Contract and Innovation: The Limited Role of Generalist Courts in the Evolution of Novel Contractual Terms

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CONTRACT AND INNOVATION: 
THE LIMITED ROLE OF GENERALIST COURTS IN THE EVOLUTION OF NOVEL CONTRACTUAL FORMS

Ronald J. Gilson, * Charles F. Sabel* & Robert E. Scott* **

In developing a contractual response to changes in the economic environment, parties choose the method by which their innovation will be adapted to the particulars of their context. These choices are driven centrally by the thickness of the relevant market—the number of actors who see themselves as facing similar circumstance-- and the uncertainty related to that market. In turn, the parties’ choice of method will shape how generalist courts can best support the parties’ innovation and the novel regimes they envision. In this Essay, we argue that contractual innovation does not come to courts incrementally, but instead reaches courts later in the innovation’s evolution and more fully fledged than the standard picture contemplates. Highly stylized, the trajectory of innovation in contract we find is this: Private actors respond to exogenous shocks in their economic environment by changing existing structures or procedures to make them efficient under the new circumstances. The innovating parties stabilize their newly emergent practices through a variety of regimes, both bilateral and multilateral, whose goal is to establish the context through which the innovation is implemented. It is only at this point, and when a dispute is presented to them, that courts step in. If contract innovation does indeed reach generalist courts through the mediating institution of these contextualizing regimes, then our argument follows directly: As a central goal of contract adjudication is to enforce the agreement in the context the parties intended, the courts’ willingness to defer to the context the parties give them will put the law more directly in the service of innovation.

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I. INTRODUCTION

Contract is broadly regarded as a cohesive body of law precise enough to facilitate transactions across very different domains, yet open and flexible enough to accommodate and eventually discipline substantial variations and changes in commercial practice without sacrificing its cohesion. There is disagreement as to whether contract achieves these ends best when judges most fully respect the autonomy of the parties, and decide disputes principally by reference to the formal agreements they enter, or when instead judges are free to go behind the terms of the contract and inquire into the context of the parties’ dealings, and decide disputes with reference to the parties’ practices and informal understandings.¹ But there is little disagreement that contract law, as developed by generalist judges, approximates the ideal image of the common law as a highly decentralized and sensitive institution for responding incrementally to incipient changes in the parties’ relations. Thus, common law courts are commonly believed fully capable of extending the reach of existing legal principles to emergent forms of agreement without undermining the security of actors who continue to rely on traditional doctrine.

This familiar picture of the development of contract in our view misportrays how generalist courts should respond to innovation – how courts ought to participate in developing and adjudicating disputes over novel contract forms and terms – and therefore mischaracterizes the ways in which generalist courts do, and do not, effectively support innovation in contract law. The goal of this Essay is to replace this common but erroneous picture with a more accurate one. We argue first and most fundamentally that contractual innovation does not comes to courts incrementally -- as where innovation is shaped gradually through iterative exchanges between contracting parties and the courts-- but instead reaches the courts later in the innovation’s evolution and more fully fledged

¹ Beginning with the battle between the titans of contract, Samuel Williston and Arthur Corbin, and continuing to the present, two polar positions have competed for dominance in the interpretation of formal agreements between sophisticated parties. The primary battleground has taken place in generalist courts that are committed to polar interpretive styles: In a textualist regime, and absent ambiguity, generalist courts cannot choose to consider context; in a contextualist regime, these courts must consider it. Textualist interpretation, as embodied in the parol evidence and plain meaning rules and the effect of an integration clause, looks to a contract’s formal language and disregards claims, unless anchored in the text, that the parties intended to assign contract terms a special meaning that is revealed by the course of dealings or some other feature of the context of their relation, or that the parties otherwise intended to supplement the formal contract by unwritten understandings and undertakings. Contextualist courts, on the other hand, reject the notion that words in a contract can have a plain or unambiguous—context free—meaning at all. By the same logic they favor a soft parol evidence rule. Thus, the court may admit extrinsic evidence notwithstanding an unambiguous merger clause declaring the contract to be an integrated writing, or, absent such a clause, notwithstanding the fact that the writing appears final and complete on its face. For discussion, see Alan Schwartz & Robert E. Scott, Contract Theory and the Limits of Contract Law, 113 YALE L.J. 541 (2003); Jody S. Kraus & Robert E. Scott, Contract Design and the Structure of Contractual Intent, 84 N.Y.U. L. Rev. 1023 (2009); Alan Schwartz & Robert E. Scott, Contract Interpretation Redux, 119 Yale L.J. 926 (2010).
than the standard picture contemplates. Highly stylized, the trajectory of innovation in contract we find is this: Private actors respond to exogenous shocks in their economic environment by changing existing structures or procedures to make them efficient under the new circumstances. The innovating parties stabilize their newly emergent practices through a variety of regimes, both bilateral and multilateral, whose goal is to establish the context through which the innovation is implemented. It is only at this point that courts step in when a dispute is presented to them.

As we develop here, the nature of these “contextualizing regimes,” and hence the courts’ function and the allocation of responsibility between courts and alternative interpretive institutions depend on two characteristics of the economic market in which the innovating parties participate: the thickness or scale of that market, as measured by the number of actors who understand themselves to be transacting under similar circumstances, and the uncertainty associated with it. Across the four principal regions

2 In this Essay, we examine the role of generalist courts in the emergence of innovations in commercial contracting between sophisticated parties. We argue elsewhere that any theory of optimal contract design and interpretation requires a separation of the question of consumer protection -- whether a particular contract is exploitive and, in turn, what terms would be reasonable -- from the design and interpretation of commercial contracts. Consumer protection is an important goal of public policy, but placing the responsibility for advancing this goal in the hands of generalist courts charged with the task of contract enforcement and interpretation of commercial contracts is a category error. Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, Text and Context: A Unified Theory of Contract Interpretation (mimeo 2012). For an argument along the same lines, see Meredith R. Miller, Contract Law, Party Sophistication and the New Formalism, 75 Missouri L. Rev. 493 (2010),

3 We extend to purely private contractual relationships the conception of “contextualizing regimes” that was first used to describe public-private collaborations in Charles F. Sabel & William H. Simon, Contextualizing Regimes: Institutionalization As A Response to the Limits of Interpretation and Policy Engineering, 110 Mich. L. Rev. --- (2012).

4 The thickness or scale of the relevant market and the level of uncertainty facing contracting parties within that market are the two central variables that explain how contractual innovation evolves. A thick market is one in which many commercial actors are exchanging goods or services by using the same or similar contracting behaviors and strategies. Hence the contracting is multilateral. In this respect, similarity should be understood as a continuum. As we will see, broadly similar transactions may still have significant idiosyncrasies, which will influence how a multilateral contextualizing regime addresses markets that are thick at a general level and thinner with respect to particular transactions. See text accompanying notes – and --infra (discussing fast track construction rules and the Delaware Court of Chancery). The polar opposite—a thin market—exists when each contracting party must negotiate a bespoke agreement with its counterparty. Here contracting is bilateral.

5 As is commonplace, we follow Frank Knight in distinguishing between risk – the likelihood of an event that can be estimated probabilistically, and uncertainty, the likelihood of whose occurrence, or even whether it could happen at all, is unknown. FRANK H. KNIGHT, RISK UNCERTAINTY AND PROFIT, (1921). For discussion, see Ronald J. Gilson, Charles F. Sabel & Robert E. Scott, Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration, 109 Colum. L. Rev. 431, 433 (2009) (hereinafter cited as Contracting for Innovation). Rudolph Richter, Efficiency of Institutions: From the perspective of New Institutional Economics with Emphasis on Knightian Uncertainty, available at http://ssrn.com/abstract=2105604 (July 2012), helpfully discusses how the incomplete foresight associated
of space defined by these two dimensions--low and high levels both of scale and uncertainty--courts must follow the instructions of the contracting parties as to how their contract is to be adapted to its particular context. In each case, the role of generalist courts – the non-specialized workhorses of formal dispute resolution – is more restricted than in the standard account, as much of the interpretation of context will already have been established by other institutions including by the parties themselves. Thus, in responding to contract innovation driven by changes in the contracting parties’ business environment, courts must practice the passive virtues; the parties, not the courts, drive innovation. A court’s approach to an innovative contract can support or undermine the innovation – the court can be a friction or a facilitator.

The Essay proceeds as follows. Part II frames the taxonomy of contract innovation: the multi-dimensional space on which we build our account of the relationship between generalist courts, contextualizing regimes and contract innovation. Part III develops the general argument of the relation between contractual innovation and contextualizing regimes with regard to bilateral contracts and the role of uncertainty. We stress two exemplars: the emergence of collaborative contracting in global supply chains, platform production and project development that have figured prominently in recent years; and the use of preliminary agreements as a means to investigate whether a business opportunity should be pursued with a partner. Part IV discusses multilateral contextualizing regimes more systematically in connection with regimes involving institutions beyond the particular contracting parties, ranging from trade associations in the cotton industry to the role of the Delaware Court of Chancery in complex corporate disputes. We situate these regimes by mapping them to the combination of the two central characteristics of the environment in which each arises: the level of uncertainty concerning the activities that are covered; and the thickness of the market for those activities – whether there are many or few participants facing similar circumstances.

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with Knightian uncertainty is central to institutional (contractual) design. Exogenous uncertainty, say, technological change that overtakes current knowledge, can produce a feedback effect on the contracting process itself. Thus, in high uncertainty environments, where future contingencies cannot be estimated and parties must adapt collaboratively, the contracting process itself reflects continuous uncertainty. In that sense, uncertainty is endogenous to the contract. As with market thickness and the similarity of transactions, see note 4 supra, risk and uncertainty are also a continuum, where any particular transaction will present elements of both risk and uncertainty but in different proportions. For expositional purposes, we will treat the term low uncertainty as covering situations in which probabilistic assessments can be made in important respects, and use high uncertainty for circumstances where probabilistic assessments are of little consequence. Thus, a high level of uncertainty exists when exogenous events that may affect the parties’ obligations to perform are unknown or cannot be estimated probabilistically. Conditions of high uncertainty—generally the product of an exogenous shock—can occur in either bi-lateral or multilateral markets. Similarly, under conditions of low uncertainty both bespoke and multilateral contractors can identify relevant risks that may impede future performance, estimate their occurrence probabilistically and allocate those risks in the resulting agreement.
We conclude in Part V by summarizing the relation between the character of the contextualizing regime and the uncertainty and scale associated with the relevant market. In the end, the message is straightforward: to facilitate innovation, the courts must pay increased attention to the role the contracting parties have given them through the formation of contextualizing regimes. That role will only exceptionably reflect the traditional assumption that courts appropriately respond to innovation by extending the reach of existing contract doctrine to emergent forms of agreement. Nonetheless, even in respecting these limits, generalist courts will retain an important, albeit less central, role than that accorded by the standard account. Common law contract doctrine and generalist courts are still needed to deter opportunistic efforts by contracting parties to exploit their counterparties. In this way, generalist courts will retain their historic role in policing efforts to game the system.

II. THE TAXONOMY OF CONTRACT INNOVATION AND THE ROLE OF GENERALIST COURTS

In developing a contractual response to changes in the economic environment, parties will choose the method by which their innovation will be adapted to the particulars of their context. These choices are driven centrally by the thickness of the relevant market and the uncertainty related to that market. In turn, the parties’ choice of method will shape how generalist courts can best support the parties’ innovation and the contextualizing regimes they envision. In Part A of this Part we frame the taxonomy of innovation in terms of the four regions of space created by high and low uncertainty and thin and thick markets. Part B then addresses how that analysis informs the role of generalist courts in interpreting the resulting contextualizing regimes.

A. The Taxonomy of Contract Innovation

When markets are thick in the sense that many actors face similar changes in their dealings and stand to benefit from concerted responses to them, the affected parties often will institutionalize their innovative contract forms and terms through collective action. Put differently, there are scale economies in contracting. Depending on the precise character of the collective action problems parties face, the resulting structure for adapting their contracts to the particulars of the context—what we will call a multilateral contextualizing regime—may be entirely private (with contract terms developed by industry associations and disputes resolved by private arbitration), largely public (with terms developed by an administrative agency in consultation with trade associations and disputes resolved by an administrative tribunal), or a combination of these as where
courts enforce the collectively determined contract forms. The nature of the regime, moreover, will vary according to the level of uncertainty\(^6\) faced by the actors. When uncertainty is low (insiders to the activity know what to do but judges are ignorant of the relevant details and likely to remain so), attention will be focused on elaborating specialized terms and industry codes. When uncertainty is high—neither insiders nor outsiders can reliably predict on their own what should be done—attention will focus on the creation of a joint framework for exploring and defining new opportunities and mitigating hazards in their implementation.

