Louisiana Law Review

Volume 62 | Number 4
Essays in Honor of William D. Hawkland - Unifying Commercial Law in the 20th Century: Understanding the Impulse and Assessing the Effort - Symposium
Summer 2002

Incomplete Law

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I. INTRODUCTION

A. Codes as Signals of Willingness to Harmonize

A standard result, both of economic and political theory[1] and of sociological empiricism,[2] is that when groups form, insider members desire their agents to rent seek against outsiders. Thus, when groups led by responsive leaders interact with each other, they reach "beggar-thy-neighbor" equilibria.[3] Rational transactors are aware of this impulse by political groups and their governmental representatives and when they contemplate relocating or transacting across political boundaries, they will take measures to forestall being exploited. Some of these costly precautions could be avoided if the jurisdictions involved agreed to coordinate their laws governing the transactions

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* Byron R. Kantrow Professor of Law, LSU Law Center. Work on this study was supported by a research grant from LSU Law Center Chancellor John Costonis. I am also grateful for the comments made by the panelists at the symposium where I presented the preliminary draft of this paper, most particularly, Alan Schwartz, Robert Scott, and Douglas Baird. The customary disclaimer, nevertheless, continues to apply.

1. *See, e.g.* Saul Levmore, *Interstate Exploitation and Judicial Intervention*, 69 Va. L. Rev. 563 (1983); Robert O. Keohane & Joseph S. Nye, Jr., *Between Centralization and Fragmentation: The Club model of Multilateral Cooperation and Problems of Democratic Legitimacy*, Kennedy School of Government, Harvard Univ. Working Paper No. 01-004, (Feb. 2001). This insight is not new.

> Neighboring Nations are naturally enemies of each other, unless their common weakness forces them to league in a CONFEDERATIVE REPUBLIC, and their constitution prevents the differences that neighborhood occasions, extinguishing that secret jealousy which disposes all states to aggrandize themselves at the expense of their neighbors.

Cf. Alexander Hamilton, The Federalist No. 6, quoting l'Abbe de Mably, *Principes des Négociations*.

2. *See, e.g.* Roger Brown, Social Psychology, Part VI (2d ed. 1986) (describing experiments in which members knowing they were assigned to groups at random and having no other relationship with other members of the same group, nevertheless discriminate against members of other groups whose makeup is also known to have been randomly selected).

3. In the absence, of course, of transaction costs to the group members in selecting and motivating their leadership. Indeed, the bright (as opposed to dark) side of transaction costs such as agency costs, and asymmetric information leading to moral hazard and adverse selection problems and the like, may be that they make neighbor-beggaring arrangements more costly to organize and thus less likely than the level of rent-seeking that might exist in their absence.

in question. The history of Europe over the last 600 years, for example, can probably be characterized by the coalescing of powerful nation state groups followed by vigorous neighbor-beggaring among them, leading to wars about every generation. In the twentieth century, war-making technology became so destructive that the costs of waging war began to greatly outweigh the potential gains from rent seeking against foreigners. As a result, the nations of Europe formed a centralized bureaucracy and empowered it to outlaw a host of the most destructive neighbor-beggaring practices, from the top down.[4] The last half of the twentieth century can probably be described as the era of such coordination.

Not only did the Europeans adopt the Rome treaty; the GATT[5] and the WTO[6] were also created. NAFTA[7] was enacted in the western hemisphere. Fifty-four countries of the world harmonized their law of sales by subscribing to the United Nations Convention on the International Sales of Goods.[8] To the extent that their rent-seeking impulses were not already forestalled by provisions of the United States Constitution,[9] the individual states of the United States harmonized their commercial law not, like the Europeans, from the top down, but rather by cooperative state activity, the adoption of uniform laws from the bottom up. Of these uniform enactments, the best known is the Uniform Commercial Code ("U.C.C."). By political reckoning, at least, the U.C.C. has been a resounding success. It has been wholly adopted, with only minor deviations from

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4. Treaty establishing the European Community, Feb. 7, 1992, O.J.C. 224/1, (1992) 1 C.M.L.R. 573 [hereinafter "EC Treaty"], incorporating changes made by the Treaty on European Union, Feb. 7, 1992, O.J.C. 224/1 1992, [1992] 1 C.M.L.R. 719. Of course, federalizing a number of formerly competing states may simply move the level at which the impulse to rent seek against your neighbor is exercised from the national to federation level. *See e.g.* Council Directive 97/7/EEC, 1997 O.J.C. (L144/19, particularly art. 12(2) at L144/24), from the European Parliament and Council regarding the protection of European consumers from distant sellers. It recites the severe danger to European consumers that long distance sellers may treat them unfairly, and then prescribes protective terms for all such distance contracts with European consumers while, apparently, approving the exploitation of non-European consumers by European distance sellers.

5. General Agreement on Tarriffs and Trade, Multilateral International Trade in Cotton Textiles, Oct. 1, 1962, 13 U.S.T 2672, T.I.A.S. No. 5240.

6. Agreement Establishing the World Trade Organization, Apr. 15, 1994, KAV 4042; 33 I.L.M. 1125, 1144.

7. North American Free Trade Agreement, *opened for signature* Dec. 17, 1992, U.S.-Can.-Mex., KAV 3417; 32 I.L.M. 289, 296 (1993) (entered into force Jan. 1, 1994).

8. United Nations Convention on Contracts for the International sale of Goods, *opened for signature* Apr. 11, 1980, U.N. Doc. A/CONF.97/18, Annex I at 178 (1981).

9. *See, e.g.* City of Philadelphia v. New Jersey, 437 U.S. 617, 98 S.Ct. 2531 (1978) (Laws discriminating against interstate commerce held unconstitutional.).

NCCUSL's[10] "Uniform" Version,[11] in 49 of the 50 states,[12] and almost wholly in the 50th.[13] From an economic standpoint this success should not be surprising, and to that extent, my colleague, friend, and former chancellor Bill Hawkland, who was instrumental in drafting, promulgating, and revising the code, might be credited as a leader in sensing an historic trend in the facts of social and transactional life—that the one market should be governed by essentially one set of doctrines. His early work presaged a global coordination movement in the law. No one is suggesting that the global (or even our national) harmonization movement has increased interjurisdictional rent seeking, or even that it failed to reduce it.[14]

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10. An acronym for National Conference of Commissioners on Uniform State Laws. NCCUSL is a body of lawyer/commissioners appointed by the governors of their respective states whose purpose is to draft and propose adoption of uniform state legislation. *See* Handbook of the National Conference of Commissioners on Uniform State Laws and Proceedings of the Annual Conference Meeting in its Ninety-Eighth Year (1994).

11. NCCUSL and the American Law Institute (ALI) jointly promulgate a so-named "Official Text" version of the entire U.C.C. and propose it for adoption by the various states. Most states adopt the official text nearly verbatim, but many make minor modifications to the details. These minor nonuniformities are collected in one volume of Hawkland's Treatise on the Uniform Commercial Code, (Hawkland U.C.C. series local code variation, 12000).

12. Every state has adopted every article of the official text except that Louisiana has not adopted Article 2. 2A Uniform Laws Annotated 2 (1990) (supplementary pamphlet). Louisiana has, however, amended the sales articles of its Civil Code to adopt close analogues of several of the sections of that article. La. Civ. Code Book III, Title VII, Ch. 13, entitled "Sales of Movables."

13. 1A Uniform Laws Annotated, *supra* note 12. *See also* La. Civ. Code art. 2601 which enacts much of the content of U.C.C. § 2-207. There are other analogues, *e.g.*, between La. Civ. Code art. 2604 and U.C.C.§ 2-513; La. Civ. Code art. 2610 and U.C.C. § 2-508; La. Civ. Code art. 2609 and U.C.C. § 2-712; La. Civ. Code art. 2611 and U.C.C. § 2-706. Although these provisions do not explicitly enact an attempt to unify Louisiana sales law with the laws of its sister states, they illustrate that the substance of several of Article 2's provisions were politically attractive to contracting parties buying and selling goods in Louisiana.

14. *Cf.* Jenna Bednar, *Shirking and Stability in Federal Unions* (Apr. 2001 unpublished manuscript, Univ. of Michigan Dept. of Political Science) (arguing that under incomplete information, the equilibrium between related governments is reached at a suboptimal level of productive contributions to the unification effort); Paul B. Stephan, *The Futility of Unification and Harmonization in International Commercial Law*, 39 Va. J. Int'l Law 743 (1999) (suggesting that regulatory competition is as likely to deliver efficient outcomes as regulatory coordination is). Dean Robert Scott has expressed skepticism that the U.C.C. did, in fact, create "substantive" interjurisdictional uniformity of sales law because its regulatory provisions are so vague as to make it unknowable whether the outcomes in any sales contract dispute in jurisdiction A will match those in jurisdiction B. Robert E. Scott, *Is Article 2 the Best We Can Do?*, 52 Hastings L.J. 677 (2000) [hereinafter "Scott, *Article 2*"]. Scott does not consider the commitment which the U.C.C. means each state makes, however, to use interpretations reached by sister states as

Particularly, Article 2 of the U.C.C., however, has been subjected to another sort of complaint. Ironically, it was not issues of interjurisdictional rent-seeking that motivated Article 2 so much as the perceived inadequacy of the predecessor sales laws.

B. The Critique from Technique

The founding fathers of the U.C.C., including Bill Hawkland whose career we are honoring here, were persuaded that the code needed to be enacted because the then existing commercial law, which, at least with respect to the sales of goods, was the Uniform Sales Act, had been extensively interpreted by various state courts to yield nonuniform results.[15] The resulting defect in this joint product of the uniform legislation and common law adjudication had been the loss of certainty and predictability in commercial transactions for which the commercial law community had long hoped and dreamed.[16] The U.C.C.'s drafters thought they knew the cause of the problem—predictability and certainty had been lost as a cost of using a common law, case precedent legal system.[17] They also thought they knew the solution. Rather than adopting a mere statute which was subject to common law court interpretation, they would adopt a true "code." Why a code? Because it was theorized that practice under a code employs better legal technique. On this topic, by quoting him, Hawkland showed he feels like most of us do, that if Grant Gilmore said anything about a topic, he probably said it best:

> A 'code,' let us say, is a legislative enactment which entirely pre-empts the field and which is assumed to carry within it the answers to all possible questions: thus when a court comes to a gap or an unforeseen situation, its duty is to find, *by extrapolation and analogy,* a solution consistent with the policy of the codifying law; the pre-Code common law is no longer available as an authoritative source.[18] (Emphasis mine).

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authority in the adjudication of matters in the home state. *See, e.g.* Cromwell vs. Commerce & Energy Bank, 464 So.2d 721 (La. 1985). This commitment, if followed, sends a powerful signal that the home court will look to foreign results rather than to home citizen advantage in applying sales law, in effect an undertaking not to lend its own law to the rent-seeking ends of its own citizens. Accordingly, one ought to anticipate that the legal issues which are adjudicated in American commercial disputes will not include conflicts-of-laws questions.

15. *See* William D. Hawkland, *The Uniform Commercial Code and the Civil Codes*, 56 La. L. Rev. 231, 232-33 (1995) [hereinafter "Hawkland, *U.C.C.*"].

16. *Id.* at 231.

17. *Id.* at 233, *quoting* Professor Grant Gilmore's analysis.

18. Grant Gilmore, *Legal Realism, Its Cause and Cure*, 70 Yale L.J. 1037, 1043, (1961), [hereinafter "Gilmore, *Realism*"] *quoted in* Hawkland, *U.C.C., supra* note 15, at 236.

In the 50 years since the then young Bill Hawkland began the successful work with his mentor, Karl Llewellyn, to draft and secure passage of the U.C.C., the problem has finally come full circle. Hawkland and Llewellyn believed that lack of certainty came from the common law origins of commercial law. Recently, however, the code, particularly Article 2 dealing with sales, has come under the same criticism leveled against the pre-code commercial law by its founders: Sales law, it is said, lacks certainty and predictability because it is unlike the common law of service provider contracts, which do have predictability and certainty. However, the law of sales of goods does not have predictability and certainty *because* it is a code. The diagnosis is the same, but the prescribed cures are polar opposites.[19]

This problem is not a new one. That the law is a hard place to find definitive answers has probably perplexed lawyers and legal scholars since the law was first invented. We know that, at least since Blackstone, the notion that law could become certain was almost a joke:

> The uncertainty of legal proceedings is a notion so generally adopted, and has so long been the standing theme of wit and good humor, that he who should attempt to refute it would be looked upon as a man, who was either incapable of discernment himself, or else meant to impose upon others. . . .
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> [This uncertainty] hath sometimes been said to owe its origin to the number of our municipal constitutions, and the multitude of our judicial decisions; which occasion, it is alleged, abundance of rules that militate and thwart with each other, as the sentiments or caprice of successive legislatures and judges have happened to vary.[20]

Blackstone thought he understood why this unfortunate state of affairs had arisen. It was the fault of the Normans who had spoiled the perfect simplicity of the ancient Saxon law. "Hence the law . . . which (being intended for universal reception) ought to be a plain rule

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19. *See* Robert E. Scott, *The Uniformity Norm in Commercial Law: A Comparative Analysis of Common Law and Code Methodologies*, [hereinafter "Scott, *Uniformity Norm*"] *in* The Jurisprudential Foundations of Corporate and Commercial Law (Jody S. Kraus & Steven D. Walt, eds., 2000) [hereinafter "Kraus & Walt"].

