

CONTRACT'S CONSTITUTIVE CORE: SOLVING PROBLEMS BY MAKING DEALS

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Problem solving begins at the earliest stages of development and is central to human experience. While individuals solve simple, everyday problems automatically using cognitive shortcuts, more complex problems require self-conscious, creative mental processes. Unilateral processes of decision making solve most of these more complex problems. But when unilaterally derived solutions call for reliance on help from others, parties often engage in deal making to arrange for mutual assistance. Thus, the main purpose of deal making is to implement each side's solutions to its own problems rather than to reach joint solutions to common problems. Collaboration does occur in deal making, but it is not the main purpose in most instances.

This Article offers a descriptive, instrumental analysis of U.S. contract law as a problem-solving enterprise, and argues that problem solving, both private and public, is the primary focus of U.S. law generally and contract law in particular. It models the building-block concepts of problems, solutions, and methods of implementation, describing how individuals, groups, and governmental institutions reach and implement solutions. It then uses this problem-solving perspective to explain aspects of U.S. contract law, such as the unenforceability of gift promises and gambling contracts, that traditional bargain theories cannot explain adequately, if at all. The Article's unique perspective also explains why courts cannot function effectively as problem solvers. Because solving complex problems requires the exercise of broad discretion, individuals can accomplish the task by drawing on creative intuition. By contrast, courts are not institutionally capable of solving such problems because the adjudicative process does not allow for the exercise of broad discretion.

In developing its central thesis, this Article distinguishes between contract's constitutive core and its regulative penumbra. The core empowers private actors to reach and implement solutions to private

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problems, while the penumbra consists of public regulations that courts apply both to deal making and to deals to solve public coordination problems. This Article concludes that in U.S. contract law, only bargains that unambiguously reflect an effort to use contract's core to solve preexisting problems are deemed worthy of judicial enforcement. This problem-solving account not only carries explanatory force in describing U.S. contract law, but offers a starting point to begin to develop a robust problem-solving perspective on both private and public U.S. law.

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I. INTRODUCTION

Problem solving—eliminating obstacles to progress—is central to human experience.¹ It begins at the earliest stages of development² and carries through to the end of one's days.³ Individuals solve many problems so automatically that they hardly notice, relying on combinations of mental shortcuts and rules of thumb.⁴ With respect to more deliberative problem solving, the human mind is capable of dealing with complex, novel situations, employing techniques that this Article will examine. Actors solve problems not only individually but also interactively. When two or more persons share the same objectives, they often collaborate in reaching mutually beneficial solutions. The primary glue that holds most of these informal private initiatives together is the bond of mutual trust. Law in general and contract law in particular are more likely to play a role in shaping behavior when actors lack common objectives and have no particular reason to trust each other. To be sure, strangers may cooperate with each other and make deals without help from the law.⁵ But such help is available when the parties need it. Thus, contract law consists of officially derived solutions to the persistent problem of coordinating human conduct; more particularly, the problem of how individuals

1. See KARL POPPER, ALL LIFE IS PROBLEM SOLVING 100 (Patrick Camiller trans., 1999) ("All organisms are inventors and technicians, good or not so good, successful or not so successful, in solving technical problems.").

2. See ALISON F. GARTON, EXPLORING COGNITIVE DEVELOPMENT: THE CHILD AS PROBLEM SOLVER 3–4 (2004); GARY MARCUS, THE BIRTH OF THE MIND: HOW A TINY NUMBER OF GENES CREATES THE COMPLEXITIES OF HUMAN THOUGHT 25 (2004).

3. A problem arises when an actor perceives that an obstacle is preventing the actor from achieving the actor's objective and that the obstacle may be removable. See *infra* note 43 and accompanying text. Problems range from the trivial to the profound: Which checkout line will be faster? How may I live a satisfying life?

4. See 3 HERBERT A. SIMON, MODELS OF BOUNDED RATIONALITY: EMPIRICALLY GROUNDED ECONOMIC REASON 291–94 (1997); Reinhard Selten, *What Is Bounded Rationality?*, in BOUNDED RATIONALITY: THE ADAPTIVE TOOLBOX 13, 13–16 (G. Gigerenzer & R. Selten eds., 2001).

5. See Stewart Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 AM. SOC. REV. 55, 61 (1963). Indeed, they may self-consciously avoid such help. See generally Symposium, *Freedom from Contract*, 2004 WIS. L. REV. 261.

who do not necessarily share common objectives can more effectively solve their individual problems by binding themselves to promises of mutual assistance.

Regarding the explanatory power of this Article's problem-solving perspective, the underlying logic is quite simple. Given that contracts involve promises of future performance, it is understandable that scholarly observers would begin with the notion that contract law is mainly about keeping promises.⁶ But the unenforceability of gift promises, even when earnestly and solemnly made, demands the qualification that only promises supported by consideration—bargains—are enforceable. But then the unenforceability of gambling contracts and clauses calling for breach-based penalties, both of which involve mutual consideration, embarrasses the bargain theory, which forces the conclusion, embraced by this analysis, that courts enforce only those categories of bargains that appear on their face, or may be presumed, to constitute solutions to preexisting problems. The outline of this Article's explanation of contract law is complete when one factors in the limits of the judicial contract-enforcement process as a problem-solving mechanism. A court, it turns out, does not so much solve the parties' problems when it litigates contract claims as it implements the solutions already reached by the parties when they made their deal.

Part II consists of a descriptive overview of the nature of contract law as a set of constitutive tools by which actors reach and implement solutions to both individual and shared problems. Part II also addresses the question of why the problem solving facilitated by deal making is sufficiently important to warrant encouragement by contract law and describes how this Article fits into the broader scheme of contracts scholarship. Part III lays out the conceptual framework of problem solving—what problems are, what solutions are, and why it is useful to distinguish between solving a problem and implementing a solution. Part IV describes the decision processes by which both individual and institutional actors solve problems and identifies limits on the capabilities of different governmental decision makers. Because courts play the major institutional roles in contract settings, the main focus will be on the limits of adjudication. Part V relies on the insights from Parts III and IV to explain U.S. contract law generally as well as a number of its specific features that other perspectives on contract have difficulty explaining. The Article concludes by considering future applications of the problem-solving perspective to other aspects of U.S. law.

6. For a recent and useful summary of normative contract theories, including promise theories, see Curtis Bridgeman, *Contracts As Plans*, 2009 U. ILL. L. REV. 341, 347–66.

II. AN OVERVIEW OF CONTRACT AS A MEANS OF SOLVING PROBLEMS AND IMPLEMENTING SOLUTIONS

A. *The Constitutive Core and Regulative Penumbra of Contract*

Whatever meaning may attach generally to the concept of constitutive rules,⁷ contract law's constitutive core grants legal powers primarily to nongovernmental actors to engage in private ordering—to create private law by which to govern their interactions.⁸ Scholars have traditionally contrasted constitutive law with prescriptive or regulative law.⁹ Public regulation consists of governmentally imposed rules and standards that dictate how much care and restraint, at a minimum, actors must exercise to avoid causing injury to others.¹⁰ No legal regime is exclusively constitutive or regulative. Some, such as tort law and criminal law, are mainly regulative with only relatively minor, albeit important, constitutive elements.¹¹ But every legal regime with a substantial constitutive component also regulates the private ordering it helps make possible.¹² Thus, accompanying its constitutive core, contract law includes a regulative penumbra by which courts keep both deal-making behaviors and deals themselves within appropriate bounds.

The constitutive elements of contract comprise its core because those elements are logically antecedent to the regulative. After all, unless and until actors make deals, there are no deals to regulate. To be sure, some of the interactive behaviors that typically lead to enforceable contracts give rise to legal remedies under contract's regulative penumbra even if the deal makers never strike a bargain. But contract scholars understand that these are invariably situations in which one or both parties have taken steps toward forming a contractual relationship.¹³ It fol-

7. See FREDERICK SCHAUER, *PLAYING BY THE RULES: A PHILOSOPHICAL EXAMINATION OF RULE-BASED DECISION-MAKING IN LAW AND IN LIFE* 6–7 (1991) (explaining that constitutive rules do not tell actors how to play a game; they make the game possible).

8. See ROBERT A. HILLMAN, *PRINCIPLES OF CONTRACT LAW* 2 (2004) (stating that deal makers create “private law”). Contract is certainly not the only body of U.S. constitutive law with significant private-ordering potential. Other examples include property law and procedural law. But contract stands out as the paradigm.

9. See SCHAUER, *supra* note 7.

10. Regulation typically does not attempt to establish maximum levels of care, relying on self-interest to prevent actors from being too protective of the welfare of strangers.

11. Within tort law, an actor has the legal power to consent to the invasive conduct of others that would, in the absence of consent, be legally actionable. See generally *RESTATEMENT (SECOND) OF TORTS* §§ 892–892A (1982). More recently, tort theorists are developing the notion that tort law gives injured victims of allegedly tortious conduct, not rights to recover damages but rather, constitutive powers to bring claims for such recovery. See John C.P. Goldberg & Benjamin C. Zipursky, *Accidents of the Great Society*, 64 *MD. L. REV.* 364, 402–03 (2005); Benjamin C. Zipursky, *Rights, Wrongs, and Recourse in the Law of Torts*, 51 *VAND. L. REV.* 1, 5 (1998). Cf. *infra* note 274 and accompanying text.

12. See HILLMAN, *supra* note 8, at ch. 6 (referring to the regulative rules of contract as serving a “policing” function); see also 1 E. ALLAN FARNSWORTH, *FARNSWORTH ON CONTRACTS* ch. 4 (3d ed. 2004).

13. Mel Eisenberg refers to these as “contractual contexts.” Melvin A. Eisenberg, *The Duty to Rescue in Contract Law*, 71 *FORDHAM L. REV.* 647, 654 (2002).

lows that the constitutive dimensions of contract comprise its core not merely because they are arguably contract's most salient feature but also because they comprise contract's logical starting point.¹⁴

B. How Does Deal Making Solve Problems and Implement Solutions?

In most instances, the first step in solving problems by making deals is for the deal makers to reach solutions to their own problems unilaterally, without the other's direct involvement.¹⁵ When these unilateral solutions call for the cooperation of other actors, the parties may engage in deal making to arrange for such mutual assistance. By entering negotiations, the parties are not necessarily collaborating to achieve a joint solution to a larger problem that they share in common. They are more likely seeking agreement regarding only those narrow aspects of their unilaterally derived, interlocking solutions that call for assistance from each other. Thus, when the parties strike such a deal, the deal's main function is to implement each side's solution to its own problem. Deal making may, of course, involve collaborative problem solving. Thus, while the preliminary aspects of deal making typically involve conflict resolution, once those terms are in place the parties often collaborate to improve what has become, by means of the initial agreement, a shared solution to a common problem. Indeed, when an agreement calls for future interactions over a longer time period, the collaborative problem-solving component of deal making may be very significant. Negotiations analysts emphasize these collaborative aspects of deal making.¹⁶ Nevertheless, the potential for mutually beneficial collaboration should not divert attention from the reality that the power to bind others helps actors

14. This conceptualization suggests that if actors are free to choose not to engage in deal making in the first instance, then contract's core is essentially amoral. See generally Peter A. Alces, *The Moral Impossibility of Contract*, 48 WM. & MARY L. REV. 1647 (2007); Barbara H. Fried, *What's Morality Got to Do with It?*, 120 HARV. L. REV. 53 (2007). By contrast, contract's regulative penumbra is not optional in this same manner and thus may be assumed to have a moral base. See, e.g., Melvin Aron Eisenberg, *The Role of Fault in Contract Law: Unconscionability, Unexpected Circumstances, Interpretation, Mistake, and Nonperformance*, 107 MICH. L. REV. 1413, 1414 (2009) (referring to what are here considered the regulative aspects of contract law, the author concludes that "the basic principle that tells us how to make the best possible rules of contract law . . . must accommodate . . . moral values"). Of course, some rescue theorists and communitarian writers may reject the suggested amorality of contract's core. See Daniel Markovits, *Making and Keeping Contracts*, 92 VA. L. REV. 1325, 1327-28 (2006) (arguing for a general duty to enter contracts); Ernest J. Weinrib, *The Case for a Duty to Rescue*, 90 YALE L.J. 247, 247-51 (1980) (arguing for a general duty to rescue strangers).

15. Obviously, simple contracts may arise spontaneously with neither side being required to invest independently in preliminary game plans. And one side may instigate the other's problem-solving efforts by suggesting the possibility of making a deal. But typically, each side develops its own solution to its own problem, which in all cases logically (and in most factually) precedes interaction with the other contracting party.

16. See ROGER FISHER & WILLIAM URY, *GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN* ch. 4 (Bruce Patton ed., 1981); ROBERT H. MNOOKIN ET AL., *BEYOND WINNING: NEGOTIATING TO CREATE VALUE IN DEALS AND DISPUTES* ch. 1 (2000).

to solve their individual problems even when deal making involves nothing more than zero-sum bargaining.¹⁷

This introductory overview reveals a fundamental tenet of this Article's analysis: the problem solving that generates the tentative solutions—the game plans—that actors carry into deal making is accomplished by individuals and quite small groups of individuals acting creatively and collaboratively, based on shared objectives and mutual trust.¹⁸ The inherently adversarial deal making that contract's constitutive core encourages, culminating as deal making often does in legally enforceable agreements, expands the reach and effectiveness of this preliminary process of problem solving by encouraging the problem solvers to rely on help from others. To be sure, the deal making often provides its own opportunities for collaboration. But strictly speaking, unilateral, nonadversarial processes of decision making solve most problems of any consequence.¹⁹ As subsequent discussions will make clear, this insight has important implications not only for contract law but for U.S. law generally.

C. Why Is Private Problem Solving Sufficiently Important to Warrant Encouragement?

Contracts scholars engaged in normative analyses have argued that deal making is important either as an end in itself²⁰ or as a means of achieving overarching collective ends such as allocative efficiency.²¹ As noted earlier, this Article advances a positive, instrumental view. While it observes that contract law self-consciously aims to encourage private ordering as a way of solving problems, it makes no claim regarding whether doing so promotes fairness or efficiency. Indeed, this Article's explanation of contract law is consistent with a wide range of normative theories.²² In any event, assuming that solving problems without violat-

17. Even when deal making does not directly involve collaboration, the availability of legally enforceable deals renders more meaningful the unilateral problem solving that almost always precedes, and often explicitly relies upon, subsequent implementation of the solutions through deal making.

18. Thus, even though this Article focuses on the problem-solving aspects of deal making, the primary joint problem-solving mechanism is the nonadversarial, unilateral decision making that often precedes, and is implemented by, the making of deals.

19. In parallel fashion to the manner in which the constitutive aspects of contract law logically precede its regulative aspects, unilateral problem solving based on mutuality and shared objectives logically precedes the bilateral combination of conflict resolution, collaborative problem solving, and solution implementation that occurs in making deals. *See supra* Part II.A.

20. *See, e.g.*, Daniel Markovits, *Contract and Collaboration*, 113 *YALE L.J.* 1417, 1442–46 (2004).

21. *See, e.g.*, Charles J. Goetz & Robert E. Scott, *Enforcing Promises: An Examination of the Basis of Contract*, 89 *YALE L.J.* 1261, 1265–66 (1980).

22. Whatever one posits as the normative basis of contract law, so long as the system of contract is consistent with the relevant norms it is free, as it were, to perform instrumental, problem-solving functions. *See, e.g.*, Ernest J. Weinrib, *Deterrence and Corrective Justice*, 50 *UCLA L. REV.* 621, 629 (2002) (noting that the instrumental goal of deterrence is compatible with the noninstrumental goal of

ing relevant regulative norms is desirable, the important question is why a legal system would want to promote *private* ordering via *private* deal making rather than being satisfied with achieving *public* ordering through *public* regulation.²³ Contract law promotes private ordering for at least two reasons. First, doing so honors the traditional normative notion in U.S. law, reflected in the often-referenced objective of promoting freedom of contract, that problems with a significant private dimension should, whenever possible, be solved by private, not public, actors.²⁴ And second, promoting private ordering reflects the objective reality, to be developed in subsequent discussions, that the individuals and small groups that typically exercise power in private contexts are demonstrably more capable problem solvers from a technical standpoint than are U.S. governmental institutions.²⁵

D. *Where Does This Article Fit Within Contracts Scholarship?*

Although a number of contract scholars engage in normative analysis,²⁶ scholars are producing a significant volume of work with a positive, analytical focus.²⁷ This Article clearly falls into the latter category. What

corrective justice as long as the two are conceptually sequenced so that the former gives way to the latter when the two come into conflict).