When markets are thin and the actors few and scattered, parties facing similar problems cannot rely on collective action to institutionalize contractual innovation – the necessary scale is not present. In these circumstances, innovation occurs initially in bilateral relationships. Here, too, the level of uncertainty will determine how the parties respond to changes in the business environment. When uncertainty is low, parties in bilateral relationships can turn to bespoke contracting, relying on contract design itself as the means of integrating the relevant context into a novel formal agreement. But where uncertainty is high, even sophisticated parties cannot respond adequately to exogenous shocks by simply relying on forms of state contingent contracting. Rather, in the process of collaboration, the parties develop governance mechanisms based on rich and regular exchange of information on a project’s progress that allows each to ascertain the other’s capacity fruitfully to proceed jointly to define and produce a product. This same exchange of information creates enough mutual transparency so that opportunism can generally be detected before it has ruinous consequences for the more vulnerable party. These collaborative arrangements—commonly found in supply chains, joint efforts to develop new technologies and preliminary agreements—differ from traditional contracts in that they typically obligate the parties to jointly explore possibilities, without committing them to execute any specific project.\(^7\) Nevertheless, the purpose of these bilateral contextualizing regimes, as of the institutionalized multilateral regimes that come with scale, is to harmonize contractual relation and context. This process of contracting for innovation is a governance framework designed to create a context in which it is possible to ascertain whether extended collaboration is possible and desirable.

In sum, the level of uncertainty will identify the vehicles for contractual innovation that respond to substantive change in the business environment. Depending on the thickness of the market, the parties’ contractual responses to these changes may take the form of bilateral agreements between the participating firms, or complex, multilateral efforts through industry groups or public-private “regulatory” structures.

\(^6\) We define uncertainty in note 5 supra.

\(^7\) See text accompanying note --- infra.
B. Implications for the Role of Generalist Courts

It is only when such contextualizing responses take form, or are well on the way to formation, that generalist common law courts systematically begin to encounter significant innovations in contract. Prior to that point, disputes that lead to litigation are unlikely. The choice then posed for the generalist judge who first confronts the contractual innovation is not merely (as the standard picture suggests) how to weave a partial and incipient innovation into the fabric of contract doctrine. Rather, the fundamental choice is (a) whether to accept the output of the innovative contractual or institutionalized structure even when it deviates (for reasons particular to the context) from outcomes the court would reach in applying its normal rules of contract enforcement and interpretation, and (b) when the court does generally defer to the judgments (and instructions) that emerge from the innovative contractual structure, whether and when to superintend its operation so that parties do not exploit their counterparties.

If contract innovation does indeed reach generalist courts through the mediating institution of the contextualizing regime, then our argument follows directly: The role of the generalist court is more limited, and different, from the one commonly depicted. The court’s role is more limited because, as innovations accumulate and contextualizing regimes multiply, the proportion of cases properly decided under the general rules of contract declines in relation to the proportion resolved in accord with the principles and rules of the various regimes. And the court’s role is also different because the problem of how best to manage relations in contextualizing regimes requires courts to determine when to defer to the regimes, and when superintending correction—policing opportunism—is necessary. That the role of the generalist judge is more limited and different from that normally portrayed does not make judges and courts unimportant to the development of contract law. Contextualizing regimes are vulnerable to disruption in many ways, and a proper balance between judicial deference to the regime’s independence and judicial intervention in their operation to protect the integrity of their operation is a necessary, though not sufficient, condition for their survival.8

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8 An important question, one that we reserve for future work, is how generalist courts can appropriately determine when to intervene so as to deter opportunism and when to defer to the contextualizing regime created by the parties themselves. A failure to make the right decision can undermine the emerging regime. See discussion in note -- infra.
III. THE IMPACT OF UNCERTAINTY: BI-LATERAL CONTRACTING AS INNOVATION IN CONTRACT DESIGN

In this Part we address uncertainty-- one of the two central features of our account of the determinants of innovation in contract. We develop this theme in the context of bi-lateral relationships where changes in the level of uncertainty can stimulate dramatic changes in contract design. Thus, for example, a dramatic increase in the uncertainty associated with product design has required radical innovations in the contract forms to support businesses efforts to operate under the now prevailing conditions. We argue that this innovation in contract design is stimulated by three factors that operate along different dimensions but are highly interactive. Exogenous shocks produce dramatic changes in the structure of efficient business arrangements, whether because of changes in one or more of the firm or its industry’s economic environment or in the relevant regulatory environment. In turn, the change in efficient business arrangements evoked by the shock induces innovation in the contractual forms that institutionalize the new business arrangements. These new contractual arrangements are highly sensitive to the regulatory power of the state. That power is exercised through the adjudicatory process; in other words, generalist courts have to get the scope of enforcement right, respecting the autonomy of these bi-lateral contextualizing regimes while at the same time intervening to protect their integrity. This interactive process is neither simple nor monotonic, and in each instance the nature and extent of the innovation is a product of differing levels of uncertainty. Part A of this Part introduces the pattern by which bi-lateral innovation – substantive and contractual – evolves in both low and high uncertainty environments. Part B then illustrates the high uncertainty pattern through two examples of contract innovation: collaborative agreements and preliminary agreements. Part C addresses how these contract innovations have fared in generalist courts.

A. The Evolution of Innovation

In previous work, we identified what is loosely called “the information revolution” as the exogenous shock that marked the emergence of collaborative contracting in global supply chains, platform production and project development.9 Innovations cascaded, often leading to improvement cycles that became self-perpetuating, devaluing or disrupting existing and apparently robust solutions as they progressed.10 The resulting high levels of uncertainty rendered prior contracting forms obsolete: existing transactional structures, including contingent contracting through modular exchange, relational contracting and vertical integration, offered no

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9 Contracting for Innovation, supra note – at 441-2.

10 This increasing unpredictability is manifest as the pervasive fear of what Clayton Christensen calls “disruptive” technologies, CLAYTON M. CHRISTENSEN, THE INNOVATOR’S DILEMMA (1997).
solution to the contracting problem the parties confronted: how to share capabilities in devising a product that no single party could define on its own.\textsuperscript{11} Rather, in diverse industries ranging from contract manufacturing of advanced electronics, to contracts between suppliers of sophisticated components and manufacturers agricultural equipment, and collaborations between biotech firms with innovative technologies for identifying compounds with promising therapeutic features and large pharmaceutical companies with deep knowledge of particular pathologies and expertise in the regulatory and commercial complexities of bringing new drugs to market, these changes led to an increase in inter-firm relations with both parties whose skills were necessary expecting to innovate jointly.\textsuperscript{12} In precisely that setting, when standard theory predicts vertical integration as the response to combining different capabilities in the face of uncertainty,\textsuperscript{13} parties chose contract, not common ownership, as the way to structure their collaboration.\textsuperscript{14}

Note that initial uncertainty does not inevitably lead to this outcome. In some of these settings the parties anticipate that joint exploration, if successful, will resolve the


\textsuperscript{12} For discussion of the rise of collaborative contracting in these diverse industries, see \textit{Contracting for Innovation}, supra note – at 438-44. The development of the Boeing 787 aircraft is a good example of the demand for collaboration. Innovation in the design and manufacture of the wing, the province of one supplier (or group of suppliers), is dependent on the design and manufacture of the fuselage, the province of a different supplier (or group of suppliers), and vice versa. Innovation in one structure must mesh with innovation in the other in order for either to be successful. The wing must not only be compatible with the fuselage; the two must fit. Innovation is thus a collaborative and iterative process rather than a discrete product supplied by a party upstream in the supply chain according to specifications set by a downstream customer. Id. at 450. As difficulties in managing the complex 787 supply chain have shown, the problems associated with extreme uncertainty are not easily solved even by innovation.


\textsuperscript{14} See e.g., Fountain Manufacturing Agreement between Apple Computer, Inc. and SCI Systems, Inc (May 31, 1996) (a contract manufacturing agreement for SCI to produce designated products at the Fountain, Colo., plant); Research, Development and License Agreement between Warner-Lambert Company and Ligand Pharmaceuticals Inc. ( Sept. 1, 1999) ( pharmaceutical research and development collaboration between “big pharma” and “little pharma”); Collaboration and License Agreement between Pharmacopeia, Inc. and Bristol-Myers Squibb Co. (Nov. 26, 1997) (same); Long Term Agreement between John Deere & Company and Stanadyne Corporation (5 year supply contract for the purchase of fuel filtration systems, injection nozzles and related products by Deere from Stanadyne), available at onecle.com, \url{http://www.onecle.com}, and the Contracting and Organizations Research Institute, \url{http://cori.missouri.edu}. For an in-depth analysis of these contractual responses to continuous uncertainty see \textit{Contracting for Innovation}, supra note – at 458-71.
uncertainty at the outset of their dealings and give rise to familiar contractual problems.\(^{15}\) In the case of the pharmaceutical collaborations, for example, as uncertainty is reduced, reliance on the contextualizing regime gives way to reliance on more familiar instruments, either traditional statements of obligation and remedy, with a mix of rules and standards\(^{16}\) or, when the reduction in uncertainty is substantial, the creation of property rights through the use of nested options.\(^{17}\)

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\(^{16}\) See, e.g., the Warner Lambert/Ligand contract, note 14 supra and the discussion in *Contracting for Innovation*, supra note – at 467-71. Commercial contracts often include both precise rules and general standards, and courts will then actively interpret and enforce such standards by reference to context evidence. For example, contracts may state one party’s performance obligation as to make “commercially reasonable efforts,” “reasonable efforts” or “reasonable best efforts.” See, University of Missouri-Columbia, Contracting and Organizations Research Institute, CORI Contracts Library, at [http://cori.missouri.edu](http://cori.missouri.edu) (last visited Feb. 25, 2012). Parties choose their mix of rules and standards so as to optimize the admissibility of context evidence over two dimensions: when the court will look to context and who decides what context matters. The combination of general and specific terms, therefore, offers parties the ability to braid the text with context evidence that is revealed over the course of contract performance. Robert E. Scott & George G. Triantis, *Anticipating Litigation in Contract Design*, 115 Yale L. J. 814 (2006).

\(^{17}\) See e.g., the Pharmacopeia/ Bristol Myers Squibb contract, supra note 15 and the discussion in *Braiding*, supra note— at 1408-10. In the case of these pharmaceutical collaborations, as uncertainty is reduced, the separation of formal process terms but informal substantive terms gives way to formal contracting over substance: once the product is identified, collaboration is replaced by an allocation to the pharmaceutical company of the responsibility to use “commercially reasonable efforts” to bring the drug to market. *Contracting for Innovation*, supra note – at 470-71.