20. Sir William Blackstone, 3 Commentaries on the Laws of England 325 (1867) *cited in* Duncan Kennedy, *The Structure of Blackstone's Commentaries*, 28 Buff. L. Rev. 209, 235 (1979).

of action, became a science of the greatest intricacy."[21] Despite the efforts of the common law courts thereafter to clean up the mess, unfortunately parliament itself had continued to keep the law intricate and uncertain.[22]

About a century later the law apparently began to experience some improvement in generating easily predictable results, at least in North America. As one professor summarized the prevailing view toward the end of the nineteenth century

> To the classical formalists, law . . . meant a scientific system of rules and institutions that were *complete*; in that the system made right answers available in all cases; *formal* in that right answers could be derived from the autonomous, logical working out of the system; *conceptually ordered* in that ground-level rules could all be derived from a few fundamental principles; and socially *acceptable* in that the legal system generated normative allegiance.[23]

Whatever relief the Langdellian formalism idea offered to lawyers and judges suffering from Blackstonian uncertainty, it was not long lasting. By the early part of this century, revered legal realist scholars such as Arthur Corbin, and judges, such as Benjamin Cardozo,[24] were leading legal theory back into the swamp.[25] If it stood for little else, the American legal realist movement convinced American legal theorists that Doris Day had been right: "The future's not ours to see," including the as yet to be told story of the law and us. Legal doctrines are not very good about letting us know what precisely will be happening in future litigations. Latter day realists, adherents to the critical legal studies movement, in fact, came to advocate a radical indeterminacy thesis—that doctrines were incapable of either predicting or justifying future legal results.[26]

In particular, Article 2 of the U.C.C. has been criticized for its failure to solve the problem of contractual incompleteness. In this study, I examine two of these critiques. I illustrate the weaknesses of those critiques by analyzing examples of incompleteness in sales contracts. Part II of this study addresses the argument that the U.C.C. unwisely adopted a regulatory strategy based on general standards

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21. *See* Kennedy, *supra* note 20, at 236.
22. *Id.* at 237.
23. Richard H. Pildes, *Forms of Formalism*, 66 U. Chi. L. Rev. 607 (1999) (summarizing the features of so-called Langdellian formalism).
24. Grant Gilmore, The Age of Anxiety, *in* The Ages of American Law (1977).
25. *See* Arthur Leff, *Some Realism About Nominalism*, 60 Va. L. Rev. 451 (1974).
26. Mark Kelman, A Guide to Critical Legal Studies, 17-25 (1987) [hereinafter "Kelman"].

rather than precise rules, and that it rejected a formalist interpretive application practice. This part also argues that the contextual, anti-formalist technique adopted by the code in Article 2 was not only correct, but also inevitable. I show that formalist statutory and contract interpretive strategies exacerbate rather than solve the problem of contractual incompleteness. In Part III, I apply these arguments to two particular problems of incomplete contracts which U.C.C. Article 2 addresses: the problem of indefinite quantity terms and the uncertain quality specifications in certain contracts for the sale of goods.

Part III's discussion directly addresses a second strand of criticism of the code, particularly Article 2, which I denote as the distributional dissent. Article 2's critics argue that the code is too favorable to sellers. I illustrate the problems with this argument in the context of incomplete contracts. In particular, there is a problem with adequately specifying the quality of the goods being bought and sold. I propose a theoretical understanding of some issues in these indefinite quality contracts and also argue that the U.C.C.'s incorporation doctrine mitigates the problems of contractual and legal incompleteness. In the course of developing these arguments, I too will be a critic of the code, and by implication of my colleague, one of its principal prophets and promoters. I will also, however, be a defender of his realist premises.

II. THE FASCINATION WITH FORMALISM AND THE CRITIQUE FROM TECHNIQUE

In a series of articles,[27] Dean Robert Scott has vigorously argued for an abandonment of the jurisprudence of the U.C.C., and a return to a formalist interpretive regime that characterized the common law of contract prior to the adoption of the U.C.C.. The critique is actually quite complicated. It begins with the argument that the internal dynamics of private legislatures such as NCCUSL and ALI, which drafted the U.C.C., are such that the rules they adopt will be vague and indefinite,[28] unless they have been captured by an interest

27. Robert E. Scott, *The Case for Formalism in Relational Contract*, 94 N.w. U. L. Rev. 847 (2000) [hereinafter "Scott, *Formalism*"]; Scott, *Uniformity Norm, supra* note 19, and Scott, *Article 2, supra* note 14. In his contribution to this symposium, Robert E. Scott, *The Rise and Fall of Article 2,* 62 La. L. Rev. 1009 (2002), [hereinafter "Scott, *Rise & Fall*"] he reiterates some of the arguments for formalism in these pieces but also advocates a more moderate, nuanced approach to the problem which he relabels as "neo-formalism."

28. Alan Schwartz & Robert E. Scott, *The Political Economy of Private Legislatures*, 143 U. Pa. L. Rev. 595 (1995).

group in which case the rules will be very precise and protective of the interests of the dominant group.[29] Article 2, Scott claims, is guilty of the first defect. Vague and indefinite rules, he argues, are unsuitable for formalistic application which is necessary if true substantive uniformity of law is ever to be achieved.[30]

Scott urges that the principle role of contract law is to efficiently deal with the problem that real world contracts are incomplete. He breaks that task into two parts: (1) correctly determining the [incomplete] content of what the parties actually promised each other, and (2) efficiently devising "default" clauses which fill in contractual gaps the parties have left in their expressed contractual promises.

Since real substantive uniformity requires that the same contract clauses be honored in the same way, both over time and as among various jurisdictions, Scott argues strongly that the courts should pursue the first task by confining themselves to a strictly textualist, literal interpretation of the words used by parties in their written or oral promises. This approach apparently exploits the value of the dictionary, which defines words the same whenever, or wherever, one consults it.[31] The mistake of the code drafters, he urges, was to

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29. Robert E. Scott, *The Politics of Article 9*, 80 Va. L. Rev. 1783 (1994) [hereinafter "Scott, *Politics*"].

30. The vagueness of Article 2's rules gives courts discretion to reach nonuniform results across jurisdictional boundaries. Scott, *Article 2*, *supra* note 14, at 684-85. For a fascinating explanation of what may both cause and justify statutory uncertainty, *see* Joseph Grundfest & A.C. Prichard, *Statutes with Multiple Personality Disorders: The Value of Ambiguity in Statutory Design and Interpretation*, 54 Stan. L. Rev. 627 (2002):

> It is entirely rational that, in the repeat game between Congress and the courts, both branches prefer a degree of ambiguity that can sustain mixed strategy equilibria. It follows that efforts to articulate more consistent and precise rules for statutory construction could well be doomed to failure whether those rules are described as textualist, intentionalist, expressive, dynamic, or of any other form. Those rules may be doomed to fail in practice not because they are illogical or incorrect, but because they seek to generate a level of precision that is inconsistent with the equilibrium relationship between the legislative and judicial branches. Put another way, a level of ambiguity may be part of the essential fabric of our legal regime.

Id. at 636.

31. Scott, *Uniformity Norm*, *supra* note 19, at 150. At the conference, Scott and Alan Schwartz softened this assertion, arguing that the interpretive techniques courts should use should, themselves, be contractible. The disagreements then seemed to focus on whether parties employing standard integration clauses in their contracts intend those clauses to direct an interpreting court to employ a completely noncontextual, formalist contract interpretation strategy or not. If that is what parties intended integration clauses to accomplish but courts routinely don't regard them as instructions to ignore contexts, one might expect contract drafters to begin to employ interpretative direction clauses which are more explicit. The rareness of

abandon a formalist interpretive strategy[32] and to replace it with a command to honor the contractual context in which the interpretive task arises.[33] Formalist interpretive strategies, Scott argues, are preferable to practices which take context into account because the decisions generated by formalist interpretation are more predictable.[34]

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such clauses dilutes the strength of the Schwartz and Scott take on integration clauses.

Scott is aware that the two tasks of contract law are in some degree of tension:

> Uniform interpretation argues for *formalism*, for a "textualist" or plain-meaning interpretation of the (facially unambiguous) express terms used in incomplete contracts. On the other hand, the task of generating useful defaults argues for *functionalism*, for contextualizing incomplete contracts. The defaults will naturally come from commercial practice and context evidence is the way courts find out about commercial practice. Thus the first goal seems to require keeping context out as often as possible, and the second goal seems to require incorporating context whenever possible.

Scott, *Uniformity Norm*, *supra* note 19, at 150.

In his contribution to this symposium, he recharacterizes his concerns as choosing the appropriate point on a continuum between pure textualism, and pure contextualism. Scott, *Rise & Fall*, *supra* note 27, at 1056 fn.144.

32. Larry Alexander offers a pithy version of our common understanding of the definition of formalism:

> By formalism I mean adherence to a norm's prescription without regard to the background reasons the norm is meant to serve (even when the norm's prescription fails to serve those background reasons in a particular case). A Formalist looks to the form of a prescription—that it is contained in an authoritative rule—rather than to the substantive end or ends that it was meant to achieve. A norm is formalistic when it is opaque in the sense that we act on it without reference to the substantive goals that underlie it.

Larry Alexander, *"With me it's All er Nuthin'": Formalism in Law and Morality*, 66 U. Chi L.Rev. 530, 531 (1999).

33. *See e.g.*, U.C.C. § 1-102(2)(b) (2001) (policy of U.C.C. is to permit continued expansion of commercial practice); U.C.C. § 1-205(3)-(5) (2001) (trade usage and course of dealing shall be used in interpreting the contract); U.C.C. § 2-202(a) (2001) (evidence of commercial context always admissible to explain the terms even of integrated final expressions in contract language); U.C.C. § 2-208(1) (2001) (post-contractual behavior is relevant to determining the meaning of the contract).

34. *See,* Scott, *Uniformity Norm*, *supra* note 19, at 152 ("Predictability of meaning is the bedrock of any signaling system."). Note that Scott does not address the need, under pre-code nonharmonized law, to engage in conflicts-of-law determinations for cross-border transactions. Anyone who can feel confident in predicting the outcome of cases which must be determined using existing conflicts-of-law doctrines has an understanding of that subject which is vastly different from that of most observers. *See* George Rutherglen, *International Shoe and the Legacy of Legal Realism*, 2001 The Supreme Court Rev. 347 (2001). More probably, Scott, if called upon to address the question would reply that private coordination is cheaply available for cross-border transactors given that choice of law clauses in contracts are routinely honored, *see, e.g.*, U.C.C. § 1-105(1) (2001), so that public harmonization of law is unnecessary.

Scott argues that contextual inquiry might have produced good default rules,[35] even at the expense of causing courts to make mistakes in determining what the parties actually promised in their deals, but that the potential has never been realized. Courts adjudicating disputes under Article 2, Scott asserts, simply have failed to develop useful contract default clauses, largely because he is convinced that courts are incapable of any sort of decision-making process other than to employ mechanical formalisms.[36]

If contracts were complete, it is the standard wisdom that there would be no need for contract law because nobody would breach a complete contract.[37] The contract consists of: (1) the deficient promises expressed by the parties, completed by (2) the default gap-filling terms of the background contract law. The express terms alone, by hypothesis, will always be incomplete, and a formalist application of them is the equivalent of the refusal to attempt to fill in any gaps. A formalist interpretation strategy, then, is an unpromising solution to the problem of contractual incompleteness. Scott concedes that such a strategy disables courts from developing the very default terms which might fill the gaps in the parties' expressions and thus solve the incompleteness problem via the development of gap-fillers.[38] This is Murphy's law with a vengeance.

It is an empirical question whether traders' use of language always conforms so tightly with the dictionary meaning so that a rigidly formalistic interpretive technique, determining the true content of the parties' promises from the dictionary meaning of the words in their promises alone, is the strategy least likely to reach erroneous conclusions about what they really promised each other. If languages grow and evolve, a contract will always be expressed, and a dictionary always written, for an obsolete version of the language. A promise to deliver a two inch by four inch photographic print can presumably be taken literally, even though we know for sure that a promise to build using two by four framing lumber would surely, if interpreted literally, produce a mistake.[39] Scott suggests that if the

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35. Scott, *Article 2*, *supra* note 14, at 686.

36. Scott, *Formalism*, *supra* note 27, at 861-66 (arguing that the same transaction costs and circumstances of asymmetric information which disable parties from writing complete express contracts likewise probably disable courts from writing the default clauses necessary to complete them).

37. *See* Scott, *Uniformity Norm*, *supra* note 19, at 151-52.

38. *See* Scott, *supra* note 31 and sources cited therein.

39. *See* specifically Stewart Macaulay, *Relational Contracts Floating on a Sea of Custom: Thoughts about the Ideas of Ian MacNeil and Lisa Bernstein*, 94 N.w. U. L. Rev. 775, 787 (2000) (discussing the relation between nominal and real dimensions of 2 x 4 lumber); and more generally *e.g.*, Elizabeth Mertz, *An Afterword: Tapping the Promise of Relational Contract Theory—'Real' Legal Language and a New Legal Realism*, 94 N.w. U. L. Rev. 909, 919-25 (2000)

law's exclusive reliance on the dictionary were perfectly known to traders, they could use dictionary defined terms only in their dictionary sense in their contracts, thus adapting to a formalist regime. Then, formalism would never generate contractual error, although the approach would likely generate fewer default terms as well. There is a transaction cost, however, in requiring parties to forgo the efficiency of their professional jargon and natural modes of expression when they trade. It might also be true that traders are more likely to adapt well to their own personal transactional cultures than to an artificial context of formal law. Thus, when using the formalist approach, traders are likely to be frequently trapped with inaccurate dictionary definitions of words which they efficiently use in all the rest of their dealings in a lexicographically deviant sense.[40]

Even if Scott's empirical hunches are correct about whether formal interpretations of contracts are the most efficient ways of understanding what the (regrettably incompletely expressed part of the) deal really was, there is, however, good reason to doubt whether as an interpretative strategy in law, his insight will ever be very relevant. Indeed the American Legal Realist movement, of which U.C.C. Article 2 is such a prominent product,[41] was based on the discovery that claims like Scott's were, in reality, usually irrelevant. The dream of "substantive uniformity" which Scott berates the Code for failing to achieve is a straw man. Despite the aspirations of drafters of comprehensive legal "Codes," completely reliable predictions of legal outcomes were probably never possible in the first place. Article 2, accordingly, was designed to fulfill a second-best role, enforcing contracts only after first trying to understand what the parties hoped to gain from them and how they expected the gains to be achieved. This mirrors the realist faith—law can be accurately deployed only when it is well understood.

(questioning whether accurate interpretation of the meaning of any contract language is ever possible without having detailed information about the context in which the parties were using it).

40. An extreme version of this theory is employed in Louisiana where, although the official version of the state's Civil Code was published both in French and English, courts have been inclined to give primacy to the French language version on the grounds that the code had originally been written in French and the English version was only a translation. This priority for the French language version exists, *see, e.g.*, Loescher v. Parr, 324 So.2d 441 (La. 1975), even though only a tiny fraction of Louisiana's citizenry, including its legislators, judges and lawyers can read or write in that language. Merely because Louisiana's citizens do understand French is not, in theory, any reason why they could not, concededly at some expense, adapt to what for many is, practically speaking, secret law.

41. *See* Alan Schwartz, *Karl Llewellyn and the Origins of Contract Theory*, *in* Kraus & Walt, *supra* note 19 (discussing the realist foundations of Article 2).

