group dominance raises difficult policy issues, these are different questions from the kind that are stimulated by the vague rules that interest group competition produces in the Article 2 context.

114. See Lisa Bernstein, *The Questionable Empirical Basis for Article 2's Incorporation Strategy: A Preliminary Inquiry,* 66 U. Chi. L. Rev. 710 (1999). But see Jody S. Kraus and Steven D. Walt, *In Defense of the Incorporation Strategy,* this volume (arguing that Bernstein's empirical data show at most the dearth of uniform, trade-wide customs in the early part of the twentieth century but do not exclude the possibility that relevant trade practices do, in fact, exist in particular subgroups today).

115. The repetitious use of express terms generates two special problems: *rote use* and *encrustation.* Each of these is a feature of what is commonly designated as "boilerplate." Rote usage may develop as a kind of "contractual overkill" in which terms are used by rote so consistently that they are robbed of their meaning. For example, the recitation of the phrase "signed and sealed" continues to be prevalent in contracts that are already enforceable and where the "seal" has no legal effect. Nonetheless, rote terms such as these are repeated because the parties have no incentive to eliminate a term that is seen as costless to include, especially if they thereby incur a risk, albeit a small one, of jeopardizing the formally understood meaning of their agreement. Needless repetition pf such phrases imposes a cost on those parties who actually seek to use the formal term operationally only to discover that its meaning has been emptied by prior, needless repetition. A related problem with the maintenance of the stock of express, formal terms is encrustation, or the overlaying of legal jargon to the point where the intelligibility of language deteriorates. This sort of jargon-laded boilerplate robs words and phrases of their communicative properties, making them less reliable as true signals of what the parties really intended. See Goetz and Scott, *The Limits of Expanded Choice,* supra n. 7 at 288–9.

6

In Defense of the Incorporation Strategy

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I. Introduction

Contract law must provide rules for interpreting the meaning of express terms and default rules for filling contractual gaps. Article 2 of the Uniform Commercial Code provides the same response to both demands: It incorporates the norms of commercial practice.[1] This "incorporation strategy" has recently come under attack. Although some question the incorporation strategy for gap-filling, recent scholarship criticizes the incorporation strategy for interpretation as well.[2] Critics charge that the expected rate of interpretive error under an incorporationist interpretive regime is so excessive that almost any plain-meaning regime would be preferable.

The attack on the incorporation strategy for interpretation is fundamentally flawed. The best interpretive regime is one that, all else equal, minimizes the sum of interpretive error costs and the costs of specifying contract terms.[3] Critics of the incorporation strategy have focused exclusively on the former and completely ignored the latter. Yet the chief virtue of the incorporation strategy for interpretation is its promise to yield specification costs well below that of plain-meaning regimes. Even if plain-meaning regimes have lower interpretive error costs, the incorporation strategy is superior if its lower specification costs outweigh its higher interpretive error costs. Moreover, most critics treat their objections to Article 2 as objections to the incorporation strategy generally. But Article 2 is just one possible institutional variant of the incorporation strategy. All of the sources of interpretive error critics identify can be substantially reduced, if not avoided, by making feasible alterations to Article 2 that nonetheless preserve its incorporationist character.

This chapter defends the incorporation strategy as a method of contractual interpretation. Part II analyzes the debate between incorporation and plain-meaning regimes. After explaining the comparative and empirical nature of this debate, we present the intuitive empirical case for believing that incorporationist interpretive regimes will yield significantly lower specification costs

than plain-meaning regimes. Part III considers recent objections to the incorporation strategy for interpretation. These objections identify several potential sources of interpretive error and offer both a priori and empirical arguments to suggest these errors are likely to be extensive in any incorporation regime. We argue that these criticisms overstate the probable extent of interpretive error under Article 2, and that all of the kinds of interpretive errors identified can be significantly reduced by feasible changes to Article 2. Part IV describes the salient features in Article 2 that implement the incorporation strategy and presents possible amendments to reduce the extent of the interpretive errors identified in Part III. Given the distinction between the incorporation strategy and its implementation, Article 2 can accommodate these amendments without abandoning the incorporation strategy. Part V concludes by summarizing the argument for favoring the incorporation strategy for interpreting contracts among a heterogeneous group of contractors: Because the lower contract specification costs of a carefully designed incorporation regime will outweigh its higher interpretive error costs, it is likely to have a lower sum of specification and interpretive error costs than a plain-meaning regime.

II. The Structure of the Incorporation Debate

The contemporary debate about the role of commercial norms in contract interpretation typically pits the incorporation strategy against a plain-meaning regime. Although the notion of plain-meaning at work is seldom clarified, for our purposes we need only roughly describe it. We understand "plain meaning" to be rule- or convention-based sentence meaning independent of the particular context of sentence use. Plain meaning is literal sentence meaning.[4] We also count as plain-meaning approaches ones that exclude commercial custom, even if they rely on other contextual evidence to determine meaning. This extension of "plain meaning" preserves the contrast between the incorporation strategy and plain-meaning regimes. It is of course another matter whether literal sentence meaning exists or is useful in resolving the range of interpretive disputes litigated. In the course of defending the incorporation strategy against plain-meaning regimes, we take into account the possibility that the plain meaning of terms sometimes will not be clear, and in some cases may not exist. We do not, however, take a position on debates over the inherent limitations of plain-meaning regimes.

We should note at the outset, however, that the contest between incorporationist and plain-meaning regimes arises most directly when contractual disputes pit an interpretation based on an ideally precise and unique commercial norm against an interpretation based on an equally precise and unique plain meaning. In such cases, the different results under each interpretive strategy are clear. But in many cases, the commercial norm and "plain-meaning" candidates will be somewhat vague and ambiguous. In these cases, even the proper

application of either strategy will serve at best to limit the range of interpretive disagreement. Neither strategy will be useful in choosing among the possible interpretations within the remaining range of interpretations they identify. Some other interpretative strategy would be necessary to resolve disputes within that range. Similarly, in some extreme cases, there will be no relevant commercial norms or plain meaning to apply. Obviously, in these cases the proper application of either strategy will not yield an interpretation. In one sense, then, the debate between incorporationist and plain-meaning regimes is limited to the domain of interpretive questions susceptible, at least in part, to proper resolution by both approaches.

However, the merits of both approaches turn not only on the likelihood and seriousness of the interpretive errors that result when each is applied to resolve a dispute that at least in principle it can be used properly to resolve. The merits also turn on the likelihood and seriousness of the interpretive errors that result when each approach is applied to resolve a dispute that even in principle it cannot be used properly to resolve. Where commercial norms or plain meaning are indeterminate or do not bear on the interpretive issue in question, neither approach can select among possible meanings. Each approach will yield an expected aggregate cost of interpretive error both in cases where commercial norms or plain meaning are determinate and relevant and in cases where they are not. The approach that has the lower cost, all else equal, is superior. Of course, even if analysis reveals one regime to be superior to the other on these grounds, a third approach is necssary for resolving interpretive questions to which that strategy cannot be properly applied, such as when commercial norms or plain meaning are not available. We set this question aside, however, to focus exclusively on the relative merits of the incorporation and plain-meaning interpretive strategies.

Although the contemporary incorporation/plain-meaning debate arises in response to Llewellyn's explicit adoption of the incorporation strategy in Article 2, it has precisely the same structure as the classic and familiar debate between the subjective and objective theories of intent in the common law of contract. The same considerations that easily vindicate the objective theory of intent in contract law structure the debate between plain-meaning and incorporation interpretive regimes in both contract and sales law. However, because plain-meaning and incorporation regimes are both versions of objective theories of intent, these considerations do not so easily settle this debate.

The first lesson taught in first-year contracts is that contractual intent is objective rather than subjective. Even though one of the parties can prove that he or she understood the contractual term "dog" to mean cat, courts will interpret the term "dog" to mean dog. The lesson seems counterintuitive. The law of contract is designed to vindicate parties' intent, yet one party's subjective understanding of the meaning of the terms of the contract is, by itself, irrelevant to a court's interpretation of those terms.[5] The counterintuition rests

on the erroneous presumption that subjective intent is static rather than dynamic. The party who assigns an idiosyncratic meaning to a contractual term might be surprised the first time he learns his subjective view is irrelevant to its judicial interpretation. But he will not be surprised again. The next time he enters into an agreement, the party will be careful to use terms according to the interpretation a court is likely to give them. Thus, if courts refuse to interpret terms according to the parties' subjective intent, parties will align their subject intent with the "objective" intent courts enforce. Contractors' choice of terms and the subjective meaning contractors assign to them are therefore a function of the contractors' expectation of how courts will interpret contractual terms. Contractual behavior can be explained and predicted only by a dynamic rather than static model.

The purpose of a theory of contractual interpretation therefore is not merely to select an interpretive rule that is most likely to reflect the parties' subjective intent. This goal can be secured by any interpretive rule that allows parties to predict the likely interpretation of their contractual terms with reasonable certainty. When there are equally predictable interpretive rules, the best rule allows the parties to secure their desired interpretation at the lowest cost. Consider an interpretive regime, for example, that enforced key contractual terms only if they appeared on an extensive menu of judicially constructed terms of art. A court would find an agreement that did not use these terms to specify its key provisions too indefinite and therefore unenforceable. Such a regime would provide an extremely high degree of predictability of judicial interpretation of contract terms. But this predictability would come at a price. Parties would be forced to choose between creating a legally unenforceable agreement or incurring the costs of learning and using the terms on the judicial menu, which might nonetheless vary from the terms they most prefer in their contract. The price of predictability, therefore, is the inefficiency of the resulting contract: Whenever the terms of a contract are at variance with the parties' most preferred terms, the expected joint value of the contract at the time of formation will be suboptimal.[6]

Thus, a perfect interpretive rule not only enables parties to predict a court's interpretation of contractual terms with complete certainty, but also allows parties to specify their desired contract at no cost. Real-world interpretive regimes therefore face an unavoidable trade-off between maximizing the predictability of contractual interpretation and maximizing the ability of the parties to specify the most efficient terms for their contracts. To maximize the ability of the parties to specify their most preferred terms, the parties' costs of specifying their most preferred terms must be minimized. Thus, all else equal, the optimal regime minimizes the sum of interpretive error and specification costs.[7] The costs of interpretive error consist of the losses due to both the prospect and actual incidence of interpretive error. The prospect of interpretive error leads to suboptimal reliance losses. These losses consist of the foregone

benefits of the increased reliance that would be efficient in a regime of interpretive certainty, and the direct and opportunity costs of taking affirmative precautions to hedge against the prospect of interpretive error. The actual, rather than prospective, incidence of interpretive error leads to detrimental reliance losses. Specification costs are the costs parties incur in specifying their most preferred terms, such as learning and selecting from a judicially chosen menu of express terms.[8]

The justification for the objective theory of contractual intent is based not merely on the claim that it yields a high degree of predictability of contractual interpretation and thus a low prospect of interpretive error. It also turns on the low specification costs produced by the objective theory. The proposition that the objective theory will yield a high degree of interpretive predictability is based on two claims. The first is that most terms have a relatively clear, objective "plain" meaning, which consists of their most common interpretation. Because most people know the common interpretation of most terms, both contractors and judges ordinarily will be able to determine accurately objective meaning, and contractors will be able to predict accurately the likely interpretation of their contractual terms. The second claim is that the costs of learning a term's plain meaning will be lower on average than the costs of learning any alternative meaning these terms might be given. This second claim also supports the proposition that the objective theory of intent will yield low specification costs. The lower the costs of learning the judicially recognized meaning of terms, the lower contractors' specification costs. Further, under the objective theory, parties in principle will always be able to include any term they prefer in their contract. Unlike the hypothetical interpretive regime that limits parties to a finite list of judicially recognized key contractual terms, the objective theory offers contractors all the English language, which presumably provides an array of terms, each with plain meanings, sufficient to specify virtually any term parties might prefer.

At bottom, the case for the objective theory of intent is comparative. The objective theory of intent will yield an equilibrium producing a sum of interpretive error and specification costs. The choice between the objective theory and any competing theory is decided by determining which theory is expected to yield the equilibrium producing the lower sum of interpretive error and specification costs. If most English language terms have a clear, common, "plain" meaning known to most contractors and judges, or learned at low cost, these costs will not be great. Whether an alternative regime can produce an even lower sum of these costs remains an open empirical question.

The case for the objective theory of intent is traditionally made by comparing it to a purely subjective theory of intent. The objective theory of intent is defended on the ground that it yields an equilibrium with lower total interpretive error and specification costs than a purely subjective theory of intent. The case is easily convincing. Contractors and courts cannot determine or

verify purely subjective intent. Because the interpretive error rate by courts and contractors under a subjective intent regime would be high, the total interpretive error costs would be high. Contract specification costs would also be high because parties would have great difficulty specifying terms with meanings that courts would reliably enforce. In contrast, if terms have an objective and verifiable plain meaning, the objective intent regime will clearly lead to an equilibrium with much lower aggregate interpretive error and specification costs. The move from subjective to objective intent in first-year contracts takes a class or two at most.

But the choice between objective and purely subjective theories of intent presents a false dichotomy. Most terms have multiple meanings that can be described along continua of objectivity and verifiability. If many terms have multiple objective meanings, the issue is not whether objective theories of interpretation should be preferred over subjective theories. Rather, it is how we should choose among various possible objective theories. The main objective competitors to plain-meaning regimes are incorporation regimes. Incorporation regimes, like plain-meaning regimes, are objective because they interpret contractual terms in light of objective and verifiable commercial practices. Thus, unlike the debate between objective and purely subjective theories of intent, the intramural debate between plain-meaning and incorporation regimes is far more difficult to assess. Both regimes constitute objective theories of interpretation and both require trade-offs between reductions in interpretive error costs and reductions in specification costs. The debate is a contest between competing empirical intuitions.