There is additional complexity in the case of large pharmaceutical company/ biotech collaborations. One problem is that the biotech, which typically has a number of research projects with other companies as well as proprietary research, may use the contractual payments to cross-subsidize other projects, to the disadvantage of the pharma and its project. Another is that the biotech may skew research to its benefit and to the detriment of the commercially oriented research desired by the pharmaceutical. Here the problem is not uncertainty per se – both parties know and understand the object of the contract and the desired inputs to performance, and the pharmaceutical company will know when the biotech is, from the commercial point of view, misdirecting the project. Rather, the problem is that the pharmaceutical company will not be able to prove the misbehavior to the court at reasonable cost. But because uncertainty is low, the parties can still use innovative contingent contracting to police the biotech by granting the pharmaceutical company an unconditional option to terminate the relationship, and thereby secure broad property rights to the research output on payment of a termination fee. The termination fee, in turn, constrains responsive opportunism by the pharmaceutical company. This use of options may viably substitute for the ex ante incorporation of performance specifications in a low uncertainty environment because the inputs that may be subject to opportunism are fully observable by the contracting parties. Josh Lerner & Ulrike Malmendier, *Contractibility and the Design of Research Agreements*, 100 Am. Econ. Rev. 214 (2010).
In other settings, furthermore, repetition results in a learning process that reduces uncertainty, permitting a shift from a contextualizing regime to a contingent contract: Accrued experience substitutes for collaborative exploration so that it is possible to identify the relevant contingencies going forward. Here, contracts become more complex and complete as time goes on.\textsuperscript{18} When either successful exploration or repetition results in a reduction in uncertainty, the parties are able to write contracts that provide relatively explicit instructions to courts indicating what context to consider and what context to ignore.\textsuperscript{19} The parties are thus less reliant on informal mechanisms created by the contextualizing regime and can instead turn to a variety of contract clauses to deal with what is now the kind of low-uncertainty environment in which the enforcement role of the court figures most prominently.\textsuperscript{20}

When uncertainty is reduced in either of these ways, current law, despite the ongoing battle over interpretive styles,\textsuperscript{21} faces familiar and tractable problems. This is a thin-market, low-uncertainty environment, and it is here that we observe the state contingent contract—the discrete contract in legal terminology\textsuperscript{22}—that is the canonical


\textsuperscript{19} See examples in note 23 infra. There are good reasons to believe that commercially sophisticated parties prefer a regime that follows the parties’ instructions specifying when to strictly enforce formal contract terms and when to delegate authority to a court to consider surrounding context evidence. By eliminating the risk that courts will erroneously infer the parties’ preference for contextual interpretation, such a regime reduces the costs of contract enforcement and enhances the parties’ control over the content of their contract. That control, in turn, permits sophisticated commercial parties to implement the most efficient design strategies available to them. Ex post, preferences may change for the party disfavored by the resolution of uncertainty, who may then prefer the right to persuade a court of a different result. Of course, that is the point of the ex ante focus. For discussion see Robert E. Scott, \textit{Text versus Context; The Failure of the Unitary Law of Contract Interpretation}, in THE AMERICAN ILLNESS: ESSAYS ON THE RULE OF LAW (forthcoming Yale U. Press 2012).

\textsuperscript{20} See Scott & Triantis, \textit{Anticipating Litigation}, supra note – at 452-460 (discussing acceleration and termination rights, best efforts obligations, force majeure and liquidated damages clauses as examples of contract terms in low uncertainty environments that delegate to courts the task of applying general standards as constrained by precise rules).

\textsuperscript{21} See note 1 infra.

case for parties contracting under stable conditions. Because here parties can anticipate the environment in which performance will occur, the contract itself will reflect it. Even if bespoke contracting can seldom be completely prescient, where uncertainty is low the parties can specify in the formal contract the relevant context within which specific obligations of performance are measured. Innovation in these relatively complete contracts thus takes the form of discursive exposition of goals, expectations and business plans, whether in the contract’s preamble or in particular sections. This additional context can supplement precise specifications of outcomes while still constraining a future court’s discretion to range more widely than the parties want ex ante.

But there is a substantial and apparently growing range of situations in which uncertainty is persistent or recurrent; that is, uncertainty starts high and remains so. Researchers have found parties trying to cope with high levels of uncertainty in a variety of diverse settings and industries; for example, in the co-development of successive generations of innovative components by automobile, construction or agricultural equipment manufacturers and their leading suppliers, in the regular, joint re-definition of “service levels” by the providers of business process outsourcing (typically “back office” services ranging from human resources management to account or treasury management), or in successive collaborations between large pharmaceutical firms and different bio-tech companies. The challenge facing transactional

23 Contract clauses that embed context in the written agreement include (a) “whereas” or “purpose” clauses that describe the parties’ business plan and the transaction; (b) definition clauses that ascribe particular meanings to words and terms that may vary from their plain meaning; and (c) appendices that provide more precise specifications governing performance as well as any memoranda the parties want an interpreting court to consider in interpreting the contract’s text. See for (a) the purpose clause in the Fountain Manufacturing/Apple Computer Agreement, note 14 supra; for (b) the Data Management Outsourcing Agreement Between Allstate Insurance Company and Acxiom Corporation, Art. 2. DEFINITIONS (defining 34 technical or non-standard meanings including specialized meanings of “Agreement,” “Confidential Information,” “Data Integrity,” “Current Projects”, “Affiliate,” “End User,” “Material Default,” “Party,” “Person,” “Problem,” “Term,” “Work Order,” and “Work Product.”), available at http://contracts.onecle.com/acxiom/allstate.outsource.1999.03.19.shtml; and for (c) The Fountain Manufacturing/Apple Computer Agreement, all available at http://contracts.onecle.com/apple/scis.mfg.1996.05.31.shtml; http://cori.missour.edu.


25 See note 14 supra, and Iva Bozovic & Gillian K. Hadfield, Scaffolding: Using Formal Contracts to Build Informal Relations in Support of Innovation (mimeo 2012) (a study of governance structures through interviews with innovative group of firms that supports the institutional structure of collaborative contracting described in Contracting for Innovation, supra note—at 472-92).
lawyers in these circumstances is to craft a contractual structure—what we are calling a contextualizing regime-- that supports ongoing collaboration, allows adjustment of the parties’ obligations under conditions of continuing uncertainty and limits the risk of opportunism inherent in open-ended goals. Unaddressed, such risk undermines the incentive to make efficient relation-specific investments in the first place. Absent a successful design for innovative contractual safeguards, the substantive innovation fails.

B. Innovation in Bi-Lateral Contractual Design

1. The Case of Collaborative Agreements

The common challenges facing parties contracting across organizational boundaries when uncertainty makes specification of the product impossible yield solutions with common elements: a process of collaboration substitutes functionally for ex ante specification of the desired product – the process defines the specification, not the other way around. Through this process each party makes relation-specific investments in learning about the other’s capabilities. These investments raise the costs to each party of replacing its counterparty with another—its switching costs—and so restrain both parties from taking advantage of their mutual dependency.

The key design innovation is to use formal contracts to create governance processes that support iterative joint effort to discover the characteristics of the product that the parties will decide whether to make; the contract creates a bilateral contextualizing regime. These

26 In an earlier article, we described in the following terms the character of the contracting problem facing parties in the rapidly innovating industries that we investigated:

In some markets and for some products, increases in the complexity of the technology and in the rate of change have made it difficult for a single firm to sustain state-of-the-art capacity across all the technologies necessary for successful product development. The response has been collaborative innovation across organizational boundaries with, for example, upstream and downstream participants in the supply chain specializing in particular technologies and the ultimate product resulting from cooperation among different organizations, each having contributed its special expertise…. In the new arrangements, innovation is the product of a joint effort by two or more organizations; it is metaphorically situated between them and is dependent on both. Innovation is thus a collaborative and iterative process rather than a discrete product supplied by a party upstream in the supply chain according to specifications set by a downstream customer.

Gilson, Sabel & Scott, Contracting for Innovation, supra note __, at 448-9. Tracey Lewis and Alan Schwartz model a simpler version of high uncertainty contracting arrangements. They address innovation that contemplates alternative phases of effort, first by one party and then by the other, rather than the ongoing simultaneous involvement of both parties, as have been observed in high uncertainty contexts. See Tracey Lewis & Alan Schwartz, Long Term Contracting with Private Information, available at http://ssrn.com/abstract=2016375 (Feb. 2012).

27 A non-exhaustive and non-random sample of collaborative contracts that combine formal and informal elements can be found at onecle.com, http://www.onecle.com, and the Contracting and Organizations Research Institute, http://cori.missour.edu. See e.g., Data Management Outsourcing Agreement Between Allstate Insurance Company and Axciom Corporation (March 19, 1999) (contract for
contracts rely on low-powered enforcement techniques that cover only the commitment to collaborate, without controlling the course or the outcome of collaboration, and with the extent of damages limited to investment in the collaborative process rather than expectation damages based on the commercialization of the product that might have resulted from successful collaboration. The success of this formal governance arrangement depends on two closely linked components.

The first critical component is a commitment to an ongoing mutual exchange of private information designed to determine if a project is feasible, and if so, how best to implement the parties’ joint objectives.\textsuperscript{28} The second component is a procedure for resolving disputes arising during the course of the first. Its key feature—the “contract referee mechanism”– is a requirement that the collaborators reach unanimous (or near unanimous) agreement on crucial decisions, with persistent disagreement resolved (or not) by unanimous agreement at higher levels of management from each firm.\textsuperscript{29} Together these two mechanisms render observable, and forestall misunderstandings about, each party’s character traits and substantive capabilities; working under uncertainty, they can expect to encounter unanticipated problems that can only be solved jointly and that can be expected to generate occasions of disagreement. At the same time, the parties’ increasing knowledge of their counterparty’s capacities and problem-solving type, a direct result of the processes specified in the formal contract, generates trust and thus creates switching costs that constrain subsequent opportunistic behavior. Innovation thus occurs at both the substantive and contractual levels: the bilateral contextualizing regime “braids” formal and

\begin{itemize}
\item Axiom to develop a data acquisition system to support Allstate’s underwriting of new business in auto and property insurance); Agreement between Phoenix Technologies Ltd. and Intel Corporation (December 1995) (supply contract for Phoenix to be a principal supplier of system-level software to Intel); General Terms Agreement between the Boeing Company and Spirit Aerosystems Inc. (June 30, 2006) (general terms agreement covering purchase orders by Boeing for particular product to be supplied by Spirit); Component Supply Agreement between American Axle & Manufacturing, Inc. and General Motors Corporation (June 5, 1998) (requirements contract for motor vehicle components to be supplied by AAM to GMM); Development Agreement between Nanosys, Inc. and Matsushita Electric Works, Ltd. (Nov. 18, 2002) (collaboration agreement to develop photovoltaic devices with nano components in Asia); Fountain Manufacturing Agreement between Apple Computer, Inc. and SCI Systems, Inc (May 31, 1996) (a contract manufacturing agreement for SCI to produce designated products at the Fountain, Colo., plant); Research, Development and License Agreement between Warner-Lambert Company and Ligand Pharmaceuticals Inc. (Sept. 1, 1999) (pharmaceutical research and development collaboration between “big pharma” and “little pharma”); Collaboration and License Agreement between Pharmacopeia, Inc. and Bristol-Myers Squibb Co. (Nov. 26, 1997) (same); Long Term Agreement between John Deere & Company and Stanadyne Corporation (5 year supply contract for the purchase of fuel filtration systems, injection nozzles and related products by Deere from Stanadyne); Airbus A320 Purchase Agreement between AVSA S.A.R.L. and New Air Corporation (April 30, 1999) (JetBlue and Airbus purchasing agreement). See also examples of collaborative contracts cited in George S. Geis, The Space Between Markets and Hierarchies, 95 Va. L. Rev. 98 (2009).
\end{itemize}

\textsuperscript{28} Contracting for Innovation, supra note – at 476-9.

\textsuperscript{29} Id. at 479-81. Requiring unanimity for project decisions makes it easy for reasonable skeptics to require more information from enthusiasts; bumping disagreements up to impatient superiors discourages obstinacy. Id.
informal contractual elements in novel ways that respond to the technological innovation the contract is designed to support. 30

The formal element of a braided contract is thus sharply and distinctively limited in what it aims to accomplish. It functions to allow both parties to learn about each other’s skills and capabilities for collaborative innovation and to develop jointly the routines necessary to working together in the service of substantive innovation. But, importantly, the formal contract does not commit either party to develop, supply or purchase any product, and this limits the potential damages that can arise out of the formal contract. Production and purchase commitments result from the informal contract supported by increased switching costs generated by the collaboration process itself. 31 Thus, contracting for innovation represents the braiding of two forms of contracts that the academic literature treats as substitutes, while real contracting parties treat them as complements. In effect, contractual braiding endogenizes trust by formalizing the

30 In an earlier article we described the concept of a braided contract in the following terms:

The endogenous uncertainty inherent in contracts for innovation renders the parties’ performance both difficult to observe and therefore unsuitable for informal contracting, and difficult to verify and therefore unsuitable for formal contracting. To deal with these circumstances, commercial parties are writing contracts that braid formal and informal elements. In such agreements, formal contracting establishes processes that make behavior observable enough to support informal contracting over the substance of the innovation. In the prototypical case, the information regime characteristic of these braided contracts is designed to make it easy for each party---through representatives actually engaged in the collaboration---to request clarification from the other, but make it difficult to hold obstinately to convictions in the face of compelling information to the contrary. Thus, the information regime allows for the joint interpretation of ambiguity, and makes observable to the parties actions that would be opaque in an unstructured, informal exchange. This heightened, mutual observability allows the parties to learn about their respective capabilities as well as their disposition to cooperate. Under these conditions, continuing cooperation builds trust (in the narrow sense of confidence that the other party will not take advantage of vulnerabilities created by mutual dependence) and...protects each party’s reliance on that trust in its substantive performance by increasing the parties’ switching costs---the costs of finding an alternative partner capable of reliably doing, and learning, as much as the current one.

