocabulary from the humanistically and socially inclined disciplines so as to revise the discourse that parses through the issues with SFCCs with an awareness of how they affect consumers/users/adherents/subjects. This vocabulary is described throughout, though not comprehensively as there are definitely other terms in these disciplines that may be useful. Rather it might be considered a preliminary list of terms that may invite new ways of considering SFCCs.
As Drucker (2013) notes, a heuristic such as the approach offered here would embody the way information is actually accrued, embracing the human and

[...] parallax, disaggregation of the illusion of singularity through comparatists and relativist approaches, and engagement with fragmentation and partial presentations of knowledge that expose the illusions of seamless wholeness. Veils of maya are replaced with other veils of maya, we know this, but at the very least, acknowledging that creates a restless engagement with the acts of knowledge. (par. 42)

The “veils of maya” currently being presented to us are statements such as those in the Draft that seem ‘only logical’ based on the conclusions present, but instead in context are grim. They are contracts in the truest, most material sense and to the furthest extent that they can affect the lives of adherents; yet, they embody the most minimal ceremony that traditionally afforded contracts legitimacy and have thus become “extensions that reach beyond the scope of the parties' primary contemplation” (Leib and Eigen, 2017). To the task of unveiling these conclusions and exposing the “illusions of seamless wholeness” governance such as the Draft presents, the need is urgent and necessary. Anything short of full engagement in this sense is negligent and willfully ignorant of a body of knowledge that could help in exactly this way.

In 1978, legal scholar Ronald C. Griffin wrote: “We are faced with an historic choice in contracts. We can lump together standard forms and classic contracts, or we can treat the former differently.” In the decades since, it seems standardized contracts have been “lumped together,” not only with other types of contracts, but also with new technological forms of these documents. Contract law changed very little from the First Restatement of Contracts in 1932 to the early 2000s, due to no “disruptive” technological developments in this field during these years.
(Moringiello and Reynolds, 2013). The Draft is a monumental moment for these specific types of agreements, and I argue the conversation is not ready to be restated. The conversation is only just beginning. Confirming these opinions in doctrine at this moment does a disservice to consumers who need a stable, clear understanding of these contracts to inform the ‘reasonable expectations’ they are meant to rely on when expected not to have read the terms.

Even at that early stage in the late 1970s, Griffin understood “the rules of the quiet past are simply too cumbersome to deal with the complexities of a stormy contract future.” We have now reached that future, and it is indeed stormy. The tools to fix the situation are available and the methods sound. This exploration should continue.

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68 It has been argued, for instance, that a “student who could pass a contracts exam in 1932 could also pass the exam in 2000” (Moringiello and Reynolds, 2013).
Table 1—Table of Myths

<table>
<thead>
<tr>
<th>Myth</th>
<th>Affirmation</th>
<th>Deflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy</td>
<td>Enough consumers have knowledge from opportunity to read</td>
<td>If they did not read, still for the greater good</td>
</tr>
<tr>
<td>Engagement</td>
<td>The information in the agreement is accessible because it is presented in a certain way</td>
<td>If it is not accessible, users still have control over their experience with granular design mechanisms</td>
</tr>
<tr>
<td>Equality</td>
<td>Fein ignorance of the content of the agreement</td>
<td>Or responsibility is taken and a commitment (or recommitment) to some principle is stated</td>
</tr>
</tbody>
</table>

Figure 1—Dilbert Cartoon
Figure 2—Yahoo’s Hyperlink in the Margins

Figure 3a—Facebook’s linked contracts (bulleted)

- **Pages, Groups and Events Policy**: These guidelines apply if you create or administer a Facebook Page, group, or event, or if you use Facebook to communicate or administer a promotion.
- **Facebook Platform Policy**: These guidelines outline the policies that apply to your use of our Platform (for example, for developers or operators of a Platform application or website or if you use social plugins).
- **Developer Payment Terms**: These terms apply to developers of applications that use Facebook Payments.
- **Community Payment Terms**: These terms apply to payments made on or through Facebook.
- **Commerce Policies**: These guidelines outline the policies that apply when you offer products and services for sale on Facebook.
- **Facebook Brand Resources**: These guidelines outline the policies that apply to use of Facebook trademarks, logos, and screenshots.
- **Music Guidelines**: These guidelines outline the policies that apply if you post or share content containing music on Facebook.

Date of Last Revision: April 19th, 2018
Figure 3b—Facebook’s linked contracts (in line)

Figure 4—Wikipedia’s languages
Table 1: Twitter’s developer policy

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Who May Use the Services</td>
<td>If you use developer features of the Services, including but not limited to</td>
</tr>
<tr>
<td></td>
<td>Twitter for Websites (<a href="https://dev.twitter.com/web/overview">https://dev.twitter.com/web/overview</a>), Twitter Cards</td>
</tr>
<tr>
<td></td>
<td>(<a href="https://dev.twitter.com/cards/overview">https://dev.twitter.com/cards/overview</a>), Public API (<a href="https://dev.twitter.com/">https://dev.twitter.com/</a></td>
</tr>
<tr>
<td></td>
<td>streaming/public), or Sign in with Twitter (<a href="https://dev.twitter.com/web/sign-in">https://dev.twitter.com/web/sign-in</a>),</td>
</tr>
<tr>
<td></td>
<td>you agree to our Developer Agreement (<a href="https://dev.twitter.com/overview/terms/a">https://dev.twitter.com/overview/terms/a</a></td>
</tr>
<tr>
<td></td>
<td>greement/) and Developer Policy (<a href="https://dev.twitter.com/overview/terms/policy">https://dev.twitter.com/overview/terms/policy</a>).</td>
</tr>
<tr>
<td></td>
<td>If you want to reproduce, modify, create derivative works, distribute, sell,</td>
</tr>
<tr>
<td></td>
<td>transfer, publicly display, publicly perform, transmit, or otherwise use the</td>
</tr>
<tr>
<td></td>
<td>Services or Content on the Services, you must use the interfaces and instructions</td>
</tr>
<tr>
<td></td>
<td>we provide, except as permitted through the Twitter Services, these Terms, or</td>
</tr>
<tr>
<td></td>
<td>the terms provided on dev.twitter.com.</td>
</tr>
</tbody>
</table>

Table 2: Twitter’s Effective Date

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Who May Use the Services</td>
<td>If you are a federal, state, or local government entity in the United States</td>
</tr>
<tr>
<td></td>
<td>using the Services in your official capacity and legally unable to accept the</td>
</tr>
<tr>
<td></td>
<td>controlling law, jurisdiction or venue clauses above, then those clauses do</td>
</tr>
<tr>
<td></td>
<td>not apply to you. For such U.S. federal government entities, these Terms and</td>
</tr>
<tr>
<td></td>
<td>any action related thereto will be governed by the laws of the United States</td>
</tr>
<tr>
<td></td>
<td>of America (without reference to conflict of laws) and, in the absence of</td>
</tr>
<tr>
<td></td>
<td>federal law and to the extent permitted under federal law, the laws of the</td>
</tr>
<tr>
<td></td>
<td>State of California (excluding choice of law).</td>
</tr>
<tr>
<td></td>
<td>In the event that any provision of these Terms is held to be invalid or</td>
</tr>
<tr>
<td></td>
<td>unenforceable, then that provision will be limited or eliminated to the</td>
</tr>
<tr>
<td></td>
<td>minimum extent necessary, and the remaining provisions of these Terms will</td>
</tr>
<tr>
<td></td>
<td>remain in full force and effect. Twitter’s failure to enforce any right or</td>
</tr>
<tr>
<td></td>
<td>provision of these Terms will not be deemed a waiver of such right or</td>
</tr>
<tr>
<td></td>
<td>provision.</td>
</tr>
<tr>
<td></td>
<td>These Terms are an agreement between you and Twitter, Inc., 1355 Market</td>
</tr>
<tr>
<td></td>
<td>Street, Suite 900, San Francisco, CA 94103 U.S.A. If you have any questions</td>
</tr>
<tr>
<td></td>
<td>about these Terms, please contact us.</td>
</tr>
<tr>
<td></td>
<td><strong>Effective:</strong> May 25, 2018</td>
</tr>
<tr>
<td></td>
<td><strong>Archive of Previous Terms</strong></td>
</tr>
</tbody>
</table>
Figure 6b—Twitter’s Archive

Previous Terms of Service

Please Note: These terms are NOT current. Please read the current terms.

Version 12: October 2, 2017
Version 11: September 30, 2016
Version 10: January 27, 2016
Version 9: April 17, 2015
Version 8: September 8, 2014
Version 7: June 25, 2012
Version 6: May 17, 2012
Version 5: June 1, 2011
Version 4: November 16, 2010
Version 3: September 18, 2009
Version 2: September 10, 2009
Version 1

Figure 7—Twitter’s Download Link

Download: The Twitter User Agreement

If you live in the United States, the Twitter User Agreement comprises these Terms of Service, our Privacy Policy, the Twitter Rules and all incorporated policies.

If you live in the European Union or otherwise outside the United States, the Twitter User Agreement comprises these Terms of Service, our Privacy Policy, the Twitter Rules and all incorporated policies.
3. Your Commitments to Facebook and Our Community

We provide these services to you and others to help advance our mission. In exchange, we need you to make the following commitments:

1. Who can use Facebook
   When people stand behind their opinions and actions, our community is safer and more accountable. For that reason, you must:
   - Use the same name that you use in everyday life.
   - Provide accurate information about yourself.
   - Create only one account (your own) and use your timeline for personal purposes.
   - Not share your password, give access to your Facebook account to others, or transfer your account to anyone else (without our permission).