23. Daniel Markovits stresses the importance of answering the question regarding why parties should make private agreements, in addition to the question of why they should honor agreements once made. See Markovits, *supra* note 14, at 1325–26. While Markovits answers the question normatively, the reasons in the text following this footnote consist of empirical observations regarding customary, commonly shared social norms and practices.

24. See HILLMAN, *supra* note 8, at 2 (“Th[e] recognition of ‘freedom of contract’ constitutes one of the core principles of [the U.S.] free-market economy and is a fundamental precept of [the U.S.] political philosophy.”); Lon L. Fuller, *Consideration and Form*, 41 COLUM. L. REV. 799, 806 (1941) (“Among the basic conceptions of contract law the most pervasive and indispensable is the principle of private autonomy.”); Samuel Williston, *Freedom of Contract*, 6 CORNELL L.Q. 365, 367 (1921) (“[I]t was a corollary of the philosophy of freedom and individualism that the law ought to extend the sphere and enforce the obligation of contract.”).

25. Regarding the technical superiority of private orderers as problem solvers, clearly the limits on the capabilities of U.S. governmental institutions are not immutable facts of nature but are, themselves, the products of value choices reflected in the structural designs of those institutions. It follows that, at least in theory, the discernable advantages that private problem solvers enjoy over their public counterparts are a function of normative choices that, in the final analysis, deserve a normative critique. Rather than attempting such a critique, this analysis accepts the relevant institutional designs and the value choices they reflect as part of the factual premises for the positive assertion that, in the U.S. legal system, the private ordering that contract law encourages is sufficiently more competent compared with normatively constrained public ordering to warrant giving robust effect to contract’s constitutive core. To be sure, U.S. contract law traces its origins to sources predating the founding of the U.S. republic and its uniquely democratic institutions. But the most significant constraints on public ordering in the context of contract law—the limits of adjudication—have not changed significantly enough over time to undermine the legitimacy of the point here being made.

26. See *supra* note 6 and accompanying text.

27. Mel Eisenberg’s work epitomizes this type of contracts scholarship. See, e.g., Eisenberg, *supra* note 13 (analyzing the duty to rescue in U.S. contract law); see also George M. Cohen, *The Fault That Lies Within Our Contract Law*, 107 MICH. L. REV. 1445 (2009) (examining the nature of contractual fault and the oversimplification of describing contract law as a system of strict liability); Melvin A. Eisenberg, *Mistake in Contract Law*, 91 CALIF. L. REV. 1573 (2003) (developing a normative and descriptive framework of legal rules governing mistake in contract law); Nathan B. Oman, *A Pragmatic*

may not be so clear is the extent to which the descriptive theme of contract-as-problem-solving has played out in academic writing. Thus, early contracts scholars reflect a pragmatic, instrumental mindset when they justified the legal enforceability of executory bargains in terms of the need for business people to “make reliable arrangements for the future”²⁸ and spoke of some mutual promises being “of such great importance that social control must be applied.”²⁹ In his classic essay on consideration, Lon Fuller observes that often the best forms of regulation are found in enforceable private agreements.³⁰ During the time period after World War II, Fuller’s legal process colleagues spoke of law in general, including contract law, as reflecting “the never-ending efforts of people to maximize the satisfactions of their wants through the institutions and procedures of cooperative, interdependent living.”³¹

More recently, Mel Eisenberg has observed: “A bargain promise requires and embodies two choices by the promisor. First, the promisor must choose to achieve a certain objective. Second, the promisor must choose to achieve or further that objective by making a given [deal].”³² And in a recent book, Roy Kreitner describes the rapid rise and revolutionary triumph in early twentieth century U.S. contract law of the judicial construct of the calculating individual problem solver, who is free to reach tailor-made solutions, over the constrained contractual actor who had been, under prior law, forced to choose among off-the-rack, formally defined solutions.³³ Although Kreitner focuses on how rapidly the concept of the calculating problem solver came to be used by the courts rather than on the decision processes by which calculating actors devise tailor-made solutions, his analysis—including the specific examples he uses to illustrate his points—very much resonates with this Article’s contract-as-problem-solving thesis.³⁴

It remains to consider scholarship explicitly advancing the thesis that contract law is a means of achieving private ordering through problem solving. Several legal scholars have begun to promote what they call

Defense of Contract Law, 98 GEO. L.J. 77 (2009) (extolling the pragmatic virtues of contract law); D. Gordon Smith & Brayden G. King, *Contracts As Organizations*, 51 ARIZ. L. REV. 1 (2009) (challenging dominant economic accounts of contract law).

28. Henry Winthrop Ballantine, *Mutuality and Consideration*, 28 HARV. L. REV. 121, 134 (1914).

29. Hugh Evander Willis, *Rationale of the Law of Contracts*, 11 IND. L.J. 227, 230 (1936).

30. Fuller, *supra* note 24, at 810.

31. HENRY M. HART, JR. & ALBERT M. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 107 (1994).

32. Eisenberg, *supra* note 27, at 1581.

33. ROY KREITNER, *CALCULATING PROMISES: THE EMERGENCE OF MODERN AMERICAN CONTRACT DOCTRINE* 91–94 (2007).

34. Kreitner uses gift promises, *id.* at pt. 1, and gambling contracts, *id.* at pt. 2, as major examples supporting his thesis. Part V.A of this Article uses both of these examples to show how contract law aims at helping actors solve problems.

the planning theory of law,³⁵ including Curtis Bridgeman who has recently published an article using planning theory to explain portions of contract law.³⁶ In their view, “law is a set of plans promulgated by officials to solve coordination problems.”³⁷ From the perspective advanced in this analysis, the equation of law with *plans* rather than *solutions* is somewhat off the mark. After all, a plan, as in the phrase “game plan” used earlier,³⁸ is a solution to a problem; so they seem to be saying that solutions solve problems, which is not particularly helpful.³⁹ Why do planning theorists equate law with plans rather than with solutions? A primary reason may be that the planning theorists rely on the work of a nonlawyer philosopher, Michael Bratman, who has developed the importance of forming stable, forward-looking intentions—plans—as part of his overview of practical reasoning.⁴⁰ In any event, this Article locates Bratman’s concept of planning in the more inclusive concept of problem solving, in which planning plays an important, but not the only, part.

The published work of planning theorists reflects one further shortcoming: none of the theorists has examined the decision processes by which planning occurs. Instead, they accept plans as given,⁴¹ occasionally focusing on who engaged in a particular type of planning without considering how they did so.⁴² This is a significant omission. As this Article makes clear, inherent limits on the problem-solving capacities of various governmental agencies help to explain the formal contours of U.S. law in general, and limits on judicial problem solving explain contract law in particular. Rich literatures are available regarding how plans are made

35. See, e.g., SCOTT J. SHAPIRO, LEGALITY 193–204 (2011); see also Scott J. Shapiro, *Law, Plans, and Practical Reason*, 8 LEGAL THEORY 387, 401–09 (2002) (using Michael Bratman’s “joint intentional activity” model to explain the functions of planning).

36. Bridgeman, *supra* note 6, at 380–87.

37. *Id.* at 343. The concept of “coordination problems” is appropriate, and this Article embraces it. Thus, from the problem-solving perspective developed in this analysis, law may be defined as a set of official solutions to coordination problems.

38. See *supra* text accompanying note 18.

39. For one thing, the terms “plans” and “solutions” are not synonymous; while many solutions take the form of plans, not all of them do. For example, the clusters of no-duty tort and contract rules that include the absence of a general duty to rescue and limitations on duties to disclose represent public solutions to coordination problems, but only with difficulty can they be said to constitute plans for future action. Moreover, the assertion that law is a set of plans is misleading in that plans do not solve problems, planners do. As will be developed subsequently, plans or solutions identify the means by which obstacles to progress may be eliminated. The only role that the planning theorists ascribe to government is the official promulgation of certain plans; those theorists pay no serious attention to the processes by which such plans are derived.

40. See MICHAEL E. BRATMAN, FACES OF INTENTION: SELECTED ESSAYS ON INTENTION AND AGENCY ch. 2 (1999); MICHAEL E. BRATMAN, INTENTION, PLANS, AND PRACTICAL REASON ch. 3 (1987). For a description of the planning theory, see Bridgeman, *supra* note 6, at 343–44.

41. See *supra* note 37 and accompanying text.

42. For example, the closest that Bridgeman comes to recognizing the very different modes of planning or problem solving is in his overview of what he calls our “tiered system of planning” in which the Constitution provides a plan for how lawmakers may make subplans (laws), and law empowers individuals to make legally enforceable plans for themselves. Bridgeman, *supra* note 6, at 344. Cf. *supra* note 37 and accompanying text (explaining that, according to planning theorists, officials promulgate law to solve coordination problems).

and problems are solved, including by individual minds, collaborative groups, adversarial deal makers, large organizations, and various governmental institutions. Part IV takes advantage of these resources, as the planning theorists do not, in developing a problem-solving perspective on U.S. law.

III. DEVELOPING A PROBLEM-SOLVING PERSPECTIVE: THE BUILDING BLOCK CONCEPTS

A. *What Are Problems?*

An actor has a problem when the actor: (1) perceives that an obstacle threatens to prevent the attainment of a desired objective, (2) realizes that a response strategy for overcoming the obstacle (a solution) is not immediately available, and (3) believes that an effective strategy may become available if appropriate efforts are undertaken.⁴³ The perceived obstacle, itself, is not the problem, although one often hears obstacles referred to as problems: “My biggest problem is a lack of self-confidence.” In that circumstance, the problem inheres not in the lack of self-confidence, which is the obstacle, but in the lack of adequate knowledge regarding how to respond effectively.⁴⁴ More accurately, one should say: “My problem is that I have not figured out how to gain the self-confidence necessary to achieve my objectives.” Moreover, it is the perception of an obstacle, not its actual existence, that creates the problem. Even a very real obstacle does not present an actor with a problem unless the actor perceives it, and a perception may create a problem for the actor even though the perceived obstacle does not actually exist.

It follows that an actor has a problem if, but only if, the actor thinks a problem exists, and its contours are as the actor perceives them to be. Although one may confront a very real and threatening obstacle, one does not have a problem to solve under any of the following circumstances: (1) when the actor does not perceive the obstacle to exist or does not deem it to be sufficiently threatening to warrant devising a response strategy; (2) even if the actor perceives a sufficiently threatening obsta-

43. These three conditions and much of what follows immediately in the analysis derive logically from the universally recognized core definition of what it means to have a problem in the sense employed in this analysis. See, e.g., Roger L. Dominowski & Lyle E. Bourne, Jr., *History of Research on Thinking and Problem Solving*, in THINKING AND PROBLEM SOLVING 1, 23 (Robert J. Sternberg ed., 2d ed. 1994) (“Throughout the history of psychology there has been reasonable agreement that the essential features of a problem are that an organism has a goal but lacks a clear or well-learned route to the goal.”). Two well-known researchers add the essential elements of cognition, plausibility, and timing in their definition: “A person is confronted with a *problem* when he wants something and does not know immediately what series of actions he can perform to get it.” ALLEN NEWELL & HERBERT A. SIMON, HUMAN PROBLEM SOLVING 72 (1972).

44. Widely cited researchers sometimes employ shorthand references that appear, taken out of context, to equate problems with obstacles. See, e.g., POPPER, *supra* note 1, at 4 (“A *problem* arises for [an] animal if an expectation proves to have been wrong.”). But when taken in context, it is clear that the author shares the widely accepted view of what constitutes a problem.

cle, when an adequate response strategy is immediately apparent; and (3) even when the actor perceives that the obstacle exists and that no response strategy is immediately available, when the actor believes that no adequate strategy could be developed in time to be of any benefit. The third of these circumstances may seem puzzling—one might suppose that an actor's perception that an important objective is in jeopardy would invariably present the actor with a problem. But without any hope of overcoming the obstacle posing the threat, the actor does not confront a problem that invites solution.⁴⁵

Analytical complexity, which makes problems difficult to solve, is mainly a function of the number of constituent elements and their interconnectedness. When a problem's elements are strongly interconnected, as with the strands of a spider's web, consideration of any one necessarily requires the simultaneous consideration of all, or most, of the others. Problems involving planning and design epitomize this form of nonlinear interconnectedness.⁴⁶ Anyone who has ever decorated a home or a suite of offices appreciates how challenging it can be to make all the elements—wall colors, floor coverings, window treatments, furniture, and lighting—harmonize within each room, and from room to room, to produce the desired overall effect.⁴⁷ To consider a significant change in any one of the important elements of decor usually requires reconsideration of, and possibly changes in, many of the others. Such problems, which Lon Fuller refers to as many centered, or polycentric,⁴⁸ will be centrally important in subsequent discussions of the problem-solving capacities of governmental institutions including, in connection with contract disputes, the judiciary.

45. The notion that a problem, by its very nature, invites efforts to solve it is implicit in Allen Newell and Herbert Simon's definition. *See supra* note 43 and accompanying text. Human mortality is an example of an obstacle (physical death) that does not present a problem for most rational individuals. How to live longer or better presents problems that invite solutions; but how to live forever, physically at least, does not.

46. This may help to explain why planning theorists are comfortable with focusing on planning rather than problem solving. Because the great majority (but not all) of the difficult problems that public and private ordering addresses involve planning, the planning theorists end up focusing on mostly the right questions but for slightly wrong reasons.

47. *Cf. infra* notes 76–82 and accompanying text (using one of Donald Schön's case studies to illustrate the interconnectedness of the relevant variables involved in designing a building complex).

48. *See* Lon L. Fuller, *The Forms and Limits of Adjudication*, 92 HARV. L. REV. 353, 371, 394–404 (1978).

B. What Are Solutions?

A solution to a problem identifies the means by which it may be possible to overcome the obstacle giving rise to the problem.⁴⁹ The perceived response strategy need not appear to be certain or even likely to succeed to constitute a solution, nor must it actually be implemented. Certainly a response strategy represents a solution if the actor has sufficient confidence in it to cause the actor to abandon further efforts to devise a better strategy.⁵⁰ But even when the actor perceives a strategy that offers only a small probability of eliminating the obstacle and the actor continues searching for a better solution, the first response strategy may be said to constitute a tentative solution to a problem that continues to exist. Although a response strategy may constitute a solution and thus eliminate the problem even if it is not implemented,⁵¹ when an attempt at implementation reveals that the proposed solution will not succeed but that another solution not yet identified may be possible, the problem re-
vives.⁵²

Solving a problem must be distinguished from resolving a conflict. A conflict arises when two or more actors assert incompatible claims to the same resource. Each party's claim in a conflict situation constitutes an obstacle to the achievement of the other party's objectives, and thus presents each side with the problem of devising a game plan or strategy—a solution—by which to maximize the chances of obtaining a favorable outcome. Once the parties solve these preliminary problems, the resolution of the underlying conflict does not, itself, represent a solution to a problem but rather the implementation of the solution proposed by the successful party. Thus, when adversaries engage in zero-sum bargaining, when they litigate, when they engage in a competitive game, or when they go to war, their interactions with each other do not solve problems but rather, by resolving the conflict between them, implement previously devised solutions. In the course of their interaction, each side confronts and must solve subsidiary problems unilaterally as they arise, and game plans may require revision or abandonment as events unfold.⁵³

49. The previously discussed definitions of "problem" employ "route to the goal" and "actions . . . to get [what the actor wants]." See Dominowski & Bourne, *supra* note 43. This analysis will use another synonym that many writers have used: "[T]he essence of problem solving [is]: a goal, an obstacle, and a strategy for circumventing the obstacle and reaching the goal." Shari Ellis & Robert S. Siegler, *Development of Problem Solving*, in THINKING AND PROBLEM SOLVING, *supra* note 43, at 333, 333 (emphasis added).

50. In this event the problem ceases to exist. Indeed, the problem—not necessarily the obstacle—also disappears when, after searching for a solution, the actor perceives that the situation vis-à-vis the obstacle is hopeless. See *supra* note 45 and accompanying text.

51. One prominent planning theorist has asserted, erroneously by this account, that a plan or solution exists only if it has been adopted *and followed*. See Shapiro, *supra* note 35, at 437.

52. Thus, the problem once again "invites solution." See *supra* note 45 and accompanying text.

53. Helmuth Karl Bernhard von Moltke, a nineteenth century Prussian military officer, observed that "[n]o plan of operations extends with any certainty beyond the first encounter with the enemy's

But the end result—the resolution of the conflict—is the means by which the solution of the prevailing party is implemented.