Intuitively, plain-meaning regimes are likely to lead to lower interpretive error costs than the incorporation regimes. Plain-meaning regimes posit a fairly clear set of non-domain-specific, common meanings associated with most terms, whereas incorporation regimes posit a set of fairly clear but domain-specific meanings. Even assuming both the generic "plain" meaning and the more specialized domain-specific meanings are equally clear, we would expect a higher rate of interpretive error under incorporation regimes because they require judges (and contractors) to choose among the various possible meanings of terms. Under a plain-meaning regime, the judicially recognized meaning of every term is unique. The only possible source of interpretive error is a misinterpretation of the plain meaning by contractors or judges. Under an incorporation regime, however, contractors and judges can mistakenly identify the domain for which a term's meaning is determined, in addition to misinterpreting the meaning of the term within that domain. Thus, there is only one opportunity for interpretive error under plain-meaning regimes. Incorporation regimes, however, present a second opportunity for interpretive error in addition to the same opportunity presented under plain-meaning regimes. Because the two types of mistakes are not correlated, incorporation regimes would be expected to have a higher rate of interpretive error than plain-meaning regimes, all else being equal.

But the comparative strength of the incorporation strategy is its potential for producing lower specification costs than the plain-meaning rule. The key presumption of the incorporation strategy is that contractors naturally and costlessly use terms that have domain-specific meanings. These terms presumably have evolved to address the particularized needs and expectations of contractors within a given domain. Their efficiency is analogous to the efficiency of terms of art within academic and technical disciplines. Terms of art allow participants familiar with a particular discipline effectively to communicate a complex thought with the ease of one specially defined word or phrase that is widely understood within the discipline.[9] Similarly, it would sometimes be cost-ineffective for some contractors to restate their understanding of all the dimensions of their contractual agreement using the plain meaning of terms. Indeed, some specialized or context-specific terms carry with them an array of implications that might be difficult even to bring to mind, let alone commit to paper. Nonetheless, just as the full connotations of even the plain meaning of terms can be specified by English speakers only when presented with a particular contextualized application, the implications of specialized contractual terms will be clear to the contractors, and every other participant in their trade or industry, only when particular contingencies arise in their relationship. They will nonetheless "know it when they see it."[10]

If courts interpret contractual terms by attempting to determine whether the parties intended to invoke their plain or domain-specific meaning, the specification costs for parties might be lower than under a plain-meaning regime. Under an incorporation regime, contractors can use the terms that express their intent most effectively at the lowest cost. Contractors will choose a less efficient term over a more efficient term whenever the additional cost of specifying the most efficient term exceeds the gains from using the more efficient term instead of the less efficient term. The incorporation strategy can save contractors specification costs by allowing them to use domain-specific meanings customized to suit the needs and expectations of their contracting context. A plain-meaning regime imposes on parties the additional costs of either translating the understandings already carried by the domain-specific meanings of available specialized terms into an equivalent statement using the plain meaning of terms, or settling on a less efficient contractual term that can be specified at a lower cost.

Moreover, the plain-meaning rule requires contractors to make sure they are not mistakenly relying on a domain-specific meaning rather than a plain meaning. In a complex contractual setting, it may prove extremely costly, and perhaps impossible, to identify all the unwritten interpretations of contractual terms that the contractors naturally and unconsciously presume to be mutually understood. Even when contractors knowingly operate under a plain-meaning regime, they will sometimes fail to realize that their understanding of the meaning of a term, particularly commonly used industry terms, will nonetheless not be judicially recognized. To be sure, such mistakes might be less

frequent over time. But as long as domain-specific meanings exist, such mistakes are unlikely to disappear entirely.

Thus, the contest between plain-meaning and incorporation regimes turns on competing empirical hunches. Which is larger, the interpretive error costs saved under a plain-meaning regime or the specification costs saved under an incorporation regime? Any comparative analysis of plain-meaning and incorporation regimes that focuses exclusively on relative interpretive error costs is seriously incomplete. It must also take into account relative specification costs. The case for the incorporation strategy rests on its claim to significantly lower specification costs than plain-meaning regimes.

In Part III, however, we set aside this comparative question to consider the likelihood of interpretive error under incorporation regimes. The criticisms that allege extensive interpretive error under the incorporation strategy, we argue, are overdrawn and one-sided. They either exaggerate the likely extent of interpretive error under incorporation regimes or fail to acknowledge that the sources of interpretive error they identify apply equally to plain-meaning regimes.

III. The Critique of the Incorporation Strategy

Three different sorts of charges have been made against the incorporation interpretive strategy and in favor of a plain-meaning regime. Although often not distinguished from each other, each charge asserts the likelihood of a particular form of interpretive error. For ease of reference, we refer to the charges respectively as the "*existence,*" "*informal norms,*" and "*encrustation*" critiques. The existence and informal norms critiques are supported by both a priori reasoning and empirical studies. For each critique, we describe the kind of interpretive error it identifies. Our objective is to isolate the sources of these errors in order to clarify how they might be reduced by the amendments to Article 2 that we suggest in Part IV or by an alternative incorporation regime. Where appropriate, we also argue that these critiques either exaggerate the likely extent of interpretive error under an incorporation regime or fail to acknowledge that similar errors are likely to be equally extensive under a plain-meaning regime.

A. The Existence Critique

The existence critique argues, on both an empirical and a priori basis, that commercial practices might be less extensive and less clear than proponents of the incorporation strategy have supposed.[11] The extreme form of this critique suggests that commercial practices suitable for incorporation might not even exist. Were this the case, the incorporation strategy at best would be a useless interpretive strategy. Attempts to employ the strategy would end in a vain

attempt to identify relevant commercial practices. At worst, fact finders might wrongly believe that a commercial practice exists and thus mistakenly interpret a contract term in light of the nonexistent commercial norm. But the extreme critique must overcome an extremely strong pretheoretical empirical presumption that widespread, identifiable, and effective commercial practices do exist. The near-universal insistence by merchants of all kinds that their conduct is governed, in large measure and important respects, by relatively clear commercial norms justifies a demand that evidence be presented for their nonexistence. To date, only one empirical study has been presented in support of the existence critique.

Lisa Bernstein has recently offered a case study to support the claim that "the pervasive existence of usages of trade and commercial standards, whose geographic reach is coextensive with the reach of the relevant trade, is a legal fiction rather than a merchant reality."[12] Her study examines the debates surrounding merchant industry efforts to codify commercial customs in the hay, grain and feed, textile, and silk industries near the turn of the century. She argues that these debates, as well as interview evidence and testimony of merchant associations when Article 2 was proposed, reveal widespread disagreement among merchants regarding the commercial customs in their trade. Specifically, Bernstein claims her evidence "casts doubt on the systematic existence of industry-wide unwritten customs that are generally known, geographically coextensive with the scope of trade, and implicitly assented to be market transactors."[13] Bernstein uses her evidence to argue primarily against the existence of what she calls "strong form Hayekian customs whose existence is assumed by the Code."[14] Although Bernstein allows that "some industry-wide usages of trade do exist, and highly local customs might have existed,"[15] she claims that her evidence nonetheless "strongly suggests that the types of customs that exist, even in these rather well-defined merchant communities, do not amount to anything close to the all-pervasive sets of implicit gap-filling provisions and dictionary-type interpretive guides assumed by the Code."[16] Instead, Bernstein claims that commercial customs that do exist at best constitute "weak-form customs" that "play an important role in the development of commercial relationships,"[17] but fall far short of the kind of customs required by the incorporation strategy.

Bernstein's study constitutes a worthwhile preliminary effort to uncover the nature and extent of commercial custom. But it does not make a convincing case against the existence of the kind of commercial practice posited by the incorporation strategy. The most important limitation of Bernstein's study is that, even by its own lights, it demonstrates at most that there were few, if any, uniform national customs in many commercial industries around the turn of the century. If the incorporation strategy required such customs to exist, Bernstein's study might provide reason to doubt the strategy's viability at least at the time Article 2 was created. But neither the incorporation strategy in general nor

Article 2 in particular requires that uniform industrywide commercial practices exist. Indeed, the commentary to Article 2 itself states that usage of trade should be used to interpret the language in contracts so that it means "what it may fairly be expected to mean to parties involved in the particular commercial transaction *in a given locality* or in a given vocation or trade."[18] If Bernstein's study is correct, the incorporation strategy at the turn of the century would have had limited value in interpreting contracts between merchants in localities with different customs. If local customs existed, however, the incorporation strategy would have been a viable strategy for interpreting local contracts.

But the evidence Bernstein presents to demonstrate the nonexistence of nationally uniform customs provides equally compelling support for the existence of precisely the extensive and robust local customs the incorporation strategy anticipates. Indeed, most of Bernstein's evidence of lack of nationally uniform customs is based on industry members' assertion that different customs existed in different locales.[19] The very codification efforts giving rise to the debates Bernstein examines presuppose the existence of extensive and important local customs. The objective of the codification efforts typically was not to create trade rules out of whole cloth but to *unify* industry customs and thereby eliminate preexisting, widespread differences between local customs.

As a critique of the incorporation strategy, Bernstein's study has at least two other weaknesses. First, the dearth of uniform, tradewide customs in the early part of the century provides poor evidence that such customs do not exist now.[20] Changes in the size and structure of the national economy make extrapolation to the present unsafe. By the end of the nineteenth century, extensive changes in transportation produced a national market in agriculture and manufacturing.[21] The national market expanded significantly throughout the first half of the twentieth century, as shown by indexes such as freight-tonnage and freight-mileage shipped by commercial carriers.[22] Merchants' desire at the turn of the century to replace local with uniform custom is completely consistent with uniform customs now existing. As Bernstein repeatedly acknowledges, the express purpose of the codification efforts she studied was to replace local custom with uniform industry custom.[23] In order to better compete in a geographically larger market, merchants likely felt they could not wait for a nationally uniform customary practice to evolve at the rate at which local customs had evolved. An expanding national market is likely to increase the desire for a single industry custom. Codification efforts at the turn of the century suggest only that commercial custom lagged behind changes in patterns of distribution. They do not show that nationally uniform custom does not exist today. Thus, earlier trade practices are bad indicators of contemporary industry practices bearing on custom.

Second, although Bernstein claims the evidence she considers demonstrates that industrywide customs did not exist, much of the evidence at most establishes that some customs were not ideally precise. For example, Bernstein

reports that members of the National Hay Association disagreed over whether the term "carload" meant ten tons or twelve tons.[24] Such evidence at most establishes that customary understanding was not always sufficiently precise to resolve any possible interpretive dispute. Assuming the debates accurately reflect the lack of consensus in the industry over the definition of a "carload," custom could not be invoked to adjudicate a dispute between merchants over whether a contract calling for a carload of hay to be delivered would be satisfied by a ten ton rather than twelve ton shipment of hay. But on this evidence, it is plausible to suppose that custom does establish that an eight ton shipment would not constitute a "carload" and that a twelve ton shipment would constitute a "carload." Thus, evidence of imprecise customs is not evidence of no custom at all. The incorporation strategy is useful even if it incorporates imprecise customs, so long as those customs serve at least to define a range of reasonable and unreasonable disagreement over the meaning of contract terms.[25] Bernstein's empirical case against the existence of commercial practice is unconvincing.

However, the existence critique, in either its empirical or a priori form, can be stated more modestly. Richard Craswell offers an a priori version of the modest critique.[26] Craswell's target is the view that the incorporation strategy is justified because it "enable[s] judges or legislators to adopt efficient [or fair] rules of law even if they lack the economic [or ethical] expertise to design efficient [or fair] rules on their own. As long as judges or legislators can identify those communities whose customs are likely to be efficient [or fair] (the argument goes), they can simply adopt legal rules that mimic those communities' customs, without having to analyze directly the efficiency [or fairness] of the resulting rules."[27] Craswell believes that this justification implicitly presumes that customs take the form of bright-line rules, which require little if any exercise of individual judgment to identify and apply. But Craswell argues that customs by their nature can be identified and applied only by the case-specific exercise of individual judgment. If courts must engage in individual judgments of their own, or defer to individual judgments of others, in order to identify and apply a custom, then, he concludes, the incorporation strategy cannot be justified on the ground that it enables courts to avoid making or relying on such judgments.[28] Further, once it is conceded that custom identification and application requires at least the individual judgment of merchants, Craswell argues that custom no longer provides an alternative to interpretation based on substantive, normative analysis. If the justification for reliance on customs is efficiency, courts might consult efficiency experts directly, rather than attempting to identify and apply customs, which in turn ultimately requires the same individual efficiency judgments to be made. Similarly, if the justification for reliance on customs is fairness, ethics experts might be consulted directly.[29]

Craswell's argument can be put succinctly as follows: Because the process

of incorporating commercial custom inevitably relies on the exercise of individual judgment, rather than the judgment-free application of bright-line rules, the incorporation strategy does not avoid the need for courts, directly or indirectly, to rely on individual judgment to decide cases. But if courts are going to rely on individual judgment to decide cases, it is no longer clear they should rely on the judgments of merchants, as incorporation strategies typically require, rather than the judgments of nonmerchant experts such as economists or philosophers.

The central premise of Craswell's argument is, we believe, uncontroversial. Identifying and applying custom requires individual judgment. The question is how the need for individual judgment bears on the viability of the incorporation strategy. Its most obvious implication is that in order to identify and apply the custom relevant to interpreting a disputed contract, the incorporation strategy requires courts to rely on the exercise of their own or others' individual judgment. But the need for individual judgment is not only congenial to existing and proposed incorporationist regimes, it is in fact presupposed by them. Article 2 contemplates the use of testimony by experienced merchants to identify and apply relevant custom, and as Craswell notes, judges exercise their own judgment in deciding Article 2 cases. Further, Llewellyn's original proposal for implementing the incorporation strategy contemplated that Article 2 cases would be decided by merchant juries. Presumably, the members of such juries would use their individual judgment to identify and apply custom relevant to resolving the dispute before them. Craswell's argument also suggests incorporationist regimes might do best by relying on the judgment of nonmerchant experts rather than merchants or judges. But even this argument recommends that incorporationist regimes take a particular form, not that incorporation ought to be abandoned.