   We try to make Facebook broadly available to everyone, but you cannot use Facebook if:
   - You are under 13 years old.
   - You are a convicted sex offender.
   - We previously disabled your account for violations of our terms or policies.
   - You are prohibited from receiving our products, services, or software under applicable laws.
Figure 8b—Facebook’s Permissions Provision

3. The permissions you give us
We need certain permissions from you to provide our services:

1. Permission to use content you create and share: You own the content you create and share on Facebook and the other Facebook Products you use, and nothing in these Terms takes away the rights you have to your own content. You are free to share your content with anyone else, wherever you want. To provide our services, though, we need you to give us some legal permissions to use that content.

   Specifically, when you share, post, or upload content that is covered by intellectual property rights (like photos or videos) on or in connection with our Products, you grant us a non-exclusive, transferable, sub-licensable, royalty-free, and worldwide license to host, use, distribute, modify, run, copy, publicly perform or display, translate, and create derivative works of your content (consistent with your privacy and application settings). This means, for example, that if you share a photo on Facebook, you give us permission to store, copy, and share it with others (again, consistent with your settings) such as service providers that support our service or other Facebook Products you use.

   You can end this license any time by deleting your content or account. You should know that, for technical reasons, content you delete may persist for a limited period of time in backup copies (though it will not be visible to other users). In addition, content you delete may continue to appear if you have shared it with others and they have not deleted it.

2. Permission to use your name, profile picture, and information about your actions with ads and sponsored content: You give us permission to use your name and profile picture and information about actions you have taken on Facebook next to or in connection with ads, offers, and other sponsored content that we display across our Products, without any compensation to you. For example, your name may show up next to a friend’s photo that you liked or commented on.
1. Our Services

Our mission is to give people the power to build community and bring the world closer together. To help advance this mission, we provide the Products and services described below to you:

- **Provide a personalized experience for you:**
  Your experience on Facebook is unlike anyone else’s: from the posts, stories, events, ads, and other content you see in News Feed or our video platform to the Pages you follow and other features you might use, such as Trending, Marketplace, and search. We use the data we have - for example, about the connections you make, the choices and settings you select, and what you share and do on and off our Products - to personalize your experience.

- **Connect you with people and organizations you care about:**
  We help you find and connect with people, groups, businesses, organizations, and others that matter to you across the Facebook Products you use. We use the data we have to make suggestions for you and others - for example, groups to join, events to attend, Pages to follow or send a message to, shows to watch, and people you may want to become friends with. Stronger ties make for better communities, and we believe our services are most useful when people are connected to people, groups, and organizations they care about.

- **Empower you to express yourself and communicate about what matters to you:**
  There are many ways to express yourself on Facebook and to communicate with friends, family, and others about what matters to you - for example, sharing status updates, photos, videos, and stories across...
Figure 9 – JvNCnet’s Acceptable Use

JvNCnet ACCEPTIBLE USE POLICY

This statement represents a guide to the acceptable use of JvNCnet for data communications. It is only intended to address the issue of JvNCnet use. In those cases where data communications are carried across other regional networks or the Internet, JvNCnet users are advised that acceptable use policies of those other networks apply and may limit use.

JvNCnet member organizations are expected to inform their users of both the JvNCnet and the NSFNET acceptable use policies.

1. JvNCnet Primary Goals

1.1 JvNCnet, the John von Neumann Computer Network, has been established to: 1) provide the highest quality and optimum access of networking services to the research and educational community of the United States and internationally, 2) offer network resources at the maximum level of cost-efficiency, and 3) promote and facilitate innovation and regional and national competitiveness. These goals remain the standard for excellence in service and price and should not be compromised.

2. JvNCnet Acceptable Use Policy

2.1 All use of JvNCnet must be consistent with JvNCnet's primary goals.

2.2 It is not acceptable to use JvNCnet for illegal purposes.

2.3 It is not acceptable to use JvNCnet to transmit threatening, obscene, or harassing materials.

2.4 It is not acceptable to use JvNCnet so as to interfere with or disrupt network users, services or equipment. Disruptions include, but are not limited to, distribution of unsolicited advertising, propagation of computer worms and viruses, and using the network to make unauthorized entry to any other machine accessible via the network.

2.5 It is assumed that information and resources accessible via JvNCnet are private to the individuals and organizations which own or hold rights to those resources and information unless specifically stated otherwise by the owners or holders of rights. It is therefore not acceptable for an individual to use JvNCnet to access information or resources unless permission to do so has been granted by the owners or holders of rights to those resources or information.

3. Violation of Policy

3.1 JvNCnet will review alleged violations of Acceptable Use Policy on a case by-case basis. Clear violations of policy which are not promptly remedied by member organization may result in termination of JvNCnet membership and network services to member.
Chapter 6: Experiment Brief: Document-Engineered SFCCs

This chapter provides an example experiment brief, which outlines a possible study that would lead to both the creation of a document standard for SFCCs and an assessment of its usefulness. Due to the contributions of this project lying elsewhere, this experiment is only described, not conducted, but it was written with the idea that it will be in the near future. A portion of the information, especially in the Background section, contains ideas that have already been presented in other chapters; however, it is written as a standalone brief, so it provides that context again, independent of those chapters.

6.1 Background

Standard form consumer contracts (SFCCs) between consumers and businesses are ‘standardized’ so as to increase the efficiency of transactions and save costs, which are ostensibly passed on to the consumer (Sales, 1953). These take the form of Terms of Service agreements, End User License Agreements (EULAs), or more generally fine print, boilerplate, or adhesion contracts. Since one party, the consumer or “the adherent,” is generally less powerful in terms of knowledge and resources, these contracts have been called out for being imbalanced in favor of the business entity (“the drafter”) (Kessler, 1943; Patterson, 2010). In this vein, digital SFCCs have been implicated in the wrongdoing of many widely used service platforms (in terms of data policies, copyright policies, acceptable use policies, and others), and thus have been at the center of concern for consumer rights groups and the general public in recent years.\(^1\)

\(^1\) The Electronic Frontier Foundation (EFF) wrote a series of white papers in 2013, for instance, and volunteer organizations such as TOSback.org work toward tracking contract changes. Other studies found that SFCCs affect human rights significantly in the areas of freedom of speech, privacy, and due process, particularly for marginalized and low-income communities (Ventuini et al, 2016), and that the “vast majority of [adherents] completely missed a variety of potentially dangerous and life-changing clauses” at contract formation (Obar and Oeldorf-Hirsch, 2016).
Much of the tension in the discourse around SFCCs comes from a negotiation of the ‘freedom of contract’ principle that is seen as a cornerstone of a free market and democracy and underlies much of traditional contract doctrine. This freedom is often put in tension with enforcement mechanisms that regulate and dictate certain egregious aspects of the contract. Since one party realistically cannot read and fully comprehend all of the terms they encounter, standard form contracts and ‘freedom’ have a tenuous relationship—some might say it has already been sacrificed in the name of convenience. Various regulatory solutions have been considered that attempt to make SFCCs fairer for the consumer-adherent; these solutions often include disclosure and notification mandates, term regularization, forbidden terms, and mechanisms of presentation or consent (Ben-Shahar and Schneider, 2014). This proposal suggests that standardizing aspects of the document form of SFCCs, rather than relying on notions of ‘standard practice’ that work against user psychology (Sullivan, 2012; “Deceived,” 2018), would have substantial benefits for consumers and work against the inherent power imbalance of this type of contract. Any future proposed regulation would also prevent the dreaded standardization of content that freedom of contract precludes.

6.2 Research Questions

The purpose of this experiment is to test the hypothesis that a document-engineered SFCC would provide a safeguard against corporate overreach. Specifically, it explores the following research questions:

70 Freedom of contract is crystallized in the Fourteenth Amendment (Article 1, Section 10) of the US Constitution that says states cannot interfere with the transactions of individuals or obligations of contracts. Traditionally “contract systems” are in opposition to “status systems” as the latter establishes obligations and relationships by birth and class, whereas a “contract system” presumes that the individuals are free and equal to transact (D’Agostino, 2015).
1. Can more information be gleaned from the SFCC document if it is preemptively marked-up or engineered, rather than coded in standard html or other current, basic formats? Could this schema be implemented in an automated fashion through the automatic tagging of certain topics or clauses?

2. Could this information contribute to building a working document standard (e.g., metadata and XML schema) that minimally, but appropriately, interferes with the freedom of contract principle?

3. Would this standard and subsequent processing help fulfill the informed minority hypothesis (i.e., provide a voice for consumers)? Would it provide opportunities for other potential future safeguards for consumers?

6.3 Experiment Design

Document-engineering is an approach proposed by Robert J. Glushko and Tim McGrath outlined in their 2008 book that synthesizes “complementary ideas from separate disciplines,” including from information and systems analysis, electronic publishing, business process analysis and business informatics, and user-centered design (p. 27). The document-engineering approach uses both ‘document analysis’ that analyzes text and ‘task analysis’ that analyzes data and objects (p. 29-30). It seeks to provide a spectrum of solutions addressing document and process specifications that could lead to a better comprehension of SFCCs, including a common set of metadata, an XML schema, and a metamodel of a type of interpretation protocol for analysis, and even possibly a database configuration. It also projects the trajectory of a few processes and potential regulations that might be possible if this study is successful.