Braiding, supra note – at 1402-3. For an extended analysis of a prototypical braided contract see the discussion of the Collaboration and License Agreement Between Pharmacopeia, Inc. and Bristol-Myers Squibb Company, id at 1405-10.

31 Only where the subject of the braided contract is a discrete project do we see formal contracting over the output of the process. In the discrete project setting, switching costs discourage opportunism during the collaborative period, but the parties have to fear opportunistic renegotiation once the cooperative stage of the project is completed and switching costs no longer provide protection. The only issue then remaining is division of the gains from prior cooperation. As a result, an explicit constraint on opportunism must be employed; but at this stage, the uncertainty having been resolved, the contract theory solution of allocating rights to decision-making is feasible. See text accompanying notes – to – infra. For examples, see the Warner Lambert/Ligand contract, note –supra, and the Pharmacopeia/Bristol Myers Squibb contract, note – supra.
process that builds trust and supports informal contracting based on the trust created. In this setting, we see just the opposite of the behavioral literature’s concern that formal contracting will drive out informal contracting by inducing the parties to make calculating decisions where they otherwise would have been guided by norms of reciprocity. Rather, the formal contract creates the conditions that allow informal contracting to function.

2. **Supporting the Search for Partners: The Case of Preliminary Agreements.**

Similar innovations are underway in certain types of preliminary agreements. The increasing pace of technological development—the knowledge revolution—means that parties can no longer expect the next generation of solutions to emerge directly from current practice. Solutions to problems can and do come from more and more unexpected places, off the trajectory of development. For that reason, parties constantly have to search for unexpected alternatives to current techniques. Uncertainty and search are thus two sides of the same coin; in an uncertain world the search for partners capable and willing to engage in incompletely specified collaboration becomes an essential part of doing business rather than an incidental preliminary. In this sense, contracting for innovation as canvassed in the previous section is just a special, albeit extreme, case of the impact of the increased velocity of changes.

Thus, in domains as diverse as commercial contracting, corporate acquisitions and complex construction projects, parties increasingly realize that the feasibility of many

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32 Braiding, supra note ___ at 1402-05.


34 In construction, contractually specified information exchange regimes are now often used to facilitate coordination during complex projects, and especially to register emergent problems and respond effectively to them. See, e.g., AGREEMENT by and between Georgetown 19th Street Development, LLC, (as authorized agent for HTRF Ventures, LLC) "Owner" and Turner Construction Company "The Construction Manager" for The West Side 18th and 19th Street Project located at 527--537 West 18th Street, New York, New York, Dated as of April 1, 2003 (on file with the authors). Article 5.2 of the Agreement provides
projects can only be determined by joint investment in the production of information to evaluate whether a project is profitable to pursue. These types of bilateral arrangements typically take the form of preliminary agreements or letters of intent, as they are termed in the context of corporate acquisitions.\footnote{For discussion of the range of preliminary agreements, see RALPH B. LAKE & ÚGO DRAETTA, LETTERS OF INTENT AND OTHER PRECONTRACTUAL DOCUMENTS (2006). For a discussion of letters of intent – a preliminary agreement of sorts – in corporate acquisitions, see, Braiding, supra note __, at 1439-44.}

The common feature of these regimes is to facilitate joint exploration and search without imposing legal consequences on the outcome of the parties’ collaborative activity. The contextual framework of this relationship requires that neither party have a right to demand performance of the transaction that the parties imagine may result in a successful collaboration. If the parties cannot ultimately agree on a final contract, they may abandon the deal. In effect, both parties enter into an option on (each round of) the deal, which is exercisable after the parties learn the information produced through the preliminary investments and whose price is the cost of the preliminary investment.\footnote{For discussion, see Alan Schwartz & Robert E. Scott, Precontractual Liability and Preliminary Agreements, 120 Harv. L. Rev. 661 (2007).} Agreements of this kind place demands on generalist courts to recognize new forms of contracting that heretofore were denied legal enforcement.

Throughout the Pre-Construction Services Phase and the Construction Services Phase of the Work, the Key Personnel, and the Construction Manager's Trade Contractors shall meet at least once a week (and more frequently if required by Owner) with Owner and the Architect for the purpose of (i) reviewing the Work, or any component thereof, in respect of design, construction, costs incurred and to be incurred, and progress, and (ii) preparing a list (to the extent reasonably foreseeable) of decisions or actions which Owner must make or take within the next sixty (60) Days to avoid delays in completion of the Work, or any component thereof.

For a detailed account of how such mechanisms function in practice, see Atul Gawande, The Checklist Manifesto: How to Get Things Right 54-71(2009). Similar collaborative arrangements appear to be proliferating in business process outsourcing. See, e.g., The Professional Services Agreement between New Century Financial Corporation and Accenture LLP, dated January 25, 2006, available at http://contracts.onecle.com/new-century-financial/accenture-services-2006-01-25.shtml, last visited Jan. 11, 2009. The Agreement provides that Accenture will supply defined Human Resource services to New Century, and periodically improve them (7.4). Moreover, under the agreement Accenture will conduct surveys of New Century employees to determine their level of satisfaction with the services provided (7.5). “If the results of any satisfaction survey .. indicate that the level of satisfaction with Supplier’s performance is less than the target level .., Supplier shall promptly: (i) conduct a Root Cause Analysis as to the cause of such dissatisfaction; (ii) develop an action plan to address and improve the level of satisfaction; (iii) present such plan to New Century for its review, comment and approval; and (iv) take action in accordance with the approved plan and as necessary to improve the level of satisfaction.” (7.6 (c))
C. Collaborative Contracting and Preliminary Agreements in Generalist Courts


Contracting parties must be able to count on the state’s enforcement monopoly if they are confidently to rely on novel forms of agreement. Ideally, generalist courts should respond to exogenously induced innovations by enforcing the chosen methods of mutual cooperation on terms consistent with the arrangements themselves. A court’s ability to achieve this consistency will depend very generally on (a) its expertise in the domain of innovation, (b) the conspicuousness of the contextualizing regime (i.e., the salience of the industry codes or other markers that indicate to outsiders that insiders have given distinctive meaning and effect to usages they agree by creating a regime); and (c) the extent to which the court respects the purposes and values to which the regime is dedicated.

As we will see in the case of the Delaware Chancery Court, courts that are expert in the innovators’ domain can see developments through the participants’ eyes, and give effect to legitimate changes.37 Conspicuously marked multilateral contextualizing regimes that arise in thick markets put courts on notice that particular kinds of expertise are in play and that generalist knowledge of doctrine and the effects of their application in the usual run of cases may be an insufficient or erroneous guide to decision making. The more clearly marked the regime, the more likely it is that the court will be alerted to the possibility that doctrine may not be applicable as usual. However, in the case of innovations that emerge from the bilateral arrangements discussed in this section, the unique governance structures are less visible to a reviewing court.38 Moreover, unlike bespoke contingent contracts between sophisticated parties, here the courts cannot simply follow the instructions of the parties in deciding what context, if any, should be relevant in resolving disputed transactions.39 As a consequence, it becomes more

37 See Part IV B infra.

38 To be sure, disputing parties can introduce their novel contracts into evidence, but these contextualizing regimes typically rely on a complex combination of formal and informal mechanisms that are unlike traditional contractual forms and that have not been previously analyzed by scholars specializing in contract theory. In the absence of an emerging academic consensus as to how and why these novel forms function as they do, a generalist court is placed at a severe disadvantage if called upon to determine the respective obligations of the parties. That disadvantage is exacerbated by the fact that the very fact of the dispute will result in the court being presented with two self-serving accounts of the novel contract where the existence of the novelty degrades the court’s capacity to determine which account (or combination of accounts) is “right.” Gilson, Sabel & Scott, Text and Context, supra note __, at __; Alan Schwartz & Robert E. Scott, Contract Theory and the Limits of Contract Law, 113 Yale L.J. 541, 601-5 (2003).

39 Despite the academic debate whether the default rule of interpretation for generalist courts should encourage scrutiny of context or limit it to the parties’ text, the overwhelming majority of common law courts continue to follow the traditional “formalist” approach to contract interpretation in which courts respect the instructions of sophisticated commercial parties as found in merger clauses and reject appeals by plaintiffs to consider extrinsic evidence not found in the integrated written contract. Alan Schwartz & Robert E. Scott, Contract Interpretation Redux, 119 Yale L. J. 926, 928 (2010).
important for the court to independently affirm values and methods that accord with those of the bilateral regime. The more the court does so, the more likely it will arrive at concordant decisions, whether or not it expressly takes note of the regime’s existence. But courts that disavow the goals and methods of a contextualizing regime may, either knowingly or inadvertently, set aside the results determined through the parties’ regime in favor of outcomes closer to their own preferences.40

Seen this way, courts are not well positioned to interpret contracts for innovation and search-supporting preliminary agreements in accordance with the parties’ intentions. Most contemporary courts are generalists. They operate in a heterogeneous and rapidly changing economy, of which their institutional situation affords little detailed knowledge or experience.41 Unsurprisingly, such courts are prone to undermine an emergent innovation by inadvertently failing to extract the correct meaning from the signals that the parties have given.42 There is no

40 Contextualizing regimes can be fragile and, as a result, the innovations they produce can be short-lived. A much noted and discussed example of this vulnerability is insurance law. In insurance litigation from roughly the 1960s through the end of the 1980s, courts modified general rules of contract to reach decisions protecting consumer interests while also creating incentives for insurers and regulators to clarify and strengthen the overall regime. One of the most important adjustments of general doctrine was the elaboration of a strong variant of contra proferentem, under which a court, encountering an ambiguity in an agreement, immediately decides for the policyholder, rather than undertaking the usual interpretive efforts to determine the parties’ meaning. Another was judicial defense of the policyholder’s reasonable expectations of coverage, explicit language in the agreement notwithstanding. However, after a long period in which generalist judges modified common law doctrines to create in effect a contract law for insurance, more recently courts have undermined the doctrinal structure they had created. This outcome might have been avoided if courts, instead of re-imposing general contract doctrines, had instead used their power of administrative review to induce regulators to seek clarification of insurance terms and policies. In that case, the doctrinal adjustments would have functioned as a judicially administered incentive system—rewarding clarity achieved by the parties under the regulator’s aegis, and penalizing failure to achieve this result—rather than an as open-ended invitation to judges themselves to determine in particular cases what the parties ought to have intended. For discussion see Gilson, Sabel & Scott, Text and Context, note —supra at 53-56.

41 The claim of generalist judicial competence was true under historical circumstances that no longer prevail: the early English courts of equity were effectively able to contextualize contracts because they functioned within homogeneous communities, and thus were able to recover the context surrounding interpretive disputes. In effect, fifteenth century courts of equity were specialized in the narrow range of activities that came before them and that characterized a locally based economy. In contrast, contemporary courts are operating in a heterogeneous and rapidly changing —both the first and second derivatives are positive -- economy, of which their institutional situation where they wait for parties to bring a dispute to them, affords them no window on larger commercial practice and, hence, little detailed knowledge or experience. Gilson, Sabel & Scott, Text and Context, supra note --- at 18.