A. Formalizing Formalism

Understanding the basic problem requires us to deal with the structure of law: *legal rules are fact contingent.* A legislator drafting a statute, a common law judge confecting a rule in a litigated case, or even the writer of a contract, spelling out what the parties' rights and responsibilities will be, must recognize that the prescriptions they are drafting take the following form:

$$O_L = f(a,b,c,d,e,f,g)$$

The legal outcome [O_L] is a function [f] of the values taken on by various factual variables [a,b,c,d,e,f,g]. Therefore, in a world in which formalism was a plausible regulatory strategy, we could first adopt the above rule. Then, whenever an occasion to apply the above rule arose, we could program the function [f] and the facts (variable values for [a,b,c,d,e,f,g][42]) into our computer, and out would spit a ticket with the result [O_L]. Indeed, were formalism really an efficacious legal technique, lawyers would be unnecessary.[43] Computers could do the job just as well as lawyers, and would probably be cheaper to boot.[44] The O_L formulation does not require the rule to have been enacted by a legislature or adopted by some other governmental law giver. The formulation could also describe a decision rule found in a contract clause. If the contract requires in an (a,b,c,d,e,f,g) context a certain outcome, say O_C [the Outcome of the Contract], contract law which purports to enforce the rules that the parties make for themselves simply recognizes that rules can have different sources, but does not change the logic of working with rules as sources for making decisions. Suppose we did not have either a governmentally drafted rule [O_L] or a privately drafted contract rule [O_C] developed for a specific confluence of facts, a circumstance we could characterize as either incomplete law or

42. I ignore for the time being, the complications introduced by the symbolization of any "fact" as the value taken by a simple variable. Probably one would have to identify two kinds of facts, at minimum, binary facts whose values could be expressed as either 1 or 0 [*e.g.*, did the seller sign anything], and continuous facts [*e.g.*, what was the price] which could take a number of values needed to compute the result using the function which expresses the relationships between the variables and the consequences of the values given them.

43. Or more accurately, lawyers would become useful only in the conduct of proceedings intended to determine what the facts were, once the computer determined what fact findings it was necessary to make. I have known theorists of civil procedure and the law of evidence who probably believe that this is, in reality, the current state of law practice, even though the rest of our curricula belies it.

44. No pun intended. For doubts that computers could ever actually develop capability to deal with the application of legal rules *see* Cass Sunstein, *Of Artificial Intelligence and Legal Reasoning*, (2001 Univ. of Chi. Law School Public Law and Legal Theory Working Paper No. 18).

incomplete contract. In lieu thereof, we might surmise that what people actually do tends to indicate how they think they can make the best of things, and on that basis, decide to resort to some market trade usage in search of a decision rule.[45] We might discover that parties finding themselves in contexts characterized by [a,b,c,d,e,f,g], and only those facts, always act as if they were acknowledging their joint desire for a distribution of entitlements characterized as O_U, the Outcome of the Usage. A court adopting the usage as a decision rule simply renames O_U as O_L. The same could be said for course of dealing, course of performance, and other contextual sources for decision making rules as well. When it comes to using the decision making rules to decide discrete cases, the facts generating the trade practice or usage, and the outcome described by the usage, are recast as if they were legal rules. Thus, a formalistic approach can be taken with contextually generated decision criteria, as well as with those framed by private contract drafters (contract clauses), by legislators (statutes), or by judges in appellate decisions in previous cases (common law precedent).[46]

B. Formalizing Realism

In practice, rules that take this logical form tend to be useless to lawyers even when it is clear that the factual contingencies exactly match those of the rule. When a client comes in and wants an outcome *not-* O_L but describes the factual context as containing only facts [a,b,c,d,e,f,g], the lawyer who knows that the law is O_L = f(a,b,c,d,e,f,g) must advise his client he can not have what he wants,

45. Given the ubiquitousness of the prisoners' dilemma in interactive human relationships, some might argue the contrary, that extracontractual behavior we will observe will principally illustrate defection from cooperation. Douglas Baird et. al., Game Theory and the Law, 11-12 (1994). If we observe iterated behavior, however, we can presume it is cooperative, although via the folk theorem, even if we can say it is cooperative, we can't concluded it is optimal. *Id.* at 167-72. On the other hand, if the observed behavior occurs in a market context where the parties are making choices among many available alternatives, then we have reason to conclude that the outcomes are likely to be more than merely jointly rational but more likely Pareto optimal as well. Since observed behavior is not guaranteed to be efficient, however, we might also insist on a requirement of any custom we adopt as a decision rule, that we understand what drives the behavior, or at least that it is unlikely to be explainable as rent-seeking. *Cf.* 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); Eric Posner, *Law, Economics, and Inefficient Norms*, 144 U. Pa. L. Rev. 1697 (1996).

46. These possibilities do not exhaust the potential sources for decision guiding rules. Regulatory bureaucrats performing their rule-making functions provide another common example. The regulations they adopt, nevertheless, will have the same fact-contingent character as rules growing from other sources.

and that is that. Even at $240 per hour, the legal services only generate $4 in fees. Just as one would not anticipate breaches of totally "complete" contracts to occur,[47] legal disputes are unlikely when the rights of all the parties are spelled out in the law in ways that cannot be denied, i.e. when the *law* is totally comprehensive and complete. Even where they are better at it than computers, lawyers can not make much of a living passing on to their clients the easy-to-determine, already developed definite answers to all of their problems.

The unarticulated presupposition of formalist theory is that once we develop the answer (f) = [O_L] to a legal question occurring in environment [a,b,c,d,e,f,g], we have a valuable piece of doctrine because that environment [a,b,c,d,e,f,g] can be expected to recur again and again. Alas, however, the application of Murphy's law to life did not end with the discovery that the problem of incomplete contracts is almost impossible to solve.[48] It also implies that once you have a solution for any situation, you can not ever expect the situation to recur! The fundamental, if unarticulated, premise of formalism is simply not valid. The central insight of American legal realism about legal practice was that the facts of life are extremely heterogeneous. Fees are earned not by reusing old answers to old problems to solve new ones, but rather by coming up with new answers to questions that have never before been asked. It follows that "substantive uniformity," which Scott maintains is required for meaningful uniformity to exist,[49] will almost never be a concept capable of empirical confirmation. No two jurisdictions will ever face identical cases to decide; thus, we can never know whether another jurisdiction would or would not have faithfully replicated the outcomes in a sister jurisdiction.[50]

When real clients, with legal problems offering fee collection potential in excess of $4, arrive in real law offices, their cases always fall into one of three classes:

a. The lacuna case: [a,b,c,__, e,f,g];
b. The lagniappe fact case: [a,b,c,d,e,f,g, **h**]; or most likely,
c. The Double Whammy—lacuna *and* lagniappe facts: [a,b,c, __, e,f,g, **h**]

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47. *See* Scott, *supra* note 37 and accompanying text.

48. Alan Schwartz, *The Default Rule Paradigm and the Limits of Contract Law*, 3 S.Cal. Interdisciplinary L.J. 389 (1993).

49. Scott, *Uniformity Norm, supra* note 19.

50. This formulation does not imply, as Steve Harris's comment to this symposium seems to suggest, that rules cannot generalize. Steve Harris, *Rules for Interpreting Incomplete Contracts: A Cautionary Note*, 62 La. L. Rev. 1279 (2002). One rule can apply to several parties so long as the facts in their cases are sufficiently close to identical.

Recall that the legal raw materials we are given to work with in solving these problems is a rule, one of our old friends $O_L/O_c/O_u$ = f(a,b,c,d,e,f,g), and, perhaps, a dictionary. However, the real problem, to be solved by real lawyers, can not ever be solved by a simple mechanical application of any of these rules from any of these sources. The problems created by contractual or legal incompleteness are ubiquitous. The only rules judges and practitioners have to work with do not direct us to any outcome in the case where fact "d" is not part of the context (the incompleteness consists of the absence of a factual predicate for the rule). Nor does the rule tell us whether and if so, how the outcome should be affected by the presence of fact "**h**," (where the incompleteness is a failure to specify whether the rule applies in the presence of other potential contextual predicates), our rule is particularly inadequate when our client's case differs from the presuppositions in both respects.

Nineteenth century legal theory assumed that outcomes in specific future cases could always be deduced from a set of grand, immutable legal principles.[51] It turned out, though, that this Langdellian view was also premised on the unarticulated presupposition that the set of legal problems simply recurred throughout history. Thus, the answer worked out to the problem when it first arose (*e.g.*, O_L) and could also be implemented the second, third, and fourth times around as well. The problem is that history does not simply consist of constantly recurring situations. History hardly ever sends us (a,b,c,d,e,f,g) again. Instead, we always get double whammies. We keep having to work out new solutions to new problems which always differ from the old ones. Since rules were formulated or adopted to solve old problems, which always differ factually in some respect from the new problems, the rules simply do not solve the new problems automatically. Formalist technique, when applied to solve new problems, simply becomes fiction masquerading as deduction.[52]

C. The Scope/Precision Trade-Off

One solution to the problem of the inevitable incompleteness of rules which the law adopted, and for which the U.C.C. in particular

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51. Thomas C. Grey, *Langdell's Orthodoxy*, 45 U. Pitt. L. Rev. 1 (1983).

52. This much was the now ignored message of traditional American legal realism, and more recently the radical indeterminacy thesis of the Critical Legal Studies movement. *See* Kelman, *supra* note 26, at 257-62. It is, however, familiar to practitioners who rarely if ever, face opposing counsel in each case, who isn't always able to cite some authority on behalf of his or her client. When life in the real world always presents multiple potential authoritative answers to any problem, and those answers always differ, the preconditions necessary to successfully employ a formalist legal strategy simply do not obtain.

has been specifically criticized[53] is to abandon narrow rules tied to specific facts in favor of more generalized "standards."[54] Narrow rules have the advantage of advance precision. When the facts, and only those facts, which drive the rules occur, the narrow rules give clear directions and prior notice about the nature of the outcome. The conventional wisdom is that because they require a lot of ex ante specification, complete rules are expensive to formulate; thus, the benefits of that precision must be weighed against the costs of obtaining it.[55] A popular example of a definitive rule is that if you have not reached the minimum constitutional age to hold a particular office, you will not be permitted to run for or to serve in that office.[56] The slice of life covered by that rule, on the other hand, is so narrow that rarely will anybody invoke it. A thirty-four year-old presidential aspirant will simply wait until the next election.

Because precise rules are expensive to formulate, and because they have so little scope, one might expect to see them used mainly to regulate common behaviors which are frequently iterated.[57] The basic premise of contract law, on the other hand, is that we should enforce the heterogeneous promises of extremely heterogeneous parties. Contract theory is justified by the improbability of precise reiteration of real world transactions.[58] Article 2 expressly directs the

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53. Scott, *Article 2*, *supra* note 14; Schwartz & Scott, *supra* note 28.

54. The rules/standards dichotomy was popularized by Duncan Kennedy, *Form and Substance in Private Law Adjudication*, 89 Harv. L. Rev. 1685 (1976). *See also* Louis Kaplow, *Rules vs. Standards: An Economic Analysis*, 42 Duke L.J. 557 (1992). It has been invented several times and given differing names in the process: Schwartz & Scott, *supra* note 28 (Model 1/Model 2 rules); Jason Scott Johnston, *Uncertainty, Chaos, and the Torts Process: An Economic Analysis of Legal Form*, 76 Cornell L. Rev. 341 (1991) (jurisprudence of rules/jurisprudence of balancing); Carol M. Rose, *Crystals and Mud in Property Law*, 40 Stan. L. Rev. 577 (1988) (Crystals/Mud); Isaac Ehrlich & Richard Posner, *An Economic Analysis of Legal Rulemaking*, 3 J. Legal Stud. 257 (1974) (specific commands/general commands).

55. Louis Kaplow, Title 9000-*General Characteristics of Rules*, 5 Encyclopedia of Law and Economics 502, 510 (B. Bouckaert & G. De Geest eds., 1998) [hereinafter "Kaplow"]; Jody S. Kraus & Steven D. Walt, *In Defense of the Incorporation Strategy, in* Kraus & Walt, *supra* note 19 (analyzing the cost of obtaining precision as "specification" costs).

56. U.S. Const., art. II, § 1, para. 5. Paul R. Baier, *The Constitutionality of Minimum Age Requirments for Public Office: Reading Joseph Story on Constitution Day*, 60 La. L. Rev. 481 (2000).

57. "[R]ules tend to be preferable when particular activities are frequent, and standards do best when behavior varies so greatly that any particular scenario is relatively rare." Kaplow, *supra* note 55, at 510. Thus, since there are millions of drivers, the archetypical "rule" is the highway speed limit. *See, e.g.* Schwartz & Scott, *supra* note 28, at 604-05; Johnston, *supra* note 54, at 347.

58. Even when mass produced products are sold to multiple buyers, the times, places, and features of the buyers are still quite heterogeneous, although the expense of taking all these distinctive qualities of the situation into account in the contract

courts to look to iterated behaviors, customs, and usages as sources for decision rules. Ironically, however, it is this very attempt to use iterated behavior as a source for rules, thus encouraging the use of rules in precisely the contexts where it is most efficient to employ them, which is the object of complaint in the critique via technique.[59]

Standards, in the style of my argument here, formalize as:

$$O_L = f(\_\_, \_\_, \_\_, \ldots\ldots).$$

Function (f) gives a legal command to be observed in the future, but does not specify anything about the contexts in which the legal command will be enforced. The factual predicates for application of the command are determined only *ex post*.[60] For this reason, standards have the advantage of scope. "Be nice" and the phrase more commonly encountered in legal prescriptions, "be reasonable," are commands which have potentially wide application in many of life's arenas. Thus, the commands offer some promise to assist the decision-making required in the future, especially in cases where history is not simply reoccurring. The problem with standards, however, is that although they offer a potentially wide scope of application, they do not offer much precision. Is it just being pleasantly friendly, and therefore "nice," to grin and wink at that blond in the elevator lobby, or is it harassment? The standard does not tell you ex ante, but that is when you are making the decision on how to behave and when you need to know the answer. A rule "never (or always) to wink at blonds in the 19th floor elevator lobby" is superior to a "be nice" standard in influencing behavior we would like to encourage or deter. The trouble with rules, however, is the double whammy problem. The factual predicates, and only those predicates, for precise application of the rule will so infrequently recur that the rule will rarely be useful in deciding how to behave either. What do you do, for example, when you encounter the blond on the 18th floor, on the stairs, or in the hallway rather than in the elevator lobby? What if she is a redhead? The value of really precise rules formalistically applied must then be severely discounted to reflect the improbability of their ever being directly useful in the future.[61] Likewise, however, the value of standards must similarly be

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appears to be sufficiently expensive that mass produced contracts tend to be employed for such goods as well. Murray on Contracts § 97. The variety of mass produced goods available everywhere is, of course, gargantuan.

59. *See* Scott, *Formalism, supra* note 27, at 854-58.

60. "[I]t is useful to define the difference between rules and standards as involving exclusively the distinction between whether the law is given content *ex ante* or *ex post*." Kaplow, *supra* note 55, at 508.

61. Thus, for the legal process to create the kind of "default clauses" which can be formalistically applied as Scott would like to see happen, wouldn't likely produce much value. Each default clause would have such a narrow scope as to be

discounted for the paucity of information they transmit to us about how to behave.