Although the document-engineering approach is meant for transactional documents and document exchange, Glushko and McGrath provide a description of a spectrum of document
types to explain the ambiguity of different types—they note how these lines are often blurry, but similar to a color spectrum, we can recognize the difference between the colors red and blue (p. 10). The opposite ends of their spectrum (Figure 1) are narrative documents and transactional documents, with the latter being involved in “document exchange” and thus more apt to benefit from a document-engineering approach. Since SFCCs are unique in a contractual sense in that there is no meaningful exchange, but rather they are presented ‘narratively,’ I argue this type of document would also benefit from this approach. The authors propose the following phases of the document-engineering process (p. 33-5):

1. **Analyzing the Context of Use**: uses “business and task analysis techniques [to] establish the context of the document-engineering effort by identifying the requirements and rules that must be satisfied to provide an acceptable solution.”

2. **Analyzing Business Process/Apply Patterns**: “appl[ies] business process analysis to identify the requirements for the document exchange patterns needed to carry out the desired processes, collaborations, and transactions in the context of use”; identifies documents that are needed, but “only generally as the payload of the transactions.”

3. **Document Analysis**: “involves identifying a representative set of documents or information sources (including people) and analyz[es] them to harvest all the meaningful information components and business rules”; identifies document needs beyond “payload” (see phase 2).

4. **Component Assembly**: a “document component model” is developed that “represents structures and their associations and content that define the common rules for possible contexts of use.” (Figure 2a and Figure 2b)
5. **Document Assembly:** uses the “document component model to create document assembly models for each type of document required”; move from analyzing “tasks” to designing “new document models;” reuses “common or standard patterns to make the documents more general and robust.”

6. **Implementation:** the conceptual models are encoded using “a suitable language to support their physical implementation.” (Figure 3)

The authors describe the ‘document component model’ as “a conceptual model that encompasses all the information components for any documents required by the context of use” (p. 354). This conceptual model looks like “specifications for interfaces, for generating code, or configuring an application that creates or exchanges new documents” created bottom-up and in a rigorous manner, then uses these models to “implement [...] solution[s] in in an automated or semi-automated manner [...] to bridge the gap between knowing what to do and actually doing it” (p. 354). Put simply, the documents in question are first analyzed contextually and then individually to identify their various components, and then patterns across these components are recognized and assembled into a document hierarchy that describes a single instance of a set of components for a type of document.

1. **Analyzing the Context of Use:** For SFCCs, this phase will outline what the ideal solution would accomplish—the information ideally communicated or explained, processed, extracted, understood, and preserved, based on the SFCC situation. This might look like identifying the clauses that need supplemental information, the information needed for evidentiary reasons, or the specifications for the automatic identification of clause types. The questions being asked in this first phase is: What would be the ideal document outcome needed
to produce a voice for consumers? What is the most important information to communicate?
What are the best ways to communicate this information?

It will consider the discourse, governance, and issues outlined in this governance around
SFCCs, as well as ontological and epistemological conversations about what it means to be a
document or record in an information system. This includes recognizing the need to retain the
right to freedom of contract, as well as acknowledging that certain social and political paradigms
might solidify power imbalances amongst the parties of this type of contract, which warrants
sacrifices this freedom to some extent. It strives to find the most elegant balance of these
principles for an outcome that allows for control of the document form, with minimal control
over its content.

2. Analyzing Business Process/Apply Patterns: This phase is the one most dissimilar from
the original document-engineered process. Rather than looking at ‘business processes,’ this
phase looks slightly tangentially at how legal processes and associated discourse specify the
“ultimate payload document.” The question being answered in this phase is: What is necessary
for drafters to comply with basic SFCC requirements? How is this type of presentation afforded
by legal discourse and what is it lacking? How have document standards been used previously to
regulate other types of contracts?

This phase will be informed by theories of contract, records, and documents, but also by
using foresight to suggest how SFCCs might be regulated once in a document-engineered form.
These predictions might be gained by an analysis of similar situations that have standardized
contract and other regulations that have had success regulating by document form. The most
important outcome of this phase will be to decipher between the types of compliance efforts that
would be required of businesses (e.g., format or schema requirements) and the work that would
be done by other entities such as consumer advocacy groups. These two efforts most probably would be iterative and inform each other, but a clear distinction is necessary to set out the types of regulation needed.

3. Document Analysis: For SFCCs, this phase considers a selection of contracts to analyze with various document analysis tools and would be performed by interested parties that would make up the informed minority. While this might include any member of the public who wishes to analyze these documents, the most likely interested parties would be consumer advocacy groups with a vested interest in understanding these contracts. The tools used to analyze SFCCs might include text analysis tools (e.g., Lexos or WE1S) that include topic modeling or clustering to show language data (e.g., word frequency, word proximity, common topics) (see Appendix B for examples of these visualizations). The information garnered from these analyses shows some of the patterns that occur amongst these documents, which is important to build the necessary schematics from the bottom-up (rather than imposing a schema onto the genre in a top-down fashion). Moreover, this process should be iteratively revised (along with phases 4-6) in order to continually reflect how these contracts are written and implemented in practice. This preserves the ability for drafters to exert their right of freedom to contract to some extent and keeps the standard reflective of actual practice. Such a method might include the NEH-funded text mining and analysis tool Lexos built by computer scientists from Wheaton College, Massachusetts and medieval scholar Dr. Scott Kleinman (Cal. State University, Northridge), that is described as being designed with a workflow that helps a researcher to be “mindful of the many decisions made in [their] experimental methods” (par. 1).71

71 https://wheatoncollege.edu/academics/special-projects-initiatives/lexomics/lexos-installers/
4. Component Assembly: As document component models strive to define all the necessary components to maximize and minimize redundancy for each individual document, this phase will strive to identify the components of the SFCC document from the analysis that took place in phase 3. These components might include structural components, content components, and associative components (p. 34). Different types of documents or, in this case, contracts, might make use of the same pattern of components, and these patterns should be identified and reused. For instance, related SFCCs (e.g., Privacy Policies, Copyright Policies) might have the same components, including a component labeled Data Use, or Tracking.

A goal is to ultimately identify the components that would allow for a standard JSON file or XML schema, and this process would be complex and should be constantly revised. Standardizing the language and the relationships among the Cases and Topics (see Appendix A for a complete list of Topics and Cases) from the notations made manually by TOS;DR\textsuperscript{72} is another way the schema could be created (other than by the information from phase 3). An example of this would look like taking one of their descriptive Cases (e.g., “This service does not force users into binding arbitration”) and standardizing the language into something that reflects the legal discourse (e.g., “mandatory arbitration”). Since, in their current form, there is inconsistency among the positionality of the descriptions in the language of the Case labels, beginning with standardizing this aspect seems appropriate. For instance, there are two separate Cases, one labeled “This service does not force users into binding arbitration” under the Topic “Law enforcement and due process,” and another called “You waive your right to a class action” under the Topic “Waiving your right,” both to the same effect—mandatory arbitration—but put

\textsuperscript{72} https://edit.tosdr.org/cases
differently from varying perspectives. It makes more sense to label the Cases according to their effects, which would standardize based on outcome. Or perhaps these Cases could remain separate, and another attribute could be added that separates the Topics according to perspective (e.g., is it based on what the Service allows or the actions of the consumer?), although often the way these agreements are presented, on a take-it-or-leave-it basis, does not allow for a difference in perspective since there is no negotiation or real ‘action’ afforded to the consumer in the first place.

This process, since it is an act of ‘naming’ and thus exerting some type of bibliographic control onto the document and those affected by it, should be cognizant of the critical lens applied to information science work. This includes recognizing that while organizing is essentially “bringing all the same information together,” that information is often standardized habitually, which risks sacrificing complexity in the name of simplicity and economy, a common issue in the creation information organization systems (Svenonius, 2009, p. 80). Additionally, the naming practices can either become habitual or seemingly benign and can mask the politics, strategy, and implications behind the labeling decisions (Bowker and Star, 2000). These are relevant concerns for SFCCs, although it might be argued that they are already in play and the goal of this project is to use information organization to work against their current constitution.

5. **Document Assembly:** Once the document components are identified, this phase would consider the relationships between the components to figure out the best possible configuration of individual contract documents. This ideal schema would strive to “define on document-specific view of the more complex document component model” (p. 463). In Glushko and McGrath’s conception, the “document component model [the outcome of phase 4] [is] the
roadmap of a city that depicts the entire network of roads. A particular document assembly model [the outcome of phase 5] describes a specific route through that network” (p. 464).

This phase is informed by the literature on information studies, that argues that semantics and naming are always not exact. However, as the document-engineering approach strives to produce document exchanges that “require unambiguous clarity in semantic interpretation,” this project also strives to reduce ambiguity as much as possible, even if documents are not being ‘exchanged’ in the same sense (p. 463). It would also make use of previous work done in this regard, including the list of Topics and Cases identified by TOS;DR, and the XML schema created by OASIS.

6. Implementation: First, a corpus of current and past SFCCs would be analyzed to develop a standard. Then, the documents would be marked up with this new standard and processed a second time with a set of agreements to see if engineering the document this way would make a difference in terms of information extracted. A machine learning tool should also be trained with this sample to automatically identify the parts of the document. Then a holistic analysis should be conducted of the usefulness of the possible regulatory activity that could stem from this document-engineered SFCC.