There is, however, a fundamental criticism of the incorporation strategy embedded in Craswell's argument. Despite his claim that his title, "Do Trade Customs Exist?," is "semifacetious," Craswell's argument can be read as denying the idea of custom itself. Craswell suggests that abandoning the notion that custom consists in bright-line rules, and acknowledging the inevitability of using individual judgment to interpret custom, makes custom-based interpretive methodologies equivalent to interpretive methodologies based solely on individual judgment. Thus, when the incorporation strategy adverts to custom to interpret or fill a gap in a contract, it is equivalent to an interpretive strategy that simply requires the exercise of individual judgment without invoking the notion of custom at all. Thus, according to Craswell, there is then no appreciable difference between the incorporation strategy and nonincorporationist interpretive regimes that rely on the individual judgments of experts, such as economists or philosophers: "if individual witnesses must draw on their own analysis of particular contexts, then they are providing an assessment that is not entirely different from what would be provided by any other expert whom a court might consult, such as an economist or a philosopher."[30]

The critical flaw in Craswell's argument is in his description of the interpreter's individual judgment. Craswell claims that the judgments of merchants and nonmerchant experts are "not entirely different." In fact, they are entirely different. Two important differences distinguish the judgments made by each group: their likely reliability and what is being judged. As to reliability, first note that interpreting custom requires a preliminary determination of the instances of past commercial behavior that in part constitute the relevant custom. These instances constrain interpretations of relevant custom. The worth of competing interpretations in part will be a function of their fit with these instances. This means that an analysis counts as an interpretation of custom only if it adequately fits relevant commercial behavior and attitudes. Otherwise, the analysis is not an interpretation of anything. It instead serves as a recommended decision rule, not a description of a going convention. Thus, even if the interpretation of custom relies on efficiency judgments, it cannot rely exclusively on them. Further, the preliminary determination of past commercial behavior must be based on pretheoretical intuitions informed by experience. The use of a particular theory to select behaviors and attitudes that constrain the interpretive process would be question-begging.[31] The question therefore is whether merchants' judgments identifying the relevant commercial behavior underlying custom are likely to be more reliable than the judgments of nonmerchant experts.

Merchants' judgments in the matter are likely to be more reliable. Their familiarity with the typical behavior and attitudes of other merchants in a particular trade make it so. To be sure, individual judgment plays other roles besides determining the instances of commercial behavior and attitudes that interpretations of custom must fit. For example, the choice between interpretations satisfying the criterion of fit might turn in part on the application of some normative principle such as efficiency. Craswell therefore might be correct that an economist would do at least as well as a merchant noneconomist in determining the implications of the efficiency principle. But even then the economist has a disadvantage in judging how prior commercial practice trades off efficiency for fit, making its judgments of fit less reliable than the judgments of the merchant. Any advantage its expertise gives in applying an efficiency principle does not improve the reliability of its judgments about commercial practice.

Craswell muddies this assessment of comparative reliability by the example he uses. He focuses on the rare case in which the best interpretation of custom requires exclusive application of a single principle, such as efficiency or fairness. Given the nature of the principle, the judgments necessary to interpret the custom's application in a particular case are reliably made by the expert, –

an economist or philosopher, respectively. Merchants plausibly have no particular advantage given by their greater exposure to commercial practice. But most customs are more complex in their underlying principles than the ones Craswell discusses. They often involve multiple, competing principles in which the difficulty of application need not derive from a vagueness of their terms. For example, a commercial custom of price adjustment in response to cost increases might require efficiency to be balanced against a norm of equality or risk sharing. Although an economist might make superior efficiency judgments, and a philosopher superior distributional judgments, only merchants in the trade have exposure to instances in which both values constituting the custom are in play. Greater exposure to the more complex principle makes their individual judgments about custom more likely to be accurate.

Finally, even if the best justification of a custom is based on efficiency, it does not follow that the best interpretation of custom is itself based on efficiency. A custom justified by efficiency concerns might require individuals to make only non-efficiency-based judgments when interpreting custom. Rawls famously illustrated this point by imagining an institution of punishment based exclusively on deontic rules but justified entirely on consequentialist grounds.[32] To identify and apply the rules of the institution of punishment correctly, participants in that institution, such as judges and jury members, can engage only in deontic reasoning. Despite the consequentialist justification of their institution, the individual judgments of participants in the institution of punishment necessary for the correct interpretation of the rules of punishment do not, because they cannot, consist of judgments about the consequences of their decisions. Similarly, even if the best justification for commercial customs is based on their efficiency, the individual judgments necessary for the correct interpretation of custom need not therefore consist of judgments about the efficiency of possible decision rules. Indeed, such judgments might consistently yield incorrect interpretations of commercial customs. Because an economist could judge only efficiency, his or her judgment would likely be less reliable than the non-efficiency-based judgment of an experienced merchant.

As to what is being judged, it should now be evident that nonmerchant experts are ordinarily most competent to make judgments only within their area of expertise, but not about a custom per se. Merchants ordinarily are most competent to make judgments concerning commercial practice, but not about efficiency per se. If the latter requires exclusively the former, as it does in Craswell's example of an atypical custom, both merchants interpreting a practice and economists analyzing the efficiency of possible contract terms are in some sense making judgments about the same thing: A judgment interpreting the custom is reducible to a judgment of the efficiency of contract terms. Except in this rare instance, however, the interpretive judgments of merchants and the efficiency judgments of economists are about different things. Thus, ordinarily there will be no difficulty in discerning the difference between an

interpretive methodology that incorporates custom and one that need only take into account the individual judgments of nonmerchant experts.

However, suppose Craswell's extreme, reductivist account of custom were correct. The individual judgments required for interpreting custom might then be equivalent to the individual judgments of nonmerchant experts. This fact might undermine the economic justification of the incorporation strategy for gap-filling. Suppose that justification holds that incorporating custom allows courts to avoid reliance on individual efficiency judgments, which are likely to be less efficient than evolved customary practices. Obviously, if the process of interpreting these practices itself requires reliance on individual efficiency judgments, the incorporation strategy cannot constitute an alternative to deciding cases by reliance on individual efficiency judgments. But even if this critique were accepted, it would not similarly undermine the justification we have presented for the incorporation strategy for interpretation. That justification holds that interpreting contractual terms according to their customary meaning will save parties the costs of specifying the same contract provisions using terms that will be interpreted according to their plain meaning. The potential savings in specification costs created by the incorporation strategy does not depend on the extent to which the interpretation of custom relies on individual judgment, nor on whose individual judgment it relies. As long as the parties prefer their terms to be given a customary interpretation, rather than a plain-meaning interpretation, and the incorporation strategy accurately interprets terms according to their customary meaning, the incorporation strategy will economize on specification costs.

Craswell's a priori existence critique properly dispels the naive conception of custom as bright-line rules and raises the interesting question of how individuals exercise the judgment necessary to interpret custom. It also rightly points out that the judgment of experts, in addition to merchants, might be relevant to the interpretation of some customs, and in extreme cases, might be dispositive. But the critique is wrong to the extent that it suggests that the need for individual judgment eliminates any relevant differences between interpretation by custom and interpretation by nonmerchant experts. Moreover, even if this conclusion could be sustained, it would not threaten the viability of the incorporation strategy for interpretation.

B. The Informal Norms Critique

The informal norms critique points out that not all commercial practices provide good evidence of the intended meaning of contractual terms. Some commercial practices are indicative of "formal" norms, which parties intend to be given legal effect, while others indicate "informal" norms, which parties intend not to be given legal effect. The paradigm evidence of a formal norm is provided by tradewide contractual practices. For example, suppose that 90% of

a representative sample of contracts for the sale of horses disclaimed the warranties of merchantability and fitness for a particular purpose. There is little question that this evidence establishes the existence of a commercial norm of warranty disclaimer in sales of horses and that this norm is intended by contractors to be given legal effect.

In contrast, informal norms are common commercial practices that are intended by their practitioners not to be given legal effect. The paradigm evidence of an informal norm is provided by tradewide testimony that a practice is not intended to be given legal effect. For example, suppose that horse sellers routinely exchange or return the price for lame horses that were accepted by their buyers. But every horse seller will testify that this practice constitutes a legally optional accommodation rather than a legally binding obligation. In fact, sellers might well claim that the desirability of the accommodation practice turns crucially on the availability of the legally enforceable right to enforce the original trade. Such an informal practice might arise in order to preserve an ongoing relationship with a set of repeat buyers.[33] But the same transactors who follow these norms might do so only because they take themselves to have preserved the option of enforcing their more stringent contractual rights – in this case, refusing to exchange or refund the price of the horse. Contractors might invoke their stricter, contractual rights whenever they consider their contracting partner to be behaving opportunistically. Such behavior is more likely at the end of a contractual relationship, when further contractual interaction between the parties is unlikely, rather than in the middle of an ongoing relationship.[34] In specifying the terms of their contract, parties attempt to create an optimal mix of formal and informal norms to mediate their relationship. The informal norms critique argues that the incorporation strategy, as implemented in Article 2, undermines this optimal mix by formalizing informal norms.

Thus, the informal norms critique presupposes that contractors intentionally select from a rich set of formal and informal norms an optimal combination of norms to regulate their conduct. If the premise of the critique is that incorporation of informal norms undermines this optimal mix, there must be many formal and informal norms for courts to confuse with one another. After all, if there are few commercial norms of any sort, as the existence critique maintains, incorporating informal norms would hardly present a serious problem.

Like the existence critique, the informal norms critique has both an a priori and an empirical form. The a priori informal norms critique simply relies on the presence of some informal norms to conclude that an incorporation regime such as Article 2 might incorporate an informal rather than a formal norm. Clearly, the possibility exists that informal norms sometimes will be incorporated under an incorporation regime, and clearly such incorporation is undesirable in any interpretive regime. But in order to constitute a critique of the incorporation strategy, much more is required than establishing the mere possibility that an incorporation regime might incorporate some informal norms. The informal norm critique must instead show that even well-designed incorporation regimes inevitably would so frequently incorporate informal norms that they would be inferior to most plain-meaning regimes on that account alone. There is, however, no reason to believe that all incorporation regimes would incorporate informal norms frequently, let alone so frequently that the entire incorporation approach must be rejected. In fact, there is no reason to believe that Article 2 itself frequently incorporates informal norms, or that feasible revisions to Article 2 could not ensure that such instances would be rare.

Article 2 does not explicitly direct courts to distinguish between formal and informal norms. However, Article 2 clearly does not contemplate or condone the incorporation of informal norms. No court applying Article 2 would intentionally incorporate informal norms. This is because an informal norm cannot be evidence that the term is intended to be enforced. In other words, the evidence goes to something that is not a term of the contract. Indeed, the informality of a norm entails that no term in the contract at issue can be interpreted as having a meaning governed by the norm. It is simply no part of the parties' enforceable set of obligations. Thus, any court that identified a norm as informal must already have concluded that the norm cannot be used as a basis for interpreting the meaning of the contract. The court's prior determination of the norm's informality would constitute its finding that the norm does not inform the meaning of any of the contract's terms.

Accordingly, the incorporation strategy is not embarrassed by commercial practices reflecting both formal and informal norms. Instead, these practices simply raise another potential source of interpretive error. Under Article 2, for example, judges might mistakenly incorporate an informal norm in the process of interpretation. The possibility is unexceptional. Judges can make mistakes in passing on any aspect of the sales contract, from formation questions to remedies. So the question is whether this kind of interpretive error will be so extensive and costly that Article 2 and other incorporation regimes will be less efficient than available nonincorporation interpretive regimes. The answer depends on the precise design of the incorporation process and on the base rate of observable contractual activity that is inconsistent with the legal duties contractors intentionally undertake in their contracts. When both variables are taken into account, the probability of erroneous incorporation of informal norms is unlikely to be as extensive as the current literature suggests.

Consider how Article 2 directs courts to determine the existence of a commercial norm in the process of interpreting contractual terms. The predicate for a finding that a usage of trade exists is an empirically observable regularity in the conduct of a majority of contractors in the relevant trade.[35] The predicate for a finding that a course of dealing or course of performance exists is a pattern of observable behavior by the parties.[36] Before the finder of

fact can incorporate a norm under Article 2, it must first have evidence of observable regularities in the conduct of merchants or the parties to the contract in dispute. Unless the finder of fact ignores this requirement, no norm, whether informal or formal, can be incorporated into an agreement in the absence of a prior finding of the existence of a pattern of observable conduct that serves as evidence of the norm. Therefore, in order for an informal norm to be incorporated under Article 2, there must be some pattern of behavior of merchants in the relevant trade or the parties to the contract in dispute that provides observable evidence of the norm.

Erroneous incorporation of informal norms is possible only to the extent that such norms are evidenced by observable patterns of behavior. The existence of informal norms not evidenced by observable patterns of behavior has no effect on the probability of erroneous incorporation of informal norms. Therefore, the probability of courts mistakenly incorporating informal norms is a function of the ratio of observable patterns of behavior in which contractors are entitled to engage under their contract to observable patterns of behavior in which contractors are not entitled to engage under their contract. All else equal, the higher this ratio, the lower the rate of mistaken incorporation of informal norms will be. If this ratio is very low, however, the likely rate of mistaken incorporation of informal norms, all else equal, will be much higher. At some point, the probability of such errors might be so high as to call into question the viability of the incorporation strategy itself, and thus Article 2 as well.

There is no empirical study that attempts directly to measure the proportion of formal to informal norms evidenced by observable patterns of behavior in commercial settings. Thus, in estimating the likelihood of mistaken incorporation of informal norms under the incorporation strategy, lawmakers must speculate about the proportion likely to obtain. Our speculation is that observable patterns of commercial behavior more often than not reflect formal rather than informal norms.[37] We base our speculation on two considerations. First, the literature suggests that informal norms most commonly will develop in the context of relational, rather than discrete, contracts. Many, perhaps a majority, of the transactions governed by Article 2 are discrete.[38] Because informal norms are less likely to play a significant role in discrete contracting, the risk of erroneous incorporation of informal norms in this context is relatively low.