C. *What Constitutes Implementation of a Solution?*

Implementation of a solution consists of efforts, using the solution as a guide, to remove the obstacle giving rise to the problem. Even when successful, implementation efforts often create new problems requiring new solutions.⁵⁴ And implementation of those solutions may create more problems, and so on. When an individual or a small group devises a solution that does not require the help of others or any official validation, they may implement the solution themselves. For example, a family may plan a camping trip and implement it largely by its own devices.⁵⁵ But when a proposed solution calls for significant assistance from others in its implementation or when a solution to be effective must be validated by some official authority such as a court or legislature, then implementation involves at least two stages: first, in order to eliminate the relevant obstacles, the problem solvers must either enter deals committing others to provide assistance or obtain the required official validation; and second, the resources necessary to eliminate the obstacles must actually be expended.⁵⁶

IV. DEVELOPING A PROBLEM-SOLVING PERSPECTIVE: BY WHAT DECISION PROCESSES DO ACTORS SOLVE PROBLEMS?

A. *Why Do Decision Processes Matter?*

This Article is certainly not the first to insist that an understanding of the differences in decision processes and problem-solving competence is necessary to an understanding of law and legal institutions. Neil Komesar's book, *Imperfect Alternatives*, usefully explores the topic,⁵⁷ and the post-Second World War legal process movement, alluded to earlier,⁵⁸ engages in much the same sort of cross-institutional comparative analy-

main strength." MOLTKE ON THE ART OF WAR: SELECTED WRITINGS 45 (Daniel J. Hughes ed., Daniel J. Hughes & Harry Bell trans., 1993).

54. Johann Wolfgang von Goethe observed that the solution of every problem is another problem. KANZLER FRIEDRICH VON MÜLLER & JOHANN WOLFGANG VON GOETHE, GOETHE'S UNTERHALTUNGEN MIT DEM KANZLER FRIEDRICH VON MÜLLER [GOETHE'S CONVERSATIONS WITH CHANCELLOR FRIEDRICH VON MULLER] 67 (C.A.H. Burkhardt ed., 1898) ("Jede Lösung eines Problems ist ein neues Problem.").

55. If it were a motor trip, the family would almost certainly require interactions with others in order to obtain fuel, lodging, and the like.

56. The interesting dimensions to this second stage relate to the reality that implementation of solutions to large-scale problems often require large-scale resources, which explains why problem solvers seek validation and sponsorship from large organizations and institutions.

57. NEIL K. KOMESAR, *IMPERFECT ALTERNATIVES: CHOOSING INSTITUTIONS IN LAW, ECONOMICS, AND PUBLIC POLICY* (1994).

58. See *supra* note 31 and accompanying text.

sis.⁵⁹ Part of what makes this Article's analysis different from others is its commitment to comparing institutional (mostly governmental) decision making with noninstitutional (individual and small group) decision making. The need for this additional, extrainstitutional comparison stems directly from this Article's commitment to examining the private, nongovernmental lawmaking made possible by contract's constitutive core. For present purposes, the differences between judicial and legislative decision making are less significant than are the differences between governmental (mainly judicial) decision making and decision making by the private individuals and small groups to whom the courts, mainly through contract law, have delegated frontline problem-solving responsibility. Thus, it is hardly surprising that this Part begins by examining how individuals and small groups of individuals solve problems before turning attention to more formal, institutional behavior.

At the risk of oversimplification, a brief sketch of where this discussion is headed will assist understanding. It turns out that significant social problems, all of which are polycentric, can be solved only through the exercise of broad, intuition-based discretion, which only individuals and very small groups of like-minded collaborators are capable of exercising effectively.⁶⁰ Large groups, which are incapable of achieving the necessary coordination, are confined to implementing solutions reached by individuals and small groups to whom problem-solving responsibility is invariably delegated.⁶¹ What of the governmental institutions that are primarily responsible for solving public problems? Those in which the decision makers are individuals or very small groups—the executive and the judiciary—are technically capable problem solvers but are normatively constrained due to concerns over political accountability whenever lawmaking decisions require, as does solving polycentric social problems, the exercise of broad discretion.⁶² And while the legislature is politically accountable, it is too large and diverse to solve problems effectively.⁶³ Because courts are most intimately connected with the creation and application of contract law, the primary focus in the latter portion of this Part will be on the nature and limits of adjudication.

B. *How Do Individuals Solve Problems?*

Before examining the mental processes by which individuals solve polycentric problems, it is important to consider one significant form of individual decision making that does not constitute problem solving—the

59. See HART & SACKS, *supra* note 31, at 161–67 (interrelationships of lawmaking institutions); *id.* at ch. 2 (private ordering); *id.* at ch. 3 (judiciary); *id.* at ch. 5 (legislature); *id.* at ch. 6 (administrative agencies).

60. See *infra* note 90 and accompanying text.

61. See *infra* notes 96–97, 112, 126 and accompanying text.

62. See *infra* Part III.E.

63. See *infra* text accompanying notes 111–12, 124.

formulation, expression, and application of personal preferences. If solving a problem involves an actor finding the means by which to achieve the actor's ends, then the actor's preferences supply an important basis for choosing the ends to be pursued. Although preferences may be shaped by external events and often change over time,⁶⁴ they are personal in the sense that they represent assertions of personal sovereignty. One's choice of a favorite color or song cannot be impeached on the grounds that it is wrong or foolish—it simply is what it is, and no one can argue with that.⁶⁵

It follows that when a person decides to have chocolate ice cream rather than vanilla for dessert, in making the choice the individual is not ordinarily solving a problem, but rather is expressing, noninstrumentally, a personal preference. Of course, one might be required to solve problems to give oneself or others the opportunity to choose in the first instance. Moreover, one might make such a choice instrumentally in order to achieve an objective external to the choice—e.g., to gain favor with a chocolate-loving boss in the hopes of receiving a promotion. And eating food, in general, is a means to an end—survival. But in most cases, an actor chooses chocolate ice cream for dessert because the actor personally prefers chocolate as an end in itself. Thus, an actor ordinarily expresses a preference (rather than solves a problem) when the actor creates art for its own sake,⁶⁶ makes a gift to a loved one,⁶⁷ or takes revenge on a vanquished enemy.⁶⁸

64. See generally Sarah Lichtenstein & Paul Slovic, *The Construction of Preference: An Overview*, in *THE CONSTRUCTION OF PREFERENCE* 1 (Sarah Lichtenstein & Paul Slovic eds., 2006); Aaron Wildavsky, *Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation*, 81 *AM. POL. SCI. REV.* 3 (1987).

65. Preferences, once formulated, are like tastes for which, as the saying goes, there is no accounting.

66. Certainly artists do create art in order to achieve external goals relating to morality, politics, and utility. But many believe that a preoccupation with these instrumental, problem-solving objectives is inimical to the essence of artistic expression. For example, Poe argues in his essay *The Poetic Principle*:

[T]he simple fact is, that, would we but permit ourselves to look into our own souls, we should immediately there discover that under the sun there neither exists nor *can* exist any work more thoroughly dignified—more supremely noble than this very poem—this poem *per se*—this poem which is a poem and nothing more—this poem written solely for the poem's sake.

EDGAR ALLAN POE, *THE POETIC PRINCIPLE* (1850), reprinted in EDGAR ALLAN POE: *CRITICAL THEORY* 175, 182 (Stuart Levine & Susan F. Levine eds., 2009); see also OSCAR WILDE, *THE PICTURE OF DORIAN GRAY* (1890), reprinted in *COLLINS COMPLETE WORKS OF OSCAR WILDE* 17, 17 (centenary ed. 1999) (“All art is quite useless.”).

67. Again, many gifts are made instrumentally and help to solve problems. But gifts to loved ones may also serve as expressions of unconditional love—affection for its own sake, if you will. One writer, accepting that the “affective values [of] love, friendship, affection, gratitude, and comradeship are the prime motivati[ons]” for gift promises, argues that they should not be cheapened—some would say “commodified”—by legal enforcement. Melvin Aron Eisenberg, *The World of Contract and the World of Gift*, 85 *CALIF. L. REV.* 821, 847–49 (1997).

68. This sort of revenge for its own sake must be distinguished from the problem solving that is necessary to vanquish one's foe in the first instance. Moreover, revenge must be distinguished from punishment. The former tends to exist as an end in itself; the latter, as a means to an end. See generally Leo Zaibert, *Punishment and Revenge*, 25 *LAW & PHIL.* 81 (2006).

Regarding the mental processes by which individuals solve problems, until the middle of the twentieth century, behaviorists focused attention on observing subjects' behavioral responses to different stimuli in their experimentally manipulated environments.⁶⁹ Researchers treated internal mental processes essentially in black box fashion; they assumed that successful problem solvers possessed mysterious cognitive powers that led to contextually appropriate responses to stimuli. Researchers in the early period did not systematically examine the relevant thought processes.⁷⁰ In the 1950s, experimental psychologists began to consider the mental aspects of problem solving, exploring both the nature of, and limitations on, the human mind.⁷¹ Herbert Simon was influential among these writers. He is best known for his work on the role of mental shortcuts, or heuristics, coining the phrase "bounded rationality" to refer to the mental processes by which problem solvers search for preexisting solutions and then choose which solution to implement from among the available alternatives.⁷² Simon teamed with Allen Newell in the early 1970s to produce the first ambitious study of individual problem solving.⁷³ Building on the authors' earlier work with bounded rationality and their insight that the human brain is an information-processing system not unlike a computer, their collaboration advances a theory of individual problem solving that continues to exert influence to this day. The authors describe mental processes based on back-and-forth movements between the elements of the problem as framed by the problem solver and sets of possible solutions drawn from experience and recalled from both short- and long-term memory.⁷⁴ The key to success on Newell and Simon's view lies in fashioning the problem's characteristics so as to facilitate the application of previously applied solutions while dealing with the current problem as an interconnected whole.⁷⁵

By what decision-making processes does an experienced problem solver select from sometimes contradictory, previously applied solutions? When and how does creativity in developing new solutions assert itself? Donald Schön, an academic philosopher concerned with deliberative problem solving and the functioning of learning systems within organiza-

69. See K. Anders Ericsson, *The Acquisition of Expert Performance As Problem Solving: Construction and Modification of Mediating Mechanisms Through Deliberate Practice*, in *THE PSYCHOLOGY OF PROBLEM SOLVING* 31, 37–38 (Janet E. Davidson & Robert J. Sternberg eds., 2003).

70. See generally Dominowsky & Bourne, *supra* note 43 (discussing the history of problem-solving research).

71. See *id.* at 32–33; Earl Hunt, *Problem Solving*, in *THINKING AND PROBLEM SOLVING*, *supra* note 43, at 215, 216–18. See also BERNARD J. BAARS, *THE COGNITIVE REVOLUTION IN PSYCHOLOGY* (1986); HOWARD GARDNER, *THE MIND'S NEW SCIENCE: A HISTORY OF THE COGNITIVE REVOLUTION* (1987).

72. See sources cited *supra* note 4.

73. See NEWELL & SIMON, *supra* note 43 *passim*.

74. *Id.* at ch. 4. See generally Ericsson, *supra* note 69, at 45–48; Hunt, *supra* note 71, at 217–22.

75. Hunt, *supra* note 71, at 227 ("A great deal of expert reasoning depends on the expert's learning how to describe actual situations in such a way that their descriptions can be related to the abstract descriptions in the expert's memory.").

tions, provides answers. His book, *The Reflective Practitioner*, relies on participant-observation studies to explore how professional experts solve complex, polycentric design problems.⁷⁶ Schön develops what he calls the “reflection-in-action” model. Reflection-in-action is the professional’s version of “the spontaneous, intuitive performance of the actions of everyday life,”⁷⁷ consisting partly of Simon’s heuristics on the one hand, and partly of self-conscious reflection on the other. According to Schön, when attempting to solve a polycentric problem, an expert intuitively relies on mental shortcuts developed by experience and instinctively searches for parallels to previously derived solutions to similar problems. At the same time, the individual reflects on the problem-solving activity itself and the possible solutions toward which the activity appears to be headed.⁷⁸

One of Schön’s case studies involved an architecture teacher who took a student through a problem-solving exercise involving the design of an elementary school.⁷⁹ After some time working on her own, the student presented her proposed solutions. The teacher placed tracing paper over the student’s drawings and began to sketch tentative changes, at the same time talking aloud about what he was doing. The teacher alternated between specific aspects of the design and the design as a whole, saying: “The principle is that you work simultaneously from the unit and from the total and then go in cycles.”⁸⁰ The teacher’s monologue repeatedly emphasized the interconnectedness of the various elements of the problem and the need to address the elements both individually and as parts of an integrated whole:

[When the teacher] remarks that “the kindergarten might go over here—which might indicate that the administration [goes] over here” [the teacher is] noting the implications of earlier moves for later ones, on the basis of a system of norms that governs the relative placement of major building elements. . . . Thus a decision to locate a road or a kindergarten “here” has implications for the location of a turning circle or an administration “there.”

. . . .

The web of moves has many branchings, which complicates the problem of discovering and honoring implications. . . . As he reflects-in-action on the situation created by his earlier moves, the designer must consider not only the present choice but the tree of further choices to which it leads

. . . .

76. DONALD A. SCHÖN, *THE REFLECTIVE PRACTITIONER: HOW PROFESSIONALS THINK IN ACTION* (1983).

77. *Id.* at 49.

78. *Id.* at 49–50.

79. *Id.* at 79–104.

80. *Id.* at 81.

He also demonstrates how the whole is at stake in every partial move. Once a whole idea has been created, a bad placement of the administration can ruin it. Hence the designer must oscillate between the unit and the total

Finally, as he cycles through iterations of moves and appreciations of the outcomes of moves, [the designer] shifts from tentative adoption of a strategy to eventual commitment.⁸¹

Schön's account of how an expert solves a polycentric problem is the clearest available in the literature. It is consistent with the empirical work of Simon, Newell, and others. And it demonstrates how an experienced problem solver like the architecture teacher makes the transition from a complex problem involving many interconnected elements to a satisfactory solution of a whole. Schön refers to the problem solver's back-and-forth progression between the individual elements and the problem of a whole as a "reflective conversation" between the designer and the problem.⁸² His explanation of how experienced individuals exercise intuition-based discretionary judgment in solving polycentric problems, especially his conversation metaphor, will be helpful in subsequent discussions of how small groups, large organizations, and governmental institutions solve problems in the context of making and applying law.

C. *How Do Groups Solve Problems?*

Lon Fuller observed that groups of individuals interact to solve problems based on either mutuality of interests or reciprocity and exchange.⁸³ Mutuality-based interactions involve collaboration based on shared objectives. Exchange-based interactions comprise the deal making on which this Article primarily focuses. Much mutuality-based problem solving never leads to deal making; the same group members who devise the solutions implement them without help from nonmembers. But implementation of small group solutions often requires the involvement of others, which leads to deal making aimed at committing the nonmembers to provide necessary assistance. As outlined earlier, deal making quite often involves both conflict resolution and collaboration. The former, by arriving at agreement regarding the basic terms of future engagement, implements the solutions already reached unilaterally and brought to the table by the parties. Collaboration between deal makers, when it occurs, builds on and improves the preliminary unilateral solutions that zero-sum bargaining has transformed into a joint solution.

81. *Id.* at 99–102.

82. *Id.* at 93, 95.

83. Fuller, *supra* note 48, at 357–58.

1. *How Do Collaborators Solve Problems?*

The groups of primary interest here are those that form naturally, outside the deal-making framework, from their members' own initiatives. As suggested earlier, for the group to exercise the discretion necessary to solve problems, it must be quite small. At some point, perhaps near the beginning of a project, it may be necessary for the group members to resolve potential conflicts regarding how to divide the burdens and benefits of their joint enterprise.⁸⁴ But thereafter, intrinsic motivations coupled with small size and shared purposes are usually sufficient to keep agency costs at a minimum. How does a self-initiated small group approach the problems they have undertaken together to solve? The same mental processes described earlier in the context of individual problem solving presumably play out in connection with small group problem solving. Assuming that the group is small and consists of like-minded volunteers, it should be possible to arrive at a common framework for the problem at hand.⁸⁵ Thereafter, frequent interactions between and among group members allow each participant to advance his or her own thinking based on advances achieved by the other(s).⁸⁶ Extending Schön's imagery, the members have conversations not only with the common framework but with each other,⁸⁷ and progress toward a common solution is possible.⁸⁸ If the project were to involve two or three authors preparing a law school casebook, a collaborative work product would be one in which each coauthor could be said to be an author of the entire book.⁸⁹

It follows that for collaboration based on shared objectives to succeed, a self-initiated group must be small enough to allow the minds of the collaborators to function, at least with regard to the more important elements and with minor disagreements along the way, essentially as one mind. Experience reveals that only if the group is quite small—two or three is ideal—can the members collaboratively engage in the back-and-forth process between the problem and possible solutions that Simon and Schön describe.⁹⁰ Such a work environment minimizes ego-driven, zero-

84. This conflict-resolution aspect is not what brings the collaborators together in the first instance, as it does in the deal-making scenario sketched in the preceding text. In this context, conflict resolution may never surface; and even when it does, it may be viewed as a "necessary evil."