6.3.1. Workflow. The experiment will utilize the following workflow:

1. First a corpus of ToS agreements will be processed at the sentence-level through a topic modeling tool (e.g. Lexos or WE1S) to find word frequency, saliency and relevance, and topic distance that would inform a machine-readable document schema (see Appendix B for sample outputs). The process for doing this processing is generally as follows:
   1. Strip html from text files
   2. Create json files from text files
This interpretation protocol is specific to the WE1S tools but is generally representative of the type of preparation that would be needed for analysis by these types of tools.

2. The schema would be implemented on a sample dataset of agreements. This would tag the sentences, clauses, and topics throughout the document. Common document components and document assemblies, as well as their relationships, will be part of the schema.

3. This sample would be used to train a machine-learning tool such as Universal Language Model Fine-tuning for Text Classification (ULMFiT), with which early experiments have already had some success,\(^3\) to be able to automatically identify these document components.

6.4 Hypothesis

The hypothesis is that a document-engineered SFCC would help in several respects. It would help organize the content of these contracts granularly at various levels: 1) genre, 2) clause, and 3) language. These markups would help consumers and consumer advocacy groups begin to understand these contracts by identifying the sections that need additional types of

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\(^3\) Personal Interview, Nasir Safdari, April 30, 2018
regulation, such as supplemental information, and help make them as better evidence in cases of dispute. In these ways, this standard could produce a safeguard for consumers against corporate overreach.

6.4.1. Genre: Identifying the genre of the contract based on its content would help with separating the different types of contracts often presented in minimal ways such as hyperlinks in the margins. Separating them was a useful practice when laws such as the Facebook’s 2018 Consent Order or, more recently, GDPR forced companies to separate privacy policies from the rest of ToS agreements. This was a good step toward making consumers aware that there are different types of contracts within this one type of agreement. This would help identify which clauses should be separated into their own agreements, for instance, such as it did for the privacy policies, or for which topics it makes sense to exist within a larger agreement just as a clause.

6.4.2. Clause: This would help identify the different types of clauses used in these agreements. Although not all clauses will be identified, and although not all clauses need to be tagged, there are several commonly used clauses that should be. These might include acceptable use, copyright, labor terms, privacy policies, and other salient terms that have implications for a large population of users. The document analysis and tagging could also occur at the sentence level so as to capture more granularly the language used in these agreements, which would help with automating their identification in the future.

6.4.3. Language: For instance, the word ‘service’ might signify that certain types of regulations such as commercial codes that are supposed to apply to sales of goods are not applicable to aspects of these agreements. For instance, privacy policies, once separate from the larger agreement, are not “sales of goods” in the traditional sense and thus it might not be appropriate for these terms to be governed by commercial laws. Similar interpretations might
help designate appropriate governance without regulating the content or language of the clauses.

Also, certain semantic structures in design practices have recently been found to “nudge” consumers toward privacy intrusive options (“Deceived,” 2018, p. 4). These ‘deceptive design practices,’ include “hidden privacy defaults,” and cumbersome or illusory privacy options (p. 18-9, 31-4), “positive and negative wording” that frames privacy-invasive options as convenience (i.e., “if you keep face recognition turned off, we won’t be able to use this technology if a stranger uses your photo to impersonate you”) (p. 22-5), and reward-punishment systems that favor privacy-intrusiveness (p. 25-7). Identifying and some of these language and design choices, as well as their relationship to the layout of these agreements, might be a future outcome of this experiment and could potentially help pinpoint these issues more accurately.

6.4.4. Changes: Processing the documents comparatively would also help identify types of changes corresponding to the levels of content (genre, clause, language) which would provide more information about the types of changes that occur and would give consumers more information about their implications. It might help decipher between a vertical change, or one that affects the document holistically, and a horizontal change that only affected a section/clause, for instance. This provides a safeguard against corporate overreach and consumers being left without recourse.

Instead, metadata or markup requirements that would aid in processing the document would allow for a controlled process of creation, classification, description and organization. These qualities would allow for the following consequences:
1. They could make SFCCs more accessible for consumer advocacy groups, which increases the chances of fulfilling the informed minority hypothesis\textsuperscript{74}.

2. They could help stabilize the document for evidentiary reasons (e.g., dispute, burden of proof) and work against unnoticed changes (from unilateral modification); they could also enable automatic download onto a user’s keychain for preservation.

3. They might help standardize the form of the content for future methods of novel disclosure such as decision provenance (Singh et al, 2018), counterfactual explanation (Wachter et al, 2017), or probative requirements (outside the four-corners of the contract) in a Ricardian contractual sense. This might involve requiring that a few salient clauses link to additional information (e.g., documentation of contract formation, sample dataset that simulates the plausible, representative outcome of a clause) that could provide further explanatory purposes. (see Figure 7)

6.5 Preliminary Conclusions

This section will lay out some early thoughts on the experiment and its potential outcome. Even at this early stage, three principles, which are ultimately shifts in concepts from traditional standard form contract doctrine, emerge and are described here. The argument of this experiment brief is that over time it would aid in achieving these shifts in concepts. This would benefit consumers by making SFCCs more trustworthy, stable (authentic and reliable), and understandable.

6.5.1. Standardization, not standard practice. This experiment would be a move toward standardizing the SFCC document in a systematic and rigorous manner, and based on practices

\textsuperscript{74} This theory claims that a group of informed consumers could provide a counterbalance to push back on any negative aspects of SFCCs (Schwartz and Wilde, 1979). Recent empirical studies claim to prove that the informed minority does not exist amongst the current consumer population (Bakos et al, 2014).
of documents, recordkeeping, and document-engineering that understand memorization from a different, and possibly higher, standard than contract doctrine. Rather than a vague notion of ‘standard practice’ that is perpetuated by ill-conceived and untested conventions, this experiment would produce a standard for SFCCs that would ideally continually be fine-tuned and assessed over many iterations.

Some of the early standardizing decisions that had to be made in the design of this project included differentiating between the type of SFCC (e.g., “Legal Policy,” “Terms of Use,” “Terms”), the boundaries of which are vague, as well as standardizing the language of the tags (i.e., Cases) that label the interpretive efforts of the advocacy volunteers. In terms of genre, for instance, thirty-four items were scraped from Amazon, only twenty-eight of which were used. Six were not used because they were either designed as “Frequently Asked Questions” (FAQs), so therefore not a contract, or because they were too specific (i.e., referred to a special offer) and thus were not representative of the types of documents I sought to analyze. Also, some of the licenses were business-to-business (B2B) in nature, rather than consumer facing. For example, third party licenses, while have real implications for consumers, are not terms intended for consumers to read or to which they are beholden. The tool could probably be adjusted to accommodate these discrepancies, but on a critical level, they present some interesting queries of standardization choices. Other types of agreements such as “Legal Notices” and “Conditions of Use” were included in the sample as they straddled the genre of ToS. “Acceptable Use” policies were another complicated area as they have been around since the 1980s when they designated etiquette concerns, rather than more recent uses of private ordering for which consumers can be criminally prosecuted, such as from laws such as the CFAA (1986) that rely on outdated
conceptions of computer use. Because these have generally been considered contracts, they were included in the ToS sample.

Additionally, the language of the tagging system used by TOS;DR would need to be standardized in order to come up a consistent markup schema. Currently, the TOS;DR database is organized into five tables: 1) Users; 2) Points; 3) Reasons; 4) Services; 5) Topics. These tables are currently situated as a production and development database made with a PostgreSQL configuration. They also provide an API to allow the “export and reuse” of data (par. 2). The creators of this project also note how they “simplified a lot the schema” as they only had 10 days to develop the tool (par.3).

As this database schema was created to drive the website, the outcome of which is a browser add-on that provides a rating of a service’s ToS, it might be viewed as a starting point for understanding some of the components as possible assemblies of these documents. This schema allows TOS;DR to utilize the data in the following interpretation protocol:

1. A change or analysis (called a “Point”) in a “Service’s” ToS agreement is detected by a “User” (volunteer or administrator).
2. Change documented by tagging with “Topic” and “Case.”
3. Interpretation approved by administrator. If rejected, “Reasons” also documented.
4. Case weight determined (based on rating Good, Neutral, Bad, or Blocker).
5. Case weight factored into overall Class.
6. TOS;DR output updated (see Figure 6 for current output).

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75 https://github.com/tosdr/edit.tosdr.org/wiki/database
The population titled “Users” consists of about 200 regular volunteers and about 10 administrators that contribute to the content of the site. To be a contributor to the website, a nickname, email and password are necessary (par. 5). The identifier “Service” describes the website or platform that authors the ToS agreement. “Points” are the locations of analysis provided by the Users. This might look like an identification of a Topic or Case or a change in the content of that information. “Topics” are described as “categories of services.” These topics are found in the ToS and relate to the content of the contract. They range from those that describe practices by the Service (e.g., “Anonymity and Tracking”) to those that describe characteristics of the agreement such as its language (e.g., “Easy to Read”). Each Topic has related “Cases,” which are not identified by the database schema, ranging in number from one (i.e., “Changes”) to thirty (i.e., “Governance”), and a number of instances found for each Case. This schema could be revised to provide a foundation for identifying the document components of ToS agreements. In an interview with one of the administrators of the site, Michiel de Jong, he said they feel they have identified many, if not most, of the main relevant Topics and Cases of these agreements. If this is true, and some analysis and justification is needed to back up this assertion, then this compilation of identifiers is incredibly useful toward starting the component assembly process.