42 Generalist courts can err in several different ways. They can, for example, interpret formal terms that are intended merely to supplement the underlying context (including the default rules of contract such as the doctrine of excuse) as trumping the context and its defaults. See e.g., Publicker Indus., Inc. v. Union Carbide Corp., 17 U.C.C. Rep. Serv. (Callaghan) 989, 992 (E.D. Pa. 1975); Missouri Pub. Serv. Co. v. Peabody Coal Co., 583 S.W. 2d 721, 728 (Mo. Ct. App.) (seller’s claim for excuse denied because seller
reason to think that judges, exceptionally, will have knowledge of the circumstances that motivate the innovation expressed in collaborative contracting and novel types of preliminary agreements. Nor will the bilateral contextualizing regime created in the contract necessarily put them on notice that they are entering unknown territory. The information exchange regime created within collaborating firms and between collaborating partners by the innovative braiding of formal and informal contracting elements is the most inward facing and the least outwardly visible form of such regimes. Moreover, preliminary agreements in their traditional form—in which, for example, two commercial parties agree to investigate together the prospects of a commercial project and agree to negotiate the remaining terms of the contract once they can observe the fruits of their efforts—are historically unenforceable under the indefiniteness doctrine of the common law of contracts. So to the extent that generalist courts might be said to have a prior and independent disposition concerning the outcome produced by the innovative contextualizing regime, that disposition is unfavorable to the emergent innovation.

Despite these impediments, courts have in some cases enforced collaborative contracts and new preliminary agreements in terms that support the purposes of the contextualizing regime that the parties have created. But as we discuss below, the doctrinal recognition of the innovation in contract remains incomplete and in some regards murky. This lack of clarity can impede further innovation by making the innovation’s fate even more uncertain.

“agreed to the use of the Industrial Commodities Index”), cert denied, 444 U.S. 865 (1979). Alternatively, courts can commit the converse error by interpreting formal terms that were intended to serve as trumps—and thus signal parities intent to opt out of the normal context—as merely supplementing the typical regime. See e.g., Brunswick Box v. Coutinho, Caro & Co., 617 F.2d 355 (4th Cir. 1980) (course of performance and surrounding context suggest that standard meaning of F.A.S. term might not be applicable); Columbia Nitrogen Corp. v. Royster Co., 451 F. 2d 3 (4th Cir. 1971)(course of dealing and usage of trade, if admitted in evidence, demonstrate that express price and quantity terms in written contract were only “fair estimates”); Modine Mfg. Co. v. North E. Indep. School Dist., 503 S.W. 2d 833, 837-38 (Tex. Civ. App. 1973) (trade usage admissible to show that express term “capacities shall not be less than indicated” should be interpreted as permitting “reasonable variations in cooling capacity.”). For discussion, see Charles J. Goetz & Robert E. Scott, The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms, 73 Calif. L. Rev. 261 (1985).

43 Robert E. Scott & Jody S. Kraus, Contract Law and Theory 29-41, 299-303 (4th ed. 2007). Two factual patterns typify unenforceable indefinite agreements at common law. The first, illustrated by Varney v. Ditmars, [111N.E. 822 (N.Y. 1916] is the indefinite bonus contract. In Varney, the New York Court of Appeals held a bonus agreement for “a fair share of the profits” too indefinite and thus enforceable. The second archetype is a variation on the first, extending the common law rule to agreements where essential terms were explicitly left to further negotiation. For example, in Petze v. Morse Dry Dock & Repair Co., 109 N.Y.S. 328 (App. Div. 1908), the New York appellate court held that an agreement providing that “the method of accounting to determine the net distributable profits is to be agreed upon later” was unenforceable under the indefiniteness rule. Common law courts thereafter have consistently held that such “agreements to agree” are unenforceable so long as any essential term was open to negotiation. Id. at 35.

44 For an analysis of the litigated cases and of the ambiguous doctrinal formulations of contemporary courts, see Schwartz & Scott, supra note --- at 691-702.
2. Low Powered Enforcement of Collaborative Contracts

The effectiveness of the collaborative contracts discussed in this Part depends centrally on courts enforcing the chosen methods of mutual cooperation on terms consistent with the underlying arrangements. The function of collaborative contracts is to address the high uncertainty confronting the parties – neither the products nor their specifications can be set out ex ante – by creating a process through which the parties jointly will both develop this information and learn about each other’s capabilities. This function and the parties’ decision to locate the process of collaboration in a formal contract dictates the scope of legal enforcement: the parties to such an agreement should be legally required to comply with their initial commitments to pursue promised investments (typically investments in information) that are necessary to reveal whether or not a proposed project is feasible. But formal enforcement should play no role in determining whether or not the project should go forward or on what terms. The challenge, as in Eli Lilly & Co. v. Emisphere Technologies Inc., is to discourage parties from defecting early in the relationship, before there is an opportunity for a robust pattern of cooperation to develop. The threat of a legal sanction, therefore, should be designed only to assure that the parties make the called for investment in developing patterns of cooperation that will provide information for the decision whether to go forward. Put differently, the parties

408 F. Supp. 2d 608 (S.D. Ind. 2006). The court held that the parties to this pharma/biotech collaboration had entered into a form of cooperative agreement that had important—and legally enforceable—limits. When Lilly subsequently undertook secret research projects, using information that had been jointly developed, it not only risked a claim of patent infringement, but it breached the contract that gave it the limited license in the first place. Holding that Lilly had therefore forfeited its investment in the joint project, the court concluded:

Lilly and Emisphere entered into a close, collaborative research relationship that required trust and good faith on both sides. After several years of joint research, Lilly decided it really did not need Emisphere any further, so it decided to pursue a secret research strategy in breach of its contractual obligations to Emisphere. The parties in this case are both highly sophisticated and well-counseled businesses that have the right to try to exercise their full legal rights under the relevant contracts. Lilly has asserted theories to justify its actions under the contracts, but those theories are not supported by the evidence or the law.

A result similar to Emisphere was reached in an analogous case, Medinol Ltd. v. Boston Scientific Corp., 346 F. Supp. 2d 575 (S.D.N.Y, 2004), In Medinol, the parties entered into a collaborative agreement for research, development, manufacture, and distribution of stents for medical uses.” Id. at 581. The contract contemplated both on-going collaboration in research as well as the development and production of the resulting product. Medinol was to manufacture the stents and Boston Scientific was to sell them in the United States under license from Medinol. The parties agreed that Medinol would establish an “Alternative Line” for manufacturing stents, which Boston Scientific would be permitted to operate under license from Medinol so as to reduce the risk of supply disruptions. That license was limited to “the operation of the Alternative Line.” Id. at 597. Boston Scientific then set up a secret manufacturing operation outside the scope of the Alternative Line. Although there was no express covenant against such manufacture, the court found that the parties’ close collaborative relationship showed that the unauthorized manufacturing amounted to a breach of contract, id. at 598, without limiting Medinol to a patent infringement suit. The court further found that Boston Scientific’s stealth and secrecy showed it had acted in bad faith by setting up the unauthorized line. Id. at 596. The court granted summary judgment for Medinol on liability for the breach, leaving only the issue of damages for trial. See also Shaw v. E. I.
have created a regime to determine the context of their relationship, with the courts’ role limited to policing the relationship, not enforcing the outcome.

This analysis suggests that the question for a reviewing court should primarily be one of character rather than capability: has one party behaved opportunistically by reneging on its promised investment in open exchanges of information, and, if so, what remedy is appropriate? Low-powered sanctions designed to encourage compliance with the information exchange regime (and the informal relations it supports), should be imposed and high-powered sanctions like expectation damages that might crowd out informality and destroy the braid should not.\(^{47}\) And, indeed, we are beginning to see just this distinction: Courts in leading cases are sanctioning overtly selfish abuse of information-exchange regimes.\(^{48}\) But because the sanction relates only to the commitment to collaborate, damages are limited in principle to the reliance costs incurred in the collaboration rather than lost profits that might have been earned if the project had gone forward. In this way, the collaboration commitment can achieve its intended purpose of generating information and trust precisely; low-powered formal enforcement does not drive out informal enforcement.\(^{49}\) While there is some evidence that courts are wisely limiting the sanctions they impose on parties who breach their commitment to collaborate, these institutional forms of innovation remain fragile and the degree to which courts will properly respect the parties own design is still far from settled.

3. Preliminary Agreements in the Courts

Recently, perhaps as a general response to increased uncertainty and the need to search for a collaborator discussed above, courts have affected a major shift in the common law’s

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\(^{47}\) For a discussion of the risk of crowding out and the ways in which formal enforcement of collaborative contracts can function as a complement rather than as a substitute for informal enforcement, see *Braiding*, supra note – at 1398-1402.

\(^{48}\) Id. at 1416-22.

\(^{49}\) Id. As might be anticipated in an emergent area of law, the decisions of courts called on to enforce braided contracts are not uniformly consistent with the enforcement theory we have developed here. Some decisions invite the award of damages for parties who participate faithfully in the information exchange regime but then decide that it is not profitable for them to pursue the joint project. See e.g., *Tan v. Allwaste, Inc.*, 1997 WL 337207 (N.D. Ill. 1997). Other decisions contemplate (or at least invite the possibility of) the award of full expectation damages – that is, high-powered enforcement -- for breach of the information-exchange obligation. See e.g., *VS & A Communications Partners, L.P. v. Palmer Broadcasting Limited Partnership*, 1992 WL 339377 (Del. Ch. 1992), and *Venture Assocs. Corp. v. Zenith Data Sys. Corp.*, 96 F.3d 275 (7th Cir. 1996). In both instances, some courts have failed to appreciate the importance of limiting formal enforcement to low-powered sanctions focused on willful violations of the collaboration agreement itself and thereby create the kind of incentives that undo braiding by inducing strategic crowding out of informal enforcement. *Braiding* at 1439-44.
aversion to preliminary agreements by relaxing the rule under which parties are either fully bound or not bound at all. Instead, a new contract rule has emerged that enforces “a mutual commitment to negotiate together in good faith in an effort to reach final agreement.”

But the new rule governing preliminary agreements to collaborate -- creating a legal duty to bargain in good faith but not requiring the parties to agree -- is only a first step in solving the parties’ contracting problem. The courts must now give content to this rule by determining the nature of the sanction to be imposed when one party seeks to use the novel form of collaborative agreement to opportunistically exploit the counterparty.

Consider *In re Matterhorn Group, Inc.* Swatch wanted to sell more watches in the United States by expanding its franchise operations and so Matterhorn and Swatch agreed to collaborate on pursuing the possibility of a long-term relationship. The parties signed a letter of intent granting Matterhorn the exclusive franchise for thirty possible sites. Under the agreement, Matterhorn undertook to invest in finding appropriate locations for retailing Swatch watches from among the list of possible locations. Swatch undertook to process diligently the applications for franchises at potentially profitable locations as Matterhorn filed them, and then to seek financing and approval of franchises at chosen locations from its parent firm. In other words the parties agreed to collaborate by making concurrent investments in pursuit of an entrepreneurial innovation. Swatch subsequently engaged in just the strategic behavior that we might expect under these circumstances: It delayed processing several applications and failed to secure the necessary approvals.

The court found Swatch to be in breach of a preliminary agreement to bargain in good faith and awarded Matterhorn reliance damages based on its...
investment expenditures in investigating the locations in question. Importantly, however, the court denied Matterhorn’s claim for expectation damages based on lost profits, holding that “there is no guarantee that it would have opened a store in [that location].” Thus, the court compensated Matterhorn for Swatch’s failure to pay for the option on new locations that Matterhorn had in effect sold it; but the court did not protect Matterhorn from Swatch’s decision not to exercise that option, a result that would have had crowding out effects by linking the risk of large damages on the use of a formal agreement to establish a contextualizing regime.

The result in Matterhorn supports the view that narrowly defined duties of a good faith commitment to a formal collaborative process complement a regime that depends primarily on informal enforcement for the substantive opportunity. A properly configured braiding mechanism, such as the one that appears to have been validated by the court in Matterhorn, likely will not crowd out the informal mechanisms on which the ultimate informal business arrangement is built, but rather will offer a low-powered complement during the early stages of collaboration, thereby giving reciprocity and trust the opportunity to evolve. Put differently, the formal portion of the braided contract for innovation endogenizes the trust necessary to support the informal portion. By limiting formal enforcement to only the collaborative aspect, the crowding out phenomenon is avoided.

But generalist courts have not uniformly understood the limited role of legal enforcement in these preliminary agreements. In several notable cases, the court has failed to embrace fully the notion that an enforceable preliminary agreement only requires a party to pay the option price by undertaking a promised investment in acquiring and sharing information. And in cases involving letters of intent in corporate

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53 Id.