85. See generally Brigid Barron, *Achieving Coordination in Collaborative Problem-Solving Groups*, 9 J. LEARNING SCI. 403 (2000) (observing and recording different groups of three sixth-grade boys solve the same problem).

86. *Id.*

87. See *supra* note 82 and accompanying text.

88. See Barron, *supra* note 85, at 429–31. The study revealed three variables that determined success levels: (1) the mutuality of exchanges, (2) the achievement of joint intentional engagement, and (3) the alignment of group members' goals. *Id.*

89. This author submits that, except for textual notes specially prepared to reflect different authors' opinions and points of view on particular issues, a law school casebook should speak with a single voice as much as is possible. Collections of essays by different authors on related topics are a different matter.

90. See, e.g., PAUL H. EPHROSS & THOMAS V. VASSIL, *GROUPS THAT WORK: STRUCTURE AND PROCESS* 137 (1988) ("To promote maximum interaction between each and every member, keep the

sum competition, allowing the collaborators to travel through the problem space together, building on each other's contributions.⁹¹ Presumably the partners question each other, and disagreements serve to keep the members alert to their task.⁹² But for the collaborators to succeed, these differences must not persist nor should they become disruptive. Given this picture of mutuality-based collaboration, one can appreciate why the effectiveness of small groups diminishes as the numbers of members increase.

Small problem-solving groups that arise naturally from their members' own initiatives may be contrasted with groups created by organizations. The important characteristic of organizationally created groups, besides their larger size, resides in their quite different sources of motivation. Recall that members of self-initiated groups serve the group's interests largely because those interests coincide with their own.⁹³ Their motivations may be said to be intrinsic⁹⁴ and are sometimes passionate in their intensity. By contrast, members of groups created by organizations are committed to serving the organizations' objectives, which may not coincide with their own.⁹⁵ To the extent that the group members pursue their own interests, interactions within the group may involve reliance on top-down directives more than they involve bottom-up collaboration.⁹⁶ Much of the published literature on this sort of group problem solving comes out of the business management context and addresses questions of how business organizations can structure, staff, direct, motivate, and

size of the group below eight."); JON R. KATZENBACH & DOUGLAS K. SMITH, *THE WISDOM OF TEAMS: CREATING THE HIGH-PERFORMANCE ORGANIZATION* 45–47 (1993) (explaining that a majority of problem-solving teams that the authors have encountered have had fewer than ten members; larger numbers tend to break into subteams); Patrick R. Laughlin et al., *Groups Perform Better Than the Best Individuals on Letters-to-Numbers Problems: Effects of Group Size*, 90 *J. PERSONALITY & SOC. PSYCHOL.* 644, 649–50 (2006) (finding that groups of three to five members performed better at solving moderately difficult problems that require the use of logic, verbal, and qualitative skills than did single individuals); Paul B. Paulus et al., *Creativity in Groups and Teams*, in *GROUPS AT WORK: THEORY AND RESEARCH* 319, 333 (Marlene E. Turner ed., 2001) ("Teams should be kept to the minimal number of members required to do the task.").

91. See *supra* notes 85, 86, 88 and accompanying text. See also R. Scott Tindale & Tatsuya Kamed, "Social Sharedness" As a Unifying Theme for Information Processing in Groups, 3 *GROUP PROCESSES & INTERGROUP REL.* 123 (2000) (explaining that "social sharedness," or the degree to which members of groups share preferences, is essential to understanding group decision making).

92. See Charlan Jeanne Nemeth & Brendan Nemeth-Brown, *Better than Individuals? The Potential Benefits of Dissent and Diversity for Group Creativity*, in *GROUP CREATIVITY* 63, 71–74 (Paul B. Paulus & Bernard A. Nijstad eds., 2003).

93. See *supra* text accompanying note 84.

94. See Beth A. Hennessey, *Is the Social Psychology of Creativity Really Social? Moving Beyond a Focus on the Individual*, in *GROUP CREATIVITY*, *supra* note 92, at 181, 182–83; Paul B. Paulus & Vincent R. Brown, *Enhancing Ideational Creativity in Groups: Lessons from Research on Brainstorming*, in *GROUP CREATIVITY*, *supra* note 92, at 110, 115.

95. Their motivations may be said to be extrinsic. See Hennessey, *supra* note 94, at 182; Paulus & Brown, *supra* note 94.

96. See KATZENBACH & SMITH, *supra* note 90, at 46 ("[W]hen teamwork values break down, the groups revert to formal hierarchy, structure, policies, and procedures.").

monitor problem-solving groups to serve organizational objectives more effectively.⁹⁷

2. *How Do Deal Makers Solve Problems?*

The place to begin to consider how deal makers solve problems is with voluntary interactions where the parties are not trying to settle a preexisting dispute. Because these deal makers act on their own initiatives and are not locked in a preexisting legal controversy, collaboration is a distinct possibility. The relatively small size of these bargaining units—the deal-making paradigm is two principal parties in interest—is conducive to interactive problem solving. Whether collaboration occurs in any given instance depends in part on the complexity and projected duration of the deal. In the simplest situation—the sale of a good for cash with immediate delivery—the exchange simultaneously reaches and implements solutions to both sides’ problems.⁹⁸ When the only term at issue is price, conflict resolution in the form of zero-sum bargaining is all that is required. Moving up the scale of complexity increases the likelihood that collaborative problem solving will occur.⁹⁹ As noted earlier, collaboration is most likely when the negotiating parties seek an arrangement whereby they will cooperate over time in an ongoing enterprise.¹⁰⁰

The literature clearly reflects the picture here being drawn of collaborative deal making. Thus, negotiation experts recommend that, before addressing the individual elements of a complex deal, deal makers acknowledge openly that conflicts between them exist, addressing and resolving those conflicts in an overall, somewhat tentative fashion, perhaps leading to something like a preliminary “agreement in principle.”¹⁰¹ Rather than each side presenting the other with a different solution followed by haggling to a compromise regarding each point of initial disagreement, the parties should discuss the project in its entirety, leaving the elements open and tentative while they share their overall visions and aspirations.¹⁰² One respected commentator observes that the parties in such a circumstance typically progress from exploratory negotiations, in which neither side feels particularly bound to the other, to later stages in

97. See, e.g., sources cited *supra* note 90.

98. See MNOOKIN ET AL., *supra* note 16, at 128 (stating that such a sale is known as a “spot-market transaction”).

99. See *id.* at 145 (“[B]ecause deals involve bundles of terms . . . negotiators can trade among terms, swapping relatively inexpensive terms for more valuable provisions.”).

100. See *supra* text preceding note 16; see also Melvin Aron Eisenberg, *Private Ordering Through Negotiation: Dispute-Settlement and Rulemaking*, 89 HARV. L. REV. 637, 676–80 (1976) (describing rule-making negotiation between actors involved in long-term relationships).

101. See MNOOKIN ET AL., *supra* note 16, at 129; see also Carrie Menkel-Meadow, *Toward Another View of Legal Negotiation: The Structure of Problem Solving*, 31 UCLA L. REV. 754, 817–21 (1984).

102. See MNOOKIN ET AL., *supra* note 16, at 207–09.

which both sides come to feel bound by a deal.¹⁰³ These patterns are strikingly parallel to those that Donald Schön observed in connection with individual professionals' efforts to solve polycentric planning problems "of a whole."¹⁰⁴

How much different from voluntary deal making are situations in which negotiations aim at settling disputes? Experts stress that the parties in settlement negotiations are not free, as they would be in purely voluntary deal making, to break off negotiations and have nothing further to do with one another.¹⁰⁵ Moreover, in many instances, the parties need to agree only on the price at which the plaintiff is willing to sell his or her legal claim to the defendant. Bargaining under such conditions unavoidably consists mainly in zero-sum conflict resolution, not problem solving. Collaboration sometimes enters the settlement of a legal dispute when circumstances require the parties to plan for future interactions, as when the parties to a divorce settlement must work out arrangements for sharing custody of minor children.¹⁰⁶ Obviously, the major obstacle to devising an effective solution in such circumstances is the absence of mutual trust. Even if both parties want to make the best of a bad situation, they may be reluctant to reveal their true preferences for fear of being exploited.¹⁰⁷ Notwithstanding these difficulties, negotiation analysts insist that some of the same approaches that prove successful in connection with voluntary deal making are often capable of creating value rather than merely dividing it, even in these more openly adversarial settings.¹⁰⁸

D. How Do Nongovernmental Organizations and Institutions Solve Problems?

Organizations are networks of interdependent relationships, usually structured hierarchically, that accomplish collective action to achieve specified goals over relatively short to intermediate time horizons.¹⁰⁹ Large business corporations and governmental agencies are prime examples, as are many charitable organizations. Institutions, including the major branches of government examined in the next Section, are enduring social structures that control human behavior through combinations

103. *Id.* at 143.

104. *See supra* notes 76–82 and accompanying text.

105. Robert Mnookin draws a sharp distinction between settling disputes (conflict resolution) and making deals (problem solving). *See* MNOOKIN ET AL., *supra* note 16, at chs. 4 & 5 (discussing dispute resolution); *id.* at chs. 9 & 10 (discussing problem solving); *see also* Eisenberg, *supra* note 100, at 638. By contrast, Carrie Menkel-Meadow draws no sharp distinction. Menkel-Meadow, *supra* note 101, at 758 n.6.

106. *See* MNOOKIN ET AL., *supra* note 16, at 176 (“[D]ivorce negotiations are a hybrid of dispute resolution and deal-making.”).

107. *See id.* at 198.

108. *See id.* at 119–21.

109. *See generally* GERALD M. GOLDHABER, ORGANIZATIONAL COMMUNICATION ch. 2 (6th ed. 1993) (describing various theories of organization); HENRY MINTZBERG, THE STRUCTURING OF ORGANIZATIONS pt. 1 (1979) (explaining how organizations function).

of regulatory authority, normative influence, cultural deference, and symbolism.¹¹⁰ Organized religions and private universities are prime examples of nongovernmental institutions. Consistent with an earlier discussion of how the smallness of problem-solving groups enhances their effectiveness,¹¹¹ the relatively large size of many organizations and institutions render them intrinsically incapable of solving polycentric problems. They may, and do, rely on smaller groups created internally to solve problems, thereby incurring the agency costs described in the preceding Section.¹¹²

Large business organizations also take advantage of small group collaboration by acquiring startup companies that, employing the small group collaborative model, have already solved (or are well on their way to solving) problems regarding product innovation but lack the financial resources and business acumen necessary to continue their problem-solving programs and adequately implement their solutions. A variety of venture capitalists perform bridge functions in this regard, supplying capital (and often expertise) sufficient to bring startup entrepreneurs to the point that selling to a larger organization is a viable alternative.¹¹³ In this manner, consistent with earlier observations, large organizations do not so much solve the underlying problems as they implement the creative solutions previously derived by individual innovators and small groups of collaborators.

E. How Do Governmental Institutions Solve Problems?

It is useful to think of the problem-solving capabilities of governmental institutions as comprised of two components. The first, intrinsic capability, reflects the size, structure, procedures, and expertise of the decision-making unit(s) within the institution. The relevant question here is to what extent the institution, accepting its intrinsic characteristics as givens, is technically capable of solving complex, polycentric problems.¹¹⁴ The second component of a governmental institution's problem-solving capability reflects the extrinsic normative constraints that limit the institution's intrinsic capability. Concern over holding governmental agencies politically responsible has generated normative limits on their

110. See generally W. RICHARD SCOTT, INSTITUTIONS AND ORGANIZATIONS chs. 3 & 4 (2d ed. 2001) (developing a contemporary analytic framework of institutional theory).

111. See *supra* notes 90–91 and accompanying text.

112. See *supra* text accompanying notes 96–97.

113. See generally David J. Denis, *Entrepreneurial Finance: An Overview of the Issues and Evidence*, 10 J. CORP. FIN. 301 (2004); Thomas Hellmann & Manju Puri, *The Interaction Between Product Market and Financing Strategy: The Role of Venture Capital*, 13 REV. FIN. STUD. 959 (2000); William A. Sahlman, *The Structure and Governance of Venture-Capital Organizations*, 27 J. FIN. ECON. 473 (1990).

114. Intrinsic capability as used here is the institutional analog to the psychological attributes and thought processes by which the human mind reaches decisions or the collaborative process through which a small group solves problems. See *supra* notes 74–82 and accompanying text.

powers to exercise managerial, problem-solving discretion in making law. The relevant question here is whether an institution may, in light of limited political accountability, legitimately use its intrinsic capabilities to reach and enforce important policy decisions.¹¹⁵ The discussions that follow reference federal governmental models for the sake of convenience, and they focus mainly on courts because contract law is created and applied mostly in litigation.

1. *The Problem-Solving Capabilities of Nonjudicial Institutions*

Putting to one side the huge executive branch bureaucracy,¹¹⁶ the intrinsic problem-solving capabilities of the federal executive office are quite substantial. The President and his close White House advisors are individuals and the problem-solving groups are small and collaborative. The personnel are presumably intelligent, well-educated and experienced, and the informal procedures at the top of the executive hierarchy are conducive to collaborative give-and-take exchange between like-minded participants.¹¹⁷ All things considered, no one can doubt that the federal executive is intrinsically capable of solving important social problems.¹¹⁸ The extrinsic normative constraints on the federal executive take the form of limits on the President's powers of implementation—on the President's power to make law. Article II grants authority to exercise broad discretion in conducting international affairs, making appointments, granting pardons, and vetoing legislation.¹¹⁹ Although Article II exhorts the President to seek to have executive solutions enacted into

115. The distinction between intrinsic problem-solving capabilities and extrinsic normative constraints gives way under pressure. The intrinsic capability of an institution, after all, is itself a function of extrinsic (mostly constitutional) norms that determine the institution's size, structure, and internal procedures. Similar to a point made earlier in the context of distinguishing between normative and positive legal analysis, see *supra* note 25, this Section accepts an institution's internal structural characteristics as factual givens even if they have normative historical origins.

116. The executive branch bureaucracy is comprised of many large organizations, including departments (the heads of which comprise the President's cabinet), independent agencies, bureaus, administrations, and the like. See generally PETER L. STRAUSS, *ADMINISTRATIVE JUSTICE IN THE UNITED STATES* 127–35 (2d ed. 2002); Daniel Carpenter, *The Evolution of National Bureaucracy in the United States*, in *THE EXECUTIVE BRANCH* 41 (Joel D. Aberbach & Mark A. Peterson eds., 2005).

117. See generally JAMES W. DAVIS, JR., *THE NATIONAL EXECUTIVE BRANCH* 22–23 (1970) (describing how the members of the Executive Office serve as the President's assistants, gather information, act on the President's behalf, and often specialize in specific substantive areas of concern).

118. Aside from the question of how the executive is empowered to implement its solutions, the President and the President's advisers in their official capacities epitomize an effective policy-making, problem-solving, and public-relations engine. See generally Fred I. Greenstein, *The Person of the President, Leadership, and Greatness*, in *THE EXECUTIVE BRANCH*, *supra* note 116, at 218; Lawrence R. Jacobs, *Communicating from the White House: Presidential Narrowcasting and the National Interest*, in *THE EXECUTIVE BRANCH*, *supra* note 116, at 174; Sidney M. Milkis, *Executive Power and Political Parties: The Dilemmas of Scale in American Democracy*, in *THE EXECUTIVE BRANCH*, *supra* note 116, at 379. Article II of the U.S. Constitution recognizes the importance of the President as a problem solver by giving the President the responsibility of recommending to the Congress “such Measures as he shall judge necessary and expedient,” but does not give the President special legal authority to affect a favorable outcome in such events. U.S. CONST. art. II, § 3.