The U.C.C.'s critics have developed an alternative to this tradeoff analysis by presupposing the possibility of creating "bright line" rules. While the logical structure of these bright line rules is never made clear, a weak version of a "bright line" rule can probably be restated as the proposition in my formulation that lagniappe facts will never be regarded as relevant—(O_L obtains if (a,b,c,d,e,f,g) are present or have the requisite values when computed using the function (f) *no matter what other variables may be present, and no matter what values those other variables take on.*)[62] An even stronger version of a bright-line rule definition would be that $O_L = f(a)$—the outcome is a function of a single factual variable's value. Thus, the problem of omitted or lagniappe variables never becomes relevant. If the single variable is frequently observable, verifiable, and easy to ascribe precise values to, the possibility exists that a bright line rule could have both precision and significant scope. The problem, particularly with the strong, single variable form of a bright line rule is with another sort of trade-off. Rules of that sort are much more likely to produce forms of regulatory error because they are more apt to be seriously underinclusive, thus underdeterring unfortunate behavior, or overinclusive, thus overdeterring desirable behavior.[63] Rarely can we precisely describe a normative, attractive state of affairs as a strict function of the value of a single real world factual variable.

D. The Imprecision of Analogy

Several U.C.C. scholars have accepted as jurisprudential reality the aspirations of Karl Llewellyn[64] and his protege Bill Hawkland that commercial law could be governed by a "true code" in the style of the European Civil Codes.[65] Hawkland, Llewellyn, and even apparently Grant Gilmore[66] hoped that a commercial code containing the answers to all of life's impending questions could be drafted:

> A 'code' .... is a legislative enactment which entirely pre-empts the field and which is assumed to carry within it the

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almost valueless and thus unlikely to be worth the effort of generating the clause, either by statute or by adoption in case law in appellate cases.

62. *Cf.* Schwartz & Scott, *supra* note 28, at 604-05.

63. *Cf.* Ehrlich, *supra* note 54; Schwartz & Scott, *supra* note 28.

64. William D. Hawkland, *The Uniform Commercial Code and the Civil Codes*, 56 La. L. Rev. 231 (1995).

65. William D. Hawkland, *Uniform Commercial "Code" Methodology*, 1962 U. Ill. L. F. 291 (1962).

66. Gilmore, *Realism, supra* note 18.

> answers to all possible questions: thus when a court comes to a gap or an unforeseen situation, its duty is to find, by extrapolation and analogy, a solution consistent with the policy of the codifying law.[67]

The hope that unprovided-for cases can be resolved by extrapolation and analogy suggests that formalism might offer some of the unknown answers. This vision does not require that a code, *interpreted using only formalistic means*, provides the answers to all possible questions. Professor Gilmore's vision, nevertheless, seems to suggest that even formalistically extrapolated rules created to fill codal gaps must still pass a test of consistency with the policies which justify the code in the first place. Perhaps he had in mind that the premises generating any legal gap-filling extrapolations would always embody those same policies. Given the factually contingent nature of legal rules, the uncertainty about what contingencies will occur in the future, and the reality that if our prescriptions are to have scope they will inevitably lack precision, the number of unanswered questions will be staggering for any code. Thus, the realist message to the creators of codes is that aspirations to be comprehensive and preemptive are overly optimistic at the very best, and probably foolhardy, unless coupled with an interpretive methodology which makes the maximum use of the policy information imbedded in the code. The technique of analogy, I will argue next, is inadequate for that task.

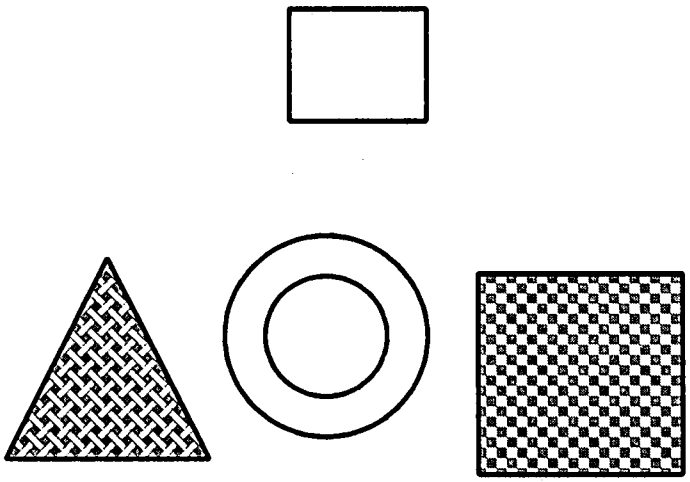

Figure 1

67. *Id.*

Even if bright line rules could be well-fitted enough to reality to justify adopting them, situations can still arise in which bright line rules cannot be easily applied using formalistic reasoning. Consider a rule symbolized by the top box in figure 1.[68] Then, consider that three new disputes come before a court to be resolved using the rule symbolized by that box. Each of the three "cases" has likenesses to the "bright line" rule, but each case has its differences as well. The triangle, like the top box rule, is constructed of straight lines although it ultimately takes a different shape. It is like the box rule in its size, at least in a two category size world consisting of big and little. The circle also has a different shape, in that it is not constructed out of straight lines. However, the circle is like the top box in that neither the top box nor the circle are shaded. The big box is alike in shape, but different in size and shading. There is no purely formal way, however, for us to know which of the three cases the top box rule really governs. To achieve a decision using literal, formalistic reasoning alone, the decision maker resorting to the top box rule must first decide whether it is size, shape, straightness of perimeter lines, or shading that really "matters" to the box rule. Merely to ask what qualities there are about the rule which really matter, however, is itself to abandon formalism. The key to deciding the case is not found in its mechanical application of likenesses. Rather, the key is the criteria for choosing which feature really matters.[69]

Law is all about influencing events in the future in the directions we want to influence the law at that time. Murphy's Law of Law, however, holds that we can not know as much as we might like about what the future holds, let alone know what we will want to do when eventually we find out. Scarcity of information about what circumstances will come to be in the future dictates that scope be traded for precision.[70] U.C.C. Article 2 purports to provide the contract law governing the sales of all sorts of goods, from Asphalt

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68. The Box Rule one can't be a single variabled bright line rule, because we are depicting it in a two-dimensional medium. Indeed its shading adds a third dimension, and then, when placed in the context of 3 other shapes ala the famous Sesame Street: Some-of-these-things-belong-together, but one-isn't-the-same framework, it becomes apparent that its *relative* size adds a fourth dimension. This illustrates, then, how hard it is to describe a normatively desirable state of affairs in terms of only a single factual variable. A four-variable rule may be as close as one can practically come to a "bright line." If as my reference to size as a variable illustrates, however, that the number of variables itself is determined contextually, the hope of creating bright line rules to avoid consideration of context becomes completely futile.

69. *Cf.* Peter Westen, *The Empty Idea of Equality*, 95 Harv. L. Rev. 537 (1982).

70. *Cf.* Stephen C. Pepper, World Hypotheses 76 (1942) (arguing that all metaphysical theories are subject to a scope vs. precision tradeoff).

plants to pacemakers and by all sorts of heterogeneous sellers to a multiplicity of types of buyers. Hence, it is a statute extremely ambitious in its scope. No one should, therefore, be surprised that Article 2 tends to use standards rather than rules, and is thus subject to the critique that it lacks precision.[71] One should react to such a critique in much the same way as one might to a complaint that lunches aren't free. Life rarely permits us both to have our cake and also to eat it. Murphy's Law of Life applies to Law, and particularly to sales law, as well. If we want a sales law of broad scope, we probably have to sacrifice a lot of precision in the kinds of predictions we can make from our legal raw materials. Here is the trade off: do we prefer knowing definitely what we will do about corn output contracts entered into in 1981 in East Jesus County, but knowing next to nothing about other kinds of contracts entered into elsewhere or do we prefer having some guidance, but much less precision, about all kinds of sales of all kinds of products everywhere in the state or in the interstate market? If, indeed, we hold the latter preference, then the decision of the 50 states to employ a private legislature to propose the provisions which harmonize the law governing cross-border and intrastate transactions might have been the wise one.[72]

E. Variances in Precision as Functions of Constraints on Source Institutions

Indeed, one might anticipate that when rules are adopted by legislators, they are likely to be more standard-like than rule-like. Legislators are enacting law ex ante. A critical shortage of trustworthy, qualified soothsayers, who can state today with certainty what fact patterns will emerge out of social life tomorrow, means that

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71. Note, however, that Article 2 does direct the use of frequently iterated behaviors as a source of rules when such iterations do occur. *See* text accompanying *supra* notes 57and 60. Interestingly, Scott's dissatisfaction with Article 2 is very different from his analysis of Article 9. Article 9 governs a much more homogeneous set of constantly reiterated transactions than does Article 2. The limit to the scope of those transactions does permit Article 9 rules to be more precise than those in Article 2. Scott, however, complains that this very precision is evidence that the Article 9 process had been captured by dominant interests. *See* Scott, *Politics supra* note 29. He does not explain why, however, the dominant interests seem so highly motivated to secure adoption of narrow rules which likely have small value due to their stipulated lack of scope. For other critiques of his capture theory *see* Barry E.Adler, *Limits on Politics in Competitive Credit Markets*, 80 Va. L. Rev. 1879 (1994); Clayton P. Gillette, *Politics and Revision: A Comment on Scott*, 80 Va. L Rev. 1853 (1994).

72. Schwartz & Scott, *supra* note 28, argue that private legislatures like ALI and NCCUSL which drafted the U.C.C., are structurally biased in ways that tend to produce standard-like law rather than rule-like law.

legislators are required to specify desirable features about future states of the world without very much information about the facts of life that will obtain in that world.[73] Common law appellate adjudication, on the other hand, occurs ex post, when the future has been allowed to fully unwind, and the facts that arose can be known. Thus, the holdings of appellate cases seem to be narrowly fact bound because the rules the opinion formulate are made in the context of well-developed factual environments. Accordingly, statutes and codes are likely to be designed to have scope while rules arising in the common law cases can be precise.

F. Scope-Creating Features of Interpretive Methodologies

We know from the decision in the (imaginary) case of *Bank v. Fred* that the next time a man named Fred signs a promissory note on blue paper agreeing to repay an $1,100 loan by Friday, March 13th, the bank can come and levy on his grand piano if he does not. What we do not know for sure from the *Fred* decision, however, is what happens for a nonrepaying debtor named Ralph who only borrowed $800 and signed a pink note providing a due date of Thursday, March 14th, and Ralph does not own a grand piano; may the bank levy on his golden retriever? Unfortunately for the lawyers and the judge, the only case they will ever be responsible for is Ralph's, but the legal raw materials they have for use in deciding the case will be rules like the one in *Fred*.

Now almost any lawyer, and even law student, you may consult would render a strong opinion that the *Fred* rule is likely dispostive of Ralph's case. If it is, then the problem of incompleteness of the law is less than I have just theorized. However, the application of the *Fred* rule to Ralph is not possible using only formalistic logic. Formalism, you recall, requires that we limit ourselves to absolutely literal interpretation of the rules. We have no resort to the normative features of the world we hope the rule will help create. Literally, however, *Fred* gives us a "bank levies" outcome only for $1,100 debts due Friday, March 13th, contracted on blue notes by debtors named Fred who own grand pianos. Extrapolating from the *Fred* rule Ralph's case involves a lot more than literalism. For sure, it is not some sort of mechanical process akin to interpolating intermediate values between two cells in a table of logarithms.

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73. This may be another explanation of why private legislatures, such as the ALI, and NCCUSL may enact "vague" legislation, regardless of the influences of participants with differing preferences, and incentives. The important parameter may be that the process is ex ante and legislative, not that the particular legislative body is public or private. *Cf.* Schwartz & Scott, *supra* note 28.

Our confidence that the rule governs comes from our sense that the purposes the *Fred* rule fosters are powerful and uncontroversial. We can not say that Fred literally is Ralph.[74] We can say, on the other hand, that we desire the kind of world which is created when law treats everybody alike in critical ways.[75] Applying *Fred* to Ralph carries out that policy. We can not say that a debt of $1,100 due on the 13th is literally identical to a debt of $800 due on the 14th. But we can say that the world will be a better place if the law enforces the heterogeneous promises its inhabitants actually do make, and that principle justifies us in ignoring the differing amounts and due dates of the debts.[76] If we passed kindergarten, we know that pink is not literally blue either. We can say, however, that the world would contain less welfare if we imposed needless and potentially costly color formalities on the promise-making process. That normative standard justifies us in disregarding the color distinctions in the two cases. We also know that since debtors always have the power to choose which among their various assets they wish to liquidate in order to settle their debts. Thus, the way to induce debtors to conduct optimal liquidations is to give the creditor the choice of which asset to levy on when the debtor has refused to make his own choice and has not paid.[77] Accordingly, we will order a levy on a retriever on the authority of a rule authorizing the levy on a piano.

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74. Even the literal application of a rule probably requires, initially, a characterization of the facts. The Fred/Ralph problem for example must restate the content of fact "a" in the formula which, in Fred's case is: suppose there's a debtor named Fred. Literally, that characterization of fact "a" distinguishes the Ralph case completely. So, the bank's lawyers resorting to the Fred rule will restate fact "a" as: "suppose there is a borrower-any borrower." If that is the correct form for fact "a" in the rule, then the Fred rule can apply to the Ralph case. The case begins to turn, in this event, however, not on the logical form of the rule, literally applied, but rather on some mysterious process under which we re-characterize the facts. Whatever that process, however, it is not the mere mechanical application of some formality. The heavy lifting done by the rule actually comes from the decision to look at the particular trait Ralph shares with Fred (being debtors) versus both being members of bowling teams, without articulating why we choose debt rather than bowling-team membership as the salient trait.

75. Among other reasons for preferring this equal treatment mandate is that it helps solve an agency problem the public might have with its decision-making agents. Agents who harshly enforce promises against their political opponents, for example, face the necessity under such an equal treatment regime, of treating their political supporters with equal harshness. Since they then are partially disabled from abusing their powers to feather their own nests, they are likely to be more influenced by considerations of optimal harshness instead.

76. *Cf.* Charles J. Goetz & Robert E. Scott, *Enforcing Promises: An Examination of The Basis of Contract*, 89 Yale L.J. 1261 (1980).

77. James W. Bowers, *Groping and Coping in the Shadow of Murphy's Law: Bankruptcy Theory and the Elementary Economics of Failure*, 88 Mich. L. Rev. 2097, 2113-29 (1990).