The standardization process proposed would be bottom-up as it would make use of the collection and interpretive tags already crowd-sourced from TOS;DR volunteers. It would also be cognizant of the implications that the naming process would have for consumers. For instance, by designating “Acceptable Use” an official genre that would need to be separated from the rest of the ToS agreement in the same way that Privacy Policies have in recent regulatory
efforts (i.e., “Consent Order,” GDPR), it might make them more valid as contracts to which consumers are beholden. Currently they exist in a wide variety of forms, including in FAQs or as a clause in a larger agreement. Thus, each of the documentation choices need to be considered carefully in order to prevent them from making ill-conceived notions of standard practice and convention more effective through standardization efforts. Similar outcomes have been seen with notification and disclosure efforts that attempt to clarify certain clauses, but actually just signal to courts that a box has been checked and no real engagement with the consumer or change in knowledge is achieved.

The first part of implementing the document-engineering SFCC starts with revising the schema already created by TOS;DR. A possible type of revision of this schema might be to rewrite it as a set of JSON files that are machine-readable and ready for processing by text analysis tools. This way, rather than a set of tags, this revised schema might be operationalized as a folder of files, a table in a relational database, or a collection of documents in a noSQL database. The first step of this revision might be to take the five categories (i.e., Users, Points, Reasons, Services, Topics) offered by the schema and reduce them to the following four categories: 1) Contributors, 2) Points, 3) Services, and 4) Topics (see Appendix C for detailed revisions of this schema). The category “Reasons” does not seem to relevant for the time being to the organization of this information and may be returned to at another time. “Contributors” is a more accurate term than “Users” as the users include administration, volunteers, and others. Further attributes might be added to this property to further specify the type and role of each Contributor.

77 This schema was devised in collaboration with Dr. Scott Kleinman
In this revised schema, Contributors, Services, and Topics are all treated as separate JSON files, each containing an array of items (e.g., an item for each Contributor), and each Point is a separate JSON file on its own. This allows for the properties to be referenced across these separate files. For example, the contributor property in a Point file would reference a name of a specific contributor found in the contributors.json file as if it was a file for that contributor in a Contributors folder.

Another goal is to ultimately identify the components that would allow for a standard JSON file or XML schema, this process would be complex and should be constantly revised. Standardizing the language and the relationships among the Cases and Topics is another way the TOS;DR schema could be amended. An example of this would look like taking one of their descriptive Cases (e.g., “This service does not force users into binding arbitration”) and standardizing the language into something that reflects the legal discourse (e.g., “mandatory arbitration”). Since, in their current form, there is inconsistency among the positionality of the descriptions in the language of the Case labels, beginning with standardizing this aspect seems appropriate.

Ultimately, a document-engineered SFCC could allow for a summarized, standardized view of the clauses. This is the second part of the implementation process. This would be similar to the nutrition facts of a food product that was required by the Nutritional Labeling and Education Act of 1994⁷⁸ that required important information (e.g. calories, cholesterol, sugar) be printed in a bold, identifiable table for consumers to easily understand. The NLEA was only modestly successful in attaining a change in eating habits (Patterson et. al, 2017), however, only

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an informed minority hypothesis is the modest goal of this project. A corresponding publicity campaign to this goal might also increase the awareness of the terms of SFCCs. This process disrupts any misguided presumptions of consumer knowledge as by tagging the information semantically, it guarantees certain interpretations for consumers who do not wish to comprehend the content of the contract.

6.5.2. Documentation, not integration. Creating document assemblies would help stabilize the document as it would provide a controlled process of creation, help identify the genre and type of contract, and allow for a more accurate and nuanced assessment of these contracts. An example of this might be the American Institute of Architects (AIA) Contract Document System that provides type and version numbers for a wide variety of contract documents put together by 35 industry professionals from various fields, such as design, construction, law, construction, and insurance79. Other models include those from certain industries that already have their own organizations for standardizing contracts, such as the Insurance Service Organization that is well regarded in the legal insurance world80, which also registers their contracts numerically81 and provides economic statistic information that verifies the usefulness of these contracts.

Assembling common patterns of document components into assemblies would produce a similar process, including possibly novel forms of version control. The systemization of these various document assemblies once determined might look similar to the WEMI (Work, Expression, Manifestation, Item) descriptive data model from the bibliography, which recognizes


80 Interview, Jeff Carlisle, Oct 5, 2017

81 https://www.verisk.com/insurance/brands/iso/about/
a relational hierarchy of document entities and their manifestations (Coyle, 2016) (see Versions example in Figure 5a). In this model, the relationship of entities is described and ordered accordingly. Working backwards, the entity called “Item” is concrete and exemplifies a single manifestation of a work. In the case of a SFCC, an example of an Item might be Facebook’s ToS on a given moment, day, and year (e.g., 10-9-17 08:09:41 2017 Facebook Service Terms). The Item should always be accompanied by a downloadable and readable PDF so the adherent can easily access a copy and to resolve the issues presented by the UETA (i.e., no physical copy) and the new burden of proof determination.

This exemplary manifestation (Item) might draw from more general versions of its type, like the more general 2017 Facebook terms. This version might be called a Manifestation that embodies an even more general Expression of a Work, which is basically the intellectual form of the document. The Work, then, is the most general version, a basic Service Terms agreement, and the general Expression is a company’s version of that general type of agreement. The relationship between the two upper tiers is one of form (Work) and the expression of that form (Expression).

On the far end of the regulation spectrum, for a type of verification to occur, a company’s Expression of a Work would need to be verified by some oversight institution such as the Federal Trade Commission (FTC) that would keep a log of the ‘approved’ types of contracts (Works) and their corresponding clauses. A database of this type might also be maintained voluntarily by an independent agency such as TOS;DR. Either way, a corporate entity or Service such as Facebook would need to get their specific version (their Expression) of a Service Terms contract approved by the FTC (or another agency), in order to include the verification number (e.g., 428716) on their Contract’s card. They should also list the subsequent versions that stemmed
from this verified Work that led to the current Item with which the consumer is currently agreeing (see Versions expansion in Figure 5b). The list of salient clauses that correspond to a type of contract (Work) could also be kept and graded (see Clauses expansion in Figure 4c) so that consumers could get a quick sense of the nature of the contract they are ‘signing.’

These solutions are intended to be illustrative and hypothetical, not ideal. It is meant to show how just a few steps of documentation, including identifying the components and assembling them into common types of documents might provide the adherent a way of accessing the contract they ‘signed,’ stabilizing the information in the process, and providing a bit more information that would, along with other efforts such as explanation, more fully inform the consumer of their role in the bargain.

6.5.3. Explanation, not notification. This experiment would fulfill the principle of explanation, rather than conventions of notification, because it would move beyond the banners or emails to which consumers have become accustomed and strive to find points of the contract that need further information to understand. This could potentially inform novel types of disclosure, including decision provenance and counterfactual explanations, as well as also provide regulation for the appropriate places in the contract, which would ultimately serve explanatory efforts. One model for this type of explanation might be the Ricardian contract model developed by Ian Grigg from the cryptography community (see Figure 7), which, put simply, makes use of a model of contracts that are both human and machine readable, while preserving the cryptography efforts that secure the records (Grigg, 2004). This model is currently being used successfully in a consumer-to-consumer fashion with smart contracts in the marketplace platform OpenBazaar82.

82 https://openbazaar.org/
The fulfillment of this principle might upset ill-conceived notions of consumer engagement as it could be possible to consider that engaging with and understanding the contract—seeing it as a ‘material’ object with consequences—could be a beneficial goal of contracts, even, and perhaps especially, for SFCCs. In practice, this might mean that “meaningful disclosure,” for instance, works toward disrupting familiar forms such as the annoying cookie notification, and assent means understanding the contract within the context of other information. Drucker (2013) claims that “more attention to acts of producing and less emphasis on product” help promote “the creation of an interface that is meant to expose and support the activity of interpretations, rather than to display finished forms,” which might be “the antidote to the familiarity that blinds us” (par. 42).

A document-engineered contract might supersede alternate solutions that have been proposed. Studies have shown (Korobkin, 2003; Ayers and Schwartz, 2014) that salient terms can be generally limited to two to five terms, for instance, based on the limits of our psychology and/or what has been found to be considered ‘unexpected.’ Russell Korobkin (2003) wrote an oft-cited article that described how two to three salient points, for instance, fulfill the extent of our psychological understanding of terms on average. Ayers and Schwartz have called this process ‘term optimization,’ and it might involve surveys, or other means to gather information about users’ knowledge of the terms, their interest in certain terms as salient, and their ability to understand the terms they encounter.

In a moment where users rely on online services to attend to every need, adherents are also inclined to trust in the ‘system’ when it comes to believing that they do not have to pay attention to SFCCs because somewhere, somehow, someone is taking care of their integrity. This
only exacerbates the problem, producing a toxic situation where service providers (i.e. drafters) assume users do not understand the language of these contract and users fulfill this promise by exerting no effort to this effect. Hillman (2006), for instance, argues:

Businesses can still hide behind legalese and consumers, who do not have bargaining power, will continue to process information selectively and to believe that nothing will go wrong. In fact, by increasing the information available to consumers, the early display of terms may add to the problem of information overload. (p. 850)

To add to this ‘information overload’ is the difficulty of unfamiliar language, even referred to as an “autonomous sub-system [that] cannot be directly mapped onto, or compared with, ‘ordinary language’” (Luhmann, qtd. in Hutton, 2009, p. 46). Radin (2012) argues that assent relies on concepts of a ‘social understanding’ of the terms present in a contract due to the need for sufficient meaning to be garnered from the terms, meaning that could only be understood through a context that is provided by an awareness of a community of discourse.