119. See generally STRAUSS, *supra* note 116, at 87–89.

law by the Congress, the President cannot legislate.¹²⁰ Article II, however, authorizes the President to implement some of his solutions by direct action—by issuing executive orders, proclamations, and other edicts declaring that the solutions embodied therein carry the force of law.¹²¹ Given that the President is intrinsically well-suited to exercise discretionary managerial authority, not surprisingly the trend in recent years has been for Presidents to exercise these powers expansively. And equally predictably, given the diminished political accountability that accompanies these expansions of executive authority, they have been controversial.¹²²

By contrast to these extrinsic limitations on the powers of the federal executive to solve problems by making law, the U.S. Constitution imposes scant extrinsic constraints on the lawmaking powers of Congress. Thus, subject to judicial scrutiny based on civil rights, Article I authorizes Congress to engage in lawmaking in sweeping fashion on a broad range of subjects.¹²³ By contrast, with respect to the intrinsic capability of Congress, the Framers appear to have self-consciously structured the federal legislature to perform poorly as a problem solver and solution implementer. Regarding problem solving, a major limitation is practical—like most nongovernmental organizations, Congress is too large to solve problems effectively.¹²⁴ Although individuals and small groups within Congress engage in problem solving,¹²⁵ the primary function of the federal legislature is to implement solutions developed elsewhere rather than to reach them itself.¹²⁶ Moreover, while nongovernmental organizations and institutions are deliberately designed to implement solutions effec-

120. On the subject of the President's lack of the power to appropriate, see generally *Schism v. United States*, 316 F.3d 1259, 1288 (Fed. Cir. 2002) ("Under Article I, § 8, only Congress has the power of the purse. To say that the Executive Branch could promise future funds for activities that Congress itself had not authorized would . . . violate . . . the Separation of Powers doctrine, for it would allow the Executive Branch to commandeer the power of the Legislative Branch."); LOUIS FISHER, *PRESIDENTIAL SPENDING POWER* (1975) (providing a historical and doctrinal account of the Presidential spending power). *But see* J. Gregory Sidak, *The President's Power of the Purse*, 1989 DUKE L.J. 1162, 1183-94 (arguing that the President has implicit power to appropriate funds to perform explicit Article II duties, even without congressional authorization).

121. See generally PHILLIP J. COOPER, *BY ORDER OF THE PRESIDENT: THE USE AND ABUSE OF EXECUTIVE DIRECT ACTION* (2002).

122. See generally *id.*; Kevin Sholette, Note, *The American Czars*, 20 CORNELL J.L. & PUB. POL'Y 219 (2010).

123. U.S. CONST. art. I, § 8. Controversy surrounds the scope of Congress's powers to regulate under the commerce clause. See, e.g., Robert H. Bork & Daniel E. Troy, *Locating the Boundaries: The Scope of Congress's Power to Regulate Commerce*, 25 HARV. J.L. & PUB. POL'Y 849 (2002).

124. See *supra* text accompanying notes 111-12.

125. The problem solving referenced here is not voting on proposals but rather working up proposals. See, e.g., Edward L. Rubin, *Legislative Methodology: Some Lessons from the Truth-in-Lending Act*, 80 GEO. L.J. 233, 242-43 (1991) (recounting how Senator Paul Douglas, acting alone, created the initial draft of what became the Truth-in-Lending Act). Neither does it refer to congressional committees, which are also too large to solve problems effectively.

126. Sponsors and supporters of legislation typically seek the enactment of proposals worked out by problem solvers outside of Congress. See RANDALL B. RIPLEY, *CONGRESS: PROCESS AND POLICY* chs. 4 & 8 (2d ed. 1978) (describing the influence of the President, interest groups, and constituents on congressional decision making). One major sponsor of legislation is the President. STRAUSS, *supra* note 116, at 72-75.

tively, the federal legislature appears designed to be as ineffectual as possible. Thus, Congress is comprised of two redundant decision makers, both of which must approve identical versions of any proposed legislative solution.¹²⁷ And instead of being organized hierarchically to channel solution-implementing efforts, both houses of Congress are structured horizontally so as to maximize the power of individual members to impede progress toward implementation through enactment.¹²⁸

Independent federal administrative agencies present a sharp contrast to the executive and legislative branches. With respect to reaching and implementing solutions to complex social problems, if the traditional nonjudicial branches are limited by either extrinsic constraints (the executive), or intrinsic ineptness (Congress), independent federal administrative agencies are quite the opposite. Each agency combines elements of the three traditional branches¹²⁹ in ways that encourage those elements to complement one another rather than to interfere with each other's efforts to reach and implement solutions.¹³⁰ Indeed, the relative ease with which these agencies develop and implement solutions that carry the force of law has caused them to be controversial from the beginning.¹³¹ To this day, administrative lawyers have focused on extrinsic judicial review of agency actions in an effort to keep these intrinsically capable agencies legitimately within the bounds of their open-textured congressional mandates.¹³²

2. *The Problem-Solving Capabilities of Courts*

Trial judges must solve two types of problems. The first reflects disagreements between the parties relating to procedural and evidentiary aspects of litigation. Although these problems are often polycentric and their resolution may be important to the outcome, typically they do not involve broad social issues that raise questions of political accountability. Thus, it is hardly surprising, given the importance of reaching rapid clo-

127. See U.S. CONST. art. I, § 7.

128. See RIPLEY, *supra* note 126, at 141 ("In both houses there are a number of points at which a few determined members (or perhaps even a single determined member) can stop or at least significantly delay the passage of a piece of legislation."). See generally *id.* at 4–10 (discussing factors that lead to congressional fragmentation).

129. See STRAUSS, *supra* note 116, at 20–26, 188.

130. *Id.* at 22 ("The agency's . . . specialization and embeddedness within government and law . . . is the talisman that explains how one government agency may perform [all three] functions that are kept carefully separated at the highest political level of government.").

131. Advocates of the New Deal in the early twentieth century urged the creation of independent administrative agencies precisely to compensate for the perceived inadequacies of the traditional branches as implementers of governmental policy objectives. See *id.* at ch. 2. At the outset, opponents criticized creation of the agencies as unconstitutional delegations of the lawmaking powers of the Congress in a fashion parallel to more recent criticisms of allegedly excessive presidential uses of direct action. *Id.* at 29–31; see also Lawrence Lessig & Cass R. Sunstein, *The President and the Administration*, 94 COLUM. L. REV. 1, 113–14 (1994).

132. See STRAUSS, *supra* note 116, at ch. 8.

sure, that trial judges may exercise broad discretion in solving them.¹³³ The second type of problem, which arises less frequently than the first, does involve broader, more complex issues of social policy relating not only to the case before the court but to future cases that arise on similar facts. As noted earlier, substantive law, including contract law, is comprised of solutions to these sorts of social problems. When existing law provides a clear and presumably appropriate solution, the trial court implements that solution, applying it to the facts before the court. Even here, courts unavoidably make law interstitially by adding to the understanding of the preexisting rule.¹³⁴ But when existing law is clearly not adequate to resolve the dispute, the court confronts an opportunity to solve the underlying social problem self-consciously, on its own authority, by making law.

Regarding the intrinsic capability of courts to solve polycentric social problems by making law, a federal judge should be just as capable as was the architecture teacher in Schön's case study¹³⁵ or the President and his advisers.¹³⁶ After all, federal judges tend to be mature, intelligent, well-educated people who perform their judicial tasks either individually (trial judges) or in small groups (appellate panels).¹³⁷ Indeed, judges demonstrate these intrinsic capabilities by solving the myriad of procedural and evidentiary problems that arise in the course of a trial. And the juries that often determine the outcomes of litigated cases are relatively small groups selected according to criteria aimed at making them fair and competent arbiters.¹³⁸ To be sure, courts may not seek out social problems to solve; disputes must come to them. And they lack the resources to receive and process voluminous data on wide-ranging social issues.¹³⁹ But from the standpoint of intrinsic problem-solving capability, courts would seem to combine the appropriate structures (individuals and small groups serving as authoritative decision makers) with the appropriate personnel (intelligent, disinterested decision makers) to make them effective social problem solvers.

133. See generally 1 MCCORMICK ON EVIDENCE ch. 16 (Kenneth S. Broun ed., 6th ed. 2006) (discussing judicial discretion in determining evidentiary relevance). Moreover, the practical necessity of getting on with the trial proceedings justifies the sacrifice of the parties' opportunity to participate fully in reaching resolution.

134. In a sense, existing law is never entirely adequate to resolve disputes; because every dispute presents unique facts at some level of detail, every judicial outcome creates new law interstitially. The text following this footnote refers to instances where judicial lawmaking is significant.

135. See *supra* notes 79–82 and accompanying text.

136. See *supra* notes 117–18 and accompanying text.

137. See generally WILLIAM DOMNARSKI, FEDERAL JUDGES REVEALED (2009) (compiling oral histories of Article III judges). The notable example of a judicial panel that may be too large to act effectively as a problem solver is the U.S. Court of Appeals for the Ninth Circuit sitting en banc. See Arthur D. Hellman, *Getting It Right: Panel Error and the En Banc Process in the Ninth Circuit Court of Appeals*, 34 U.C. DAVIS L. REV. 425 (2000).

138. See VALERIE P. HANS & NEIL VIDMAR, JUDGING THE JURY ch. 5 (1986).

139. See generally Jeffrey J. Rachlinski, *Bottom-Up Versus Top-Down Lawmaking*, 73 U. CHI. L. REV. 933 (2006) (comparing the process of case-by-case judicial decision making with the legislative process).

This picture of intrinsic institutional capability changes when attention turns to the extrinsic normative constraints on the judiciary's law-making authority. Whatever intrinsic capabilities courts may possess, their potential for solving broad social problems is normatively constrained in ways that render them, except in special circumstances to be considered below, only marginally significant as problem solvers. Thus, reflecting concern for the fact that judges are not politically accountable, the U.S. Constitution and a cluster of related justiciability doctrines purports to confine the powers of the federal judiciary to deciding sharply framed cases and controversies brought to them for decision.¹⁴⁰ And in deciding cases courts should, to the extent possible, avoid solving broad social problems by creating new law.¹⁴¹ Under what may be termed the traditional view, the litigants perform the problem-solving function in the first instance by shaping their legal claims, guided by the public solutions imbedded in established rules of contract law and in the private solutions reached by the exercise of contract's constitutive powers.¹⁴² From this traditional perspective litigation is, like deal making, primarily a form of conflict resolution.¹⁴³ Each side in both deal making and litigation applies the relevant norms and develops a solution—a game plan—which it proposes both to the other side and, in the context of litigation, to the court.¹⁴⁴ On this view, the central task of the court is to rely on precedents to resolve the conflict between the parties regarding which litigant's solution to the underlying social problem deserves to be validated and thereby implemented.¹⁴⁵ Again, by applying existing law to proven facts in reaching outcomes, courts unavoidably help to solve broader social problems. But in most instances, they make law only incrementally as part of an ongoing common law process rather than by acting in sweeping or decisive fashion.¹⁴⁶

140. Article III states that the judicial power of the federal courts extends only to cases and controversies which arise under the Constitution, federal laws of the United States, and its treaties. U.S. CONST. art. III, § 2; see also Jonathan R. Siegel, *A Theory of Justiciability*, 86 TEX. L. REV. 73 (2007) (maintaining that justiciability doctrines do not serve their asserted underlying purposes and proposing a "reconstructed," more relaxed doctrine of justiciability).

141. See HART & SACKS, *supra* note 31, at 342 ("[T]he development of a body of decisional law is only a byproduct of the judicial process. The basic function of courts is the function of . . . settling disputes by the method of adjudication.").

142. Tort claimants perform much the same function in negligence cases when they specify what the defendant should, or should not, have done to avoid harming the claimant. See Mark F. Grady, *Untaken Precautions*, 18 J. LEGAL STUD. 139, 144 (1989).

143. See *supra* text accompanying note 52.

144. For the proposition that deal makers invoke norms during negotiations, see generally Eisenberg, *supra* note 100.

145. A prominent proponent of the contrary notion that the primary mission of federal judges is to give meaning to public values refers to this traditional view of adjudication as the "dispute-resolution model." See Owen M. Fiss, *Foreword: The Forms of Justice*, 93 HARV. L. REV. 1, 17 (1979). As will be explained, this Article agrees with Professor Fiss's assessment that in the context of structural reform litigation in federal courts departs from the traditional model set forth in the text. See *infra* note 163 and accompanying text.

146. See *Rogers v. Tennessee*, 532 U.S. 451, 461 (2001) ("[I]ncremental and reasoned development of precedent . . . is the foundation of the common law system."); see also Rachlinski, *supra* note

Lon Fuller conceptualizes the problem-solving capabilities of courts from a somewhat different direction.¹⁴⁷ Instead of emphasizing the extrinsic, top-down constraints traditionally imposed on judicial problem solving, Fuller examines the intrinsic, bottom-up aspects of litigation. He starts with the assurances traditionally given to litigants that they will receive a meaningful day in court—that they will be able to present proofs and invoke legal norms in demonstrating before an impartial tribunal that they are entitled to a particular outcome.¹⁴⁸ To provide such an opportunity, Fuller reasons, the relevant law must consist of rules that are sufficiently specific to separate the otherwise interdependent elements of polycentric problems and to arrange them into linear sequences that allow the litigant to take the tribunal through a logical chain of reasoning to the right result.¹⁴⁹ Contract law performs this function by depolycentrizing the underlying social coordination problems—separating the constituent elements such as offer, acceptance, performance, excuse, mitigation, measures of recovery, penalties, and the like, none of which presents unmanageably polycentric issues for decision.¹⁵⁰ By contrast, tort law, with its heavier reliance on judging polycentric patterns of conduct based on vague standards of reasonableness, has been criticized for supplying courts with insufficient guides to decision making.¹⁵¹

According to Fuller, when the applicable substantive law fails to depolycentrize the social problem underlying a legal claim, litigants are unable to progress through linear chains of logic that guide the tribunal to the proper outcome.¹⁵² Instead, the vagueness of the relevant norms forces the participants to address the underlying social problem more or less of a whole, as did the architecture teacher designing a school complex in Schön's example.¹⁵³ Lacking an adequate basis on which to argue for a favorable outcome as a matter of right, litigants necessarily become

139, at 935. See generally CASS R. SUNSTEIN, *ONE CASE AT A TIME: JUDICIAL MINIMALISM ON THE SUPREME COURT* (1999) (describing and defending the Supreme Court's incremental system of "judicial minimalism"). For a critique of this incremental approach in the context of constitutional decision making, see Christopher J. Peters, *Assessing the New Judicial Minimalism*, 100 COLUM. L. REV. 1454 (2000). Even dramatic announcements of "new law" are built on previous, more gradual shifts in doctrine. See, e.g., *MacPherson v. Buick Motor Co.*, 111 N.E. 1050, 1051–53 (N.Y. 1916) (extending negligence liability from situations in which the defendant put the plaintiff in imminent danger to circumstances where the defendant merely had knowledge of probable danger).

147. Fuller, *supra* note 48.

148. *Id.* at 364. This bottom-up analysis might be thought of as an intrinsic, rather than extrinsic constraint. Cf. *supra* text accompanying note 115.

149. Fuller, *supra* note 48, at 394–404.

150. *Id.* at 403–04.

151. See, e.g., James A. Henderson, Jr., *Expanding the Negligence Concept: Retreat from the Rule of Law*, 51 IND. L.J. 467 (1976) [hereinafter Henderson, *Expanding the Negligence Concept*]; James A. Henderson, Jr., *The Lawlessness of Aggregative Torts*, 34 HOFSTRA L. REV. 329, 338–39 (2005) [hereinafter Henderson, *Lawlessness*].

152. Fuller, *supra* note 48. Fuller is careful to speak of the limits of adjudication rather than the limits on adjudication, thereby locating the limits intrinsically rather than extrinsically.

153. See *supra* notes 79–82 and accompanying text.

applicants, entreating the tribunal to sympathize with them and to exercise its broad problem-solving discretion in their favor.¹⁵⁴ Such a circumstance denies the parties their opportunity to participate meaningfully as solvers of their own problems who seek the court's assistance as a validator and implementer of the parties' solutions rather than as a problem solver in its own right. The architect in Schön's school design example was under no similar injunction to give the student, or anyone else for that matter, the equivalent of a day in court; the architect was free, as courts are not, to exercise broad discretion, basing his solution on intuition informed by experience.