Second, we suspect that the material terms in most commercial contracts are known in advance by the contractors to have a vague or ambiguous plain meaning, or no plain meaning at all, over a large range of possible contingencies.[39] If our suspicion is correct, then most contractual disputes concern matters that cannot be resolved by using plain meaning. In most cases, then, contractors would have anticipated that a third-party adjudicator would be required to interpret these terms either in light of observable regularities in commercial practice or in light of some alternative method of judicial construction. It is difficult in any event to predict with precision a court's likely

interpretation of any contract term. But it is surely far easier to predict how a court using a plain meaning regime will interpret a term with clear and unambiguous plain-meaning, or how a court using an incorporation regime will interpret a vague and ambiguous term in light of relevant commercial practice, than it is to predict how a court will interpret a term when it can advert neither to plain meaning nor commercial practice. Absent a compelling reason to the contrary, we predict that parties will choose express terms for their contracts that have meanings informed by either relatively clear plain meaning or relatively robust commercial practice. As a rule, contracting parties would avoid using language that a court must interpret without adverting to plain meaning or commercial practice.

Given that we believe contractors often, even typically, use express terms with vague or ambiguous plain meaning, we infer that they intend these terms to be interpreted in light of commercial practice. If contractors were intentionally to use express terms with vague and ambiguous plain meaning, and yet not intend each other and courts to interpret them in light of commercial practice, they would be sacrificing their own likely mutual understanding of their contract requirements and their ability to predict a court's likely interpretation of their contract. In short, rational parties would not sacrifice the benefits of predictable meaning unless doing so made possible even greater benefits of a different sort. Invoking express terms with vague and ambiguous meaning, and yet excluding commercial practice as an interpretive device, severely diminishes the predictability of a contract's requirements and the utility of the contract itself.

There are two reasons that might explain why parties would invoke vague and ambiguous terms and yet exclude interpretations based on commercial practice. The first is that, contrary to our assumption, a court's likely interpretation of such terms is in fact equally as predictable as their plain-meaning interpretations of terms with clear plain meaning or their incorporationist interpretations of terms informed by clear commercial practice. However, our reading of contracts and sales caselaw suggests this is not the case. Alternatively, even though a court's interpretation of such terms is difficult to predict, the court's independent interpretation of the terms will provide such superior content to the contract that its benefits will outweigh the loss of predictability. The plausibility of this claim depends on what method courts would use to interpret such terms. Although we cannot explore all the possibilities here, we are dubious that any practical method could provide such benefits. Quite apart from how a court could achieve such a feat, it is unclear how *any* interpretation of a term could significantly benefit parties who have little prospect of predicting that interpretation in advance.

The second explanation of why parties might intentionally specify vague and ambiguous terms and yet exclude interpretations based on commercial practice is that, as we have seen, parties might rationally intend to create a dual

regime of contractual regulation in which the expected (informal) contractual performance is at odds with the (formal) contractual requirements. Such an arrangement might prove optimal if an informal regime of commercial practices provides the most efficient regulation of transactions among contractors acting in good faith, while a formal contractual regime provides the optimal protection to a nonbreacher if his or her contracting partner acts in bad faith. Of course, if the parties intend to create a dual regime of contractual regulation, they must exclude the possibility that their contractual terms will be interpreted in light of commercial practice. The goal of such a regime is to create contract requirements that are inconsistent, rather than consonant, with informal commercial practice. But if this were their objective, we suspect that they would choose express contract terms with a clear plain meaning. By doing so, they would ensure that they, and a third-party adjudicator, would understand the difference between their informal (unenforceable) practices and their formal (legally enforceable) rights and duties.

The chief advantage of a dual regime is that it enables a nonbreacher with the ability to police against bad faith conduct by invoking a legal right to performance not otherwise required by informal practice. If that legal right itself is subject to good faith disagreement between the parties, as well as relatively unpredictable judicial interpretation, the utility of the dual regime will be defeated. The predictability of contractual interpretation is therefore especially important under a dual regime of contractual regulation. Contractors concerned to create such a regime for their contract would therefore be at pains to provide express terms with relatively clear and unambiguous plain meaning. And in the event they could not provide such terms, they would be unlikely to attempt to regulate their transaction with a dual regime. They would take advantage of the relative certainty of commercial practice in place of the relative uncertainty of judicial construction unguided by either plain meaning or commercial practice.[40]

We conclude that most observable regularities of commercial behavior are intended by contractors to inform the meaning of most of the material terms of their contracts. This conclusion is based on our speculation that the material terms of most commercial contracts are vague or ambiguous, and our argument that contractors typically will include such terms only if they intend them to be interpreted in light of commercial practice. If we are right, then most of the observable regularities of commercial behavior evidence formal rather than informal norms. On this view, relatively few patterns of behavior are understood by contractors as exceeding their contract entitlements and therefore requiring permissions or waivers of rights.[41] The existence of informal norms establishes that some observable patterns of behavior fall into the latter category. But not all informal norms are evidenced by observable patterns of behavior. And we suspect those that are correspond to a relatively small proportion of observable regularities in commercial behavior.[42]

Thus, even if the Code indiscriminately incorporated all norms evidenced by observable regularities of conduct, we suspect that most of the norms incorporated would be formal. Even if fact finders inferred formal norms from behavioral regularities in all instances, they would be right more often than wrong. But of course, the fact finder under the Code does not indiscriminately apply norms to the contract. Evidence of a norm's informality is relevant to persuading the fact finder not to incorporate it. Under Article 2, there are two principal methods of demonstrating the existence of an observable regularity of conduct: expert testimony and evidence about statistical regularities. Expert testimony sometimes can straightforwardly ascertain whether most transactors regard the norm as legally binding. The experts will presumably speak directly to that question. Disagreement among experts is no more of a problem here than elsewhere. But much of the evidence of commercial norms might consist simply in the presentation of evidence of statistical norms – mere frequencies of a given behavior in the trade, in past dealings between the parties, or in the course of performance under the contract in question. This evidence will not settle whether there is an informal, or formal norm. The rate of erroneous incorporation of informal norms will be directly affected by the manner in which the trier of fact seeks to determine whether such statistical norms are informal or formal. Our speculation is that, as a statistical matter, there is a high probability that the regularity indicates the existence of a formal, rather than informal norm. But when the reverse is true, the only method for reducing the probability of erroneous incorporation is either to seek expert testimony or require that the trier of fact have some level of relevant expertise itself.

Apart from establishing the proportion of informal to formal norms generally, empirical studies might be used to demonstrate the prevalence of interpretive error in Article 2 resulting from the incorporation of informal norms. They could therefore provide either direct or indirect evidence of the efficiency of one kind of regime over the other. Direct evidence of the regimes' comparative efficiency is a basis for inferring either the absolute or relative costs of interpretive error and specification costs under either kind of interpretive approach. Evidence of the absolute costs of interpretive error and specification under only one regime by itself allows no inference about the relative merits of the two approaches. To determine which regime is likely to be more efficient, one must estimate the absolute costs of interpretive error and specification under the alternative approach. Only partial and inconclusive evidence of the relative merits of each regime is given by an empirical study presenting data on the relative costs of interpretive error, for example, but not specification under each regime. To determine which regime is likely to be more efficient, we would need data concerning the relative costs of specification under each regime.

An empirical study, however, might reveal only indirect evidence of the comparative efficiency of these regimes. If both regimes are available to

contractors, and the majority of contractors choose one consistently over the other, where the only plausible explanation for the choice is that contractors prefer it, then that regime is likely to be the most efficient. Similarly, if only one regime is made available without cost, and a second regime can be created by contractors willing to incur the costs of its creation, choice of the second regime by the majority of parties is strong indirect evidence of its superior efficiency.[43]

The only empirical evidence offered to refute the incorporation strategy has been Bernstein's data.[44] She presents them as a challenge to "the fundamental premise of the Uniform Commercial Code's adjudicative philosophy, the idea that courts should seek to discover 'immanent business norms' and use them to decide cases."[45] Bernstein studied the arbitration system adopted by the National Grain and Feed Association (NGFA). The NGFA opted out of the Code's interpretive regime and created its own formalistic arbitration system. Its system substitutes trade rules and a formalistic interpretive system for the Code's reliance on usage of trade, course of dealing, and course of performance. Indeed, according to Bernstein, arbitrators sometimes even note that they are prohibited from taking into account trade usage inconsistent with the express terms of the contract. Her interviews with grain and feed merchants suggest that members of the NGFA prefer their formalistic system to the Code's regime because it allows them to achieve their most desired mix of informal and formal norms to govern their contractual relationships. There is no question that the likelihood of interpretive error due to incorporation of informal norms is much lower for contracts adjudicated under the NGFA regime than for contracts adjudicated under the Code's regime.

Bernstein's case study might be taken to provide direct or indirect evidence of the relative size of interpretive error costs in incorporation and nonincorporation regimes. The NGFA study gives direct evidence that one kind of interpretive error is less under the NGFA regime than under the Code regime. If the incidence of other kinds of interpretive error is the same in both regimes, the study would provide incomplete but direct evidence bearing on the relative efficiency of both regimes. The study is incomplete because it does not purport to determine the relative specification costs under each regime. But even without an empirical study of relative specification costs, it seems clear that the specification costs under the NGFA regime will be no greater, and in fact will probably be much less, than the specification costs NGFA members would face if forced to adjudicate their contracts under the Code regime.

Ordinarily, an interpretive regime that excludes extrinsic evidence of the meaning of contract terms increases specification costs relative to a regime that does not. This is because parties under a nonincorporation regime will have to incur the costs of using terms with plain or predefined meanings to express ideas more easily expressed using terms with context-specific meaning, or settle for less efficient contractual terms. But the NGFA provides its members

with an extensive set of predefined terms whose meanings are entirely derived from common commercial practice in the grain and feed industry. By providing such a tailored list of predefined express terms, the NGFA eliminates the chief advantage of incorporation regimes over nonincorporation regimes. The specification costs for NGFA contractors under the NGFA regime are certain to be lower than under any incorporation regime. This is because contractors achieve all the benefits of incorporation by incorporating all relevant commercial practice in their predefined trade rules and terms rather than in the course of adjudication. The adjudicatory process therefore can be dedicated solely to the task of enforcing predefined terms, without thereby imposing on contractors any additional costs of aligning their contractual practices with these predefined terms. Because the NGFA intentionally selects the predefined terms its members most prefer – terms with meanings reflecting the most common commercial practices in the grain and feed industry – a strict construction rule in favor of the predefined meanings for these terms can be adopted without increasing contractors' specification costs. In this way, the NGFA system thereby eliminates the ordinary tension in adjudication between interpretive strategies that minimize interpretive error costs and those that minimize specification costs. The NGFA's strict construction regime, then, appears to have both lower interpretive error costs and lower specification costs than the incorporation strategy. Thus, it might appear that the NGFA study provides good evidence that nonincorporation regimes are likely to be superior to incorporation regimes.

The NGFA study, however, establishes only that the NGFA provides a superior interpretive regime for the members of the NGFA. It says nothing about the majority of contractors whose agreements are governed by Article 2. The NGFA study illustrates the well-known efficiencies of custom-tailoring rules of contractual interpretation to the needs of specific kinds of contractors. If all contractors shared the same commercial understandings, needs, and practices, as do the members of the NGFA, the incorporation strategy would serve no purpose. An NGFA-like regime instead could be employed to govern all sales contracts. There would not be an unavoidable trade-off between customizing contractual terms in the process of adjudication, thereby reducing specification costs, and reducing interpretive error by adhering to the strict construction of predefined terms. Instead, the predefined terms themselves could be customized to suit all parties' contractual preferences, eliminating the need to attempt such customization during the course of adjudication. Thus, if contractual preferences are homogeneous, customization can be achieved ex ante, at the stage of predefining a menu of contractual terms, rather than ex post, during the adjudicative process. If customization is achieved ex ante, there is no need to attempt customization ex post, and therefore no need to introduce the additional risk of interpretive error associated with ex post customization attempts.

More generally, if contracting parties shared a narrow set of commercial understandings, needs, and practices, there would be no need for a generalized sales law such as Article 2. Of course, an NGFA-like regime that combined custom-tailored, predefined terms with strict construction adjudication would optimize contractual interpretation for such a homogenous group.[46] But the point of the incorporation strategy is to accommodate the impossibility of ex ante customization in a sales law designed to govern an extraordinarily heterogenous population of contractors. The incorporation strategy is explicitly designed to trade off the risk of increased interpretive error in order to capture some of the efficiencies of custom-tailored interpretive rules. Llewellyn's gambit is that the efficiency gains the incorporation strategy makes possible will outweigh the interpretive error costs it occasions. The NGFA example provides a perfect solution to the Code's interpretive challenge by assuming away the problem.

The NGFA example also might be indirect evidence of the superior efficiency of a nonincorporation regime over an incorporation regime. The willingness of NGFA members to incur the costs of creating the NGFA strict construction regime to opt out of the Code's incorporation regime might be taken to indicate the superiority of strict construction regimes over incorporation regimes. But no such inference is justified. First, opting out by the NGFA members at most is evidence of the NGFA's superior efficiency over Article 2's particular version of the incorporation strategy. It provides no evidence that a strict construction regime other than the NGFA is superior to Article 2's incorporation strategy or even that the NGFA is more efficient than any incorporation regime other than Article 2.

Second, and more important, the NGFA study does not even demonstrate that the NGFA regime is superior to Article 2. As explained above, the superiority of the NGFA for NGFA members has no bearing on the merits of Article 2's incorporation strategy. Indeed, Article 2 explicitly invites contractors to opt out of the Code's regime when doing so would be efficient. The ability of NGFA members to opt out of the Code's regime in part vindicates, rather than refutes, the design of Article 2 by demonstrating the efficacy of its opt-out provisions. This is because the Code anticipates that groups of homogenous contractors sometimes will be able to secure gains from forming a distinct adjudicative regime, exploiting the advantages of ex ante customization, that exceed the costs the contractors must incur to form and operate such a regime. The Code does not try to provide a more efficient regime for such contractors than they can provide for themselves. Instead, it is designed to be the most efficient regime for governing a set of heterogenous contractors whose contracting preferences cannot, except in very broad terms, be effectively anticipated in advance. The Code's comparative inefficiency would be indirectly shown only if some individuals with largely heterogenous preferences would opt out of the Code for a private interpretive regime. Instead, the NGFA example proves the unsurprising exception but leaves the rule of incorporation completely intact.