While Kienle (2010, 2013) does not directly speak to specific clauses and their effects on readers/users, he addresses issues of awareness by noting two useful concepts that help in delineating the issues with how users encounter these documents. *Complexity*, in Kienle’s meaning, addresses the required legal or technical background of the reader to fully understand the topic; *relevance* expresses how important it is for a ‘typical user’ to understand a certain topic and the language covered by the ToS. He argues that by viewing user engagement on these two levels, drafters may be able to more clearly see the issues that affect the comprehensibility of these documents and why most consumers tend to avoid trying to read them at all. Kienle’s terms tend to be activated subjectively, varying from user to user, but are helpful descriptions for both measuring clauses on a scale that considers the outcomes of the clauses legally and providing
terms to depict the reader’s response (e.g. how complex are unilateral modification clauses? not very; how relevant are they? extremely), rather than how well the clause would serve the company legally.

A further study of these programs would be vital toward understanding how contracts are already understood as digitized texts in contexts other than SFCCs specifically. Moreover, ways of codifying a contract’s workflow and life cycle, versions, metadata, and other structured data schemes (i.e. XML) have already been thought through (e.g., Figure 4, MFiles document management system’s metadata for contracts) (Krishna and Karlapalem, 2008), and the production of regulatory standards for contracts in cloud computing (distributed) environments are already a topic of study (Tasneem, 2014; Duranti, 2015).

Methods of explaining artificial intelligence systems (AI) have begun to emerge as regulation has increasingly called for transparency. For instance, Wachter et. al (2017b) in a response to GDPR’s new transparency regulation that asked for a legally mandated “right to explain AI.” They designate two types of explanation:

*system functionality*, that is, the logic, significance, envisaged consequences and general functionality of an automated decision-making system, e.g. the system’s requirements specification, decision trees, pre-defined models, criteria, and classification structures; or to

*specific decisions*, that is, the rationale, reasons, and individual circumstances of a specific automated decision, e.g. the weighting of features, machine-defined case-specific decision rules, information about reference or profile groups. (p. 6)

Furthermore, they also describe how the timing of a decision-making process is also relevant:
an *ex ante* explanation occurs prior to an automated decision-making taking place. Note that an *ex ante* explanation can logically address only *system functionality*, as the rationale of a specific decision cannot be known before the decision is made; an *ex post* explanation occurs after an automated decision has taken place. Note that an *ex post* explanation can address both *system functionality* and the rationale of a specific decision. (2017b, p. 6)

After the discussion of the scrutiny of contract terms and its relation to unconscionability, it only makes sense that Wachter et. al’s model (2017b) of explanation and consideration of timing be applied to contracts and disclosure. As implementations of AI explanations are being explored, with iterations of contracts becoming either ever dematerialized or automated, explanation of SFCCs as contracts, not just AI or a series of algorithms, is also important.

Wachter et. al (2017a, 2017b) doubt the effectiveness of the of the “envisaged” ‘right to be informed’ ideal in practice with GDPR implementation. A legally binding right does not exist in most cases with GDPR, for one thing, but also the act of explanation (in terms of AI) can be technically challenging in trying to avoid releasing proprietary information or violating the rights and freedoms of individuals (p. 3). They offer another type of solution that would avoid some of these issues, called ‘unconditional counterfactual explanation’ or simply ‘counterfactual explanation’ that makes use of positive or negative automated decisions, regardless if the decision is solely automated or legal or otherwise (Wachter et. al, 2017a, p. 4). A ‘counterfactual’ is a “statement of how the world would have to be different for a desirable outcome to occur” (p. 5). The authors detail further:

Multiple counterfactuals are possible, as multiple desirable outcomes can exist, and there may be several ways to achieve any of these outcomes. The concept of the ‘closest
possible world,’ or the smallest change to the world that can be made to obtain a desirable outcome, is key throughout the discussion of counterfactuals. (p. 5-6)

An example answer to a counterfactual explanatory question follows: “You were denied a loan because your annual income was £30,000. If your income had been £45,000, you would have been offered a loan.” (p. 5) Their proposed method seeks to “(1) to inform and help the subject understand why a particular decision was reached, (2) to provide grounds to contest adverse decisions, and (3) to understand what could be changed to receive a desired result in the future, based on the current decision-making model” (p. 4). Since they feel on its own GDPR will not fulfill the needs of transparency and accountability for AI systems, their method of analysis provides further explanation for the user and affords them the opportunity to shape their behavior around this information.

This might be similarly doable with contracts, especially with efforts to identify and actually standardize (at least salient) clauses. Moreover, certain textual editing systems for contracts either generate standard-forms or identify compliance requirements and standardized clauses. These programs might work toward identifying common language and sectors of SFCCs that might be analyzed and further standardized to facilitate the use of counterfactuals and other, similar types of explanatory mechanisms.

In any regard, opportunity to engage with the contract might help revise the presumed idea of the adherent’s ‘knowledge’ or understanding of the terms. As contracts move toward more ‘smart’ iterations, there will be room for further topics of research, including a study of the schematics or organization of information that may be used in digital or algorithmic transacting implementations.
Figure 1—Spectrum of Document Types (p. 10)

Figure 2a and 2b—Document Component Models (p. 425)

Figure 13.2 from Glushko & McGrath, Document Engineering
Figure 3—Document Assembly Model (p. 468)
Figure 4—MFiles ERM software’s external metadata card

<table>
<thead>
<tr>
<th>Class</th>
<th>The data is always set to &quot;Contract&quot; for new contracts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>The source defines the origin of the contact. Contracts received from an external party should be marked as one of the following:</td>
</tr>
<tr>
<td></td>
<td>• Extranet - Requested Contract</td>
</tr>
<tr>
<td></td>
<td>• External - Receipt</td>
</tr>
<tr>
<td></td>
<td>Contracts created internally should be marked as either</td>
</tr>
<tr>
<td></td>
<td>• Internal - Blank Template</td>
</tr>
<tr>
<td></td>
<td>• Internal - New Draft</td>
</tr>
<tr>
<td>Contract Name</td>
<td>The user-editable part of the contract title. Use this to provide a short description of the contract. It will be combined with the Contract ID and Status to form the standardized Contract Title</td>
</tr>
<tr>
<td>Category</td>
<td>The Contract Category is the high-level classification of the contract. Choosing a category will filter the choice of Contract Types.</td>
</tr>
<tr>
<td>Contract Type</td>
<td>The Contract Type is the more detailed level of classification for the contract.</td>
</tr>
<tr>
<td>Contract Owner</td>
<td>The Contract Owner is the user that will manage the contract through its lifecycle. This user has read/write permissions on the contract throughout the process.</td>
</tr>
<tr>
<td>Review Options</td>
<td>Specifies whether the contract requires approval or if the contract was created with a pre-approved template that can be sent for signatures without additional approval. This is usually set to the template and not configurable for most users.</td>
</tr>
<tr>
<td>Executive Deadline</td>
<td>An optional data property to designate the due date for signature and execution of the contract.</td>
</tr>
<tr>
<td>Organizational</td>
<td>The organization the contract is associated with. Usually, this would be the counterparty to the contract. Organizations can be clients, vendors, partners, or internal.</td>
</tr>
<tr>
<td>External Contract ID</td>
<td>Optional field to track the external organizations in the Contract ID.</td>
</tr>
</tbody>
</table>

Figure 5a—Sample design of Contract Card for Facebook
Figure 5b—Sample design of Contract Card for Facebook (Clauses expanded)

Figure 5c—Clauses and Versions expanded
Figure 6—Example of TOD;DR Output

- Terms may be changed any time at their discretion, without notice to the user
- Processes a personal information (email, id but also device info, location)
- They can remove your content at any time and without prior notice
- Reduction of legal period for cause of action
- The service is not responsible for linked or (clearly) quoted content from third-party content providers

More details
Figure 7—Ricardian Contracts

Source: webfund.org
Source: https://en.wikipedia.org/wiki/Ricardian_contract
Appendix A—TOS;DR list of Topics, Cases, and Instances

1. Anonymity and Tracking
- This service respects your browser's Do Not Track (DNT) headers (1)
- The service allows you to use pseudonyms (37)
- This service does not track you (38)
- The service uses your personal data to employ targeted third-party advertising (15)
- User pseudonyms are allowed due to the service's billing policies 2
- Users are not allowed to use pseudonyms, as trust and transparency between users regarding their identities is relevant to the service (8)
- The service may collect extra data about you through promotions (5)
- The service uses your personal data for advertising (9)
- You must provide your legal name, pseudonyms are not allowed (12)
- The service uses third party tracking pixels to track social media conversion (6)
- The service may use tracking pixels, web beacons, browser fingerprinting, and/or device fingerprinting on users (61)
- Tracking pixels used in service-to-user communication (3)
- The service deletes tracking data after a period of time and allows you to opt out (2)
- You can opt out of targeted advertising (11)
- Your profile is combined across various products (3)
- This service ignores the Do Not Track (DNT) header and tracks users anyway even if they set this header (29)
- App required for this service requires broad device permissions (2)
- Your identity is used in ads that are shown to other users (5)

2. Ownership
- This service takes credit for your content (2)
- If you offer suggestions to the service, they become the owner of the ideas that you give them (10)
- You maintain ownership of your data (40)
- This service can use your content for all their existing and future services (8)
- Users cannot scrape the website of the service (8)
- This service provides a way for you to export your data (13)
- The service disables software that you are not licensed to use (1)