54 In Braiding, supra note-- at 1439-44, we apply this analysis to the interpretation of letters of intent in connection with corporate acquisitions. As we note in that connection, courts have not been uniformly modest in limiting the level of enforcement for breach of these agreements. In several notable cases, courts have held out the possibility that high powered sanctions for breach of preliminary agreements could be imposed in “appropriate cases, suggesting a misunderstanding of the limited role that they can play in superintending these contextualizing regimes. Id.

55 For an example of a court declining to impose legal sanctions to enforce a preliminary agreement in the absence of evidence of opportunism, see Kandel v. Center for Urological Treatment and Research, 2002 WL 598567 (Tenn. App. 2002).

56 See e.g., Venture Associates Corporation v. Zenith Data Systems Corporation, 96 F. 3rd 275 (7th Cir. 1996)(expectation damages may be available in the proper case); Tan v. Allwaste, Inc., No. 96 C 3558, 1997 WL 337207 (N.D. Ill. June 11,1997)(jury question on whether a decision not to conclude a deal was a failure to negotiate in good faith); JamSports & Entertainment, LLC v. Paradama Productions, Inc., 336 F. Supp. 2d 824 (N.D. Ill. 2004) (an insistence on new conditions held a per se violation of the duty to negotiate in good faith).
acquisitions, very good judges have held out the potential for expectation damages for failure to negotiate in good faith.\textsuperscript{57} Limiting the obligation narrowly to the commitment to process rather than to an outcome in this way should permit a party to properly obtain a summary judgment even though it walks away from the transaction for reasons wholly unrelated to the actions of the counterparty. And, even if the promised investment in collaboration is not made, the defendant’s liability is properly limited to the plaintiff’s investment in the collaborative process and not to the expectancy that might result from a concluded deal.

4. Summary

In sum, courts properly supports the innovation in these bilateral regimes by recognizing the braiding of an enforceable formal contract covering collaborative assessment of a business opportunity and an unenforceable informal contract covering the substantive transaction should both parties exercise their respective options to go forward. No legal consequences flow from a party’s decision not to proceed; neither party has a right to demand performance of the contemplated transaction. If the parties cannot ultimately agree on a final contract, they may abandon the deal. Both parties thus enter into an option on the ultimate deal, which is exercisable after the parties learn the information produced through the preliminary investments and whose price is the cost of the preliminary investment.\textsuperscript{58}

In the case of disputes arising under contracting for innovation, or the related arrangements for collaborative search, the courts that support the innovation are those that, in effect, discern the existence of these innovative governance structures and conform their decisions to the parties’ purposes by respecting the arrangements the parties have created. As we have noted, in many other settings contextualizing regimes are institutionalized outside of firms and the bilateral relations they create. Here, the outputs of the regimes are more conspicuous—though not, therefore, necessarily easier for courts to interpret; indeed, these structures often may not involve courts at all. It is to those multilateral settings we turn next.

IV. MULTILATERAL CONTEXTUALIZING REGIMES: THE EFFECT OF SCALE

All else equal, the higher the level of uncertainty, the more difficult it is for parties to write, and courts to interpret, complete, state-contingent contracts. If the parties cannot

\textsuperscript{57} See note 56 supra.

\textsuperscript{58} For discussion, see Schwartz &. Scott, Preliminary Agreements, supra note – at 685-91.
predict probabilistically the range of future outcomes, the “if- then” framework of a state contingent contract necessarily will be incomplete. All else equal, the greater the number of traders engaged in the same kind of a transaction, the more likely that the contracting infrastructure—terms adapted to current need in the form of standard contracts and industry codes, and a mechanism for adjusting terms as needs change—will be provided jointly as a club or (industry specific) public good by a trade association alone or in collaboration with public authorities. We have just seen how shocks in the economic environment produce innovations in contractual form in bilateral relationships. These regimes arise when markets are thin and uncertainty is high. Similarly, exogenous factors can stimulate the creation of innovative contractual forms in multilateral contextualizing regimes. In such a case, the regimes are institutionalized outside the participating firms and arise when markets are thick – many contracting parties are affected by the same exogenous event or, even in the absence of an exogenous event, many parties are acting in the same commercial environment. In this Part, we consider those contextualizing regimes that are external to the specific contracting parties to a transaction – multilateral regimes that arise under conditions of low through high uncertainty.

In Part A, we consider the type of multilateral regime that arises when uncertainty is low and the problem is profound official ignorance of insider practices within a common environment. The exemplar here is the contextualist regime governing the U.S. cotton market. We also discuss the rules developed for fast track construction and construction management-- a similar circumstance of a thick general transaction market, where, as uncertainty increases, there are important idiosyncrasies associated with particular transactions. Part B considers a particularly interesting multilateral contextualist regime - - the Delaware Chancery Court. Here we find an environment of thick general transactions but with greater uncertainty and thus particular transaction idiosyncrasies. Finally, Part C takes up the type of multilateral contextualist regime that evolves when uncertainty is high, and ignorance of the precise nature of threats and opportunities presented by the change in the business environment is universal. In the market for leafy greens, all actors can (and must) collaborate in the joint elaboration of innovative procedures to mitigate the risks to food safety that they confront.

A. Low Uncertainty and the Problem of Ignorance

Take first the setting where commercial practices are stable and well understood by a substantial community of traders. Uncertainty is low and markets are thick. But despite the regularities of dealings, and the trading community’s easy familiarity with both patterns of dealing and the distinctive vulnerabilities to which they can give rise, the generalist judge cannot reasonably be expected to have knowledge of such trade practices or be able conveniently to obtain it. The problem here, in other words, is that the state’s designated decision maker is (and will remain) largely ignorant of the common knowledge of the trade; and unhthinking application of traditional contract law principles
will disrupt, rather than buttress, trade practice.\textsuperscript{59} Coping with the adverse consequences of judicial ignorance, including moral hazard-based litigation brought by parties who have been disadvantaged by trade practices in a particular transaction and seek to take advantage of that ignorance, stimulates innovation by the affected trade association or other collective body. The goal of the contextualizing regime that emerges is to innovate in ways that a) renders insider understanding in terms that can be incorporated into everyday contracting, b) establishes methods for the expeditious resolution of disputes arising under these agreements, and c) institutionalizes a process for keeping terms and forms of dispute resolution abreast of developments in the economic environment.

One variant of this kind of contextualizing regime is based on private ordering, to the de facto exclusion of courts and administrative agencies. Trade associations not only establish procedures for fixing and updating trade rules and technical terms, but also establish arbitral bodies to resolve disputes that arise under the collectively specified rules and terms. The contextualizing regime in the U.S. cotton industry, carefully studied by Lisa Bernstein, which originated in the mid 19\textsuperscript{th} century and took on its modern form in the 1920s, is a prominent example of this cluster of functions.\textsuperscript{60}

Dealers in cotton are organized in the American Cotton Shippers Association (ACSA); the textile mills to which they sell are organized in the American Textile Manufacturers Institute (ATMI). The ACSA and the ATMI have jointly adopted the Southern Mill Rules (SMRs) to govern transactions between their members. The SMRs

\textsuperscript{59} To be sure, one might argue, that in a low uncertainty, multi-lateral environment, generalist courts can entertain evidence from the disputing parties as to the common practice or trade. But the problem is that in modern heterogeneous economies trade practices are both complex and widely varied across industry groups. Some parties may, for example, wish to separate the legal norms that govern their written agreement from the informal social norms that govern their actions. Under these circumstances, courts err if they permit the evidence of common practice to trump the formal terms of the agreement. Moreover, the available evidence suggests that courts, perhaps mindful of the risks, generally do not undertake careful evidentiary hearings to determine the precise nature of the relevant context in a contractual dispute. [cite to Lisa Bernstein, Trade Usage Study 2012]; Imad Abyad, Note, \textit{Commercial Reasonableness in Karl Llewellyn’s Uniform Commercial Code Jurisprudence}, 83 Va. L. Rev. 429 (1997); Robert E. Scott, \textit{The Uniformity Norm in Commercial Law}, in \textit{The Jurisprudence of Commercial and Corporate Law} 167-68 & n.68, (J.S. Kraus & S.D. Walt eds 2000). This evidence suggests that many courts, lacking expertise, fall back instead on interested party testimony and generic concepts of “reasonable commercial behavior” rather than a careful evaluation of complex evidentiary submissions. The lack of any systematic inquiry into actual practices may reflect as well the fact that any context evidence that is introduced must be evaluated in an environment of extreme moral hazard where one party who is disappointed by fate seeks to persuade the court to shift the relevant risk to the counterparty.

are revised annually, and changes are announced at annual meetings and widely circulated. 61 New members are encouraged to attend a summer course to familiarize themselves with the most important rules. 62 The two trade associations have established a joint arbitration panel, the Board of Appeals (BoA), to hear all disputes under the SMRs except those concerning quality, which are referred to a separate body, the Cotton States Arbitration Board (CSAB).

Annual review by the trade associations assures that all regularities in trade practice that contribute to generally beneficial outcomes are identified and incorporated into the SMRs. As Bernstein notes, “given the amount of detail in the trade rules, cases involving contractual gaps are uncommon.” 63 In fact, given the clarity and comprehensive character of the rules, disputes of any kind under the rules are infrequent. The BoA hears on average just two cases per year. 64 Low uncertainty allows the development of the collective equivalent of state contingent contracting and an expert arbitration process eliminates the likelihood of arbitrator error. Thus, there remains little to be resolved by litigation.

Here, too, we observe a variant of the braiding of formal and informal enforcement mechanisms. Decision-making in the BoA is textualist, with great attention to the letter of the contract in dispute and next to none for the context of the transaction it governs. Contextual variations in individual transactions—for example, the willingness, or not, of a dealer to accommodate a mill by delivering before or after the contracted for date—are assumed by the BoA to be the informal and reciprocal adjustments that both parties make to maintain dealings in a world that neither can fully control. Parties will

61 Bernstein, Cotton, supra note -- at ----. The Southern Mill Rules (SMRs) have not been changed since 2004. According to representatives of the relevant trade organizations, this is because no one has felt the need to propose any amendments. Thus, the procedure recited in the text is still in place. According to cotton merchants interviewed by telephone, the reason why there has been no need to amend the SMRs is essentially due to the increased consolidation of the industry over the last 15 years on both the buyer and seller side. Specifically, as an increasing amount of processes and operations are being pursued overseas, the domestic textile community has grown smaller and more tightly knit. There are increasingly only fewer players and bigger players left, and "everyone knows the rules." The merchant response implies that the SMRs have not been amended, not because the industry has not been experiencing changes, but rather, because the extralegal enforcement mechanisms followed in the industry have been strengthened due to domestic industry consolidation. Telephone interviews conducted by Kalliope Kefallinos, Columbia J.D. (2012) with industry representatives and cotton merchants, 5/08/12—5/10/12.

62 Bernstein, Cotton, supra note --, at 1772.

63 Id. at 1735-36.

64 Id. at 1762. But see note –infra.
normally make several such adjustments before resorting to arbitration.\textsuperscript{65} If there was any risk that the BoA would interpret such adjustments of the agreement as binding in the future, parties would be more reluctant to make them, and relations would become more brittle – again, as the behavioralists fear, formal contracting would drive out informal contracting.\textsuperscript{66} Instead, the expectation of adjustments from trade terms in particular transactions represent an informal contract enforced by the expectation of repeated dealings between the parties and the importance of reputation in dealings with future industry counterparties. These informal adjustments are ignored by the textualist arbitrators; the presence of formal contracting supports the operation of informal contracting.