All of this is not always obvious to lay people and even some practitioners who would simply conclude that the factual difference between the *Fred* and Ralph cases are legally "irrelevant." The professionals may, using their learning and experience develop a good intuition for what is relevant and what is not without ever being able to articulate the underlying policy decisions which dictate what becomes relevant and what does not. The more intuitively efficient the distinction, I would speculate, the more likely a lay person would intuit it also. Nevertheless, the point made here is that a formalist interpretive strategy (which limits the application of the *Fred* rule only to defendants named Fred and denies us the use of that rule in cases like Ralph's) would, in fact, *cause* a huge quantity of contractual or legal incompleteness, and hardly ever be a plausible cure for either of them.

As the foregoing has suggested, American lawyers have probably never been able to serve their clients , nor courts to resolve the cases reaching them, using only formalist interpretive strategies. When faced with an arguably governing contract clause or statutory rule, for example $O_C = O_L = f(a,b,c,d,e,f,g)$, and the predictable double whammy case, for example [a,b,c, __, e,f,g, **h**], courts may decide the case and claim the result was compelled by the O_L rule, not infrequently by simply ignoring the absence of fact "d" in the case before them even though the rule formally makes fact "d" a predicate. Likewise, courts often ignore the existence of fact **h** entirely, even though there is nothing formally in the rule which tells us that the outcome is or is not invariant with respect to **h** and its value.[78] Judges who are better craftsmen might acknowledge the distinctions between the case and the rule, but nevertheless claim that the rule compels their decision because the absence of "d" and the presence of **h** do not, for some reason, matter. Yet, the judges stop without ever supplying that reason. The best level of judging will, however infrequently it occurs, not only note the distinctions between the factual predicates to the rule and the facts of the case being adjudicated, but also defend their decision to apply the rule in spite of those differences. Strictly speaking, however, none of the results in the double whammy case can be justified as merely the "formal" application of the rule O_L. Something else besides the rule alone must be driving the results. The presence of that something else disqualifies the decision-making method from being described as formalist.

It is, perhaps, even possible that judges and lawyers could experience a direct connection between the *Fred* case and Ralph's

78. For discussion of a famous example, *see* text accompanying *infra* notes 86, 87.

circumstances without ever being aware of or able to articulate that the move from the *Fred* rule to the Ralph decision entails some intermediate steps. Such leaps of intuition might even reach correct applications of rules like the rule in the *Fred* case because the lawyer or the judge making the leap has an accurate, but subconscious, sense of the policies that drive the rule or of the policies that are desirable to govern the decision. Likewise, the lawyer or the judge may simply have a good feel for how those policies generate criteria for the making of desirable decisions. On the other hand, handing down a decision in the Ralph case with nothing more than a cite to *Fred* will rarely provide a satisfactory explanation or justification of the decision-making process since the formalist claim that the connections are monotonically mechanical will not hold water because the facts are not *exactly* congruent. Indeed when a decision rule contained in a contract clause incompletely specifies the factual context in which it was meant to apply, the clause becomes useless if all we have for an application technique is a formalist strategy. A rule expressed for a set of future factual contingencies can never be formalistically applied to the future's double whammies. That is the basic insight of American legal realism The standard technique by which lawyers have been trained, at least since 1950, to escape from the fiction that law can be practiced using only formalist mechanics and to grapple with the need for law to have scope of application enough to be practically useful, has been to accept that buried in the automatic intuition is probably a process of purposeful interpretation. When we know the purpose motivating the state to adopt a rule, we will apply it in those factual contexts where doing so, advances that specified purpose.[79] Indeed, the fully articulated logical transit from the *Fred* rule to Ralph's case presented above is an illustration of how this technique can operate. The transaction permits us to extrapolate from a discrete rule to a set of other general fact patterns, with greater confidence the more identical the future operative facts are and with an increasing loss of certainty the more the future facts deviate from those in the rule's historical formulation.[80] Since the purposive interpretation strategy can produce significant scope for what are, initially, very narrow rules, it promises some escape from the scope/precision tradeoff constraint. Legal rules with both precision and an interpretive strategy, which gives them scope, have significant

79. And similarly, when we know why the parties adopted a contract clause containing a decision rule, we can apply the clause to obtain the purposes for which the parties adopted it. Likewise if we use a custom as a decision rule, we have to understand what drove the formation of the custom in order to use it only when that use fosters the beneficial consequences the parties adopted the custom to achieve.

80. *See, e.g.* Johnston's observation that even bright line rules get fuzzy around the edges. Johnston, *supra* note 54, at 345-46.

social value because they need not be heavily discounted either for improbability of occurrence of the circumstances in which they will apply or emptiness of critical information content.

G. The Costs of Purposive Interpretive Strategies

Supposing that it generates higher value rules than a formalistic strategy, then, are there extra costs to using a purposive interpretive strategy which outweigh the increase in the value of the decision-making criteria it generates? Recall that strict formalism will never be an available option since the only cases we are ever likely to have to deal with will be double whammies. The most obvious extra cost might be ascribable to an enhanced risk of committing legal error although determining a baseline strategy from which to measure the level of error enhancement is a formidable problem. Formalism is not an available baseline since the only cases we will ever face will be the lacuna, lagniappe and double whammy cases.

Coming up with a reliable purpose for use as a vehicle for extrapolating from a narrow rule to a decision in new double whammy environment may not be easy. The resources that may need to be expended in a search for the correct purpose, and to acquire an adequate level of assurance that the found purpose is the correct one, may be substantial. Empowering legal decision-makers to conduct purposive interpretation may give rise to high agency costs and, thus, moral hazard. The decision-maker with allowable discretion to choose among competing potential purposes of any rule has the power to create significant variances in the ultimate outcomes. This discretion can possibly be exploited by the agent to act contrary to the interests of his or her principle, the public, and instead in the interests of himself, his circle of friends, and political supporters. The decision making agent may shirk and, consequently, not expend the resources required to find the correct purpose and to obtain adequate assurance that the selected purpose is the correct one. It may also be true that because the task is so difficult, it will be impossible to obtain decision-making agents capable of performing it. The idea that incompetence is a more serious problem with hard-to-do tasks than it is with those which are easy to do clearly motivates the arguments of the code's critics not to assign jobs like that to them.[81]

The contestability of assumptions about the purposes which motivate their inclusion into the constitution has made formalism particularly controversial as a constitutional interpretive technique.[82]

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81. Scott, *supra* note 27; Eric A. Posner, *A Theory of Contract Law Under Conditions of Radical Judicial Error,* 94 N.w. U. L. Rev. 749 (2000).

82. *Compare* Lino A. Graglia, *It's Not Constitutionalism, It's Judicial*

Yet, when the rules being interpreted are those whose sources are in voluntary contracts, this is not as significant a problem. Supposing that the contract provides the way contractual gains will be split,[83] it is always in the interest of both parties to assume that their joint intent was to exploit all the possible gains available from trade. At that level of abstraction, knowing the purpose which motivated the rule is probably not controversial. The trick, however, is understanding just *how* a given rule tends to increase those gains. That means understanding a lot about the economics of the businesses engaged in the transaction and of the projects the transaction is a part of.[84]

H. The Costs of Formalistic Interpretation Strategies

Even if authorizing courts to pursue purposive interpretation strategies opens a door to potential error, one would need to know if formalistic, literalist interpretation strategies are likewise capable of producing error as well. The issue then would become empirical: which strategies' errors are worse? I observed above that ignoring factual distinctions is an extreme case of rigidly formalistic decision-making technique.[85] If the ignored missing or lagniappe fact ought to have been regarded as important, then the formalistic technique is simply a *source* of error, and not a solution to it. The potential for error exists, however, regardless of the source of the decision-making rule.

Activism, 19 Harv. J.L. & Pub. Pol'y 293 (1996) and Raoul Berger, *Constitutional Interpretation and Activist Fantasies*, 82 Ky. L.J. 1 (1994) *with* Kim I. Eisler, *A Defense of Activism*, 40 N.Y. L. Sch. L. Rev. 911 (1996) and Bernard Schwartz, *"Brennan vs. Rehnquist"—Mirror Images in Constitutional Construction,* 19 Okla City U. L. Rev. 213 (1994). Constitutional issues are more likely to have widespread distributional consequences than are rules governing private exchanges, and the lack of a generally acceptable theory of wealth redistribution probably dooms this debate in constitutional law to a life of continuous controversy.

83. A significant literature argues that contract law fails to alter the market split enough in favor of consumers. For a taste of this literature, a good place to start is Linda J. Rusch, *A History and Perspective of Revised Article 2: The Never Ending Saga of a Search for Balance*, 52 SMU L. Rev. 1683 (1999) which contains a two page long footnote (n.13 at 1688-89) citing twenty-eight law review articles. Most attack the U.C.C. as insufficiently attentive to consumer concerns. Since part II below deals explicitly with analyzing some of the stakes in the consumerist debate, I will postpone making this qualification about the parties' potential purposes until then.

84. This is a particularly threatening conclusion for lawyers and law students who find comfort in the division of labor which narrows their responsibilities to learning only the law, leaving the understanding of the business up to the client, or perhaps employable expert witnesses. The trouble with this worldview, however, is that it leaves nobody responsible for the connections between the law and the business, which, if purposive application technique drives the law, is where all the action is.

85. *See* text accompanying *supra* note 78.

For a well known example, consider the case of *Columbia Nitrogen Corp. v. Royster Company*,[86] a decision often cited as one of the horribles resulting from Article 2's insistence that custom and usage be considered in interpreting contracts.[87] Royster, the seller, sued Columbia, the buyer, for failing to take the minimum quantity of phosphate stipulated under a long term supply contract after the market price fell below the contract price. Columbia defended by urging that there was a usage in the fertilizer chemical trade that minimum quantity provisions were unenforceable, and offered, as proof of the custom, testimony of six years of sales of nitrogen by Columbia to Royster and of inventory exchanges between them, none of which had hewed to the quantity terms in the many agreements. Columbia also submitted offers of proof of testimony that because agricultural production was so subject to quantity variances for exogenous reasons, and fertilizer was an input to agriculture, the custom was that all fixed quantity fertilizer contracts were in fact understood, in the trade, as simply contracts for the supply of the buyer's requirements.[88]

The issue was viewed by the Fourth Circuit as if a rule might have developed either from this industry usage or from the course of dealing in six years of rather informal-sounding trades of Columbia's nitrogen surpluses to Royster in Royster's nitrogen-short months. The court neither inquired whether a rule developed from sales of nitrogen ought or ought not to apply to purchases of phosphate, nor whether a rule growing from transactions which seemed mainly to coordinate monthly outputs and sales variances properly applied to the elaborately negotiated long term phosphate supply contract which was executed about the time Royster made a significant investment in new phosphate production capacity and was seeking a guaranteed market for its new plant's output. Since the Fourth Circuit remanded these issues to the trial court, however, one can read the opinion as showing the Fourth Circuit believed that a formalist, literal application of the rules it found in the context was plausible without considering or even discussing the differences in the products being bought or sold, or the consequences of the other differing circumstances. In short, the *Royster* opinion can be criticized not

86. 451 F.2d 3 (4th Cir. 1971).

87. *See, e.g.*, Scott, *Uniformity Norm*, *supra* note 19, at n.30.

88. Columbia's offer of proof stopped short, however, of explaining why it was apparently optimal in the fertilizer trade for the risk of quantity uncertainty to be placed on the manufacturers (requirements contracts sellers) rather than the wholesalers, jobbers and distributors (requirements contracts buyers), knowledge which would have been required by the court to accurately know when and how to apply the customary rule in future cases. For a discussion of some potential rationales for such contracts *see* text accompanying *infra* note 94.

only for its failure to be formalistic regarding the literal wording of the contract, but also for being blindly formalistic regarding the decision rule it developed from the transaction's context. It was not the failure to be formalistic enough with contract language that was the possible sin in the opinion; instead, it was the strictly formalist application of the decision rule which the court thought it saw in the trade context. Formalism justifies the result as strongly as failure to be adequately formalistic undermines it.

A purposive interpretation of the customs might have concluded that the motivations for the monthly informalities were so vastly different from the considerations which drove the long term supply contract that a decision rule derived from a custom arising in the one context was simply inappropriate to apply in the second. If I underestimate the demand of my customers and experience a shortage in a month where you overestimate your demand and thus produce a surplus, the gains from trade available by inventory swaps filling the buyer's excess requirements in months of sellers excess output seem apparent. Neither party assumes a risk of the other's short or long term misestimation, but when the mis-estimations tend to cancel each other out, the trades relieve both parties of all or a portion of the adverse developments of the risks they took for that month. The long term supply contract, on the other hand, was prompted by Royster's multimillion dollar investment in new production capacity. It was thus probably explainable as an attempt to share a significant risk of longer term excess production capacity between the parties. Application of the monthly adaptation rule to the long term deal simply cancels the parties' risk sharing agreement and imposes all of the shared risks back onto the seller, without explaining either why or how sellers in those circumstances would engage in creating a rule which would prohibit them in perpetuity from sharing long term risk.

The lesson here is that mechanical application of rules has its own capacity to create error which must be weighed against the dangers of error created by application of purposive interpretation strategies. Wooden application of rules to contexts which do not foster their justificatory purposes, and indeed which might even undermine them, is a serious possible source of error for courts employing a strict formalist application strategy, no matter whether the source of the decision rule was a background default rule of contract law, an express contract clause, or a contextually generated rule such as a custom usage, or course of dealing. If, in fact, the circumstances under which the proffered usage "rule" developed and the circumstances that shaped it were vastly different from those that drove the long term supply contract, then the simply-minded mechanical application of that intentional usage rule to the latter negotiable long-term deal was as much an error of formalistic

decision-making technique as it was an artifact of Article 2's incorporation doctrine. Just like contract clauses, statutes and case holdings, customary norms require purposive interpretations. Whether *Royster* was a good decision or a bad one turns on whether the rule the court applied to reach its result was explainable as a means for increasing the contractual gains available, and, if so, how.[89] The decision was a failure insofar as it never sought nor developed such a justification for the custom it used to develop its decision rule. This failure is endemic to formalistic decision-making which is a strategy adopted specifically to avoid the need to inquire into the justification for decision-making criteria.

III. PURPOSIVE INTERPRETATION STRATEGIES IN INCOMPLETE CONTRACTUAL CONTEXTS

A. Interpretive Strategies as Responses to the Sources of Contractual Incompleteness

The contribution of law and economics to the analysis of commercial law has been to shed light on the probable purposes the parties are pursing in their commercial dealings. Contracts are the attempts traders make to align their ex ante incentives to behave in a manner most likely to produce ex post efficient joint outcomes. The ex ante perspective is founded on the empirical belief that parties with correct incentives are likely to make the best available adjustments in their behaviors to the fortuities which will arise between the time of the contract and the time of performance. Parties with appropriate incentives, it is believed, will make the future determinations to fill in the gaps of their incomplete contracts by making efficient future choices.