3. Law and government requests
- Users agree to comply with the law of the service's country (11)
- The service is transparent regarding government requests or inquiries that may involve user data (31)
- The service is not transparent regarding government requests or inquiries that may involve user data (4)
- The service promises to inform and/or notify users regarding government inquiries that may involve users' personal data (7)
- This service reserves the right to disclose your personal information without notifying you (11)
-The service will not allow third parties to access your personal information without a legal basis (16)
-This service can share your personal information to third parties (16)
-The service will resist legal requests for user information where reasonably possible (5)

4. Scope of the copyright license
-The copyright license maintained by the service over user data and/or content is broader than necessary (16)
-This service can license user content to third parties (7)
-The copyright license that users grant to the service is limited for the purposes of that same service, and not third parties (12)
-The copyright license that users grant this service is limited to the parties that make up the service's broader platform (4)
-This service keeps a license on user-generated content even after users close their accounts (8)
-This service will aid you when other users infringe on your copyright (8)
-This service employs a broad copyright license over user content including the right to distribute through any media (7)
-Very broad 8
-This service will continue using anonymized user-generated content even after erasure of personal information (5)
-Content is published under a free license instead of a bilateral one (11)
Users are free to choose the type of copyright license that they want to use over their content (6)

5. Governance
-You agree to defend, indemnify, and hold the service harmless in case of a claim related to your use of the service (26)
-Any liability on behalf of the service is only limited to the fees you paid as a user (2)
-Only for your individual use (2)
-Defend, indemnify, hold harmless; survives termination (2)
-Users agree not to submit illegal content (17)
-Spidering or crawling is not allowed (7)
-The service can intervene in user disputes (1)
-You are solely responsible for claims made against the service and agree to indemnify and hold harmless the service (11)
-This service is only available to users of a certain age (60)
-This service is only available for use individually and non-commercially (9)
-Users have a reduced time period to take legal action against the service (6)
-This service fines spammers (1)
-If you are the target of a copyright holder's take down notice, this service gives you the opportunity to defend yourself (3)
-Users are subject to the policies and guidelines of the service (9)
-This service cannot be held responsible for disputes that you may have with other users (4)
-This service prohibits users sending chain letters, junk mail, spam or any unsolicited messages (4)
-Users shall not interfere with another person's enjoyment of the service (4)
-Per the service's terms, users may not express negative opinions about them (1)
- This service assumes no responsibility and liability for the contents of links to other websites (8)
- Users agree not to use the service for illegal purposes (12)
- This service prohibits users from attempting to gain unauthorized access to other computer systems (3)
- This service does not condone any ideas contained in its user-generated contents (1)
- This service assumes no liability for any losses or damages resulting from any matter relating to the service (14)
- Invalidity of any portion of the Terms of Service does not entail invalidity of its remainder (8)
- Failure to enforce any provision of the Terms of Service does not constitute a waiver of such provision (8)
- You have the right to request lower Charges from Third Party Providers (1)
- If you are the target of a copyright claim, your content may be removed (6)
- Service does not allow alternative accounts (6)
- The service provides information about its attitude towards ethical, social or political problems or controversies (1)
- Service fines users for Terms of Service violations (1)

6. Guarantee
- The service has a no refund policy (22)
- The service is not responsible for linked or (clearly) quoted content from third-party content providers (5)
- Users are entitled to a refund if certain thresholds or standards are not met by the service (7)
- This service throttles your use (2)
- This service gives no guarantee regarding quality (11)
- This service will warn users about website maintenance (2)
- Accessibility to this service is guaranteed at 99% or more (4)
- The service is provided 'as is' and to be used at the users' sole risk (39)
- The service provider makes no warranty regarding uninterrupted, timely, secure or error-free service (24)
- The service does not guarantee accuracy or reliability of the information provided (21)
- The service does not guarantee that software errors will be corrected (6)
- This service does not guarantee that it or the products obtained through it meet the users' expectations or requirements (5)
- Users are responsible for any risks, damages, or losses they may incur by downloading materials (7)

7. Easy to read
- This service provides archives of their terms of service so that changes can be viewed over time (14)
- This service employs separate policies for different parts of the service (6)
- The terms for this service are easy to read (39)
- The terms for this service are translated into different languages (4)

8. User choice
- You can opt out of promotional communications (24)
- You cannot opt out of promotional communications (1)
- You can choose with whom you share content (2)
- You can choose the copyright license (3)

9. User Involvement in Changing Terms
- The service makes critical changes to its terms without user involvement (10)
- User feedback is invited regarding changes to the terms (7)

10. User information
- You cannot distribute or disclose your account to third parties (3)
- The service provides details about what kinds of personal information they collect (46)
- The service provides information about how they intend to use your personal data (17)
- You must create an account before you can access the service's pricing information (2)
- The service provides a free help desk (8)
- The service informs users about the risk of publishing personal info online (13)
- The service provides information about how they collect personal data (12)
- The service informs users that its privacy policy does not apply to third party websites (7)

11. Waiving your right
- You sign away moral rights (4)
- You waive your right to a class action (27)

12. Changes
- There is a date of the last update of the terms (62)

13. Law enforcement and due process
- This service does not force users into binding arbitration (4)
- This service forces users into binding arbitration in the case of disputes (18)

14. Unclassified
- None (1574)

15. Jurisdiction and governing laws
- The court of law governing the terms is in location X (48)
- The court of law governing the terms is in a jurisdiction that is friendlier to user privacy protection (3)
- If the service shares personal information outside of its jurisdiction, it is processed according to the original jurisdiction's data protection standards (1)
- The court of law governing the terms is in a jurisdiction that is less friendly to user privacy protection (9)

16. Right to leave the service
- Features of the website are made available under a free software license (8)
- This service retains rights to your content even after you stop using your account (1)
- This service holds onto content that you've deleted (11)
- You can delete your content from this service (25)
- You have the right to leave this service at any time (40)
- No need to register (4)
- You cannot delete your account of this service (25)

17. Notice of Changing Terms
- The service may change its terms at any time, but the user will receive notification of the changes (34)
- When the service wants to change its terms, users are notified a month or more in advance (13)
- Conditions may change, but your continued acceptance is not inferred from an earlier acceptance (2)
- When the service wants to change its terms, users are notified a week or more in advance (4)
- Terms may be changed any time at their discretion, without notice to the user (63)
- The service reviews its privacy policy on a regular basis (3)
- Users should revisit the terms periodically, although in case of material changes, the service will notify (24)

18. Suspension and Censorship
- The service can delete your account without prior notice and without a reason (51)
- User suspension from the service will be fair and proportionate (13)
- They may stop providing the service at any time (18)
- The service can delete specific content without prior notice and without a reason (2)
- The service can suspend your account for several reasons (14)
- The service gives 30 days of notice before closing your account (5)
- Usernames can be rejected for any reason (1)
- User accounts can be terminated after having been in breach of the terms of service repeatedly (6)
- Users who have been permanently banned from this service are not allowed to re-register under a new account (6)
- Service can block or censor user communications (3)
- This service can delete your content if you violate the terms (3)

19. Third Parties
- Many third parties are involved in operating the service (11)
- Third parties may be involved in operating the service (24)
- The service warns you of the potential consequences related to third-party access (5)
- Third parties used by the service are bound by confidentiality obligations (10)
- The service refers users to external documents for more information (15)
- This service only shares user information with third parties when given specific consent (4)
- The service does not share user information with third parties (11)
- The service explains how to prevent disclosure of personal information to third parties (1)
- The service allows you to opt out of providing personal information to third parties (4)
- You can limit how your information is used by third-parties and the service (1)
- The service does not use third-party analytics or tracking platforms (3)
- This service gathers information about you through third parties (5)

20. Personal Data
- The service can read your private messages (8)
-IP addresses of website visitors are not tracked (10)
-Your personal data is given to third parties (14)
-They store data on you even if you did not interact with the service (1)
-Your personal data is used for limited purposes (11)
-Only aggregate data is given to third parties (4)
-You can request access and deletion of personal data (23)
-This service may collect, use, and share location data (7)
-This service uses your personal information for many different purposes (7)
-This service assumes no liability for unauthorized access to your personal information (4)
-Your data may be processed and stored anywhere in the world (12)
-Your private content may be accessed by people working for the service (7)
-Your personal data is aggregated into statistics (14)
-This service does not sell your personal data (28)
-The service does not index or open files that you upload (3)
-Users can access most of the pages on the service's website without revealing any personal information (5)
-The service provides a complaint mechanism for the handling of personal data (5)
-The service's data retention period is kept to the minimum necessary for fulfilling its purposes (7)
-The service may keep a secure, anonymized record of users' data for analytical purposes even after the data retention period (4)
-This service may use your personal information for marketing purposes (1)
-This service may keep personal data after a request for erasure for business interests or legal obligations (5)
-The service collects many different types of personal data (2)

21. Cookies
-This service tracks you on other websites (12)
-This service only uses temporary session cookies (6)
-This service requires first-party cookies, which are cookies that only belong to the domain of the service and not a third party (28)
-This service employs third-party cookies, but with opt-out instructions (19)
-This service allows tracking via third-party cookies for purposes including targeted advertising (32)
-The cookies used by this service do not contain information that would personally identify you (6)
-The service provides a complete list of all cookies set by its website (11)
-This service uses third-party cookies for statistics (23)
-Blocking cookies may limit your ability to use the service (23)