Damage rules in the formal enforcement process are also set to encourage braiding of formal and informal contractual elements. Monetary damages are set high enough to make it unprofitable to breach a contract to take advantage of price volatility, but are generally “under-compensatory” in making no provision for recouping foregone profit through expectation damages.\textsuperscript{67} Formal penalties are then supplemented by private ones imposed by members of the community of transactors, resulting in what Bernstein calls “hybrid” (or in our terms “braided”) sanctions that remind wrongdoers of their obligations, allow the parties to transactions in distress to arrive, informally, at mutually acceptable remedies, but provide no inducement to manipulate the formal rules for selfish gain.\textsuperscript{68}

The innovations in contractual processes that are created by trade associations such as the ACSA and ATMI are protected by their formal removal from the supervision of generalist courts -- arbitration is mandatory. But regimes of this type are not inherently “private” in the sense of depending on complete insulation from public institutions. Rather, the trade associations themselves set the terms of engagement with public institutions. We see this in the cotton industry. To take advantage of the recent

\begin{itemize}
\item \textsuperscript{65} Id. 1775.
\item \textsuperscript{66} See note – supra.
\item \textsuperscript{67} There has been a great deal of price volatility in cotton particularly since 2011, rising to an all-time high in March 2011 ($2.27/lb) and coming down to around $1.00/lb today. According to bankers who deal in cotton, this price oscillation stems from concern over the health of the global economy. Cotton production and prices have been experiencing a steady uptrend into 2012, with production increasing by an estimated 6% year-over-year. Bankers suggest that insight into the future direction of cotton might best be assessed by looking at recent actions taken by China and India, the two countries who currently serve as the world’s largest producers and consumers of cotton. China is restocking its state reserves of cotton (suggesting higher prices). Meanwhile, India recently enacted a ban on cotton exports as a means of ensuring adequate domestic supply, which resulted in a knee-jerk market reaction, but this ban was replaced with a quota regime soon thereafter. See Interviews, supra note 55.
\item \textsuperscript{68} Bernstein, \textit{Cotton}, at 1783-84.
\end{itemize}
improvements in quality measurement instruments, the SMRs have incorporated reference to a grading system maintained by the Department of Agriculture, and the CSAB accordingly relies on the public grades as well. Moreover, when collective action problems thwart private coordination, contextualizing regimes of this type can also be created by statute and administered by public agencies.

Multilateral contextualizing regimes may also use common law courts to create precedents as a means of standardizing novel terms as they evolve. In contrast to the cotton industry’s walling off of generalist courts through mandatory expert arbitration, such standardization has been stimulated in construction contracting through the offices of key intermediaries such as the American Institute of Architects and the Associated General Contractors. One particularly instructive illustration is the response of these two trade organizations to the contracting challenges produced by the development of fast-track construction and the construction management model of design and construction contracting. Each of these two rival organizations produced during the 1970s a competing set of model forms that defined the contractual obligations and risks associated with the use of a construction manager. Versions of these forms have been widely adopted by contracting parties within the industry and subsequently have been


70 In “The Case of the Spoiled Cantaloupes,” the first and longest chapter in THE LEGAL PROCESS, Hart and Sacks describe, under the name of an “institutional settlement,” just such a contextualizing regime for the regulation of contracting in perishable agricultural commodities. The regime was initially created to respond to “the rejection evil.” When prices fell against them, buyers evaded their commitments by using minor nonconformities as pretexts to reject. Small shippers were typically unable to salvage rejected goods or to pursue litigation in distant locales. The dispersed and fragmented character of the industry impeded efforts by trade associations, over decades, to address the problem. In 1930 Congress passed the Perishable Agricultural Commodities Act (PACA), which makes it a violation of federal law for “any dealer to reject or fail to deliver … without reasonable cause any perishable agricultural commodity” in an interstate transaction. The Act instructs the Secretary of Agriculture to promulgate regulations to guide interpretation of contract terms allocating risks specific to the industry between buyers and sellers, to operate an arbitration process to adjudicate claims at reasonable costs, and to administer a licensing scheme to screen irresponsible buyers and sellers from the industry. In practice, contract terms were elaborated with the close cooperation of private trade associations. In this case, too, sanctions are set so as to facilitate braiding. See Henry M. Hart and Albert Sacks, THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW (William Eskridge and Philip Frickey ed.s 1994).


tested in both litigation before generalist courts and consensual arbitration where the parties select the presumably expert arbitrators.

Out of this process, a set of standardized “official” context-specific terms continues to evolve, that are easily observable by parties. Once standardization has been achieved, these forms typically specify arbitration as the means of dispute resolution, thereby allowing the parties to increase the experience of the party who will resolve disagreements over the terms of the standard forms. Importantly, these context-specific terms differ in important ways from the collective equivalent of state contingent contracting arising in the cotton industry. In the construction and construction management context, the transactions covered share general characteristics but differ significantly in ways peculiar to the particular project – unlike easily gradable cotton, every building is different and the terms apply to construction projects with very different scale and complexity. Because there is more individual idiosyncrasy associated with this activity, the multilateral contextualizing regime responds by emphasizing process rather than specific outcomes, thereby taking advantage of generally low uncertainty concerning the general transaction form, but retaining flexibility to address particular transactional features.

B. The Delaware Chancery: The Specialized Court as a Contextualizing Regime

Consider now a second circumstance, like the construction industry, where there are a large number of highly complex transactions that broadly share general features and therefore reflect a thick market for these features, but where each transaction has significant idiosyncratic features, and the common background conditions shift rapidly. Put differently, the market is thick only in general and uncertainty is high with respect to particular transactions. Here we examine how a contextualizing regime can develop that contemplates a central role for courts that provide a range of rules that apply generally, but allow particularized responses when the idiosyncrasies of a transaction are important.

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73 See e.g., Bolton Corp. v. T.A. Loving Co., 94 N.C. App. 392, 380 S.E. 2d 796 (N.C. Ct. of Appeals 1989). For a review of the testing of contract terms through arbitration, see Thomas J. Stipanowich, Beyond Arbitration: Innovation and Evolution in the United States Construction Industry, 31 Wake Forest L. Rev. 65 (1996). Scale also matters with respect to designating the forum that will adjudicate disputes concerning the performance of a contract. Analogous to form contracts, scale will support specialized forums that will have the experience and expertise to understand and apply the relevant context. Out of this testing process a set of standardized terms emerges that collectively reduces the risk of writing construction contracts. See Victor G. Trepasso, The Lawyer’s Use of AIA Construction Contracts, Prac. Law., May 1973 at 37.

74 By choosing arbitration, parties are able to select decision-makers who have expertise in the relevant industry. This is likely to result in more accurate outcomes and thus is especially important to parties to novel contractual forms. Christopher R. Drahozal & Keith N. Hylton, The Economics of Litigation and Arbitration: An Application to Franchise Contracts, 32 J. Legal Stud. 549, 558-61 (2003).
Like the construction industry case, the emphasis is on process rather than detailed rules.\footnote{See, e.g., Ronald J. Gilson & Jeffrey Gordon, \textit{Controlling Controlling Shareholders}, 152 U. Penn. L. Rev. 785, _-_ (2003)(describing Delaware Chancery Court preference for specifying processes that must applied in freezeout mergers rather than determining value of minority shares).}

Consider from the perspective of a contextualizing regime that responds to uncertainty and scale, how the legal rules governing the obligations of boards of directors in corporate acquisitions are applied. In this context, the uncertainty does not arise from the unforeseeable, unintended consequences of incorporation of new actors, products and production processes into a highly interdependent endeavor, as we examine in the next section that considers maintenance of safety of a food supply chain. Rather the uncertainty arises through the strategic interaction of actors intent on advancing their separate interests by manipulating open-ended standards in volatile environments that cannot be addressed by bright-line rules. Actors in such an environment can take collective, if only parallel rather than coordinated,\footnote{See Michael Klausner, \textit{Corporations, Corporate Law and Networks of Contracts}, 81 Va. L. Rev. 757 (1995).} actions to reduce the very uncertainty to which their own behavior contributes, with the aim of reducing the chance of judicial error in ex post application of vague standards like fiduciary duty. That collective action takes the form of reliance on expert judges with significant experience in the field: reliance, that is, on a specialized court of equity.\footnote{That the Delaware court is one of equity has an additional advantage: there are no juries in a court of equity. A lay jury as the trier of fact is a significant independent source of potential error in complex commercial cases.} The specialization of the court together with its equitable powers assure parties that, despite the impossibility of codifying particularized decision rules, judicial decisions will be taken with the fullest possible awareness of current and evolving understandings of good practice. Like the pattern with fast track contracting,\footnote{See text accompanying notes__ supra.} the focus is on process rather than on substantive facts. In turn, the scale necessary to reduce this judicial experience is achieved through parallel action in the choice of a state of incorporation.

One way to understand why a majority of U.S. public corporations choose Delaware as an incorporation state is that it serves to allocate to the Delaware Court of Chancery jurisdiction to resolve fiduciary duty issues.\footnote{In the United States, the internal affairs doctrine dictates that the law of the state of incorporation governs the corporation’s internal affairs, including the scope and application of fiduciary duties.} Delaware corporate law is enabling; that is, it gives corporations wide latitude to adopt specific rules governing their
behavior. In fact, however, Delaware corporations appear not to accept that invitation, preferring to write articles of incorporation and bylaws that largely address only formal issues such as meeting dates and the like. This is because a corporation’s circumstances and the evolution of the market for corporate control are too uncertain to specify ex ante conduct rules that will govern all of the corporation’s activities in the future.\footnote{See Robert Daines and Michael Klausner, \textit{Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs}, 17 J. L. Econ. & Org. 83 (2001).} The result of not specifying tailored rules is that serious issues are covered instead by a vague standard -- the director and officer’s overriding obligation of fiduciary duty -- that is applied by an expert court ex post.\footnote{See, e.g., Leo E. Strine Jr., \textit{If Corporate Action is Lawful, Presumably There Are Circumstances in Which it is Equitable to Take that Action: The Implicit Corollary to the Rule of Schnell v. Chris-Craft}, 60 Bus. Law. 877 (2005).} Thus, a corporation assures that the gaps in its articles of incorporation and bylaws as a result of uncertainty will be filled by a court with the expertise to reduce the likelihood of error in application. It does this by incorporating in a jurisdiction where parallel private action has produced sufficient scale of incorporations that its judges have developed the necessary experience and expertise.\footnote{Henry Hansmann, \textit{Corporation and Contract}, 8 Am. L. & Econ. Rev. 1 (2006), and Michael Klausner, \textit{ Corporations, Corporate Law and Networks of Contract}, 81 Va. L. Rev. 757 (1995), address the advantage of a specialized court of chancery in applying corporate law.}

The cost of an ex post recourse to context, like its benefit, goes up with uncertainty. Indeed, a crude generalization would be that an increase in uncertainty more than proportionately increases the cost of ex post recourse to context by generalist courts: The uncertainty erodes constraints on judicial misuse of context and augments the incentive for moral hazard-based litigation. But increasing the quality of the adjudicator can change the relationship between uncertainty and resort to context, reducing the probability of error and thus increasing the potential benefits and reducing the potential costs.\footnote{For example, in Lisa Bernstein’s description of the role of the International Cotton Advisory Committee in the cotton industry, industry specified context operates to avoid conflict in periods of low uncertainty; shared understandings and relational dealings reduce the number of arbitrations. See TAN supra. However, when uncertainty grows, so do the number of disputes as a party’s potential losses rise. This year, the unusual volatility in cotton prices has resulted in more defaults – reportedly some 10 percent of all commercial contracts – and more arbitration requests than any time since records have been kept starting in 2000.\footnote{Leslie Joseph, \textit{Cotton Contracts, Made to be Broken}, WSJ, Oct. 25, 2011, available at http://online.wsj.com/article/SB10001424052970204777904576651503911757210.html?KEYWORDS=cotton+industry. In this circumstance, the International Cotton Advisory Committee, the leading trade group and the designator of context, selects the arbitration panels. The use of industry expert arbitrators, who know the context, allows arbitrators to resort to context even as uncertainty increases, thus extending the range over which context can be usefully incorporated before uncertainty so increases the risk of mistake and moral hazard based litigation that resort to context makes things worse and the curve turns down.} Leslie Joseph, \textit{Cotton Contracts, Made to be Broken}, WSJ, Oct. 25, 2011, available at http://online.wsj.com/article/SB10001424052970204777904576651503911757210.html?KEYWORDS=cotton+industry. In this circumstance, the International Cotton Advisory Committee, the leading trade group and the designator of context, selects the arbitration panels. The use of industry expert arbitrators, who know the context, allows arbitrators to resort to context even as uncertainty increases, thus extending the range over which context can be usefully incorporated before uncertainty so increases the risk of mistake and moral hazard based litigation that resort to context makes things worse and the curve turns down.}
attempting to come to grips with the uncertainty caused by the litigants’ own behavior in planning transactions ex ante: The judges know the litigants’ context well enough to be able with high reliability to identify and sanction opportunistic behavior. Through this specialization, the Delaware Chancery Court itself becomes a type of contextualizing regime in which contractual innovation evolves.  