C. The Encrustation Critique

The final critique of the incorporation strategy focuses on the mechanics of the incorporation process of Article 2. Article 2 requires judges to interpret contractual terms in light of commercial practice. But once courts have made an initial determination of the meaning of a term, based at least in theory on an inquiry into relevant commercial practices, they appear reluctant to engage in that inquiry again. Instead, they appear to treat such determinations as canonical. Thus, although courts might initially employ the incorporation strategy, their initial interpretations become "encrusted" as virtual precedents. Courts subsequently disfavor any interpretations inconsistent with these encrusted interpretations.[47] One suggestion is that courts are predisposed to treat statutory interpretation in a static, precedent-bound fashion, rather than the dynamic fashion contemplated by the incorporation strategy. Thus, incorporation implemented by Article 2, rather than through a common law system, might account for this judicial interpretive intransigence.

The judicial practice of one-time incorporation is inconsistent with the goal of interpreting contractual terms in light of their evolving meanings. If parties understand their contractual terms in light of evolving commercial practices, encrustation will lead to interpretive error. If parties recognize and respond rationally to the judicial practice of one-time incorporation, costs of specifying their most preferred terms will increase. If courts will not interpret contractual terms in light of current commercial practices, parties will have to incur the costs of making explicit any of their understandings at variance with outdated practice, or settle for the suboptimal interpretation of their contractual terms according to the outdated practice. The costs of "opting out" of the encrusted interpretations of their terms are exacerbated by the tendency of courts to disfavor such opt-outs. If courts refuse to interpret terms in light of evolving commercial practice, the value of attempting to "opt out" of encrusted interpretations is reduced. Even if parties incur the costs to provide an otherwise clear opt-out, courts might nonetheless refuse to enforce the parties' interpretation. This practice thus reduces the expected joint value of all contracts by depriving parties of the ability to specify their most preferred terms.

Encrustation is a potentially serious problem for incorporationists. The tendency of courts to make one-time interpretations of terms instead of continually updating their interpretations in light of evolving practice is inconsistent with the implementation of the dynamic incorporation process contemplated by Article 2's incorporation strategy. The tendency to disfavor even clear efforts to opt out of encrusted interpretations constitutes simple interpretive error. How serious a problem encrustation presents depends on the relative

frequency of interpretive error resulting from a failure to recognize changes in commercial practice or a bias against clear opt-outs. These in turn depend on how the incorporation strategy is implemented.

But plain-meaning regimes are likely to suffer from shortcomings similar to those caused by encrustation. First, encrustation undermines the incorporation strategy because it prevents parties from easily invoking the current customary meanings attached to their contract terms. It thus raises the parties' specification costs. But plain-meaning regimes do not even attempt to enable parties to invoke customary meanings at minimal cost. They instead require parties to communicate their customary understandings according to the plain meaning of the terms they use. Thus, although encrustation erodes some of the expected savings in specification costs under the incorporation strategy, the expected specification costs under plain-meaning regimes will be even higher. Second, encrustation undermines the incorporation strategy because judges refuse to honor parties' attempts to opt out of the customary meanings assigned to their contract terms. Again, this judicial practice raises expected specification costs under the incorporation strategy. But if judges favor the customary meaning of contract terms when they interpret under an incorporation regime, we would expect them to favor the plain meaning of terms under a plain-meaning regime. For example, if contractors state that their quantity terms are estimates, judges might nonetheless hold the parties to the plain meaning of their quantity term. It is difficult to understand why judges would be biased in favor of the customary meaning of terms under an interpretive regime that accords primacy to customary meaning while not exhibiting a similar bias in favor of the plain meaning of terms under a regime that accords primacy to plain meaning.

E. Summary

Each critique correctly identifies the possibility of one kind of interpretive error but fails to estimate its likely extent. Because every interpretive regime produces some interpretive error costs in order to reduce specification costs, the only relevant question is whether the incorporation strategy has greater aggregate interpretive error and specification costs than alternative interpretive regimes. The question therefore is a comparative one. We have speculated that the kinds of interpretive error identified are unlikely to be so great as to clearly disqualify the incorporation strategy outright. Indeed, if the error rate were so high, most merchants would at least attempt to opt out of most of the Code's provisions. By comparing the evolution of the Code to the common law over the last forty years, Robert Scott has argued, in effect, that the sum of specification and error costs is lower under a common law plain-meaning regime than under an incorporation strategy.[48] But even Scott acknowledges that the interpretive error rate under the Code in large measure can be attributed to obvious flaws in its particular design rather than to shortcomings endemic to the

incorporation strategy itself.[49] There is no doubt, however, that the chief liability of the incorporation strategy is its vulnerability to interpretive error. Part IV canvasses measures that might be taken to improve the interpretive error rate under Article 2. We argue that such changes are entirely feasible and realistic. Once in place, these changes could dramatically reduce the current interpretive error rate under Article 2.

IV. Implementing a Defensible Incorporation Strategy

The incorporation strategy for interpreting contracts directs courts to interpret the meaning of contract terms in light of relevant extrinsic evidence, such as trade usage, course of dealing, and course of performance. But it does not specify how a court is to take such evidence into account. Interpretive regimes can implement the incorporation strategy in many different ways. They can vary along a number of crucial dimensions of institutional design. First, they might allocate the responsibility for deciding whether a usage of trade, course of dealing, or course of performance exists to different decisionmakers. The decision could be allocated to the court, a lay jury, or a merchant jury. Second, they might apply different standards for proving the existence of extrinsic evidence. Although precise formulations of such standards are notoriously difficult, familiar standards range from a "preponderance of evidence" to "clear and convincing evidence." And they might apply different standards for the kind of proof that can be offered to prove the existence of extrinsic evidence. For example, one regime might require evidence of statistical regularity, while another might require expert testimony. Third, some regimes might provide a menu of safe harbors that allow the parties to signal reliably their preference for having their contract interpreted by a particular sort of extrinsic evidence. Finally, some regimes might add presumptions to aid in justifiably inferring facts that are difficult or costly to determine. Thus, every incorporation regime will permit extrinsic evidence to be used to interpret contract terms only when a fact finder finds that the party with the burden of proof sustains its burden by offering admissible evidence satisfying the relevant standard of proof. But each regime can specify different fact finders, burdens of proof, standards of proof, safe harbors, and presumptions.

Article 2 explicitly or implicitly specifies the fact finder, burden of proof, standards of proof, safe harbors, and presumptions for the incorporation of extrinsic evidence. Article 2's core interpretive provisions are § 1-205(3) and its parol evidence rule, § 2-202. Section 1-205(3) states the order of priority given to different sorts of evidence in interpreting contract terms. It requires express terms to be construed as consistent with course of dealing and trade usage "wherever reasonable."[50] Express terms control only when a consistent construction is "unreasonable." Fairly understood, § 1-205(3) gives priority to the plain meaning of a term over trade usage, course of performance, and

course of dealing in such cases. Section 2-202 states what sort of evidence is admissible to interpret contract terms. The section instructs courts to allow trade usage, course of performance, and course of dealing to "explain or supplement" the terms of even an integrated writing. Official comments explicitly reject the "lay dictionary" and the "conveyancer's" reading of terms in commercial agreements.[51] Article 2 allows parties a safe harbor by which they can limit the sort of evidence used to interpret their agreement. They can do so by "carefully negat[ing]" any usage of trade, course of performance, or anticipated course of performance they prefer not to have applicable to their deal.[52]

Article 2 relies on a mix of Code and extra-Code law to set the other elements needed for interpretation. Interpretation of contract terms is allocated to the fact finder, except when the court finds a writing to be integrated.[53] The existence and content of trade usage, course of performance, and course of dealing also are left to the fact finder.[54] Article 2's definition of trade usage places a modest constraint on fact finding, requiring that it have a "regularity of observance in a place." The associated official comment makes clear that only statistical regularity, not longevity, is required for a finding of trade usage.[55] Although Article 2 sometimes expressly allocates the burden and standards of proof,[56] it does not do so in the case of the interpretation of contract terms. Burdens and standards of proof therefore are implicitly left to extra-Code law, presumably applicable under § 1-103. The few presumptions that bear on the interpretation of contract terms, such as *contra proferentum* rules or the bindingness of trade usage on newcomers, are products of decisional law, not Article 2's provisions.

A fair assessment of the incorporation strategy requires a clear distinction between the incorporation strategy itself and the many possible incorporation regimes that might implement it. Because the incorporation strategy does not require a single specification of any particular institutional element, many different incorporation regimes are possible. A criticism of one particular incorporation regime therefore does not by itself constitute a criticism of the incorporation strategy generally. A defect in one incorporation regime does not demonstrate that all other possible and feasible incorporation regimes are likely to have a similar defect.[57] Moreover, even if a criticism is effective against a particular incorporation regime, that regime might be amended to address the particular defect the criticism identifies. Thus, because Article 2 describes just one way in which the incorporation strategy can be implemented, criticisms of it neither condemn Article 2 itself nor the incorporation strategy generally. After all, if Article 2 is subject to compelling criticism, it might be amended to avoid the criticism. The resulting interpretive regime might well be sufficiently similar to the original Article 2 regime that we would not say the criticism required abandoning the regime. More important, whether or not Article 2 survives its own amendment, the resulting regime might not only qualify as incorporationist but constitute a more thoroughgoing incorporationist regime than Article 2.

The incidence of the interpretive errors identified by the critiques we have considered can be significantly reduced by including a number of feasible provisions in incorporation regimes such as Article 2. The existence and informal norm critiques are each directed at interpretive error produced by faulty inferences from regularities in behavior, either under a contract or in similar contracts. The existence critique holds that trade usage sometimes or often does not exist where the incorporation strategy finds it. The informal norm critique maintains that courts sometimes or often fail to distinguish formal from informal norms, wrongly interpreting the contract to include norms not intended by the parties to be enforceable. Both critiques charge that incorporation induces courts to find commercial practice where there is none.

Under Article 2, the interpretive errors identified are the product of a trier of fact (or a court, if the agreement is integrated) drawing incorrect inferences based on particular sorts of evidence. These errors can be reduced by selecting a better decisionmaker or requiring that interpretation be based on more reliable evidence. Accordingly, a combination of a superior fact finder, superior evidentiary bases, or higher standards of evidence can be specified. As with any interpretive approach, a combination of devices is available to the incorporationist. Contract interpretation therefore could be allocated away from relatively inexpert, generalist trial courts or juries and toward specialist courts or merchant juries. The Delaware Court of Chancery illustrates the former possibility. This court hears most of the corporate cases brought in Delaware, acts as a fact finder, and has a developed expertise in corporate matters. It is well positioned (and motivated) to understand the background against which corporate matters appear. In the case of contract interpretation, such specialized courts are well positioned to understand when parties are likely to incorporate commercial practice and when not.[58] At the very least, they are better positioned than generalist trial courts or juries. Interpretive error thereby can be reduced by the choice of judicial interpreter.

Merchant juries are another possibility. They can be assigned the task of interpreting the terms of the contract, taking into account commercial practices of which they are familiar. In early drafts of Article 2, Llewellyn proposed a merchant jury.[59] The elimination of his proposal from the final version of Article 2 means that inexpert fact finders both find commercial practice and interpret the terms of a sales agreement in light of it. This sort of institutional design is not inevitable. Merchant juries, potentially familiar with the commercial practices in issue, arguably make fewer interpretive errors than lay juries. They are less likely to wrongly find trade usage, for instance, where none exists or a "thick" and detailed practice where there are only "thin" and sparse regularities of behavior. Merchant juries, potentially being industry experts, are less likely to mistake local trade usage for widely shared commercial practice. Certainly parties often select arbitrators familiar with the practices surrounding the transaction for which the parties have contracted. The reasons for doing so are complex and sometimes have nothing to do with knowledge of the deci-

sionmaker selected. However, the contracting parties' choice of arbitration is consistent with a preference for the interpretive advantage provided by an expert familiar with the relevant commercial practices.[60] Merchant juries, which reduce the rate of interpretive error, make litigation a closer substitute for arbitration.

Restricting evidence, raising standards of proof, and adopting stronger legal criteria for commercial custom also can reduce interpretive error. If the existence critique is correct, regularities in industry practice are seldom pronounced or detailed enough to be trade usage. An appropriate response to such paucity of trade usage might be to restrict evidence of industry practice to written industry codes or corroborative testimony by industry experts.[61] This makes good sense given a general regulatory and contractual preference for conditioning obligations on verifiable variables. Alternatively, admissible evidence could be restricted to terms appearing in standard form contracts in the relevant trade.[62] Another response would be to require more regularity of commercial practice, both in scope and longevity. Pre-Code law apparently did this, by requiring that trade usage be "ancient or immemorial" and prevalent.[63]

The amendments to Article 2 that would be expected to reduce the interpretive errors identified by the existence critique would also be expected to reduce the interpretive errors identified by the informal norms critique. But the problems each critique identifies are importantly different. Whereas the existence critique calls for measures to ensure that fact finders do not find custom where it does not exist, the informal norms critique calls for measures to ensure that fact finders do not find formal norms where only informal norms exist. Thus, unlike the existence critique, the informal norms critique does not deny that there are regularities in commercial behavior generally, and in the contracting parties' behavior in particular, that reflect enforceable obligations. It notes that these regularities sometimes will reflect unenforceable obligations instead (informal norms). The problem therefore is not to design rules in the face of an assumed infrequent phenomenon such as formal trade usage. It is to design rules to induce the accurate detection of a frequent phenomenon: formal norms evidenced by usage of trade, course of dealing, and course of performance. If party-specific behavior is more likely to reflect informal norms than general commercial behavior, an incorporation regime might well assign different burdens and standards of proof to trade usage than for course of dealing and performance. For example, a bare statistical regularity might suffice to prove a formal usage of trade exists, while both a statistical regularity and expert testimony might be required to prove the existence of a formal course of dealing or course of performance.