22. Business Transfers
-The service can sell or otherwise transfer your personal data as part of a bankruptcy proceeding or other type of financial transaction (25)
-Promises will be kept after a merger or acquisition (3)

23. Logs
User logs are deleted after a finite period of time (5)
-This service keeps user logs for an undefined period of time (6)
-Only necessary user logs are kept by the service to ensure quality (8)

24. Data portability
-This service allows you to retrieve an archive of your data (14)
-Although this service allows users to retrieve their data, the process is difficult and time-consuming (1)

25. Security
-The user is informed about security practices (45)
-You are responsible for maintaining the security of your account and for the activities on your account (39)
-The service provides two factor authentication for your account (7)

26. Content
-Prohibits political forum discussions (1)
-Prohibits the posting of pornographic content (7)
-Users agree not to submit libelous, harassing or threatening content (13)
-Prohibits public posting of private messages (1)
-Prohibits the posting of content which promotes or glorifies violence or politically or religiously extremist values (6)
-User-generated content is encrypted, and this service cannot decrypt it (3)

**Taken from https://edit.tosdr.org/cases**
Appendix B—Topic Modeling

Slide to adjust relevance metric:

\[ \lambda = 1 \]

0.0 0.2 0.4 0.6 0.8 1.0

Top-30 Most Salient Terms

1. saliency(\text{term } w) = \text{frequency}(w) \times \left( \text{sum}_t p(\text{w} | t) \times \log(p(\text{t} | w) / p(\text{t})) \right) \] for topics t; see Chuang et al. (2012)

2. relevance(\text{term } w | \text{topic } t) = \lambda \times p(w | t) + (1 - \lambda) \times p(w | t) / p(w); see Sievert & Shirley (2014)
### Appendix C—Revised Data Schema

<table>
<thead>
<tr>
<th>TOS;DR current schema</th>
<th>Revised JSON schema</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ID: Users</strong></td>
<td>ID: <strong>Contributors</strong></td>
</tr>
<tr>
<td>To contribute to the website, you must login as a user. A nickname, email and password are necessary. Admins are flagged through a boolean value, only other admins can change. Created through the devise gem. Password are encrypted using bcrypt gem.</td>
<td>Contributors are contributors to the Terms of Service analyses, as well as administrators of the data store. The schema is a slightly more complicated version of the original “Users” schema influenced by the Frictionless Data contributors property.</td>
</tr>
<tr>
<td><strong>Specs:</strong></td>
<td></td>
</tr>
<tr>
<td>- Contributors MUST be an array.</td>
<td></td>
</tr>
<tr>
<td>- Each entry is a Contributor and MUST be an object.</td>
<td></td>
</tr>
<tr>
<td>- A Contributor MUST have a title property and MAY contain path, email, role and organization properties.</td>
<td></td>
</tr>
<tr>
<td><strong>An example of the object structure is as follows:</strong></td>
<td></td>
</tr>
<tr>
<td>&quot;contributors&quot;: [{</td>
<td></td>
</tr>
<tr>
<td>&quot;id&quot;: &quot;joe_bloggs&quot;,</td>
<td></td>
</tr>
<tr>
<td>&quot;title&quot;: &quot;Joe Bloggs&quot;,</td>
<td></td>
</tr>
<tr>
<td>&quot;email&quot;: &quot;<a href="mailto:joe@bloggs.com">joe@bloggs.com</a>&quot;,</td>
<td></td>
</tr>
<tr>
<td>&quot;path&quot;: &quot;<a href="http://www.bloggs.com">http://www.bloggs.com</a>&quot;,</td>
<td></td>
</tr>
<tr>
<td>&quot;role&quot;: &quot;author&quot;</td>
<td></td>
</tr>
<tr>
<td>}]</td>
<td></td>
</tr>
<tr>
<td><strong>ID: Points</strong></td>
<td>ID: <strong>Points</strong></td>
</tr>
<tr>
<td>Analyses submitted by users. Has many relationships</td>
<td>A Point is a specific statement within an individual Terms of Service contract upon which contributors can provide evaluative annotation.</td>
</tr>
<tr>
<td>Belongs_to :user belongs_to :topic Belongs_to :service has one :reason</td>
<td><strong>Specs:</strong></td>
</tr>
<tr>
<td><strong>Specs:</strong></td>
<td></td>
</tr>
<tr>
<td>- &quot;user_id&quot;: all points are linked to the user that created them</td>
<td><strong>Name</strong> (Required): A short url-usable (and preferably human-readable) name of the</td>
</tr>
</tbody>
</table>

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• "rank" (default: 0): all created points have a default rank of 0. Rank is used to sort the point and allow users to upvote or downvote them.
• "title": Title of the point. Cannot be blank.
• "source": Source of the ToS. Cannot be blank.
• "status": Status of the point, when created is "pending". Admins review it change it to "approved", "declined" or "disputed". When the status is declined, admins must give a reason that will be sent to the users. Cannot be null (nil).
• "analysis": The actual analysis. Cannot be blank.
• "rating": Rating of the point, integer. To choose between 0 and 10. Cannot be blank.
• "featured", default: false: (Admins only). Allow admins to feature the point on the card on the front page.
• "topic_id": Foreign key to the topic the point is linked to. Cannot be blank.
• "service_id": Foreign key to the service the point is linked to. Cannot be blank.

point. It is assumed to follow the same formatting guidelines as for contributors, but it may be a UUID or other unique identifier.
• Contributor (Required): The name of the contributor.
• Title (Required): A human-readable title, typically taken from the text of the contract.
• Text (Required): The full text of the point which is the subject of analysis.
• Source (Required): The source of the contract. It MUST be an OBJECT which MUST contain service, path, and accessed properties:
  • Service: Pointer to the name of the service as found in the “Services” document.
  • Path: The URL or POSIX path to the text of the Terms of Service contract that was used for the contributor’s analysis.
  • Accessed: The date on which the text was accessed for the contributor’s analysis.
• Status (Required): The current state of review for the contributor’s analysis. MUST be an OBJECT which MUST contain an approval property with the value “approved”, “declined”, “disputed”, or “pending”. Defaults to “pending”. If the value is “declined”, the OBJECT MUST contain a reason property with an explanation written out in Markdown.
• Analysis (Required): The actual analysis written out in Markdown.
• Rating (Required): An integer rating of the point between 0 and 10. Defaults to 0.
• Featured: May be set to true by admins to display the point’s card on the front page of a web site.
• Topics: An array containing pointers to the name values of all topics associated with the point in the “Topics” document.

An example of the object structure is as follows:

```json
{
  "name": "your_identity_is_used_in_ads",
  "status": "pending",
  "rating": 5,
  "source": {
    "service": "example-service",
    "path": "example-contract.txt",
    "accessed": "2023-01-01"
  }
}
```
"contributor": "joe_bloggs",
"rank": 0,
"title": "Your identity is used in ads...",
"text": "Your identity is used in ads that are shown to other users",
"source": {
    "service": "google",
    "path": "https://google.com/tos/",
    "accessed": "2019-04-04"
},
"status": {
    "approval": "declined",
    "reasons": "The evaluation is ignores something important."
},
"analysis": "Ads shown to other users may include a reference to you as an implied endorsement. **Might** give away information about your own personal lifestyle to strangers.",
"rating": 1,
"featured": false,
"topics": [
    "topic1",
    "topic2"
]}

**ID: Reasons**

<table>
<thead>
<tr>
<th>Has many relationships</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belongs to :user belongs to :point</td>
<td></td>
</tr>
</tbody>
</table>

**specs**

- "reason": Text of the reason. Cannot be blank.
- "user_id": User id to which the reason is linked.
- "point_id": Point id to which the reason is linked.

**ID: Services**

Has many relationships
Has_many :points

**Specs**

- "name": name of the service. Cannot be blank.
- "url": url of the service. Cannot be blank.
- "grade": grade of the service. Calculated automatically from the average of the ratings of this service

**ID: Services**

Services are the entities publishing the Terms of Service contracts. More metadata about these entities could be provided if necessary, e.g. the nation where they are based.

**Specs**

- **Name** (Required): Identifier for the service, following the same conventions as for Contributors.
- **url** (Required): url of the service’s home page
- **Grade** (Required): Grade of the service, calculated automatically from the average of the ratings of this service

An example of the object structure is as follows:

```json
{
  "name": "google",
  "url": "https://google.com",
  "grade": 2
}
```

**ID: Topics**

Has many relationships
Has many :points

**Specs**

- "title": Title of the topic. Cannot be blank.
- "Subtitle": Subtitle of the topic. Cannot be blank.
- "Description": Description of the topic. Cannot be blank.

**ID: Topics**

Topics are meta-categories to which individual points can be attached, either by human reading or machine learning.

**Specs**

- **Name** (Required): contributors, a UUID, or some other method.
- **Title** (Required): Short, human-readable title of the topic.
Subtitle: Subtitle of the topic. I could not see why the original schema made this required; it may have something to do with where the information is used on the website.

Description: Description of the topic written in Markdown. This is somewhat akin to the analysis of a point, but it involves interpretation of all the points that contribute to the topic.

An examples of the object structure is as follows:

```json
{
    "name": "topic1",
    "title": "User Identity",
    "subtitle": "How user identity is used by the service",
    "description": "This topic appears to cover multiple ways in which the user agrees to let the service use their identity."
}
```
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*Chapter 6*