Scott and Schwartz have shown,[90] however, that occasions will arise in which neither legal rules nor contract clauses can be expected to create appropriate ex ante incentives. Some future exigencies are so remote that it will never be worthwhile for parties to bear the expense of contracting over them ex ante. Some causes of contractual incompleteness result from the unobservability or the unverifiability of the appropriate future contingencies the parties would prefer to contract on. Some parties will refuse to include efficient clauses in their contracts because, merely by proposing such a clause, they risk

89. Perhaps retailers, or even the farmers themselves, rather than manufacturers are the optimal bearers of the risks of this quantity uncertainty. Proof that the custom assigned the risk to the optimal risk bearer is the critical element of the custom which justifies adopting it as a decision rule in the case.

90. Alan Schwartz, *Incomplete Contracts*, *in* Peter Newman, ed. New Palgrave Dictionary of Law & Economics (1996); Scott, *Formalism*, *supra* note 27.

revealing valuable private information to the other party without any assurance of being adequately compensated.[91] In such cases, contractual or legal incompleteness is an inevitability.

The general problem with legal incompleteness, including lack of specificity in contracts, is that gaps in what the law or the contract directs a party to do confer discretion on that party. When one party has significant discretion, the other bears the risk of moral hazard—that is the party with discretion might behave in ways which are individually rather than collectively rational, which includes seeking rents from his or her trading partner.[92] Typically that would involve actions which tend to shift as much of the costs of the enterprise onto the opposite party, while shifting as much of the gains as possible to the party having the discretion. If, for reasons of remoteness of the contingency or informational asymmetry, the parties cannot adopt optimal ex ante incentive alignments for themselves, then the only option for a court is to adopt a strategy of ex post efficient interpretation. When one party can convincingly show ex post that it was exploited when its contract partner succumbed to the temptation of the moral hazard and was behaving in an opportunistic way, it is likely to resort ex post to doctrines such as the obligation of good faith, to intervene in a way as if to enforce an implied promise of all parties to behave in a jointly maximizing way, and thus to resist the moral hazard incentive resulting from the incompleteness.

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91. In cases such as this it has been proposed that the legal rule should be shaped to induce disclosure some private information. *See, e.g.* Ian Ayers & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 Yale L.J. 101 (1989).

92. Nevertheless the costs to the parties of specifying their expected performance in such excruciating detail as to leave neither with any discretion is also likely to be high. Thus parties making contracts can be expected to invest specification costs until the marginal returns from reduction of moral hazard equal the marginal cost of the specification. Kraus & Walt, *supra* note 19. Of course the optimal direction specification may be contingent on some state of the world about which the parties expect to be asymmetrically informed or which is difficult either for parties to observe or verify to a court. Schwartz, *supra* note 28. In that case the direction cannot be used and moral hazard must inevitably be risked by the other party.

The "at will" employment doctrine, for example might be the law's response to the problem the principle has in completely specifying precisely how the agent will conduct herself in the future. Putting the agent at risk of losing employment if the principle becomes displeased makes giving in to the temptation provided by moral hazard extremely risky for the agent, and thus most closely aligns the ex ante incentives of the two parties. Even were approved agent behavior specified in advance, the principle might frequently be unable to prove that it hadn't occurred since the most common evidence of agent shirking will be reduction in the bottom line profitability of the joint enterprise.

Ironically, the admonition that courts should construe contracts with the intent to induce jointly maximizing behavior was the invention of Dean Scott in conjunction with his long time colleague and collaborator Charles Goetz.[93] In his current work, however, Scott notes the impossibility of ex ante interpretation for certain sources of contractual incompleteness and dismisses the possibility that courts are competent to police the resulting opportunism ex post. Instead, he argues in favor of a steadfast formalist approach to the contract by refusing to propose optimal ex ante or ex post completing terms. This is tantamount to giving a blanket blessing to opportunism leaving it unchecked (unless the contract was able to foresee and regulate it explicitly, which, by hypothesis, the parties will never be able to do.

B. Understanding the Means of Joint Maximization, an Indefinite Quantity Contract Case

Nevertheless, parties frequently contract with indefinite terms, even in circumstances which do not seem to be easily explained by asymmetric information. I turn to a typical case.

Businessmen have for centuries, been making contracts for the sale of goods in indefinite *quantities*. The common law, which valued definiteness in contracts, always had some difficulty in enforcing some of these contracts, particularly those in which a seller promised to sell its output of a good or a buyer promised to buy its requirements.[94] However, there might have been a good reason why the common law was so reluctant. To the extent that variations in quantity are potentially endogenous, when businessmen adopt contracts of this type, they expressly contract into a regime in which moral hazard risk is known in advance to be enhanced. Imagine a farmer agreeing to sell his output (or his crop) of wheat to a grain dealer. The size of this crop is partly a function of exogenous events beyond the farmer's control, such as good weather, absence of crop diseases and insect infestations, and the like.[95] The output contract

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93. Charles J. Goetz & Robert E. Scott, *Principles of Relational Contracts*, 67 Va. L. Rev. 1089 (1981).

94. Without a promise to *have* requirements or output, there was no consideration. *E.g.* Bailey v. Austrian, 19 Minn. 535 (Gil. 465) (1873); Swindell & Co. v. First Nat. Bank, 49 S.E. 673 (1905).

95. The effect of insects, disease and drought on the crops may not be utterly beyond the farmer's control, particularly if the former are treatable with chemicals and the latter by irrigation. The boundary between exogenous and endogenous factors effecting the quantity of output is probably a difficult and fuzzy line to draw. If infinite resources can solve any problem, distinguishing exogenous from endogenous risks comes down to a determination that risks which are cheap to

places the risk of quantity variations of this sort on the dealer. The size of the crop, however, is also responsive to endogenous factors, such as the farmer's skill and diligence at planting, cultivating, and harvesting. There is also a problem with asymmetry of information and, thus, a severe moral hazard problem in that only the farmer can know whether the decisions about when to plant and when and how to cultivate and harvest were likely to be jointly maximizing.[96] The dealer knows that since any increase in market value over the contract price will not call forth extra effort from the farmer, since the gains will all be captured by the buyer, such a contract contains known, suboptimal incentive features.

U.C.C. Article 2-306 nevertheless makes output and requirements contracts enforceable, thus avoiding the problems which the parties to such contracts had in validating them at common law.[97] Alan Schwartz has suggested that Article 2 contains some provisions which do not seem to be economically efficient because at the time it was being drafted, game theory had yet to be invented. Hence, without any means of determining, let alone evaluating the efficiency properties of the probable game equilibria, the drafters were disabled from adopting efficient provisions.[98] There may be a game theoretic outcome of games involving endogenously uncertain quantities which would make validating output and requirements contracts the efficient equilibrium. To date, however, that analysis has yet to be completed. There was information about economic efficiency, however, available at the time the code was being drafted which would provide a persuasive explanation for why parties might desire to enter into contracts which assigned discretion in ways exacerbating the moral hazard problem.

At the time some common law courts were struggling with the question whether to uphold such contracts, the insurance industry was already dealing with questions of uncertainty by invoking the "law of

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control are deemed endogenous, and those which are very costly will be deemed exogenous.

96. *See* Douglas W. Allen & Dean Lueck, *The Nature of the Farm*, 41 J.L. & Econ. 343 (1998). A standard result of economic analysis is that endogenous risks are best assigned to the party which has control over them. *See*, e.g. Robert E. Scott, *Conflict and Cooperation in Long-Term Contracts*, 75 Cal. L. Rev. 2005 (1987).

97. "A term which measures the quantity by the output of the seller or the requirements of the buyer means such actual output or requirements as may occur in good faith, except that no quantity unreasonably disproportionate to any stated estimate or in the absence of a stated estimate to any normal or otherwise comparable prior output or requirements may be tendered or demanded." U.C.C. § 2-306(1) (2001).

98. Alan Schwartz, *Karl Llewellyn and the Origins of Contract Theory*, *in* Kraus & Walt, *supra* note 19.

large numbers." Similarly, the benefits of portfolio diversification were known to investors. Aggregate portfolio value variances are likely smaller than variances in the values of any of the underlying assets or securities. If uncertain events occur unsystematically, then, a risk taker assuming the entire set of risks in the aggregate, like an insurer, can effectively price the uncertainty and bear it. This is possible because a risk taker assuming the entirety of risks will experience a variance in outcomes equaling only a small fraction of the variance faced by bearers of each discrete risky eventuality, the individual insureds. If one were to look over the parties to crop output contracts, then, one might not be surprised to learn that the farmer will sell his output to a single dealer, but the dealer will buy from a multitude of farmers/sellers. To the extent that an exogenous factor, such as timing and amount of natural rainfall, will cause a variance in the quantity of output of any individual farmer, the variance will tend to be offset by the opposite effects it will have on other farmers in the group whose members contracted to sell their outputs. Thus if Jones has a smaller crop, the shortage will, in a large group, be potentially offset by surpluses which result on Smith's farm. If Jones underproduces by 100 bushels, but Smith exceeds plan by that much, the dealer's intake is unaffected by the rain pattern. The output buyer aggregating the surpluses and shortages of multiple output sellers, then has a comparative advantage over each individual seller in accepting the risk of exogenously-caused quantity variations because the risk of variance of unsystematically caused quantity variations is lower for the aggregator than it is for any of the individuals whose outputs are being aggregated.

By the same token, we might expect to see requirements sellers dealing with multiple requirements buyers, when exploiting the law of large numbers. The individual buyers may experience significant variation in their requirements. The seller who aggregates the variations of multiple requirements buyers can estimate more accurately than any of them the amount he must produce to meet their aggregated requirements. An outputs buyer or a requirements seller, who has the best ability to plan on how much he or she must be capable of taking or producing, can make better decisions about how much to invest in storage or production capacity or generating resale volume or reuse of the product than can the individual output sellers or requirements buyers. These contracts can thus be explained now, even absent knowledge of particular game theoretic equilibria, as being desirable to the parties whenever the potential benefits obtainable from exploiting the law of large numbers exceed the foreseeable risks of being subject to moral hazard.[99] The inefficiency

99. And, one might note in any scheme that so resembles insurance, the risk of

of such contracts in moral hazard terms is traded off for gains in certainty provided by dealing in large numbers, particularly when the quantity altering factors are likely to have unsystematic affects.

The gains from assigning the indefinite surplus or shortages of quantity to an output buyer or a requirements seller need not come exclusively from the dampening affect that large numbers has on quantity variances. Output buyers or requirements sellers may have other competitive advantages in dealing with risks of this nature, as compared to the outputs sellers and requirements buyers. Output buyers or requirements sellers, for example, may have sunk the cost of developing storage capacity or have an advantage in some other related technology which explains why they are the most efficient bearers of the demand or supply uncertainty risk. But skillful lawyering requires that the court be made to understand just what those advantages are, or to what extent they exist, if the issue becomes, for example, whether an "unreasonably disproportionate quantity has been either tendered or demanded."[100] When it is large numbers that drives the nature of the deal, on the other hand, the quasi insurance feature of the contract would seem to dictate that no deviations from estimates or history would be unreasonable. It would have been the risks of just such deviations which would have been "insured against" and which dictated the structure of the bargain initially. On the other hand, if it is the availability of excess storage capacity that drove the deal, then the unreasonably disproportionate determination ought to take into account the size of that capacity.

Parties agreeing to assume some of the moral hazard risks which are endogenous and controlled in part by the other party may do so because the potential gains, e.g. from dampening of variances by dealing in large numbers, make the assumption worth it. Nevertheless, commentators seem to agree that the requirements and output contracts cases show an unusual sensitivity by the courts to moral hazard risks. Courts interpret those contracts in ways which minimize moral hazard,[101] particularly when requirements buyers increase their requirements not for unsystematic reasons; courts also interpret those contracts to systematically exploit an advance in the market price over the contract price.[102] Some contracts will contain

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some adverse selection as well.

100. *See* U.C.C. § 2-306, quoted *supra*, note 99.

101. Stacy A. Silkworth, *Quantity Variation in Open Quantity Contracts*, 51 U. Pitt. L. Rev. 235 (1990); Mark P. Gergen, *The Use of Open Terms in Contract*, 92 Colum. L. Rev. 997 (1992); Alan Schwartz, *Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies*, 21 J. Legal Stud. 271 (1992).

102. *See, e.g.*, Orange & Rockland Utilities, Inc. v. Amerada Hess Corp., 397 N.Y.S.2d 814 (1977); City of Lakeland, Fla. v. Union Oil Co. of Cal., 352 F. Supp.

uncertain quantities without granting discretion at all, and thus do not create moral hazard in the first place. A typical case involves highway and heavy contracting contracts under which contractors are paid unit prices ($X/cubic yard of soil excavated, concrete foundations poured, etc.) rather than lump sum contract prices. Solely in order to compare the bids of competing contractors, however, such contracts contain "estimated" quantities. Unit prices are bid, but the amounts paid depend on the measurement ex post of the number of units actually excavated or supplied, irrespective of the quantity estimate. Nobody knows until the hole is dug just how big it needed to be to get down to the bedrock, nor how many yards of concrete are required to fill it back up. The contractor agrees with the owner to dig and refill the hole as it proves to be necessary. The trucking firm that hauls off his excavated borrow and the concrete supplier who sells the ready-mix to fill the hole back up are aware of this. The contractor does not have discretion to alter the quantity, however. Nature just does not announce the fixed quantity at the contract stage. Critics of Article 2's incorporation doctrine prefer, however, to read the quantity estimates in underground cases to be promises to buy definite amounts, and approve cases, such as *Southern Concrete Services, Inc. v. Mableton. Contractors, Inc.*[103] for requiring the contractor to take the entire estimated quantity of concrete when the foundation, as eventually uncovered, required much less than the "estimate". Contractors will experience individual variances in underground conditions, but the ready-mix companies will be dealing with multiple contractors. Thus, for the ready-mix supplier, contractors' quantity variances will, to some extent tend to cancel each other out. The Mableton result, which relies only on the literal working of the contract, misunderstands why parties use such contracts. That the contract has an estimated quantity is misinformation unless the contract reader understands why the estimate is in there. Real damage is due if such a court also reads the estimate as a promise and thus places the risk on the parties facing discrete eventualities rather than the parties which face aggregate's risk. The literal approach to contract quantity estimates in the face of

758 (1973). A recent analysis which argues that the good faith test was too restrictively applied in these cases is Victor P. Goldberg, *Discretion in Long-Term Open Quantity Contracts: Reining in Good Faith,* 35 U.C. Davis L. Rev. 319 (2002) (arguing that since the contracts in question in those cases contained discrete, identifiable limits on the possible quantity variations—they were limited to the fuel consumable in a single power plant—that the requirements seller should be held to have implicitly agreed to be subject to moral hazard within those limits, because the other gains from the contract must have outweighed the moral hazard costs).