Reduction of the interpretive errors identified by the encrustation critique requires altering another way in which the incorporation strategy is implemented. The critique speculates that the self-contained nature of Article 2 induces courts to rely on precedent, interpreting Code provisions dependent on

commercial custom, and to ignore changes in that custom.[64] Because the tendency postulated is not irreversible, encrustation can be avoided by altering the way in which courts regard Article 2. Accordingly, the incorporationist response is similar to its other responses: altering the particular way in which Article 2 is implemented. A straightforward alteration is to make Article 2 even less self-contained by making it more reliant on extra-Code developments in commercial custom. It is common for treaties lacking a mechanism for centralized implementation to include provisions calling for national courts to interpret them with an eye to uniformity.[65] Article 2 could be amended in the same sort of way. It could contain an explicit injunction to courts to avoid relying on caselaw to determine trade usage, for instance. The injunction would help force them to gauge trade usage by looking to contemporary commercial practice. It more effectively vindicates the incorporationist strategy.

The variety of feasible ways of implementing the incorporation strategy means that it has resources to adjust to the presence of interpretive error costs. This is illustrated by specific strategies for pursuing incorporation that arguably *fail* to take interpretive error seriously. Robert Cooter, for example, proposes that courts proceed by identifying existing commercial norms and discerning the likely strategic structure of interactions in which the norms arise.[66] If the strategic structure of interactions tends to produce efficient outcomes, courts should use the commercial norms identified to interpret or supplement parties' contracts. By doing so, according to Cooter, courts need not inquire directly into the efficiency of contract terms or interpretation of them. Cooter's proposal arguably induces high interpretive error costs (as well as high administrative costs). Although courts need not inquire directly into the efficiency of terms, Cooter requires them to assess two variables: relevant commercial norms and the strategic structure of likely interactions. Because the variables are independent, the likelihood of judicial error is greater than if courts were directed only to identify commercial norms. Further, error in detecting the strategic structure of interactions probably is itself high. This is because the strategic structure of an interaction sometimes must include the way in which parties describe the array of payoffs and strategy choices. The mathematical structure of interactions, such as payoffs and strategy choices, is not enough always to explain equilibrium outcomes.[67] Because judicial access to parties' descriptions of their interactions is at best imperfect and can be gamed by parties in litigation, the interpretive error costs associated with Cooter's proposal are likely to be significant. Whether they are higher than the costs associated with directly inquiring into the efficiency of terms or their interpretation needs to be determined.

The proposal still might produce lower aggregate interpretive error costs than its competitors. If it does not, then, holding specification costs constant, Cooter's specific suggestion for incorporation of course should be rejected.

However, the failure of the suggestion still leaves a range of other feasible ways of implementing the incorporation strategy. And they might well fare better by producing greater reductions in interpretive error costs. For instance, a variant on Cooter's suggestion recommends that courts determine only relevant commercial custom, rather than the strategic structure of interactions. By not requiring that courts detect strategic structures, this strategy eliminates a likely and significant source of interpretive error. The recommendation also clearly provides recognizable means of implementing the incorporation strategy. Even if unsuccessful, Cooter's proposal therefore is only one of a number of ways in which incorporation can proceed, and its rejection does not condemn the incorporation strategy generally.

The array of possible ways of implementing particular incorporationist strategies does not undermine their incorporationist character. Each implementation still requires that commercial practice inform the meaning assigned to contract terms. They differ only in how commercial practice enters in the interpretive process. Of course, devices such as burdens of proof have effects on whether contract terms will bear the meaning given them by customary practice. An assignment of burden of proof to one who wants to introduce trade usage, for instance, might make it more unlikely that trade usage will be considered in interpreting a term. However, the reduced likelihood does not mean that trade usage will not be successfully introduced. It will depend on whether the evidence is available to the party having the burden. Alternatively, a statutory menu of language that if used by contracting parties will be taken to make trade usage inapplicable is possible.[68] This limits without eliminating the circumstances under which commercial practice will be used. Certainly both approaches remain significantly different from plain-meaning approaches to interpretation. According to them, commercial practice is never relevant to interpret the plain meaning of contracts. Even impeccable evidence of relevant industry practice is to have no effect on interpretation. Thus, implementing incorporation by adjusting interpretive devices does not destroy the distinctiveness of incorporationist strategies.

V. Conclusion

Incorporation of commercial practice in contract interpretation is best suited to generalist commercial statutes or rules. Generalist commercial laws cover a wide variety of transactions among contracting parties having heterogeneous, transaction-specific preferences. In these circumstances, interpretative approaches must take into account both interpretive error costs as well as specification costs. The case here for incorporation in interpretation argues that an incorporation strategy optimally minimizes the sum of interpretive error and specification costs associated with contract interpretation. The argument rests principally on four sensible empirical assumptions.

First, where party preference is heterogeneous, contracting parties face high costs in signaling to third parties their understanding of contract terms. Thus, specification costs are a variable that interpretive approaches cannot ignore. By interpreting contract terms according to commercial practice, the incorporation strategy saves parties most of the cost of having to signal the aspects of that practice they want applicable to their contract.

Second, despite the arguable lack of uniformity of trade custom at the turn of the century, contemporary local and national trade customs are likely to be quite extensive. Third, where norms exist governing heterogenous transactions covered by a generalist law, they are more likely to be formal norms, intended by the parties to be enforceable, than informal norms, not intended for enforcement. On the whole, formal norms are likely to outnumber informal norms because transactions cover both discrete and relational contracts, informal norms are unlikely to govern discrete contracts, relational contracts are unlikely to predominate discrete contracts, and even within relational contracts, formal norms are likely to predominate informal norms. Thus, the rate of interpretive error in mistaking informal for formal norms probably is low.

Fourth, error costs associated with interpreting terms in light of commercial practice can be reduced by adjusting the way in which incorporation is implemented. This means that mistakes due to bias against opt-outs of trade usage, misidentification of informal for formal norms, or identification of trade usage where there is none can be reduced by altering burdens of proof, evidentiary bases and standards of proof, and the like. Adjustment of these elements to affect legal error rates therefore can be made, taking into account their effect on specification costs. In this way, marginal interpretive error and specification costs can be gauged so as to obtain optimal levels of both. The case for the incorporation strategy claims that, given these four sensible assumptions, aggregate interpretive error and specification costs are lower than under plain-meaning interpretive approaches.

The a priori case against the existence of custom raises fair questions about the kinds of judgment necessary to implement the incorporation strategy, but does not undermine the prospect of incorporation itself. However, empirical studies concerning the existence of trade usage or the rates of informal and formal norms in particular industries are important for incorporationists. In fact, they are essential to the incorporation strategy because they affect the way in which it is implemented. For example, the adjustment of standards of proof and evidentiary bases depends on the likely rates of interpretive error. Thus, if trade usage is mostly local or "thin," or if most norms in a particular industry are informal, as Bernstein's data might suggest, then raising a standard of proof or restricting evidentiary bases might be appropriate. Far from being incompatible with the incorporation strategy, empirical data about the rate of informal norms or the limitations of trade usage are necessary for an intelligent implementation of the incorporation strategy. At the very least, the data require that

incorporationists be sensitive to interpretive error and specification costs. Our objection to the critiques of incorporation is not that they fail to identify possible sources of interpretive error associated with consulting commercial custom. It is that the critiques either ignore specification costs, which favor incorporation, or ignore the resources available to incorporation strategies to reduce the interpretive errors they identify.

Notes

† We thank Ian Ayres, Lisa Bernstein, Douglas Cole, Richard Craswell, and participants at the 1999 Canadian Law and Economics Association Annual Convention in Toronto, Canada, for very helpful comments.

1. The incorporation strategy is also adopted in the sales law of other legal systems and in some treaty law. See, e.g., Belgian Civil Code art. 1134 (1982), United Nations Convention on Contracts for the International Sale of Goods art. 9(2), 19 Int. Legal Mat. 668 (1980); International Institute for the Unification of Private Law, UNIDROIT Principles of International Commercial Contracts art. 1.8(2) (1994).
2. In our view, contractual interpretation is logically prior to gap-filling. Whether a contract contains a gap depends on the interpretation given its express and implied terms. We define contractual gaps as issues not resolved by the terms of a contract properly interpreted. Under a plain-meaning regime, once a contract's terms have been given their plain-meaning interpretation, issues not addressed by these terms would constitute contractual gaps. Thus, under a plain-meaning regime, there may be a contractual gap with respect to an issue even if the contract contains a term purportedly governing the issue. If the plain meaning of that term is ambiguous or does not exist, the proper interpretation of that term fails to resolve the issue it purports to govern. Therefore, in our definition, there is a contractual gap with respect to that particular issue despite the existence of a contractual term purporting to govern it. Obviously, a plain-meaning rule cannot be used to fill contractual gaps so defined because gap-filling is required if and only if the plain-meaning rule cannot be used to resolve an issue. Unlike the plain-meaning rule, the incorporation strategy provides a methodology both for interpreting actual contract terms and filling in contractual gaps.

   Criticism of the incorporation strategy for gap-filling is based on the likely suboptimality of evolved custom, the difficulty of accurately identifying and incorporating custom, and the possibility that courts, legislatures, or private lawmaking bodies can create more efficient default rules for filling in contractual gaps. For the claim that the evolution of commercial practice is not likely to be optimal and therefore might be improved by legal designers, see Michael Klausner, *Corporations, Corporate Law, and Network Externalities,* 81 Va. L. Rev. 757 (1995); Marcel Kahan and Michael Klausner, *Standardization and Innovation in Corporate Contracting (or the Economics of Boilerplate),* 83 Va. L. Rev. 713 (1997); Jody S. Kraus, *Legal Design and the Evolution of Commercial Norms,* 26 J. Leg. Stud. 277 (1997). See also Eric Posner, *Law, Economics, and Inefficient Norms,* 144 U. Pa. L. Rev. 1697 (1996). For the claim that the process of identifying and applying custom potentially undermines the usefulness of the incorporation strategy for both interpretation and gap-filling, see Richard Craswell, "Do Trade Customs Exist?," Chapter 4 of this volume [hereinafter *Trade Customs*]. For the claim that the incorporation strategy undermines the ability of contractors to create an optimal mix of legally enforceable and legally unenforceable norms, see Lisa Bernstein, *Merchant Law In a Merchant Court: Rethinking the Code's Search for Immanent Business Norms,* 144 U. Pa. L. Rev. 1765 (1996) [hereinafter *Merchant Law*]. For the claim that the kind of custom required by the incorporation strategy does not exist, see Lisa Bernstein, *The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study,* 66 U. Chi. L. Rev. 710 (1999) [hereinafter *Questionable Empirical Basis*]. For the claim that the common law plain-meaning rule better promotes uniform and predictable contract interpretation than the incorporation strategy, see Robert E. Scott, *Rethinking the Uniformity Norm in Commercial Law,* Chapter 5 of this volume [hereinafter *Rethinking Uniformity*].
3. If an interpretive regime that minimizes the sum of interpretive error and specification costs has higher administration costs than a regime with higher total interpretive error and specification costs, the latter may be the preferable regime. See Richard A. Epstein, *Simple Rules for a Complex World* 30–6 (1995). The "all else equal" proviso allows for this possibility. Our case for incorporation is not based on a complete analysis of all relevant variables. Interpretive regimes affect a number of decisions of actual and potential contracting parties, including whether to contract at all, the type of contract, contract performance, and the decision to breach. The decision to contract, for instance, is not an exogenously fixed variable. Where performance deviates from the express terms of a contract, use of commercial practice to interpret terms can increase the cost of performance over the life of the contract. In some circumstances, this prospect can make not contracting the preferred decision. A complete analysis of equilibria under different interpretive regimes must estimate the aggregate effect of an interpretive regime on all variables, not just on specification and interpretive error costs. This chapter holds the parties' preferences for contracting and contract terms constant and estimates the effect of choice of regime on two important variables. Its analysis is more manageable because the estimation is of the effect of interpretive regimes on the likely costs of making particular decisions. The full case for and against incorporation would estimate the range of decisions affected by such regimes.
4. Philosophers standardly assume that literal sentence meaning exists, as do some legal theorists. See, e.g., Donald Davidson, *Truth and Interpretation* 247 (1984); John R. Searle, *Speech Acts* 19 (1969): Larry Alexander, *All or Nothing at All? The Intention of Authorities and the Authority of Intentions,* in Andrei Marmor, ed., *Law and Interpretation: Essays in Legal Philosophy* 356, 363–5 (1995); Frederick Shauer, *Statutory Construction and the Coordinating Function of Plain-Meaning,* 1990 Supr. Ct. Rev. 213, 251–3. For scepticism about the existence of plain-meaning, see Stanley Fish, *Doing What Comes Naturally: Change, Rhetoric, and the Practice of Theory in Literary and Legal Studies* 508 (1989); Sanford Levinson, *Law as Literature,* 60 Tex. L. Rev. 373, 378 (1982). Contrary assessments of the trend in recent caselaw appear in Margaret N. Kniffin, *A New Trend in Contract Interpretation: The Search for Reality as Opposed to Virtual Reality,* 74 Or. L. Rev. 643 (1995); Ralph James Mooney, *The New Conceptualism in Contract Law,* 74 Or. L. Rev. 1131, 1159–71 (1995).
5. Of course, if one party can prove that *both* parties shared his or her idiosyncratic understanding of a contractual term, courts will enforce the term according to that understanding.
6. This assumes that contractors always prefer to maximize the joint value of their contracts ex ante and that their most preferred terms correspond to the most efficient terms. Of

course, the former does not entail the latter. Contractors might mistakenly believe their most preferred terms will maximize the joint value of their contract ex ante. But the economic analysis of contract presumes that the parties' preferences provide the best method of approximating the most efficient terms for contracts. The plausibility of this claim stems from the claim that the market will select against parties who include inefficient terms in their contracts, and will favor the evolution of commercial norms that will guide contracting preference formation.