Although courts do not, as a general rule, attempt to solve "from scratch" the substantive problems reflected in the civil litigation brought to them for resolution, it remains briefly to consider exceptions to the traditional constraints on courts acting as problem solvers. In addition to the routine procedural and evidentiary rulings and the interstitial law-making alluded to earlier, judges clearly perform problem-solving as well as solution-implementing functions when they participate as administrators in devising and promulgating uniform rules of procedure.¹⁵⁵ And courts often play an important role as problem solvers in managing complex, large-scale litigation involving legions of plaintiffs against scores of defendants.¹⁵⁶ In these latter circumstances, even if the substantive law has depolycentered the legal issues by separating the major elements and arranging them in linear sequences, the remaining case-management problems—e.g., how to handle large-scale pretrial discovery or resolve the common issues of fact—remain complex and polycentric.¹⁵⁷ These management problems require special procedures by which a potentially overwhelmed federal trial judge can cope. Federal statutes and rules of procedure not only provide for the consolidation of claims involving common issues¹⁵⁸ but also provide the necessary coping mechanisms by authorizing judges to retain special masters, magistrate judges, and other

154. This same difficulty would present itself if a court were to consider the adoption of a radically new substantive rule and invite the parties to make open-ended policy arguments for and against the new rule.

155. See generally KEVIN M. CLERMONT, *PRINCIPLES OF CIVIL PROCEDURE* 29–34 (2005) (outlining the twentieth century rules reform within the federal judiciary); Joseph F. Spaniol, Jr., *Making Federal Rules: The Inside Story*, 69 A.B.A. J. 1645 (1983) (describing the process of federal rule making). For arguments that judicial rule making may have exceeded the legitimate powers of the courts, see WINIFRED R. BROWN, *FED. JUD. CTR., FEDERAL RULEMAKING: PROBLEMS AND POSSIBILITIES* (1981); Robert G. Bone, *The Process of Making Process: Court Rulemaking, Democratic Legitimacy, and Procedural Efficacy*, 87 GEO. L.J. 887 (1999); Cheryl L. Hass, *Judicial Rulemaking: Criticisms and Cures for a System in Crisis*, 70 N.Y.U. L. REV. 135 (1995).

156. See generally CLERMONT, *supra* note 155, at 359–99 (providing an overview of complex litigation); Judith Resnik, *Managerial Judges*, 96 HARV. L. REV. 374 (1982) (describing the rise of a more interactive, "managerial" form of judging among federal judges).

157. On the depolycentrizing function, see *supra* note 149 and accompanying text. These case-management problems are handled routinely in smaller cases. See *supra* note 133 and accompanying text.

158. See, e.g., 28 U.S.C. § 1407 (2006) (multidistrict litigation); FED. R. CIV. P. 23 (class actions).

officers to help them solve polycentric case-management problems and to assist the parties in reaching settlements.¹⁵⁹

The most remarkable exception to the traditional view that courts should not try to solve open-ended polycentric problems is “structural reform” or “public law” litigation, which aims at reforming public facilities such as prisons, mental health hospitals, and school systems.¹⁶⁰ The legal standard that triggers judicial intervention—whether the public facility has deteriorated so badly that its perpetuation denies inmates, patients, and students their fundamental constitutional rights—is sufficiently focused to avoid presenting an unadjudicable problem.¹⁶¹ But after a court decides that intervention is required, the task of redesigning the deficient, broken facility is every bit as complex and polycentric as was the task of designing the school buildings in Schön’s earlier example.¹⁶² Writers have identified several factors that arguably distinguish this type of adjudication from other types, including the large claims consolidations just considered. Thus, by recognizing the rights of otherwise powerless victims of institutional abuse, the court delegates the task of redesigning the institution to an extrajudicial process involving public dialogue, bargaining, and compromise among interested parties.¹⁶³ On this view, institutional reform is achieved through deal making in a specialized market that the court’s intervention helps to create. Rather than federal courts redesigning the broken public facilities, judges, aided by special masters, help to supervise these extrajudicial processes. Viewed in this manner, public law litigation does not deny the affected parties meaningful opportunities to participate as problem solvers.¹⁶⁴

159. See, e.g., 28 U.S.C. § 636 (2006) (magistrate judges); FED. R. CIV. P. 53 (special masters). See generally CLERMONT, *supra* note 155, at 82–83 (outlining the duties of special masters and magistrate judges); Resnik, *supra* note 156, at 436–38 (describing magistrate judges and special masters as case managers). These measures have been controversial. See, e.g., James S. DeGraw, Note, *Rule 53, Inherent Powers, and Institutional Reform: The Lack of Limits on Special Masters*, 66 N.Y.U. L. REV. 800 (1991) (exploring perceived problems that exist when special masters are involved in institutional litigation); Note, “Mastering” Intervention in Prisons, 88 YALE L.J. 1062, 1082–85 (1979) (noting possible confusion that may arise from the informal and amorphous nature of special masters’ roles).

160. See generally Abram Chayes, *The Role of the Judge in Public Law Litigation*, 89 HARV. L. REV. 1281 (1976) (public law litigation); Fiss, *supra* note 145 (structural reform litigation); Charles F. Sabel & William H. Simon, *Destabilization Rights: How Public Law Litigation Succeeds*, 117 HARV. L. REV. 1016, 1021–47 (2004).

161. See Chayes, *supra* note 160, at 1305–06 nn.103–15; see also James A. Henderson, Jr., Comment, *Settlement Class Actions and the Limits of Adjudication*, 80 CORNELL L. REV. 1014, 1018 (1995).

162. See *supra* notes 76–82 and accompanying text.

163. See Chayes, *supra* note 160, at 1284; Henderson, *supra* note 161, at 1017 (“[A] court-supervised process combining public dialogue, bargaining, and compromise among interested parties largely replaces managerial governance by the court.”).

164. Constitutional scholars, some of them building on the public law litigation model, have argued that the centrally important judicial role is not one of resolving conflicts by choosing which of the litigants’ solutions to implement based on existing law, but rather one of solving broad social problems by adopting and articulating overarching social policies. See *supra* note 145; see also Owen M. Fiss, *The Law Regained*, 74 CORNELL L. REV. 245, 249 (1989) (“Adjudication is nothing more or less than a social institution for interpreting and enforcing our public values.”). While there is truth in what these scholars profess, especially in the context of constitutional adjudication, they overstate their case. The U.S. Supreme Court certainly functions as a high-profile policy maker or problem solver. And courts

V. USING THE PROBLEM-SOLVING PERSPECTIVE
TO EXPLAIN U.S. CONTRACT LAW

A. *Explaining Contract's Constitutive Core*

Before examining specific elements of contract law, observe that, as a general matter, U.S. contract law reflects a purposive pragmatism that is quite consistent with this Article's thesis. Judicial involvement in contract disputes focuses on implementing and sometimes salvaging problem-solving deals rather than on enforcing promises, as such.¹⁶⁵

1. *Helping to Solve a Persistent Puzzle: The Nonenforceability of Gift Promises*

Consistent with the bargain theory, courts refuse to enforce gift promises because they are unsupported by consideration.¹⁶⁶ Why is consideration necessary? Lon Fuller justifies the requirement as a legal formality that helps to ensure the thoughtfulness of promises when made and their authenticity when later asserted in court.¹⁶⁷ Substantively, he denigrates gift promises as "sterile transmission[s]," implying that they do not contribute to the production of wealth.¹⁶⁸ But do not some gift promises serve that purpose?¹⁶⁹ And what is necessarily sterile about unilateral expressions of affection or appreciation? More generally, although contracts writers often observe that gift promises are unimportant,¹⁷⁰ they spend considerable efforts trying to identify an adequate rationale.¹⁷¹ This Article offers a straightforward explanation for the consideration requirement, one upon which the rest of this analysis builds. Courts refuse to enforce gift promises because, with regard to

in nonconstitutional contexts help to solve social problems incrementally, over time. *See supra* note 134. But in most instances U.S. courts defer problem-solving responsibility to existing law and to litigants who apply that law in reaching the proposed solutions on which they base their arguments and advance their claims.

165. *See, e.g.,* Wood v. Lucy, Lady Duff-Gordon, 118 N.E. 214 (N.Y. 1917). In implying a best efforts term in support of plaintiff's claim, Judge Cardozo asserted: "The law has outgrown its primitive stage of formalism when the precise word was the sovereign talisman, and every slip was fatal. . . . A promise may be lacking, and yet the whole writing may be 'instinct with an obligation,' imperfectly expressed. If that is so, there is a contract." *Id.* at 214 (citation omitted).

166. *See* 1 FARNSWORTH, *supra* note 12, at 85–88; *see also infra* note 174 and accompanying text.

167. *See* Fuller, *supra* note 24, at 800.

168. *Id.* at 815 (citation omitted).

169. Gift promises without any strings attached, like gifts generally, may be helpful instrumentally in currying favor with the donee over longer time horizons, thereby eventually generating reciprocal responses that increase the original donor's welfare. But inquiring into such a wide range of circumstances on a case-by-case basis would be difficult and costly, defeating the purpose of having a formal rule in the first instance.

170. *See, e.g.,* MARVIN A. CHIRELSTEIN, CONCEPTS AND CASE ANALYSIS IN THE LAW OF CONTRACTS 21 (4th ed. 2001) ("Without quite knowing where to look for a definitive statement of policy on donative promises, I take some comfort from the rather confident hunch that the whole problem, despite its casebook prominence, cannot really be very important.").

171. *See, e.g.,* HILLMAN, *supra* note 8, at 25 ("[M]any [writers] have spilled lots of ink discussing the reasons contract law enforces bargains, but not gift promises.").

most of them, enforcement will not implement solutions to preexisting problems facing the parties.

The point here is not that gift promises can never serve instrumental purposes. It is simply that they are much more likely to constitute noninstrumental, ends-in-themselves expressions of personal preference that an earlier discussion was careful to distinguish from solutions to problems.¹⁷² Nor is the point that such donative expressions are necessarily unimportant—courts enforce completed gifts, many of which do not serve a problem-solving function. Courts simply will not allow the instrumental objectives of contract's constitutive core to be diverted by what are, judged on their faces, and almost certainly in reality, noninstrumental expressions of affect.¹⁷³ Upon reflection, this is probably what Fuller means, but did not explicitly articulate, when he refers to gift promises as sterile transmissions.

2. *Explaining Bellwether Concepts: Bargain Theory, Expectancy Damages, Illusory Contracts, Gambling Contracts, and Penalties*

Beyond helping to solve the puzzle of the nonenforcement of gift promises, viewing contract law as a problem-solving enterprise helps to explain more generally the traditional bargain theory of consideration—that bargained-for exchanges supported by consideration are the well-spring of enforceable promises.¹⁷⁴ The concept of a bargain—a deal—almost always suggests that both sides are voluntarily getting and giving value, thereby simultaneously reaching and implementing solutions to their individual, preexisting problems. And the problem-solving perspective helps to explain the expectancy measure of damages for breach, an important corollary to the bargain theory.¹⁷⁵ That the expectancy measure is appropriate seems beyond controversy—a hornbook author describes it as contract law's “most important single idea.”¹⁷⁶ From the perspective advanced in this Article, by placing the plaintiff financially where the plaintiff would have been if the promisor had performed, ex-

172. See *supra* note 67 and accompanying text.

173. This analysis, agreeing with Fuller, treats the consideration requirement as a formality. See *supra* notes 167–68 and accompanying text. To engage in a case-by-case inquiry based on extrinsic evidence of the promisor's “true motives” would require judicial review of the transaction in its total context. Cf. *supra* note 169 (noting that such review would be both difficult and costly). Inquiries into the promisor's subjective motives would tend to invite inquiries into what reasonable persons would have intended under the same circumstances, which would exceed a court's capabilities to adjudicate. See *supra* notes 147–54 and accompanying text; see also *infra* text accompanying note 237. Moreover, in many of the exceptional cases in which the gift promisor has an instrumental purpose for making the promise of a future gift, the promisee will be able to recover in any event based on detrimental reliance. See *infra* notes 205–07 and accompanying text.

174. See 1 FARNSWORTH, *supra* note 12, at 77–79; HILLMAN, *supra* note 8, at 15–37.

175. See 3 E. ALLAN FARNSWORTH, FARNSWORTH ON CONTRACTS 189–203 (3d ed. 2004); HILLMAN, *supra* note 8, at 134–64.

176. See CHIRELSTEIN, *supra* note 170, at 4.

pectancy damages, in effect, implement the promisee's solution even if the promisor fails to honor the commitment to lend assistance.¹⁷⁷

The problem-solving perspective developed in this Article is also consistent with the bargain theory's explanation of the so-called "illusory promise" and "preexisting duty" doctrines. In the case of illusory promises, what appears at first blush to be a promise to provide future assistance is made so conditional on the promisor's subsequent willingness to perform as to fail to constitute a current commitment.¹⁷⁸ Preexisting duty cases involve commitments, typically made in the context of modifying an existing agreement, that duplicate antecedent legal obligations of the promisor to perform in the same manner.¹⁷⁹ In both circumstances, courts often try to salvage enforceable deals, either by inferring good faith and best efforts in connection with illusory promises¹⁸⁰ or by inferring mutual intent to add something of value in connection with preexisting duties.¹⁸¹ Undertaking these salvage efforts, courts often appear to be searching for an underlying problem-solving venture by the parties that is presumably worth saving. In any event, when such judicial efforts fail, the contract fails for lack of consideration.¹⁸² From the problem-solving perspective, in the absence of either an adequate expression of present commitment or anything in the way of a new and different commitment, the deal fails to implement a solution to the promisee's preexisting coordination problem.

Having considered situations in which both the bargain theory and the problem-solving perspective offer plausible, consistent explanations of the relevant law, the latter may begin to appear (aside from gift promises) to be merely a different way of verbalizing the former. To show that the problem-solving perspective stands on its own, it will be useful to consider examples where the problem-solving perspective offers the only plausible rationale—where courts reach outcomes that the bargain theory has difficulty explaining. One such example is in connection with gambling contracts—contracts constituting wagers on outcomes in which neither party has a significant interest other than the possibility of win-

177. *Id.* at 159 (explaining that "[t]he larger purpose of contract law is to supply [the] assurance that the other side will honor the deal," "if not through willing performance then by forced surrender of the equivalent in hard cold cash").

178. See 1 FARNSWORTH, *supra* note 12, at 133–53; HILLMAN, *supra* note 8, at 27–31.

179. See 1 FARNSWORTH, *supra* note 12, at 520–33; HILLMAN, *supra* note 8, at 31–33.

180. See HILLMAN, *supra* note 8, at 30 ("Courts . . . imply[] an obligation of 'good faith' . . . because courts believe the parties probably intended these results."); see also *Wood v. Lucy, Lady Duff-Gordon*, 118 N.E. 214, 215 (N.Y. 1917) (describing the "best efforts" term inferred by Judge Cardozo).

181. See RESTATEMENT (SECOND) OF CONTRACTS § 89(a) (1981) ("A promise modifying a duty under a contract not fully performed on either side is binding . . . if the modification is fair and equitable in view of circumstances not anticipated by the parties . . ."); see also 1 FARNSWORTH, *supra* note 12, at 527–33.

182. See, e.g., *De Los Santos v. Great W. Sugar Co.*, 348 N.W.2d 842, 845–46 (Neb. 1984).

ning.¹⁸³ Unlike gift promise situations, here the parties clearly have a bargain supported by mutual consideration. And yet courts have traditionally been reluctant to enforce gambling contracts.¹⁸⁴

Judges and scholars have relied on the illegality of some gambling contracts to explain this reluctance.¹⁸⁵ But more is at work here than merely a morality-based, regulative override of the bargain theory. A deeper reason, one related to contract law's constitutive, problem-solving core, helps to explain this traditional judicial antagonism. Observe that a gamble is not merely a mutually agreed-upon transfer of risk. Virtually every enforceable agreement addressing future contingencies involves some element of risk transfer that might be said to constitute gambling.¹⁸⁶ Thus, when the owner of property enters into a contract for its sale, the incidental transfer of the risk of future loss (or the possibility of future gain) is not commonly thought of as gambling because it occurs as a largely unavoidable adjunct of the transfer of ownership, which transfer is presumptively a solution to a problem. Even if an owner's transfer of the risk of future loss is independent of the transfer of title, as when the owner of property purchases insurance against its future loss, the insurance contract is enforceable as a means by which the owner implements a solution to the problem of continuing to bear the risk of economically dislocating loss.¹⁸⁷

Why then, apart from questions of immorality or illegality, do courts balk at enforcing gambling contracts? This question poses difficulties for bargain theorists because the gamblers have struck a bargain supported by mutual consideration. By contrast, the perspective advanced in this Article provides an explanation: courts refuse to enforce gambling contracts because, apart from questions of morality or illegality, a transfer of risk not inherently connected with an independently significant transfer of other interests, or which does not serve to insure against the future loss of a present interest, is most unlikely to be aimed at implementing solutions to the parties' preexisting problems. To be sure, one or both parties in a given case may enter a gambling contract in order to solve a

183. Emphasis here should be on the "no other significant interest" language. Because most executory contracts depend on predictions and assumptions about future states of the world, all contracts could be said to involve "gambles." See CHIRELSTEIN, *supra* note 170, at 6. For a well-known dictum to the same effect as the statement in the text, see *Bd. of Trade of City of Chi. v. Christie Grain & Stock Co.*, 198 U.S. 236, 249 (1905) (Holmes, J., writing for the majority) (asserting that dealings for serious business purposes must be distinguished from "speculation[s] entered into for [their] own sake").