103. 407 F. Supp. 581 (N.D. Ga. 1975).

these otherwise efficient appearing industry norms places the variation risk on the parties with the comparative disadvantage in dealing with them. Surely analysts as discerning as Bob Scott should wonder why a contractor would, in effect, sign a take-or-pay clause in favor of a ready-mix supplier who had not made any obvious relation-specific investment in the supply relationship, particularly when the seller is the usual aggregator of the quantity uncertainties which arise in that trade.

C. The Distributional Dissent and Contracts with Incomplete Quality Specification

The Critique from Technique, discussed above, if valid, would apply to any standard-like law regardless of its substantive content. The technique complaint does not criticize who will win and who will lose under the sales of goods article of the U.C.C.,[104] but rather complains that the statute does not say clearly enough *who* the winners and losers will be. The most passionate criticism of the U.C.C. aims mostly at Article 2, precisely on the grounds of its (presumably easily and accurately predictable and substantively uniform) outcomes.[105] What is wrong with Article 2, goes this plea, is that consumers are not likely to win a high enough portion of their disputes with merchants. Now out in the world, there are millions of consumers with millions of potentially differing stories to tell. There are also legions of law professors who passionately believe that these stories, collectively, describe a transactional world of extreme injustice.[106]

At the risk of drastically oversimplifying, a necessity if the subject is to be addressed in a symposium article, I begin by dealing with these complaints as a branch of the economics of contract *quality*. The history of the failed attempt by a committee of academic "reformers"[107] to revise the sales of goods article of the U.C.C. (Article 2) chronicled

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104. Although the chief complainant on the technique issue has also voiced his disapproval over the substance of both the uniform laws governing Sales (Article 2) and Secured Transactions (Article 9) on the basis that they unduly disfavor consumer transactors. Scott, *Article 2*, *supra* note 14; Scott, *Politics*, *supra* note 29.

105. In an important sense the two critiques of Article 2 which I discuss, then, cannot be reconciled. If the results of a statutory regulation are drastically uncertain, as critics of the first stripe insist, then a complaint that the substantive outcomes are ideologically undesirable is at odds with the critique by claiming to be able to see those outcomes clearly enough to evaluate their ideological suitability. On the other hand if the statute is known to produce ideologically unpalatable outcomes, this very certainty undercuts the complaint of the technique critique.

106. *See* sources cited in *supra* note 84.

107. The characterization is not mine, but Schwartz and Scott's, *supra* note 28.

by the committee's reporter, Professor Richard Speidel, as a triumph of the "strong sellers"[108] supports this characterization. The principle revisions to the existing Article 2 proposed by the reformers had to do with changes in the obligations of sellers to deliver higher quality goods. The reformers also desired to limit the efficacy of mass produced contracts for the sale of massed produced goods and to limit the ability of sellers to contract out of strong quality of goods and quality of contract obligations.

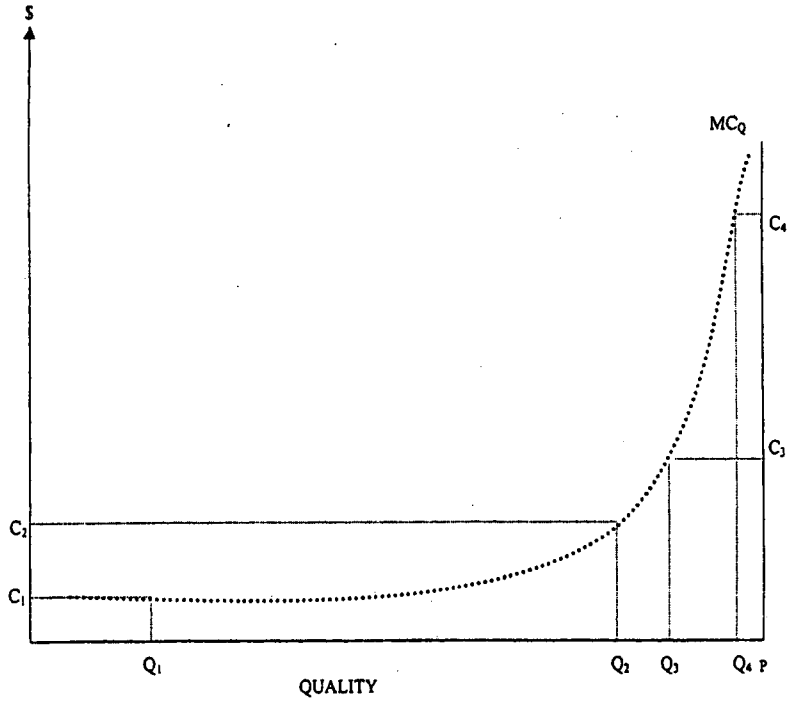
The most intuitively plausible insight of any realistic jurisprudence has to be that reality ought to matter to the law. To understand or justify any type of doctrine, then, one must first understand the reality of the slice of social life to which it will arguably apply. In this part of my study, I posit a state of social life in which a sales law normatively and positively guaranteeing higher quality contracts and goods to consumer buyers would be problematic. I begin my analysis with the empirical intuition that providing extraordinarily high quality goods using custom-crafted high quality sales contracts is likely to be extraordinarily costly. Geometrically, one can graph unit costs, whether marginal or average, as an increasing function of quality levels much as one can for increases in quantity. There is a critical difference, however, between quantity and quality. Quantity is a potentially unlimited independent variable.[109] Quality, on the other hand, is potentially subject to a limit at which it exists in an absolute form. When perfection is reached, no more increments in quality become possible. My intuition is that as one approaches perfection, the costs of making additional improvements to product quality increase geometrically, asymptotic to the limit of perfection. Graph One, below, illustrates:

108. Richard E. Speidel, *Revising U.C.C. Article 2: A View from the Trenches*, 52 Hastings L.J. 607 (2001); *See also* Rusch, *supra* note 84.

109. When graphed in two dimensions, the functional relationship between cost and quantity becomes subject to limits imposed by the ceteris paribus assumption. All inputs are fixed except the one being graphed, with the result that costs begin increasing at asymptotic rates at high levels of the graphed input matched with fixed low levels of all the others. The fact that few inputs are, practically speaking, ever fixed, however, means that the limits of quantity production as a function of the cost of the inputs will rarely be severe constraints on the decision about how much quantity to produce, in the long run, at least.

GRAPH ONE

ASYMPTOTIC COST OF MARGINAL INCREMENTS IN QUALITY



The relationship between quality level and unit cost shown by MC_Q shows how costs vary as quality is increased in increments starting at zero quality and becoming asymptotic to the measure of perfect quality represented by quality level P. Starting from low levels of quality, such as level Q_1 on the graph, it is, accordingly, relatively cheap to make large jumps in quality improvement at very little increase in costs. An increase in quality from level Q_1 to level Q_2 can be accomplished for a relatively modest expenditure of $[C_2 - C_1]$. On the other hand, starting from a relatively high level of quality, say a modest quality increase as from Q_3 to Q_4 can entail a very high increase in costs, in this case of $[C_4 - C_3]$. I intuit this relationship between costly effort and quality based on my own personal experience. Think about the time you will spend doing the fourth line edit of your latest manuscript, then access the increments in quality (per unit of editing time) you expect that edit to contribute

to the manuscript's quality[110] relative to the improvements which were available back in the first and second line edits.

Now if one is to understand the passion of the reformers for revisions of the sales law which will require sellers to deliver higher quality goods to consumers under higher quality sales contracts, we might begin by reasoning that the reformers must feel current levels of quality actually purchased by and delivered to consumers is very low. As the graph illustrates, however, the long term, fierce resistance of sellers to the proposed code revisions is not consistent with an assumption like that. If the quality is already very low, huge improvements in quality levels are possible at only the slightest increases in sellers' costs. If additional quality, which is highly desired by consumers, can be very cheaply supplied by sellers, it is a mystery why consumers' demands have not been met by the incentives provided in the market. Why should strong sellers take expensive and lengthy measures to resist amendments to the code which would result in, at most, modest increases in their costs for large increases in quality levels consumers must so desperately desire and accordingly would agree to pay handsomely to obtain? If costs of supplying quality levels are as I posit, the impulse to increase quality levels in the contracts themselves can most easily be met by consumers rewarding the few high quality producers they encounter. Competition should then prompt increases in quality levels by low quality producers. Unless the reformers are able to articulate what transactions costs out there inhibit the natural operation of markets for quality, there is no apparent reason to resort to changing sales law in order to obtain higher quality products. Even if they do have a theory of why the market for quality fails, the reformers would also need an explanation for why changing sales law is likely to be the optimal strategy for obtaining higher quality goods.[111] Until such arguments are clearly articulated, there is little or no need to modify the background sales law in order to induce or force market equilibria at higher quality levels.

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110. Developing a graphable measure of quality is not easy to quantify for a manuscript, although not so difficult for many measures of quality for goods. I would propose a measure such as decreasing number of blue marks my fastidious senior English teacher would be tempted to make on my manuscript as such a measure, with zero occurring at quality level P (perfection).

111. For example, the contribution of Professor Gillette to this symposium, Clayton Gillette, *Reputation and Intermediaries in Electronic Commerce*, 62 La. L. Rev. 1165 (2002), points out the availability to trading parties of nonlegal means for adapting to the problems caused by contractual incompleteness. If among them is a problem of adquate specification of quality of the goods being sold, such a showing ought to consider whether the option of luring sellers to develop reputations for high quality, *ala* Tiffiny, is a cheaper strategy than amending the sales laws of 50 jurisdictions.

The contrary inference, however, is that current quality levels for most goods being purchased and delivered are already quite high—to the right of the "knee" of the cost curve at which quality increases begin to become exceedingly costly. Were that the case, a reformer might infer that sellers have the potential to make huge savings in costs by chiseling only slightly on the level of quality they promised to produce. The premise, however, undercuts rather than supports the conclusion that current versions of sales law need revision in order to assure that consumers obtain only high quality goods. The motive for sellers to chisel on quality is not very strong unless they are already delivering relatively high quality goods under the current law. In that case, if the existing law already motivates sellers to supply high quality goods, then the mystery is why would reformers want to change the existing law as it respects the quality of goods and sales contracts?

There is much evidence in the world that is consistent with my hypothesis of the shape of the cost curves for supplying high quality outputs. Anyone who has ever consulted a blueprint or a floorplan for any kind of building can ascertain easily that the plans require perfection in construction. The plans unambiguously show all floors perfectly level, all walls perfectly straight and perpendicular to the floors at every location, and all corners to be perfectly square.

The contract drawings command how the walls and floors of these particular offices are to be built. If one were to interpret those drawings literally, through the formalist lens of something like the "four corners of the contract" doctrine so hailed by the critics of technique,[112] you would see that the plans call for those walls to be literally straight and to be perfectly perpendicular to a perfectly and uniformly level floor at every point. Note that the prints from which these contract requirements can be obtained are typical of those that one would find for any structure for which contract plans exist. In other words, interpreted with unblinking and literal formalism,[113] every building ever built was probably constructed under a contact that required every wall, every floor, and every ceiling to be perfect—level, straight, plumb, and square.

In reality, however, you will find that the demands of the contract are close to being Platonic forms, expressed only in terms of some ideal. People who work in the construction trades, and those that observe what they do and how they do it, know that none of those buildings specified as being perfect, were ever constructed to meet the

112. *See, e.g.* articles cited at *supra* note 27.

113. The best known critic of Article 2's technique, has argued that the common law which applies to construction contracts has optimally stuck with the "four corners" rule under which all contract symbols are interpreted with utmost laterality. Scott, *Uniformity Norm*, *supra* note 19, at 168.

literal formalist standard for quality. The plans may show the floor to be perfectly level in every building. Nevertheless, if one were to flood any floor of any building with a few millimeters of water, one would find small islands a millimeter above the water level and small ponds a millimeter deep randomly over the entire surface of the floor in question. The plans show rectangular rooms with four ninety degree corners. But if you had an expensive enough precision protractor, and measured the corners of any room in any of the world's perfectly specified buildings, you would find that the four corners, while they total 360 degree are not congruent with each other, but will vary between 88 degrees and 92 degrees depending on how far above the floor you choose to measure the angle. Thus, the corners come to the specified angle at that height only on the average. The plans likewise show the walls as perfectly perpendicular to the floor. If you were to apply precision laser measurements to them, however, you would find that eight foot high walls might lean as much as a quarter of an inch into or out of the room along any twenty foot run of the wall. The plans also show that the walls are perfectly straight from corner to corner. Yet, if you compared the walls as built with a laser line, you would discover that all walls bulge into the room and out of it slightly along their runs.[114]

Now if my empirical claim about buildings is true, one can speculate about why perfection in construction is so rare. One hypothesis is that every contractor who ever built a building was, in

114. How do I know this? I certainly do not claim to have seen every plan in every contract for every building that ever had a floor or a wall. I have, however, represented parties in construction litigation, employed experts to make measurements of floors and walls of multiple buildings, and have talked to the businessmen and workmen that actually have built many. What I say about all walls, was certainly true of the small sample with which I became personally familiar. The testimony of the men who build them, is likewise persuasive. Before one can perform any construction operation, such as one swing of a hammer, one would have to make a measurement, and adjust the structure to perfection prior to the swing and then again after it. A man can make 2 accurate hammer strikes per second on a nail or fastener if he measures and then drives the nail. One carpenter can drive hundreds of nails per day at this rate. If he measures, makes a swing, remeasures and recalibrates, and then takes a second swing, he is capable of driving only a few nails a day, and even then, the wall will still wander 1/16" away from a planned straight line along a 20' run instead of the 1/8" it will wander if constructed without a measurement between hammer blows. Persons whose jobs involve trying to conform to precise specifications are universally persuaded that the intuition in graph one is correct. That I am persuaded, however, is not the point. My hypothesis that goods and buildings never are really made to achieve perfection is demonstrably empirically falsifiable, with enough testing resources, it can be proved or disproved to a high degree of generality. The suspicions of the reformers that strong sellers always deliver lamentable quality, on the other hand is hardly discrete enough to permit falsification.

fact, a chiseler. He promised perfection to his customer and then did not deliver because he was motivated, from the beginning of the transaction to the end, to defraud every customer and to cut every corner. Economic theory even suggests that the only rational behavior to a contractor, after the contract is signed, is to maximally chisel his customer. Of course the reverse is also true—the theory predicts that every rational consumer will also chisel his contractor once the pact is signed, by, for example, flyspecking the goods tendered.[115]

The other possibility, however, and I claim, the much more credible one, is that consumers really understand that perfection is infinitely costly and therefore, are quite understanding when the contractor never produces it. Imperfections that it takes careful measurements with sophisticated measuring devices to detect are perfectly acceptable as long as they are not patent to the naked eye. Thus, even though the plans show that construction will be perfect, no buyer ever expects to pay an infinite sum for the structure; accordingly, the buyer never really thinks she has contracted to buy perfection. Contractors, similarly, do not expect consumers are willing to pay exorbitant prices to obtain perfect qualities which are difficult to detect; and accordingly, contractors never expect that they are promising to sell such levels of perfection.[116] This is the contractual significance of the fact that perfection is infinitely costly to produce. Everyone, therefore, economically, prefers things that are less than perfect, but "good enough." The test whether any individual buyer, then, is being idiosyncratic when he or she demands that the product be as perfect as the specification ought first be required to show that an infinitely high price was promised in exchange for it.