7. Again, the "all else equal" proviso holds the costs of administering an interpretive regime constant across all regimes. See n. 3 supra.
8. Specification costs provide the upper bound of the aggregate costs attributable to inefficient contractual terms: The loss in the expected joint value of a contract due to a failure to specify the most efficient terms cannot exceed the costs of specifying the most efficient terms. Otherwise, rational parties would incur the costs of specifying the most efficient terms rather than incur the larger loss in the expected joint value of their contract. Note that under the hypothetical interpretive regime in the text, the costs of securing the most desired terms will be infinite when the parties desire a term not contained in the judicially specified menu. In that case, the upper bound of the aggregate costs attributable to inefficient contractual terms is the entire expected joint value of the contract: Some contracts will have a positive expected joint value only if they contain a term not contained in the judicial menu.
9. See Richard A. Epstein, *The Path to* The T.J. Hooper*: The Theory and History of Custom in the Law of Tort,* 21 J. Legal Stud. 1, 9–11 (1992).
10. Richard Craswell makes this point when he states that "the bulk of what is conveyed by most utterances lies in the context-dependent pragmatic implications, not in the bare semantic meaning." *Trade Customs,* supra n. 2, at 26. Craswell notes, however, that even though the interpretation of custom is necessarily context-sensitive, "merchants may still be able to . . . reach decisions in particular cases, and there may even be a large degree of uniformity in the decisions that various merchants reach – but this will be because each is exercising his or her judgment in a similar way." Ibid. at 28. For an extended analogy of the necessarily contextual and judgment-based nature of interpretation of customs to the interpretation of language, see ibid. at 18–28.
11. The empirical claim is illustrated by Lisa Bernstein's empirical study of the codification efforts by merchant associations around the turn of the century and merchant responses to the proposed Article 2. See *Questionable Empirical Basis,* supra n. 2. The a priori claim is illustrated by Richard Craswell's argument that trade practices might not exist because of their ineliminably contextual nature. See *Trade Customs,* supra n. 2.
12. *Questionable Empirical Basis,* supra n. 2, at 717.
13. Ibid., supra n. 2, at 760.
14. Ibid., supra n. 2, at 717.
15. Ibid., supra n. 2, at 717.
16. Ibid., supra n. 2, at 760.
17. Ibid., supra n. 2, at 761.
18. UCC § 1-205, com. 4 (emphasis added). See Joseph H. Levie, *Trade Usage and Custom under the Common Law and the Uniform Commercial Code,* N. Y. U. Law. Rev. 1101, 1107 (1965).
19. The evidence on which Bernstein principally relies for the claim that no uniform industrywide practices existed often provides equally strong support for the existence of

relatively clear local customs. Consider the evidence Bernstein culls from the National Hay Association debates. Bernstein quotes members of the National Hay Association Meetings to support her claim that there was no uniform customary understanding of the size of a bale of No.1 hay. For example, Bernstein quotes a member attending the Fourth Annual National Hay Association meeting as stating that if one were to "[p]ut twenty bales of different grade hay along that room, . . . there will not be five men among you who will agree" on whether each bale contains no. 1 hay. *Questionable Empirical Basis,* supra n. 2, at 720. But Bernstein also quotes another member as stating that "[b]ales are not governed by size so much as by weight in the Northwest. In Chicago, I know, they like light bales, weighing from eighty-five to ninety-five pounds; and in the East they like heavier bales. In Wisconsin they will put in 125 to 135 pounds." Ibid. at 721, n. 34 quoting NHA, Report of the Tenth Annual Convention 80 (1903). Unlike the first quotation, the second supports the claim that nationally uniform customs did not exist by evidence that local customary understandings of the term *bale* did exist. Indeed, many of the quotations Bernstein cites assert the existence of relatively precise local customs in the course of denying the existence of a uniform national custom: "What is considered as No. 1 timothy, for example, in one producing section may be considered as No. 2 timothy in another producing section, and still of another grade in the consuming section to which it may be shipped." Ibid., supra n. 2, 721, n. 35, citing NHA, Report of the Fourth Annual Meeting 40 (1920); "[S]eedsmen handle large quantities of . . . seeds . . . for few of which legal weights per bushel have been established. They have, therefore, to arrive at customary weights only, which vary in the different States." Ibid., supra n. 2, at 721, n. 36, quoting the *American Silk Throwers Association Yearbook* 59 (1914); "(. . . noting that many local rules relating to shipping time contradicted the Grain Dealers National Rules)," Ibid. at 724, n. 50, summarizing 17 *Who is Who in the Grain Trade* 31, 33 (Jan. 5, 1927–28); "[W]e are old fashioned folks at Boston, and this Association must not forget one thing, that what is applicable to one section of the country is not applicable to another." Ibid. at 724, n. 51, quoting NHA, Report of the Fourth Annual Convention 24–5 (1897); "([C]ontaining a debate over grades that emphasizes the existence of regional differences)." Ibid. at 724, n. 51, summarizing NHA, Report of the Twenty-Eighth Annual Convention 68–72 (1921).

Bernstein does claim, at one point, to have evidence that even local (uniform) customs did not exist in the grain and feed industry, but the only evidence she cites is from the Minutes of Meetings, Secretary's Book, Nov. 9, 1896 (an unpublished book of clippings on file with Bernstein), in which the secretary apparently reports that the Illinois Grain Dealers' Association created trade rules, to, among other things, "establish and maintain uniformity in commercial usages as far as the grain trade is concerned." Ibid. at 726, n. 59. At best this evidence establishes that not all customs were uniform within the grain and feed industry in Illinois. But this claim is consistent with the existence of many important local customs in different geographic areas within the Illinois grain and feed industry, as well as with the existence of many uniform grain and feed customs within the state of Illinois. In sum, the same evidence that supports Bernstein's conclusion that no uniform industrywide standard for grades of hay existed also supports the existence of relatively clear local customary understandings.

On the other hand, Bernstein's evidence might be thought to be insufficiently representative even to ground the conclusion that local customs existed. Bernstein suggests as much when she notes that "there are also reasons to be skeptical about strong statements

suggesting that local customs exist. If, for example, a transactor is arguing for adoption of a particular rule (especially one that is favorable to his locality rather than simply to a subset of firms in it), he might invoke the alleged universality of the practice in his locality to give his argument legitimacy and persuasive force." Ibid. at 719, n. 28. The problem is that Bernstein's evidence typically consists of the representations of only one merchant in each of various locales. If these representations cannot be taken at face value, then perhaps, as Bernstein argues here, they provide poor positive evidence of the existence of uniform local customs. But if this is so, statements indicating conflicting customs among different locales are poor evidence that national customs did not exist. Bernstein doubts the reliability of individual statements concerning the existence of local customs when such statements are invoked in support of the claim that local customs did exist. But to establish the nonexistence of nationally uniform customs, she relies almost entirely on individual reports of local customs to argue that customs varied among different locales. Bernstein cannot have it both ways.

20. See Clayton P. Gillette, *Harmony and Stasis in Trade Usages for International Sales,* 39 Va. J. Int'l L. 707, 710 n. 10 (1999).
21. See Samuel P. Hays, *The Response to Industrialism: 1885–1914* 10, 13 (2d ed. 1995); Robert H. Wiebe, *The Search for Order: 1877–1920* (1967); Robert William Fogel, *Railroads and American Economic Growth: Essays in Econometric History* 17–9 (1964) (patterns of agricultural distribution); Glenn Porter and Harold C. Livesay, *Merchants and Manufacturers* 154–65 (1971) (consumer goods markets).
22. See Harold Barger, *The Transportation Industries: 1889–1946,* 46–8 (1951).
23. For the oligopolistic motives for forming trade associations, see William H. Becker, *American Wholesale Hardware Trade Associations, 1870–1900,* 45 Bus. Hist. Rev. 179 (1971); Lance E. Davis, Jonathan R. T. Hughes and Duncan M. McDougall, *American Economic History* 289 (3d ed. 1969).

    Bernstein correctly notes that the codification efforts do not demonstrate the paucity of uniform national customs. There are a variety of important reasons for codifying even relatively clear and uniform customs. See *Questionable Empirical Basis,* supra n. 2, at 740, 742, n. 139.
24. Ibid., supra n. 2, at 12, n. 48.
25. Bernstein's extended discussion of the meaning of critical terms in hay contracts provides another illustration. She asserts that "[t]he debates surrounding the adoption and amendment of the hay rules also suggest that there were no agreed-upon usages in relation to some of the precise aspects of a standard transaction that the Code and its Official Comments explicitly direct courts to discern by reference to usage of trade or commercial standards." *Questionable Empirical Basis,* supra n. 2, at 721. Her first example is the Code rule providing that sellers have a "reasonable time" to deliver goods to the buyer in the absence of a contractual provision specifying otherwise. UCC § 2-309. The Code directs courts to consult usage of trade to determine what a reasonable time for delivery would be under a particular contract. Bernstein claims that the debates in the hay industry surrounding the adoption of a proposed rule specifying when certain freight charges had to be requested "reveals that there was no agreement as to what a reasonable time might be." Ibid. at 722.

    But Bernstein's evidence only weakly supports the claim that usages of trade did not exist to significantly constrain the allowable time for delivery even in hay contracts in the early part of the twentieth century, let alone in most current industries in contemporary

times. First, she cites the NHA Report of the Sixteenth Annual Convention 220 (1909) to quote an individual who states the "word 'ample' [as used in a rule requiring 'ample margin'] may not have the same meaning in the minds of different people." Ibid. at 722, n. 39. But even if "ample margin" has "different meanings in the minds of different people," there may be significant overlap on clearly acceptable and clearly unacceptable cases outside of a grey area of disagreement. Usages of trade that delimit this range are useful for interpretive disputes that fall within the range of clear cases, even when they cannot resolve disputes within the grey area. Second, Bernstein quotes participants at the same convention reacting to a proposed rule that provides "[w]here sales are made on destination terms any claims that may arise, including those for shortage, damage, demurrage or over-charges in freight, must be made within ten day [sic] after arrival of property at point of final destination." NHA Report of the Sixteenth Annual Convention 214. After one participant proposes to replace the phrase "ten day" with "a reasonable time," another individual responds, that "that 'reasonable time' business will not [tell] anything. You might as well leave it out." Ibid. at 223. Bernstein quotes this participant's comment and also states that another "transactor proposed 'nine months,' another 'fifteen days,' and still another, 'within ten days after the freight bills have been paid.'" *Questionable Empirical Basis,* supra n. 2, at 722. But in fact the same participant who proposed the "nine month" amendment seconds later proposed the "fifteen day" amendment, after being accused, by the author of the "reasonable time" amendment, of not proposing the "nine month" amendment in good faith. NHA Report of the Sixteenth Annual Convention 223. Bernstein's description of the debate creates the misleading impression that two different participants proposed rules that differed by eight and one-half months, rather than a mere five days, and obscures the apparent underlying consensus that claims should be made within ten to fifteen days after the freight bills have been paid.

Third, and most important, the participants in the debates Bernstein cites were not directly addressing the question of whether customs for paying freight charges such as shortages existed in their states. Instead, they were proposing and reacting to proposed rules governing the payment of these charges. Their reactions reflected the different commercial realities in their locales that would affect the feasibility of meeting the proposed time deadline in each proposed rule (such as the amount of time between delivery and receipt of corrected freight charges in various locations). See ibid. at 221. Proposals for different rules need not reflect different local customs. Indeed, because one of the objectives of codification efforts is not only to codify but to change existing commercial practice, an inference from proposed rules to existing customs is particularly unwarranted.

Bernstein also quotes a participant at the NHA Report of the Twenty-Eighth Annual Convention 68 (1921) who states that "the words 'good color' might be stricken out and insert something which the inspector or shipper or buyer will know what it means." But Bernstein fails to note that the same individual goes on to propose in the place of "good color" the rule that "it shall be hay that shall contain not an undue amount of brown heads." Ibid. Thus, the same individual who thought the words "good color" were too indefinite apparently believed the words "undue amount" were not. Moreover, even when it is clear that the individuals speaking at this convention believed crucial terms in their industry, such as "well baled" and "good color," were vague, usage of trade might establish fairly clear ranges of acceptability and unacceptability under these terms.

Industry members, for example, might have been able to agree on many cases as either well baled or not well baled, or of good color or not, even if a significant range of disagreement over intermediate cases existed. In fact, after agreeing that the term "well baled" should be eliminated from the proposal at issue, one individual reasoned that the term could be eliminated on the ground that "[i]f the customer is not satisfied with the baling he need not buy." Ibid. If the range of reasonable disagreement over the quality of baling were not fairly narrow, a practice of allowing buyers unilaterally to reject delivered hay by claiming dissatisfaction with the baling would not be tolerable to sellers.

26. The title of Craswell's piece, "Do Trade Customs Exist?," suggests that he shares Bernstein's radical scepticism about the existence of what she calls "strong form" or "Hayekian" customs. But as Craswell notes in his opening line, he intends his title to be "semifacetious." *Trade Customs,* supra n. 2, at 1. Craswell's argument acknowledges the existence of custom but questions its utility for the purposes of contractual interpretation and gap-filling.
27. Ibid., supra n. 2, at 4. The bracketed words in the quoted passage reflect Craswell's analogous discussion of Barnett's fairness-based justification for incorporation. See ibid. 5–6.
28. Craswell claims that efficiency and fairness theorists share "the premise that customs can serve as a guide to something that courts would face great difficulty identifying on their own. But this argument has force only to the extent that the identification of customs places demands on courts that are less stringent than, or at least are different from, the demands courts would face if they tried to allocate risks based on their own nonlocalized judgments of fairness or efficiency." Ibid, supra n. 2, at 6.
29. As Craswell puts it:

> [I]f individual witnesses must draw on their own analysis of particular contexts, then they are providing an assessment that is not entirely different from what would be provided by any other expert whom a court might consult, such as an economist or a philosopher. The judgment of the industry expert might of course be either wiser or less wise than that of the outside economist or philosopher – but the comparison is still between two forms of individualized, case-by-case judgments. . . . Outside experts such as economists or philosophers will usually have a relatively explicit normative framework that enables them to recommend one outcome over another. By contrast, while industry experts may be *implicitly* making large numbers of trade-offs . . . , they often do so on an intuitive basis without any explicit normative framework.

Ibid., at 29.

Craswell continues: "[T]he view I advance here suggests that the choice is often between individual judgments that are made analytically, by outside experts; and individual judgments that are made instinctively, by industry practitioners." Ibid. at 31. Finally, in comparing the judgments of industry participants and experts, Craswell worries that, "[w]hen beliefs and values are allowed to remain intuitive, rather than being made explicit (and therefore subject to scrutiny), there is always a danger that the lack of explicit scrutiny will permit the survival of assessments that truly ought to become defunct." Ibid. at 31–32.