184. See 2 E. ALLAN FARNSWORTH, FARNSWORTH ON CONTRACTS 9–10 n.4 (3d ed. 2004).

185. See *id.* at 69 n.6.

186. See *supra* note 183 and accompanying text.

187. Early critics attacked insurance agreements as unenforceable gambling contracts, and it took considerable time and effort for courts using the concept of insurable interest to identify bargained-for risk transfers that provide solutions for actors in a free-market economy. See ROBERT H. JERRY, II, UNDERSTANDING INSURANCE LAW 233–36 (2d ed. 1996).

preexisting problem.¹⁸⁸ But in most instances, the parties enter such contracts as ends in themselves—as expressions of both parties' preferences for risk taking.¹⁸⁹

Thus, it is reasonable for courts confronting gambling contracts to resolve ambiguities in favor of nonenforcement, refusing to engage in case-by-case inquiries into the parties' motivations.¹⁹⁰ In a manner similar to gift promises, gambling contracts presumably entered into for their own sakes do not serve the instrumental purposes meant to be served by contract's constitutive core—implementing solutions to preexisting problems. They are, in Fuller's terms, sterile transmissions. The point here is not that gambling is necessarily bad, and thus should be discouraged, if not outlawed altogether.¹⁹¹ Many states conduct their own gambling enterprises, manifestly to solve revenue problems.¹⁹² Rather, traditional caselaw reflects the underlying view that gambling contracts as ends in themselves are not problem-solving enterprises and thus do not warrant support and encouragement from the law of contracts.

Another context in which the problem-solving perspective does a better job of explaining contract law than does the bargain theory relates to liquidated damages provisions. When such provisions award damages that appear to be unnecessarily high when judged against an expectancy standard, courts refer to them as penalties and refuse to give them effect.¹⁹³ Contract writers disagree over whether rulings against penalties are appropriate, with bargain theorists tending to argue that a deal is a deal—that courts should not second-guess the reasonableness of parties' objectives.¹⁹⁴ Some writers observe that these judicial reactions are per-

188. Both parties may require greater resources than either, alone, possesses to implement their plans and may flip a coin so that at least one of them will have enough to continue. Or one of them may be in the business of lawfully providing opportunities to gamble to others.

189. Cf. *supra* notes 66–68 and accompanying text (describing other instances where actors merely express preferences, rather than solve problems). Observe that deals that make it possible for parties to gamble are unambiguously instrumental, as were the solutions in the example in an earlier discussion that made it possible to choose chocolate ice cream for dessert. See *supra* Part III.B. But the choice of chocolate and the gamble, themselves, are likely to be expressions of preference. Moreover, wagers placed in legal gambling establishments are enforceable because the establishments unambiguously are solving preexisting problems when they accept wagers. (Indeed, over time they are not gambling at all.)

190. Courts similarly refuse to look beyond gift promises to ascertain donors' true motives. See *supra* note 173.

191. Gambling can be quite destructive. See JEREMY BENTHAM, *THE THEORY OF LEGISLATION* 106 (C.K. Ogden ed., 1931), for a criticism of “deep play.” But for many it is a harmless form of recreation.

192. See ROBERT GOODMAN, *THE LUCK BUSINESS: THE DEVASTATING CONSEQUENCES AND BROKEN PROMISES OF AMERICA'S GAMBLING EXPLOSION* 4–5 (1995); see also *supra* note 188.

193. See 3 FARNSWORTH, *supra* note 175, at 300–19; HILLMAN, *supra* note 8, at 170–76.

194. See generally Kenneth W. Clarkson et al., *Liquidated Damages v. Penalties: Sense or Nonsense?*, 1978 WIS. L. REV. 351 (justifying the distinction between legitimate liquidated damage provisions and penalties on economic efficiency grounds); Charles J. Goetz & Robert E. Scott, *Liquidated Damages, Penalties and the Just Compensation Principle: Some Notes on an Enforcement Model and a Theory of Efficient Breach*, 77 COLUM. L. REV. 554 (1977) (arguing that liquidated damages provisions often offer parties the most efficient means to insure against consequences of a breach that would otherwise be noncompensable); Robert A. Hillman, *The Limits of Behavioral Decision Theory in Legal*

plexing.¹⁹⁵ In any event, the problem-solving perspective reduces the confusion surrounding the traditional rule. Even if parties sometimes use grossly elevated liquidated damages provisions to place greater pressure on promisors to perform, such clauses are, as are gift promises and gambling contracts, inherently unclear in that regard. Given that lower levels of damages would presumably create adequate incentives to perform,¹⁹⁶ it may be assumed that the excessive portions are intended to function as wagers or as expressions of personal vindictiveness—as ends in themselves, quite beyond any deterrence function they might serve. The point here is not that sizeable liquidated damages provisions are invariably inconsistent with a problem-solving motive. Rather, the point is that by their manifest nature they are not part of a solution to the promisee's preexisting problem of assuring timely and adequate performance. Again, when penalty clauses are intended as wagers or as punishment they are, in Fuller's terms, sterile transmissions.¹⁹⁷ As such, contract law balks at enforcing them even if both parties have agreed to their terms. Consistent with this analysis, courts tend to enforce even substantial liquidated damages provisions when they are drafted to resemble solutions to problems, although courts are likely to set aside comparably sized liquidated damages provisions when they reflect vindictiveness or wagering.¹⁹⁸

3. *Explaining Liberal Trends in Contract Formation*

Regarding the just-considered examples, one might say that the bargain theory is more comfortable upholding deals than are the problem-solving perspective and prevailing caselaw. Does the caselaw provide contrary examples—ones in which the problem-solving perspective and prevailing caselaw are comfortable effectuating deals that the bargain theory would hesitate to enforce? Consider recent and somewhat controversial trends in contract formation that challenge, rather than conform to, the traditional bargain theory. These trends involve judicial enforcement, usually in a commercial setting, of: (1) mutual promises to use best efforts and agreements to agree, made in the course of protracted negotiations that never culminate in a formal agreement;¹⁹⁹ (2) modifi-

Analysis: The Case of Liquidated Damages, 85 CORNELL L. REV. 717 (2000) (using tools of behavioral decision theory to explain judicial reaction to liquidated damages provisions); Saul Levmore, *Stipulated Damages, Super-Strict Liability, and Mitigation in Contract Law*, 107 MICH. L. REV. 1365 (2009) (concluding that the law might actually encourage stipulated awards such as liquidated damages).

195. See, e.g., HILLMAN, *supra* note 8, at 172 (“[The] reasons [often given are] not self-evident . . . [and] do[] not explain why courts strike penalty provisions when the evidence demonstrates that both parties understood and sought the provision.”).

196. See Clarkson et al., *supra* note 194, at 360–62; Goetz & Scott, *supra* note 194, at 558–59.

197. See *supra* note 168 and accompanying text.

198. See authorities cited in 3 FARNSWORTH, *supra* note 175, at 304 n.9. For advice on how to draft these provisions to maximize their chances of being upheld, see *id.* at 319–23. For a warning that clever drafting may not save the day, see HILLMAN, *supra* note 8, at 175.

199. See 1 FARNSWORTH, *supra* note 12, at 368–91; HILLMAN, *supra* note 8, at 64–66.

cations of existing contracts under circumstances where, although one side provides no new consideration, both sides have reasons to renegotiate the deal;²⁰⁰ (3) business forms ostensibly relied on to enter a contract where one side has not been afforded a realistic opportunity to read the terms;²⁰¹ and (4) so-called “rolling contracts” in which terms favorable to the seller of consumer goods are contained in sealed packaging and are not revealed to the buyer until after the sale has been consummated.²⁰²

All of these methods of contract formation are questionable from the perspective of the bargain theory because typically the parties never reach final agreement to specific terms. Courts applying bargain theory can reason their way to judicial enforcement, but conceptually it is a struggle.²⁰³ By contrast, the problem-solving perspective more easily explains these recent trends because the nontraditional bargaining methods provide useful tools to problem solvers in contexts where the parties have unambiguously signaled that they are trying to reach and implement workable solutions to preexisting problems. Courts have not abandoned traditional requirements for contract formation. But the empathy the problem-solving perspective reflects for the difficulties facing problem solvers and solution implementers is consistent with courts giving the benefit of the doubt to instrumentally useful deal-making innovations.²⁰⁴

4. *Making Peace (Once and for All) with Promissory Estoppel*

It remains to consider promissory estoppel based on detrimental reliance. Because estoppel provides an independent ground for enforcing promises,²⁰⁵ some writers conclude that it provides an alternative method of creating contracts.²⁰⁶ Indeed, one prominent scholar relied on such reasoning to predict that promissory estoppel would replace bargained-for agreements as the primary basis for contract-based liability in commercial settings.²⁰⁷ The problem-solving perspective helps to explain why

200. See 1 FARNSWORTH, *supra* note 12, at 520–33; HILLMAN, *supra* note 8, at 31–33.

201. See HILLMAN, *supra* note 8, at 217–22.

202. See *id.* at 64, 222–26.

203. See, for example, *Schwartzreich v. Bauman-Basch, Inc.*, 131 N.E. 887 (N.Y. 1921), in which the court presumed a nonexistent rescission prior to modification in order to find adequate new consideration on both sides. Hillman describes the holding as manipulative and ingenious. HILLMAN, *supra* note 8, at 31–33. See also *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir. 1997), in which the court dated a sales transaction four weeks later than the actual sale in order to find that the terms in the rolling contract were part of the deal.

204. See, for example, U.C.C. § 2-209 cmt. 2 (2004), which imposes a test of good faith in determining whether a modification will be enforced in the absence of mutual consideration. If the conduct of the party benefiting from the modification constitutes “the extortion of a ‘modification’ *without legitimate commercial reason*,” the new terms are not enforceable. *Id.* (emphasis added).

205. See HILLMAN, *supra* note 8, at 77–88.

206. See, e.g., *Elvin Assocs. v. Franklin*, 735 F. Supp. 1177, 1182–83 (S.D.N.Y. 1990); *Wheeler v. White*, 398 S.W.2d 93, 96–97 (Tex. 1966). See generally Charles L. Knapp, *Reliance in the Revised Restatement: The Proliferation of Promissory Estoppel*, 81 COLUM. L. REV. 52 (1981) (describing the Restatement’s formulation of promissory estoppel and its influence on the law of promissory liability).

207. See GRANT GILMORE, *THE DEATH OF CONTRACT* 72 (1974).

this has not happened. Promissory estoppel and the related concept of unjust enrichment are not forward-looking constitutive tools whereby private parties may implement solutions to their individual problems. Instead, they represent backward-looking, regulative solutions to the public problem of how a court should respond when the equities surrounding a private interaction indicate that a remedy should be available but no enforceable agreement to that effect has been reached. Thus, they are part of contract's regulative penumbra, not its constitutive core. Viewing promissory estoppel in this manner helps to answer a question that has provoked controversy among contract writers: should recovery based on promissory estoppel include expectancy damages?²⁰⁸ Some courts have concluded that, because promissory estoppel leads to the creation of contractual obligations, traditional contract remedies should be allowed.²⁰⁹ The problem-solving perspective helps to explain why U.S. courts generally have not embraced such reasoning.²¹⁰ Promissory estoppel does not empower actors to achieve private solutions to private problems, but represents a public solution to the public problem of protecting reliance interests. It is hardly surprising, from the problem-solving perspective, that courts have not embraced expectancy damages based on promissory estoppel.

*B. Explaining Contract's Regulative Penumbra:
Limits on the Institutional Role of Courts*

1. Judicial Review of the Fairness of Deals and Deal-Making Behavior

Scholars have traditionally explained judicial reluctance to review the fairness of contracts in terms of promoting freedom of contract.²¹¹ This normative rationale is consistent with an earlier reference to U.S. contract law's commitment to private ordering and, as explained earlier, this Article has no quarrel with it in principle.²¹² But courts routinely interfere with freedom of contract in many other ways, including imposing

208. See HILLMAN, *supra* note 8, at 185 (noting that the controversy over the proper measure "still rages today").

209. See, e.g., *Walters v. Marathon Oil Co.*, 642 F.2d 1098, 1100–01 (7th Cir. 1981); see also Robert A. Hillman, *Questioning the "New Consensus" on Promissory Estoppel: An Empirical and Theoretical Study*, 98 COLUM. L. REV. 580, 601–02 nn.91–94 (1998).

210. See, e.g., *Walser v. Toyota Motor Sales, U.S.A., Inc.*, 43 F.3d 396, 401–02 (8th Cir. 1994) (holding that limiting damages on a promissory estoppel claim to out-of-pocket expenditures made in reliance on defendant's alleged promise was not abuse of discretion); *Goodman v. Dicker*, 169 F.2d 684, 685 (D.C. Cir. 1948) ("The true measure of damage based on promissory estoppel is the loss sustained by expenditures made in reliance upon the assurance of a dealer franchise.").

211. See HILLMAN, *supra* note 8, at 7 ("[C]ourts engaged in policing contracts must determine when 'freedom of contract' ends and appropriate regulation of contracts begins."); see also CHIRELSTEIN, *supra* note 170, at 81 ("One difficulty . . . [is] how to protect people from being dealt with [badly], while at the same time continuing to honor 'freedom of contract' as a fundamental tenet of the legal system.").

212. See *supra* notes 22–25 and accompanying text.

formal requirements for contract formation²¹³ and setting contracts aside on the ground of unconscionability.²¹⁴ Why is unfairness not also a valid basis for regulative override of the parties' manifested intent? The problem-solving perspective offers an explanation for this judicial refusal to engage in fairness-based review: courts are institutionally incapable of solving the polycentric problems they would encounter in undertaking such a task.²¹⁵

Although contracts scholars have addressed the question of judicial competence, they have provided inadequate answers. For example, two recent articles by prominent coauthors reflect a misunderstanding of the relevant institutional limits.²¹⁶ Their analysis of the efficiency implications of judicial enforcement of incomplete contracts identifies nonverifiability as the main institutional difficulty presented by vague legal standards such as fairness and reasonableness.²¹⁷ As the authors recognize, nonverifiability refers to the difficulty that the parties encounter in proving certain facts when, by the nature of those facts, objective proof is unavailable.²¹⁸ Subjective states of mind are classic examples.²¹⁹ But the difficulties courts would encounter in attempting to review contract terms under a vague standard such as fairness or reasonableness would lie not in the nonverifiability of the relevant facts but in the many-centered nature of the issues presented for decision. As explained earlier, the interdependent factual elements relevant to a court's decision under a vague fairness standard must be considered together as a whole, and broad discretion must be exercised in reaching a conclusion. Consequently, the litigants cannot work through linear chains of logic to insist on a particular outcome and are effectively denied their day in court.²²⁰

The aforementioned authors suggest that because the court would be reviewing a solution that the parties have already devised, rather than devising its own solution from scratch, the judicial task under a vague standard would be manageable.²²¹ But because a court undertaking such a review would nevertheless be required to judge the overall fairness of the agreement reached by the parties—considering a hypothetical change in one term would require consideration of most of the other terms—the

213. Cf. *infra* notes 216–19 and accompanying text (discussing the nonverifiability of subjective facts, such as states of mind, which are incapable of being proved objectively).