There is much in the common law of construction contacts to suggest that this latter possibility is the correct one. Why would the law have abandoned the normal requirement of "perfect tender"[117]

115. Chiseling is not rational, however, if the buyers and sellers think their transactions will be iterated, so that present day chiseling might lead to loss of future business. Indeed, the finding that some close knit trading communities "opt out" of standard commercial law, Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. Pa. L. Rev. 1765 (1996), is consistent with the notion that a constantly reiterating relationship is a cure for the incompleteness of contract law.

116. The literature on contract and statutory interpretation has recently noted that many contracting parties are actually firms, legal fictions to which a human intent can be attributed only via creating a fiction. In reality, however, firms have human substance, consisting of investors and agents. When they act, it is always through the human agency of an individual who ideally, intends to profit his principals and forms contracts consistent with that purpose.

117. Farnsworth, Contracts § 38.12.

and replace it with the rule of "substantial completion"[118] instead. Indeed, the decision of the drafters of Article 2 to continue honoring the perfect tender rule,[119] but to alter it by supplying sellers an option to cure defects,[120] can be explained as similarly motivated.

Why should this be generally the case? One might expect less than perfect wall and floor configuration if, for example, getting the job 99% perfect costs $1,000, and then improving from 99% to 100% costs an additional $10,000—consequences of the fact that costs increase asymptotically as the perfection limit is approached. Contractors would not expect their customers to demand perfection in the event that quality improvements become asymptotically expensive as perfection is neared. Walls that are "good enough," but cost only 10% of what perfect walls cost, are likely to be the wall quality actually expected by the consumer and furnished by the contractor, particularly when the deviation tolerances are very difficult to detect by the naked eye.

A formalist approach to construction contracts would conclude after carefully measuring performance in almost all buildings and finding that in every case, the contractor was in breach of his promise to provide perfection. In fact, however, such claims are very rare. Perhaps parties recognize that courts would interpret the perfect plumbness, straightness, and levelness shown on the plans in light of the certain knowledge of all industry participants that such perfection is not really expected by either buyers or sellers. Evidence of this rather strong usage is standing in every building in every town. It makes great sense to judges that imperfections occurs in construction contract performance because idealistic quality descriptions are a cheap way to specify in general terms what owners want built and what contractors can feasibly build for them on limited budgets, especially when it is well known that obtaining the ideally specified perfection requires unlimited budgets. All knowledgeable people dealing with such specifications understand them to be subject to some trade customs which grant tolerances from perfection. So powerful is the logic of this custom that it is rarely challenged. Thus, as far as quality is concerned, it is credible to suppose that parties confecting a common law of construction contracts are actually employing an incorporation strategy so bemoaned for its uncertainty by critics of the U.C.C.. When contractors generally do not build to the perfect standard literally demanded in their contracts with buyers, and buyers universally accept the less than perfect performances, we can infer something else, which is even more interesting. Parties

118. Jacobs & Young v. Kent, 129 N.E. 889 (1921).
119. U.C.C. § 2-601 (2001).
120. U.C.C. § 2-508 (2001).

actually behave in their contracts in ways which make perfect sense. In an important way, then, the market fills in some of the incomplete gaps in contracts. The incorporation strategy, then, is a way to directly address the problem of contractual incompleteness by bringing the market solution for incompleteness problems back into the contracts the parties make for themselves.

The incorporation strategy of U.C.C. Article 2 rejects a formalist approach for determining what the contract actually requires and instead interprets the contract requirements in the context of the markets where the transaction actually occurs. This means expensive lawyering. A strictly formalist strategy would permit a lawyer to determine the contract quality standard using only the document and a dictionary. The incorporation strategy requires the lawyer to actually go into the market and measure what parties are delivering and accepting, and then to use that information to glean an understanding of what the parties probably agreed would be the acceptable level of product quality. Were you to talk to the workmen, they would unvaryingly tell you they straighten and measure to a standard where it is "good enough," not to one which literally complies with the contract requirements. Construction contracts frequently delegate decision-making over questions of quality compliance to a third-party architect, professionals who are knowledgeable about the cost to provide perfection in quality. Specifying quality standards, in other words, is, in reality, an expensive enterprise. The tacit understanding that the quality specification is what the market deems "good enough," given the limitations on the skills of the workman and the owner's budget, is an efficient gap-filler for incomplete specification caused by the expense of the specification.

The adoption of the "substantial completion" doctrine, together with a damage measure which awards the buyer not the potentially asymptotic and infinite cost of obtaining literal compliance with the plans[121] but, rather, only the diminution in value of the structure by reason of the claimed defect, thus triggering the buyer's duty to pay after tender of an imperfect performance, is understandable in a world

121. Indeed when the buyer's claim of breach is based on a failure of the goods to be of specified quality, the shape of the curve of the cost of obtaining it provides a good explanation for the common law's preference to award damages as the remedy, rather than the grant of specific performance. Specific performance orders would impose extraordinarily high costs on the seller for only minuscule gains in quality for the buyer. Buyers however, ex post, prefer to be placed in a position to impose exhorbitant costs onto sellers as a lever to renegotiate the original deal. Sellers would pay a great deal to be relieved of responsibility to incur the extraordinarily high costs, and under a regime offering specific performance, could be forced either to incur them or buy a release from the obligation.

with asymptotically increasing costs of providing perfect quality as well. Indeed, the common law's preference for awarding market damages rather than specific performance is also explainable by the same phenomenon. Giving the buyer an entitlement to specific performance of quality specifications in an environment of asymptotically increasing costs becomes the right to impose enormous costs on sellers in return for only limited increases in the quality of the performance. Were specific performance routinely awarded, the issue would become not how badly is the buyer injured by the alleged quality "breach," but, rather, how big a loss can buyers impose on sellers by forcing them to perform at exorbitant costs. How much will you pay me not to assert my rights to specific performance of perfect quality? By my hypothesis, most buyers would agree to settle for cash amounting to a fraction of the seller's cost savings in preference for having a literally perfect product tendered to them ex post. Similarly, most would refuse to promise to pay for perfection ex ante.

IV. ON CODES AND LEGAL SOLUTIONS TO THE PROBLEMS OF SOCIAL LIFE

The fathers of the U.C.C. aspired to give guidance to commercial transactors in a wide variety of legal ventures. The realist insight can be summarized—"guidance" is about the best a legislature or contract drafter can practically do. Guidance, yes, but answers? You will have to work them out for yourselves. As Bill Hawkland has argued, this undertaking had for a precedent the existence of much more ambitious European Civil Codes, written on the model of the French Code Napoleon.[122] Those codes attempt to regulate a much broader range of behaviors than those involved in commercial transactions. On one idealistic view, at least, the French Code Civil was also designed to unify the preexisting heterogenous legal doctrines prevailing in the multiple subdivisions of pre-Napoleonic France.[123]

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122. Hawkland, *U.C.C.*, *supra* note 15.

123. "[A] major purpose of codification [of the French Civil Code] was the proclamation of a new uniform legal order to replace the vast multiplicity of local customs." Robert A. Pascal, *Of the Civil Code and Us*, 59 La. L. Rev. 301, 305 (1998). For a more skeptical view, which posits that upon assuming dictatorial power in France, Napoleon chose codification in order to centralize all law to be administered by his centralized bureaucracy, *see* Edward Glaeser & Andrei Shleifer, *Legal Origins*, (2001 Harvard Institute of Economic Research Discussion Paper No. 1920) *available at* http://www.post.economics.Harvard.edu/hier/2000papers/2000-list.html. The insistence of code theorists that judges cannot be permitted to make law, a proposition found in the Civil Code itself, *see, e.g.* Pascal, 59 La. L. Rev. at 307-08, is certainly evidence of a Napoleonic reluctance to grant political power to French institutions other than his own executive. The strategy of harmonizing law

Parties confecting border crossing transactions are likely to desire a legal regime in which the legal outcomes are the efficient ones, invariant to differences in the jurisdictions.[124] The information costs of transacting are thus reduced, and since the law is the same everywhere in the market, only one set of laws need be assimilated by participants in that market. Thus, harmonized law tends to reduce costs of transacting at distances and tends to economically enlarge markets. In enlarged markets, economies of scale can be exploited since tremendous fixed costs can be spread over larger numbers of consumers.

Suppose we adopt rules which are formally the same in every jurisdiction. Unless such rules are capable of being literally enforced, the code's critics complain, the invariance proposition which justifies the code cannot be counted on. If we cannot tell whether the buyer or the seller will win law suit "X" by simply reading the statute, we cannot count on the results to be uniform. The result would be that, in reality, transactors will be trading in multiple markets with differing regulations all of which must be learned by all the traders. The benefits of the enlarged market, then, also must be forgone.

The realist insight, however, cautions against such reasoning. Both before the U.C.C. was adopted and even today, long afterward, whether it is the common law of England, the French Civil Code, or the U.C.C., there probably never has been, nor will there ever be, a test of the invariance thesis. No two cases are ever exactly alike, and never occur at the same moment in jurisdictions differing *only* in their locations—the conditions necessary to test the invariance proposition. Similar disputes take place but between different people, at different times, and in different places. We have a pressing need to know exactly what will happen in the future, but we live in a world critically short of competent soothsayers who can fulfill this need. That is the great problem of the practice of law. And yes, realists realize, adopting the U.C.C. did not solve the problem because it could not.

The realists recognized that the ambitions of the drafters of codes could never be fulfilled. Even though believers in codes claim that true codes are preemptive, systematic and comprehensive, containing definite answers to all of life's persistent questions, they never really

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via uniform but decentralized local adoptions, pursued by the U.C.C.'s fathers acquits them of similar suspicions. For another view—that the mission of the U.C.C.'s codifiers was primarily simplification rather than harmonization—*see* Gilmore, *Realism*, *supra* note 18.

124. It is plausible that if traders are subjected to the laws of varying jurisdictions at random, they would be able to diversify away the risk of dealing with such regimes. Nevertheless, they would still have reason to prefer subjecting their transactions to regulation only by the most efficient or those regimes.

are, nor can they ever be. Old code answers might be answers to old questions, but never, credibly, to new questions which have never before been asked, and those are the only kinds of questions likely to be brought to lawyers. Codes that resemble omnipotent gods having all the answers, must, of course, be interpreted self-referentially. Actually, however, adherents to code methodology do accept that there will be incomplete law. They argue that the gaps can be filled, however, by a proper appreciation of the ontological nature of man's existence. Actual interpretations of the code, as a consequence, probably owe as much to the unarticulated religious beliefs of the interpreter as they do to the dictionary.[125]

The core message of realist teaching is that law is hard to do, and in order to do it competently, you must first understand it and second appreciate the reality of the actual conditions in which it will apply. The U.C.C. does not direct the searcher for answers to its own provisions. Instead, it explicitly tells the searcher to look out there into the real world, and to see what is happening out there before deciding just what you might want to do about it. This means that much of commercial law cannot be practiced staying in a law office. It requires lawyers to put on hard hats and go into the world where the commerce is conducted. By the same token, however, it invites courts to look to markets rather than dictionaries to complete incomplete contracts. It seems highly plausible that markets are a more fruitful place to look for such answers than dictionaries are. The consequence to codifiers is, however, that their claims to have regulated all of life's contingencies are finally identified as pure pretension. Codes, whether of the European civil variety, or of the American federal stripe, ala the Internal Revenue or the Bankruptcy Codes, or even of cooperative enactment like the U.C.C., are themselves incomplete. Thus, codes are in need of interpretative techniques designed to mitigate the indecision which results from that incompleteness.

What might we discover if we follow the code's lead and get out and look around? Well, one thing we might find out is what the people involved in the transaction really wanted to do, and an understanding of *why* they wanted it to work that way. The immanent

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125. *See, e.g.* Pascal, *supra* note 123, at 308-09 (decrying amendments to the Louisiana civil code which secularized the basis upon which the code authorized courts to arrive at interstitial determinations). Actually, however, there is good reason to believe that the facts of American social life rather than the words in its civil code have been decisive determinants of the shape of much of Louisiana's private law, civil code legal methodology to the contrary notwithstanding. Kenneth M. Murchison, *The Judicial Revival of Louisiana's Civilian Tradition: A Surprising Triumph for the American Influence*, 49 La. L. Rev. 1 (1988). Since realists believe that the facts of social life ought to matter to the law, this is as it should be.

law in the world, which Karl Llewellyn thought should actually shape the law governing transactions,[126] is nothing more than a more complete understanding of what traders really want, and why. Knowing the why permits us to engage in the purposive interpretation of the rules which the traders crafted in their admittedly incomplete contracts, so as to provide the parties by our interpretation with the legal means to achieve their actual goals.[127] Although the U.C.C. says that its policies are to "clarify" the law governing commercial transactions and to "permit the expansion of commercial practices,"[128] surely finding out what people want, understanding why it is efficient for them, and then shaping the law to foster those ends does not require much warping of the dictionary to fit well within those purposes. While I have proposed here some ways to understand why parties employ incomplete quantity terms and aspirational quality terms in contracts, I do not suppose these understandings are exclusive. I fully expect that were I required to inquire in much greater detail of many serious clients in my practice about why they do what they do, I would expect, like the realists predicted, that it is the world which drives the law and not the other way around.[129]

126. K. Llewellyan, The Common Law Tradition (1960) 122, 126-28.

127. This argument on first blush, appears to endorse an ex post efficiency interpretive strategy. *See* Scott, *Formalism*, *supra* note 27, at 888-89. In fact, however, I would advocate that the rulemaker assess whether the ex post interpretation is likely to align well with the ex ante intentions of *future* parties whose affairs will be subject to the rule. If the ex post interpretation in case 1 doesn't create suboptimal ex ante incentives for future parties in case 2, the ex ante/ex post viewpoint distinction doesn't bite. If it does, then the optimal rule is to trade off ex post efficiency in the rule's formulation governing case 1 to amend the rule to achieve marginal gains in improving the incentives in case 2.

128. U.C.C. § 1-102 (2001).

129. In this I follow that great realist Justice Holmes. *See* Grant Gilmore, The Death of Contract 143 and n.256 (1974). "Holmes kept his own theories open-ended by his reiterated insistence that law basically reflects social and economic conditions and must change as they change."