30. Ibid., at 29.

31. For a general discussion of how legal theorists must select the data to constrain their theories, see Jody S. Kraus, *Legal Theory and Contract Law, Philosophical Issues, Nous* (forthcoming).
32. See John Rawls, *Two Concepts of Rules,* 64 Phil. Rev. 3 (1955).
33. Bernstein calls these "relationship-preserving norms." See *Merchant Law,* supra n. 2, at 1796; See also Edward B. Rock and Michael L. Wachter, *The Enforceability of Norms and the Employment Relationship,* 144 U. Pa. L. Rev. 1913 (1996).
34. Bernstein calls these "end-game norms." See *Merchant Law,* supra n. 2, at 1796–7.
35. A usage of trade is "any practice or method of dealing having such regularity of observance . . . as to justify an expectation that it will be observed with respect to the transaction in question." UCC § 1-205(2). Section 1-205(2) requires that "[t]he existence and scope of such a usage are to be proved as facts." The Code commentary emphasizes that "[a] usage of trade . . . must have the 'regularity of observance' specified," and provides that "full recognition is thus available for new usages and for usages currently observed by the great majority of decent dealers." UCC § 1-205, com. 5.
36. "A course of dealing is a *sequence* of previous conduct between the parties to a particular transaction. . . ." UCC § 1-205(1) (emphasis added). "Course of dealing under subsection (1) is restricted, literally, to a *sequence* of conduct between the parties previous to the agreement." UCC § 1-205, com. 2 (emphasis added). "Where the contract for sale involves *repeated* occasions for performance by either party . . . any course of performance accepted or acquiesced in without objection shall be relevant to determine the meaning of the agreement." UCC § 2-208(1) (emphasis added). "A single occasion of conduct does not fall within the language of [the section defining course of performance]." UCC § 2-208, com. 4.
37. It is worth noting that the mere existence of a regularity of commercial behavior at odds with the plain meaning of a contractual term alone is no evidence of the existence of an informal norm. The behavior is equally consistent with the parties intending that the contract term be interpreted by their behavior under the contract, not by plain meaning. For instance, suppose the sales contract calls for delivery of "10 bushels of No. 1 wheat per month." Seller, having difficulty fulfilling all its orders, delivers eight bushels every previous month. Buyer does not complain. The question is whether the contract calls for delivery of ten bushels in a subsequent month. Delivery of eight bushels previously is equally consistent with the following two interpretations of the contract's quantity term: (1) "10 bushels" (which Buyer can insist on but has not to date); or (2) "10 bushels or 8 bushels when Seller has difficulty fulfilling its orders." Behavior inconsistent with the plain meaning of the quantity term does not show that an informal norm is operating.
38. See Larry E. Ribstein and Bruce H. Kobayashi, *An Economic Analysis of Uniform State Laws,* 25 J. Leg. Stud. 131, 150 (1998).
39. In some cases, it is difficult to conceive of a term's meaning without taking commercial context into account. For example, the term specifying the required weight of a good to be delivered pursuant to a sales of goods contract is unlikely to have a plain meaning precise enough to determine whether a tender must fall within grams, ounces, pounds, or tons of the stated weight. In such cases, the best method available to the contractors for determining the meaning of contract terms is to incorporate commercial practice. For example, we presume that in gold contracts, the gold delivered must fall within a much smaller range of the stated weight (e.g., within one gram) than coal delivered under a coal contract (e.g., within one ton). It may be plain to the contracting parties, as well as to any

reasonable third party, that a coal contract stating weight requirements in tons, and a gold contract stating weight requirements in grams, contemplate permissible weight tolerances in terms of tons and grams, respectively. But this is plain not because the meaning of these terms corresponds to a context-independent plain meaning, but rather because the meaning of these terms is made plain by the commercial context in which they are invoked. Indeed, we suspect that very few terms have a precise and unambiguous "plain meaning." When meaning seems clear, it is usually because context makes it so.

40. This is not to deny that courts sometimes must interpret contracts without the benefit of plain meaning or commercial practice. Our point is simply that parties would never plan, as their first-best option, to create express terms that cannot be interpreted in light of either plain meaning or commercial practice. If they intend to create a dual regime, they would utilize express terms with relatively clear and unambiguous plain meaning. Otherwise, they would utilize express terms interpreted in light of commercial practice. Because of its relative unpredictability, bare judicial construction would never be the preferred method of interpretation for rational contractors.
41. UCC § 2-208 provides some evidence that the Code in fact presumes regularities of conduct to evidence formal rather than informal norms. That provision directs courts to interpret the meaning of contract terms in light of certain regularities of conduct during the course of the contract's performance: "Where the contract for sale involves repeated occasions for performance by either party with knowledge of the nature of the performance and opportunity for objection to it by the other, any course of performance accepted or acquiesced in without objection shall be relevant to determine the meaning of agreement." UCC § 2-208(1). Comment 1 to UCC § 2-208 underscores this presumption: "The parties themselves know best what they have meant by their words of agreement and their action under that agreement is the best indication of what that meaning was." UCC § 2-208, comment 1. UCC § 2-208, comment 3 states that "[w]here it is difficult to determine whether a particular act merely sheds light on the meaning of the agreement or represents a waiver of a term of the agreement, the preference is in favor of 'waiver' whenever such construction . . . is needed to preserve the flexible character of commercial contracts and to prevent surprise and other hardship." One might argue that this comment suggests the Code presumes that regularities in conduct probably constitute informal, rather than formal, norms. However, the comment refers only to a single act, rather than a series of acts constituting a regularity of behavior.
42. Of course, it bears repeating that this conclusion is merely our speculation. The best evidence of the ratio of observable regularities of commercial behavior evidencing informal norms to those evidencing informal norms would be a direct empirical study. By providing evidence of this ratio, such a study would illuminate one of the most significant factors in determining the likelihood of erroneous incorporation of informal norms under the incorporation strategy.
43. Of course, the failure of a majority of contractors to create an alternative interpretive regime would not constitute evidence that such a regime is less efficient than the prevailing regime. Transition costs, network externalities, learning costs, and structural obstacles to collective action could explain why contractors might continue to utilize a less efficient regime even when the aggregate costs of creating and utilizing a more efficient regime would be exceeded by the benefits of such a regime. In contrast, overcoming these obstacles to create and utilize an alternative regime is fairly strong evidence that the regime is more efficient than the one it replaces.

44. See *Merchant Law,* supra n. 2.
45. Ibid. at 1766.
46. As Bernstein acknowledges, the NGFA system is narrowly tailored to the uniform and idiosyncratic needs of its members. For example, it is suitable only for transactions in which most significant contingencies are well known in advance, most contractual arrangements are simple, the benefits of national uniformity outweigh any advantages of local variance, and mitigation is typically simple and universally available. In addition, its trade rules and term definitions are custom-tailored for grain and feed transactions.
47. The classic encrustation critique is presented in Charles Goetz and Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interaction between Express and Implied Contract Terms,* 73 Cal. L. Rev. 261 (1985). Encrustation describes two phenomena. The first is a status quo bias in favor of default terms. The status quo bias weights default terms by resolving ambiguities in the meaning of express terms to preserve the continued application of default terms to the contract. See Russell Korobkin, *The Status Quo Bias and Contract Default Rules,* 83 Cornell L. Rev. 608 (1998); Marcel Kahan and Michael Klausner, *Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Bias,* 74 Wash. U. L. Q. 347, 359–62 (1996). The second is the reliance on precedent to determine the customary meaning of contract terms. This interpretive practice results in a failure to recognize changes in customary meaning. Because a decisionmaker can interpret express terms without consulting default rules while also not recognizing changes in commercial practice, this second kind of encrustation can occur without the first. Both kinds of encrustration lead to a failure to acknowledge clear efforts by contractors to opt out of default rules or (stale) custom.
48. See *Rethinking Uniformity,* supra n. 2.
49. Scott cites the rejection of Llewellyn's proposal to have merchant juries decide Article 2 disputes as a "drafting disaster," and identifies the requirement that Code sections be interpreted in light of the purposes underlying the Code itself as the principal source of interpretive error in Article 2. Ibid., at 40–1.
50. See UCC §§ 1-205(1) (course of dealing), 1-205(2) (usage of trade), and 2-208(1) (course of performance). The proposed revision of Article 2 increases the extent of incorporation by repealing current Article 2's interpretation of shipment terms. Proposed UCC § 2-319 instead requires that shipment terms be "interpreted in light of applicable usage of trade, or any course of performance or course of dealing between the parties." Revision of Uniform Commercial Code Article 2 – Sales § 2-319 (November 1999).
51. See UCC § 1-205 com. 1.
52. See UCC § 2-202 com. 2.
53. See UCC § 2-202. Section 1-205(2) requires the court to interpret written trade codes when they are established to embody relevant trade usage.
54. See, e.g., UCC § 1-205(2) (the allocation of issues of course of dealing and course of performance to the trier of fact is implicit).
55. See UCC § 1-205, com. 5.
56. See, e.g., UCC § 2-607(4) (accepting buyer has the burden of proving nonconformity in goods tendered), and UCC § 1-201(8) (defining "burden of establishing").
57. For instance, the UNIDROIT Principles for International Commercial Contracts includes trade usage as part of the parties' agreement, except when the usage is "unreasonable." See International Institute for the Unification of Private Law, UNIDROIT Principles for International Commercial Contracts art. 1.8(2) (1994). The exception in effect restricts

the sort of extrinsic evidence relevant to interpreting the express terms of the parties' agreement. And, of course, the restriction is itself vague and therefore potentially increases the rate of legal error in interpretation. This might make UNIDROIT's implementation of the incorporation strategy a bad one. But this fact does not undermine the incorporation strategy generally.

58. See Rochelle C. Dreyfuss, *Forums of the Future: The Role of Specialized Courts in Resolving Business Disputes,* 61 Brook L. Rev. 1 (1995); cf. Richard L. Revesz, *Specialized Courts and the Lawmaking System,* 138 U. Pa. L. Rev. 1111 (1990).
59. See Allen R. Kamp, *Uptown Act: A History of the Uniform Commercial Code: 1940–49,* 51 S. M. U. L. Rev. 275, 292–93 (1998); James Q. Whitman, *Commercial Law and the American Vol.: A Note on Llewellyn's German Sources for the Uniform Commercial Code,* 97 Yale L. J. 156 (1987); Zipporah Batshaw Wiseman, *The Limits of Vision: Karl Llewellyn and the Merchant Rules,* 100 Harv. L. Rev. 520 (1987).
60. See, e.g., Julia A. Martin, *Arbitrating in the Alps Rather Than Litigating in Los Angeles: International Intellectual Property-Specific Alternative Dispute Resolution,* 49 Stan. L. Rev. 917, 926 n. 45 (1997); A. W. B. Simpson, *The Origins of Futures Trading in the Liverpool Cotton Market,* in *Essays for Patrick Atiyah* 179, 183 (P. Cane and J. Stapleton, eds., 1991).
61. Although Article 2 in principle allows for expert testimony to establish the existence and content of commercial norms, it is surprisingly rare. See Imad D. Abyad, *Commercial Reasonableness in Karl Llewellyn's Uniform Commercial Code Jurisprudence,* 83 Va. L. Rev. 429 (1997); compare Conference of Commissioners on Uniform State Laws, Report on the Second Draft of the Revised Uniform Sales Act, 1 *Uniform Commercial Code Drafts* 281, 335 (E. S. Kelly, ed., 1984) (comment to section 1-D considering whether formal statements of usage by merchant organizations should create a presumption of the background understanding of terms).
62. The restriction risks error when the forms do not reflect changes in trade usage. Standard forms in the grain trade apparently are slow to react to changes in shipping practices; see Albert Slabotzky, *Grain Contracts and Arbitration* 15–6 (1984); cf. Raj Bhala, *Self-Regulation in Global Electronic Markets through Reinvigorated Trade Usages,* 31 Idaho L. Rev. 863, 907–8 (1995) (same for currency "switches").
63. See UCC § 1-205, com. 5; cf. Levie, supra n. 18.
64. See *Rethinking Uniformity,* supra n. 2. An alternative speculation is that encrustation is the result of doctrinal devices such as precedent or the taking of judicial notice about commercial practice. Encrustation may have no statutory genesis. For the operation of judicial notice of trade usage under pre-Code law, see Note, *Custom and Trade Usage: Its Application to Commercial Dealings and the Common Law,* 55 Colum. L. Rev. 1192, 1201, 1203 (1955); cf. *Stoltz, Wagner and Brown v. Duncan,* 417 F. Supp. 552, 559 (W.D. Okl. 1976).
65. See, e.g., Convention on Contracts for the International Sale of Goods, art. 7(2), supra n. 1; UNCITRAL Model Law on Electronic Commerce, art. 3(2) (1997), U.N. Doc. A/51/628 (1996); Draft Uniform Rules on Assignment of Receivables Financing, art. 8, U.N. Doc. A/CN.9/WG.II/Wp.9323 (1997); Model Law on Legal Aspects of Electronic Data Interchange and Related Means of Communication, art. 3(2), U.N. Doc. A/CN.9/426 (1996); UNIDROIT, UNIDROIT Convention on International Financial Leasing, art. 6 (1988); 27 Int'l Legal Mat. 931 (1988); UNIDROIT Convention on International Factoring, art. 4, 27 Int'l Legal Mat. 943 (1988), Proposed UNIDROIT Convention on International Interests in Mobile Equipment (tent. draft, Nov. 1997).
66. See Robert D. Cooter, *Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant,* 144 U. Pa. L. Rev. 1643 (1996); Robert D. Cooter, *Structural Adjudication and the New Law Merchant: A Model of Decentralized Law,* 14 Int'l Rev. L. and Econ. 215 (1994).
67. See Robert Sugden, *A Theory of Focal Points,* 105 Econ. J. 533 (1995); Michael Bacharach, *Variable Universe Games* 255, in *Frontiers of Game Theory* (K. Binmore et al., eds., 1993).
68. Cf. UCC § 2-316(2) (statutorily described warranty disclaimer language is sufficient to disclaim implied warranties of merchantability); Robert K. Rasmussen, *Debtor's Choice: A Menu Approach to Corporate Bankruptcy,* 71 Texas L. Rev. 51 (1992).