C. High Uncertainty and the Problem of Joint Risk Mitigation

Consider next the setting where markets remain thick, but uncertainty is now high. This domain has not been as prominent in the study of contracts as the thick markets, low uncertainty domains previously discussed, but for reasons we have discussed elsewhere it is rapidly increasing as a matter of practical concern. The problem here is not judicial ignorance of established trade understandings or practices. Under conditions of high uncertainty both generalists and insiders are unsure about what the correct approach to a particular problem might be. The aim of the regime is therefore not the elaboration and codification of established knowledge, but rather the organization of joint exploration of possibilities for joint problem solving. In this sense, the problem is the thick market analogue to bilateral contracting for innovation discussed in Part III, but with scale now making possible public facilitation of collaboration. This pattern is especially suited to efforts to mitigate exogenous risks that can only be addressed through exacting, common efforts by all market participants—where uncertainty is high, but, given the common challenge, idiosyncrasy is low. Put differently, in the bilateral thin market/high uncertainty case collaboration is driven by the potential joint gain to the contracting parties, while in the thick market/high uncertainty case the goal is to reduce risk common to all industry participants where failure by one party to take precautions creates negative externalities that affect everyone in the industry. The goal of the multilateral regime is to induce members to form bilateral arrangements that minimize the risk of general harm. As in case of consumer protection, regulation in the sense of the distinction of acceptable

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84 This account of the Delaware Chancery Court as a contextualizing regime does not address a destabilizing element that is peculiar to corporate law. Much corporate law fiduciary litigation is brought by plaintiffs’ lawyers representing shareholders generally, rather than reflecting disagreements between corporations. Because Plaintiffs’ lawyers can bring such cases in states other than Delaware even though Delaware corporate law and precedent applies, the Delaware Chancery Court can be avoided in cases where it is particularly important. Early empirical studies suggest that this phenomenon may be significant. See John Armour, Bernard Black & Brian Cheffins, Is Delaware Losing its Cases, working paper, available at http://ssrn.com/abstract=15478404 (2012). We now may be observing the early stages of a round of parallel activity to sustain a working contextualizing regime through the adoption of amendments to the corporation’s charter that require fiduciary litigation to be tried in the Court of Chancery. See Joseph Grundfest, The History and Evolution of Intra-Corporate Forum Selection Clauses: An Empirical Analysis, forthcoming Del. J. Corp. L (2012), available at http://ssrn.com/abstract= 1578404.  
85 Gilson, Sabel & Scott, Text and Context, supra note --- at 43-45.
from unacceptable practices goes hand in hand with the determination of the conditions for contracting. 86

Food safety illustrates the class of risk that induces formation of this type of contextualizing regime. As the supply chains for foodstuffs lengthen and ramify, pathogens can enter in innumerable and rapidly changing ways. Undetected, food contamination is rapidly propagated by processing (through mixing of foodstuffs and secondary contamination of equipment), and then disseminated through extensive distribution networks. All actors in the food supply chain—growers, processors, distributors and retailers—have an interest in protecting their market by developing a regime of practices that reduce the chances for contamination and limit its effect. Since the failure of any actor to adhere scrupulously to the good practices can undo the efforts of all the others, adhesion to the requirements of the regime will be a precondition to contracting in the market – the externality imposed by a single party will be internalized through collective action. Government, as the protector of public health, has complementary interests. So, as in the case of contextualizing regimes addressing judicial ignorance as in the cotton industry, collective responses to high-uncertainty multilateral regimes that seek to mitigate risks rather than maximize gains can be formed either by public or private action, depending on the relevant configuration of collective action problems.

The California Leafy Greens Products Handler Marketing Agreement is an exemplar of a (initially) private regime of this type. 87 Leafy greens became a salient concern after highly publicized disease outbreaks from tainted spinach and lettuce in 2006. 88 Leafy greens pose particular risks because they are often eaten raw (cooking kills most micro pathogens) and because these vegetables, produced in larger scale operations than in the past, are often sold in “salad mixes” that mingle pieces picked in different locations, thus multiplying the possibilities for cross contamination. Federal food regulation has focused traditionally on post-farm industrial processing 89 and was ill-prepared to address the

86 Sabel & Simon, supra note ----.
89 See e.g., statutes prohibiting the sale of food that is “injurious to health,” 47 21 U.S.C. §§ 342(a)(1), 601(m)(4) (2006) or “unsound, unhealthful, unwholesome, or otherwise unfit,” Id. §§ 601(m)(3),
numerous “critical control points” on the farm by which pathogens could enter this food chain.

In 2007, after the outbreaks of illness, the FDA, partly for this reason, refused to promulgate rules for processing of fruits and vegetables, and encouraged and assisted state and private efforts in this direction instead. Acting through a trade association (the Western Growers Association, California), growers petitioned the state to recognize the California Leafy Greens Product Handler Marketing Agreement (LGMA) under the authority of a state marketing act that confers antitrust immunity on organizations of agricultural producers for various purposes. There are currently about 120 members, accounting for about 99 percent of California leafy green production (which in turn accounts for about 75 percent of national production).

The LGMA designates safety standards or “best practices” for the farms from which member handlers buy. These standards, drawing on methods developed in food-safety and related domains in recent decades, requires growers and processors to prepare plans identifying hazardous control points, detailing the measures undertaken to mitigate the hazard, and reporting the results of tests verifying the efficacy of these measures. Inspectors from the California Department of Food and Agriculture monitor compliance. The LGMA additionally requires each handler to maintain records that permit identification of the farm and field from which all components of its products originate in

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92 LGMA is governed by a thirteen-member board. Board members are chosen by the state Secretary of Agriculture from nominations by the membership. Twelve must be representatives of the handler-members of the organization; the thirteenth is supposed to represent “the public.” California Marketing Agreement, supra note --, art. III.

case contamination is later discovered.\textsuperscript{94} The handler members commit to deal only with farms that comply with the standards. As in the case of the low-uncertainty contextualizing regimes like the cotton industry trade associations, the ultimate sanction for noncompliance with formal procedures is suspension or withdrawal of a recalcitrant member’s right to use a service mark, and thus temporary or permanent exclusion from the industry is enforced informally.\textsuperscript{95}

The federal Food Safety Modernization Act passed at the end of 2010 affirms and strengthens the tendencies reflected in the LGMA.\textsuperscript{96} It mandates that each food processing facility develop, implement, monitor, validate, and update a plan for hazard control (now called “Hazard Analysis and Preventive Control”).\textsuperscript{97} The Act provides for the FDA to set standards for fruits and vegetables, and it seems clear that such standards will be developed in a way that relies on organizations like LGMA to continue and advance the joint exploration of risks and possible mitigations on which this type of regime depends. In anticipation of the Act, the FDA and the Department of Agriculture jointly announced in the fall of 2010 a Produce Safety Alliance based at Cornell University that will include federal and state agencies, universities, and trade associations. The Alliance will develop standards based in substantial part on existing “voluntary and contractual produce standards” and will facilitate information exchange among members.\textsuperscript{98}

As in our previous examples, the success of the LGMA and the durability of the innovation in joint collaboration between private actors and public entities to reduce food safety risks requires a reassessment of the role of generalist courts and the extent to which they can successfully apply traditional common law contract principles to the unique problems that will arise with disputes under this regime. A properly functioning

\textsuperscript{94} Id.

\textsuperscript{95} California Leafy Greens Handler Marketing Agreement, (Jan. 27, 2007) available at www.caff.org/policy/documents/lgph_agreement.pdf. There is a parallel regime in Arizona. There are other private standard setting and certification regimes, such as GlobalGAP (for “good agricultural practices”), an organization formed by major European retailers; and a private international organization, the Global Food Safety Initiative assesses certification regimes in accordance with a set of meta-standards. Once a certification regime has itself been certified at this level, buyers who have previously decided to accept any of the other approved certifications should be willing to accept it. See generally Joanne Scott, The SPS Agreement (200).


\textsuperscript{97} Id.

\textsuperscript{98} U.S. Food and Drug Administration, “FDA, USDA, Cornell University Announce Produce Safety Alliance,”(Nov.4,2010).Available at www.fda.gov/NewsEvents/PressAnnouncements/ucm232503.htm.
contextualizing regime, we argue, assigns to administrative institutions the responsibility for establishing the baseline of standards of behavior and processes, and assigns to courts the more limited role of identifying significant deviations from that baseline in particular cases.

V. CONCLUSION: MAPPING UNCERTAINTY AND SCALE ON CONTEXTUALIZING REGIMES

Contractual innovation is the third step in a dynamic process. Exogenous change in the business environment evokes substantive innovation in business practices as private actors adjust existing structure or procedures to make them efficient under the changed circumstances. Innovations in contract form then arise to stabilize the new arrangements. It is only at this point that generalist courts enter the picture, when they are asked to resolve disputes and standardize the workings of the contractual innovation. Their task is to adapt the application of contract law to the context presented by the contractual innovation.

As we have seen, contracting parties increasingly create contextualizing regimes to delineate the context for understanding the relationship into which the parties have entered. These regimes can take different forms depending centrally, we have argued, on the level of uncertainty in the new circumstances and the scale associated with the activities affected. In thin market conditions, regimes range from bespoke contract design to bilateral collaborative agreements that are interpreted by generalist courts. In thick markets, collective actions can stimulate the formation of trade associations and arbitration, expert courts, and public-private partnerships between trade associations and government regulatory agencies. The Figure that follows our conclusion summarizes the relationship between levels of uncertainty and scale and how these combinations map on the characteristics of the matching contextualizing regime.

This mapping between uncertainty, scale and the form of contextualizing regime frames the problem confronting generalist courts in assessing how they can facilitate contractual innovation rather than serve as a friction. The role of generalist courts will differ across the regions of the taxonomy of contractual innovation, but in all will be more restricted than the standard account under which the court is to fit innovative efforts into the traditional common law of contract. Much of the contextualization will already have been undertaken by other institutions, including, most importantly, by the parties themselves.

Thus, the task for generalist courts is to recognize that contextualizing regimes are the institutions through which common law courts first encounter contractual innovation,
and the higher the uncertainty associated with the regime, the more restricted is the courts’ role. These regimes, including the constraints parties impose on courts in bilateral contracts like preliminary agreements, reflect the methods of mutual cooperation the parties have chosen to provide the context that should govern their relationship. If a central goal of contract adjudication is to enforce the context the parties have provided, then improvements in the relation between courts and contextualizing regimes – that is, the courts’ willingness to defer to the context the parties give them – will put the law more directly in the service of innovation. To do that, both judges and contract theorists will have to attend to the unique characteristics of novel contract forms as they are influenced by the key variables of uncertainty and scale. Thus, as we suggested in the Introduction, courts must practice the passive virtues in responding to contract innovation driven by changes in the contracting parties’ business environment; the parties, not the courts, drive innovation. A court’s approach to an innovative contract can support or undermine the innovation – the court can be a friction or a facilitator.
Figure: Contextualizing Regimes as a Function of Scale and Uncertainty

<table>
<thead>
<tr>
<th>Scale</th>
<th>Uncertainty Low</th>
<th>Uncertainty High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thick Market</td>
<td>Trade associations develop context through form documents with common substantive terms -- private adjudication</td>
<td>Industry organization in collaboration with government agency</td>
</tr>
<tr>
<td>Common Transactions—Many Participants</td>
<td><strong>Cotton market</strong></td>
<td><strong>Leafy greens; Food safety</strong></td>
</tr>
<tr>
<td>Thick Market of Common Transactions with Important Idiosyncratic Aspects</td>
<td>Trade associations develop context through form documents with common process-private or public adjudication</td>
<td>Expert Courts – application of standards</td>
</tr>
<tr>
<td>Thin Market – Few Participants</td>
<td>State contingent bilateral contracts – generalist courts</td>
<td>Bilateral contract with braiding of formal and informal elements</td>
</tr>
</tbody>
</table>