214. See HILLMAN, *supra* note 8, at 191, 212–17; see also *infra* text accompanying notes 225–26.

215. See *supra* notes 147–54 and accompanying text.

216. See Robert E. Scott & George G. Triantis, *Anticipating Litigation in Contract Design*, 115 YALE L.J. 814 (2006) [hereinafter Scott & Triantis, *Anticipating Litigation*]; Robert E. Scott & George G. Triantis, *Incomplete Contracts and the Theory of Contract Design*, 56 CASE W. RES. L. REV. 187 (2005) [hereinafter Scott & Triantis, *Incomplete Contracts*].

217. See Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 825–26; Scott & Triantis, *Incomplete Contracts*, *supra* note 216, at 195–96.

218. See Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 816 n.4 & 825 n.22.

219. Other than relying on self-serving testimony from the actors themselves, the best that courts can do is to infer such facts from the surrounding circumstances. See *id.* at 826.

220. See *supra* notes 147–54 and accompanying text.

221. See Scott & Triantis, *Incomplete Contracts*, *supra* note 216, at 197–98.

circumstance of “merely reviewing the parties’ design” would not rescue the court from the institutional difficulties.²²² The authors suggest further that, because the judicial task under a civil burden of “preponderance of the evidence” is merely to decide which of the two parties’ proposed solutions is the more plausible, the court’s task is manageable.²²³ If the authors were correct in assuming that the civil burden transforms a vague legal standard into something more specific, their conclusion would be warranted. But their assumption in this regard is deeply flawed. The civil burden does not provide a more specific standard by which to judge the fairness of a contract or a contract term; instead, it provides a cognitive heuristic that is believed to help triers of fact decide close cases. Regardless of the applicable burden of persuasion—even if it were “clear and convincing evidence”—the applicable legal standard would remain one of fairness under all the circumstances and the polycentricity of the issue for decision would not be diminished.²²⁴

Why are courts willing and able to review the content of contractual agreements based on an unconscionability standard? Because that substantive standard does reduce, as the preponderance-of-evidence heuristic does not, the many centeredness of the underlying issue for judicial decision. Under the unconscionability standard, a court must determine whether, on an essentially linear rather than a polycentric axis, the ratio of benefits and burdens allocated between the parties is so one-sided as to be outrageous.²²⁵ These same institutional considerations apply to the other content-related grounds for setting aside contractual agreements, such as contracts that are against public policy or illegal.²²⁶ In these last-referenced contexts where courts are willing to review the content of bargained-for deals, the relatively more focused legal standards identify a limited set of independent factual elements upon which to focus judicial attention, thereby allowing the litigants to participate meaningfully in de-

222. See James A. Henderson, Jr., *Judicial Review of Manufacturers’ Conscious Design Choices: The Limits of Adjudication*, 73 COLUM. L. REV. 1531, 1533–34 (1973).

223. See Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 827; Scott & Triantis, *Incomplete Contracts*, *supra* note 216, at 198.

224. See generally Emily Sherwin, *Clear and Convincing Evidence of Testamentary Intent: The Search for a Compromise Between Formality and Adjudicative Justice*, 34 CONN. L. REV. 453 (2002) (examining the clear and convincing evidence standard in the context of the Uniform Probate Code). Even if a clear and convincing burden were to apply, the litigants would be left to argue their cases under the vague legal standard of fairness under the circumstances, and they could not take the court through a linear chain of logic to a favorable conclusion.

225. Regarding the linearity of the “How much ratio imbalance is too much?” issue, see James A. Henderson, Jr., *Design Defect Litigation Revisited*, 61 CORNELL L. REV. 541, 546 (1976) (“How much warning is enough?” is linear; “How much product safety is enough?” is polycentric). Regarding the outrageousness standard, see HILLMAN, *supra* note 8, at 216–17 (“In general, cases finding what amounts to substantive unconscionability are pretty outrageous.”). Thus, the unconscionability standard renders the litigants’ arguments focused and linear, as an adjustment in the burden of persuasion does not. Cf. Fuller, *supra* note 48, at 394–404 (describing polycentric adjudication); *supra* note 161 and accompanying text (noting that the legal standards that trigger judicial intervention in public facility reform litigation focus judicial inquiry and do not present polycentric issues).

226. HILLMAN, *supra* note 8, at 208–12.

termining at trial whether or not to enforce the terms of their agreement.²²⁷

This pattern of courts avoiding the application of vague legal standards to solve polycentric problems is also evident in connection with judicial reactions to contract terms. Some scholars favor the use of vague contract language when such usage saves more in reduced front-end (time of contracting) costs than it generates in increased back-end (time of trial) costs.²²⁸ In this connection the authors of the just-critiqued incomplete contracts article assert that “courts seem to actively interpret and enforce vague terms.”²²⁹ On closer examination of one of their leading examples—“best efforts” clauses—the authors’ assertion is less telling than it first appears. They admit that the parties drafting a contract must “make some effort to describe their obligations” and that courts “will decline enforcement on account of excessive vagueness.”²³⁰ Moreover, in the decisions on which the authors rely, courts have construed “best efforts” in ways that significantly reduce the polycentricity of the issue presented for decision.²³¹ For example, none of the holdings condone an all-things-considered inquiry into the reasonableness of the defendant’s efforts to comply. In actuality, consistent with this Article’s analysis, courts interpret contract language more narrowly and refuse the parties’ invitations to rely on vague reasonableness standards.²³²

227. Illegality obviously involves relatively specific standards in criminal statutes and regulations. The public policy cases have developed over time into specified categories. See 2 FARNSWORTH, *supra* note 184, at 9 (“Most of these policies are now firmly rooted in precedents accumulated over centuries.”).

228. See Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 835 & nn.49–50; Scott & Triantis, *Incomplete Contracts*, *supra* note 216, at 197–98.

229. Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 835.

230. *Id.* at 836.

231. Some courts, rather than wrestle with the polycentric task of determining whether an actor has expended best efforts under all the extenuating circumstances, accept minimal good-faith attempts to comply. See, e.g., *Triple-A Baseball Club Assocs. v. Ne. Baseball, Inc.*, 832 F.2d 214, 225 (1st Cir. 1987) (“We have been unable to find any case in which a court found . . . that a party acted in good faith but did not use its best efforts.”); see also Alan Schwartz, *Relational Contracts in the Courts: An Analysis of Incomplete Agreements and Judicial Strategies*, 21 J. LEGAL STUD. 217, 302 (1992) (stating that courts interpret “best efforts” clauses to allow defendants “to supply any quantity of effort above zero”). Other courts, while ostensibly requiring more than good faith, apply the standard in ways that help to focus the trial court’s task. See *Coady Corp. v. Toyota Motor Distribs.*, 361 F.3d 50, 56 (1st Cir. 2004) (describing the test as whether conduct conformed to “reasonable business practices” or was “egregious”); *Kroboth v. Brent*, 625 N.Y.S.2d 748, 749 (N.Y. App. Div. 1995) (explaining the issue for the trier of fact as whether plaintiffs had pursued *all* reasonable methods of obtaining favorable results); *Petroleum Mktg. Corp. v. Metro. Petroleum Corp.*, 151 A.2d 616, 619 (Pa. 1959) (describing the standard of due diligence judged on a linear scale of how much defendant accomplished in sales as a percentage of what might possibly have been accomplished).

232. The authors do not advise deal makers to rely entirely on vague terms, but suggest that such terms should be combined with more specific guides to focus the subsequent litigation. See Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 851–56.

Contract's regulative penumbra also calls for judicial review of the conduct of deal makers (rather than simply the contents of deals). Proscribed behaviors such as fraud²³³ and duress²³⁴ prevent agreements from constituting meaningful solutions to at least one party's problems. But this substantive explanation does not add very much to traditional bargain theory analyses of contract law. Once again, the problem-solving perspective makes a unique contribution with regard to the form, rather than the substance, of the relevant regulative standards. Thus, without exception, the rules comprising contract's regulative penumbra are sufficiently specific to protect courts from being required to solve polycentric problems. Case law identifies elements of fraud, for example, quite specifically—even the rules governing nondisclosure of material facts impose circumscribed and limited duties, triggered by specifically defined events.²³⁵ In similar fashion, the rules governing unlawful duress do not justify nonenforcement based merely on a showing that one party pressured the other to agree to a one-sided deal. Instead, the rules require proof of specifically predetermined circumstances that reveal the deal making to have been tantamount to extortion.²³⁶

2. *Judicial Efforts to Make Sense of, and Sometimes to Salvage, Solutions Embodied in Bargained-for Agreements*

When a U.S. court concludes that a bargained-for agreement constitutes an attempt by the parties to solve their problems and that regulative norms are satisfied, initial judicial skepticism largely evaporates and the court engages in supportive efforts to implement the parties' solutions. Thus, courts not only interpret and implement deals purposefully within their institutional limits, but they also help deal makers to cope with exigencies including breaches that occur in problematic phases of performance, mutual mistakes that relate to material facts, impossibility or impracticability of performance, and external circumstances that threaten to defeat the underlying purpose of the deal. Responding to these exigencies may lead courts to fill gaps in the language and, in extreme cases, to reform the contracts themselves. Not surprisingly, the trick is for courts to accomplish those deal-supportive objectives without seriously exceeding their institutional capabilities.

The problem-solving perspective helps to explain the methodology by which courts make sense of contract language. A major judicial concern is to ensure the trustworthiness of proof from outside sources re-

233. See HILLMAN, *supra* note 8, at 200–03.

234. See *id.* at 192–97.

235. See *id.* at 202–03; see also Melvin A. Eisenberg, *Disclosure in Contract Law*, 91 CALIF. L. REV. 1645, 1656 (2003) (explaining that the development of the broad “Disclosure Principle” should not be applied directly to individual cases but should be used in “the formulation of a more specific, multi-stranded rule concerning when disclosure is or is not required in given classes of cases”).

236. HILLMAN, *supra* note 8, at 195.

garding what deal makers intended. Thus, when the parties have reduced a deal to writing, the parol evidence rule prevents courts from relying on extrinsic evidence to contradict clear contract language.²³⁷ Because such proof relates to issues of historical fact—what the parties actually intended—it does not directly present the court with polycentric problems. But once an inquiry into the parties' intentions is undertaken, the temptation is to replace that inquiry with the polycentric question of what reasonable or fair-minded persons would have intended. It follows that even when parts of the contract are vague or ambiguous and thus invite inquiry into subjective intent, courts limit themselves to specific evidence such as trade custom and usage, prior courses of dealing between the parties, and other portions of the contract itself.²³⁸ And a proverbial host of interpretative rules and maxims, many with fancy Latin names, help focus judicial efforts to interpret deals.²³⁹ Besides being trustworthy, these external sources also provide inputs that are specific enough to avoid the court being forced to engage excessively in unfocused, open-ended speculations regarding what reasonable persons would likely have intended under the circumstances.

Courts are also called upon to deal with the disruptive fallout effects of unanticipated exigencies. Parties' nonperformance is something that deal makers often address explicitly—for example, this Article earlier acknowledged the enforceability of liquidated damages provisions when they appear to serve problem-solving objectives.²⁴⁰ Recent scholarship explores more broadly the efficiency implications of deal makers addressing the possibility of breach *ex ante*, in the deals themselves, rather than relying entirely on judicial regulation *ex post*.²⁴¹ When courts address the fallout effects of material breach, they typically confront one or a combination of four major issues: (1) how to interpret terms in the contract explicitly relating to the possibility of breach; (2) whether to excuse nonperformance on the basis of an unanticipated, purpose-defeating exigency; (3) how to apply regulative rules governing the duties of mitigation of breach-related losses; and (4) whether and how to give legal effect to modifications and renegotiations that anticipate, or follow, a material breach.

Regarding the first of these issues, courts will give effect, subject to normative constraints, to specific *ex ante* directions from the parties re-

237. See 2 FARNSWORTH, *supra* note 184, at 219–67; HILLMAN, *supra* note 8, at 231–42.

238. See 2 FARNSWORTH, *supra* note 184, at 306–36; HILLMAN, *supra* note 8, at 244–49; Richard E. Speidel, *The New Spirit of Contract*, 2 J.L. & COM. 193, 199–200 (1982). These sorts of evidence offer courts more specific standards than “reasonableness under the circumstances.”

239. See 2 FARNSWORTH, *supra* note 184, at 292–306; HILLMAN, *supra* note 8, at 249–50; Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 848–51.

240. See *supra* notes 193–98 and accompanying text.

241. See, e.g., Schwartz, *supra* note 231; Scott & Triantis, *Anticipating Litigation*, *supra* note 216; Scott & Triantis, *Incomplete Contracts*, *supra* note 216.

garding what should happen in the event of material breach.²⁴² The interesting question, considered earlier, is whether courts will, *ex post*, apply vague standards of reasonableness contained in deals in trying to solve coordination problems that the parties self-consciously chose not to solve *ex ante*.²⁴³ In connection with the traditional grounds upon which courts excuse nonperformance—mutual mistake,²⁴⁴ impossibility,²⁴⁵ impracticability,²⁴⁶ and frustration of purpose²⁴⁷—enforcement of the deals as written would not serve to implement the parties' solutions to their preexisting problems. But traditional bargain theory explains that much. As with the earlier analysis of constraints on judicial review of the fairness of deals, the problem-solving perspective makes a unique contribution in connection with the formal structure, not simply the substantive content, of the rules governing excuse for nonperformance. For starters, these regulations consist of relatively specific rules rather than open-textured standards. For example, a respected commentator has observed that, to warrant relief, "courts have insisted that the frustration [of purpose] be nearly total."²⁴⁸ And to obtain relief based on impracticability of performance, the aggrieved party must demonstrate that an unforeseen contingency, the nonoccurrence of which was manifestly a basic assumption on which the deal rested, has altered the essential nature of the performance.²⁴⁹ Decisional law recognizes only a handful of remarkable examples of impracticability, including war, embargo, and significant market collapse due to a disastrous exigency.²⁵⁰

Consistent with all that has been said previously, the general principle requiring parties injured by a breach to mitigate breach-related losses²⁵¹ does not give courts a roving commission to apply vague reasonableness norms to postbreach behavior. To the contrary, as with excuses

242. See Scott & Triantis, *Anticipating Litigation*, *supra* note 216, at 856 (discussing and affirming the efficacy of "harnessing litigation" by contractual design); see also 2 FARNSWORTH, *supra* note 184, at 673–81.

243. See *supra* note 232 and accompanying text.

244. See 2 FARNSWORTH, *supra* note 184, at 589–614; HILLMAN, *supra* note 8, at 296–305; Eisenberg, *supra* note 27.

245. See 2 FARNSWORTH, *supra* note 184, at 624–32; HILLMAN, *supra* note 8, at 305–10.

246. See 2 FARNSWORTH, *supra* note 184, at 632–50; HILLMAN, *supra* note 8, at 310–14.

247. See 2 FARNSWORTH, *supra* note 184, at 650–60; HILLMAN, *supra* note 8, at 314–15.

248. See 2 FARNSWORTH, *supra* note 184, at 653; see also Robert A. Hillman, *An Analysis of the Cessation of Contractual Relations*, 68 CORNELL L. REV. 617, 652 nn.219–20 (1983) (giving various examples from cases).

249. See *supra* note 246 and accompanying text.

250. See U.C.C. § 2-615 cmt. 4 (2004).

Increased cost alone does not excuse performance unless the rise in cost is due to some unforeseen contingency which alters the essential nature of the performance. Neither is a rise or a collapse in the market in itself a justification, for that is exactly the type of business risk which business contracts made at fixed prices are intended to cover. But a severe shortage of raw materials or of supplies due to a contingency such as war, embargo, local crop failure, unforeseen shutdown of major sources of supply or the like, which either causes a marked increase in cost or altogether prevents the seller from securing supplies necessary to his performance, is within the contemplation of this section.

Id.

251. See 3 FARNSWORTH, *supra* note 175, at 229–48; HILLMAN, *supra* note 8, at 144–46.

for nonperformance, the rules governing mitigation are formal and specific. A telltale in this regard is the extent to which the subject is infused with specialized jargon. No sooner have the concepts of “cover contracts”²⁵² and “lost volume contractors”²⁵³ been mastered than one confronts the “foisting principle”²⁵⁴ and the “new business rule.”²⁵⁵ Substantively, mitigation is consistent with the purposive, problem-solving perspective developed in this Article—breach of contract creates a new set of problems that the regulative rules governing mitigation help to solve. But an important, hitherto untold part of the mitigation story concerns the institutional limits on courts as problem solvers.

When deal makers fail *ex ante* to address the possibility of a disruptive eventuality that threatens their underlying objectives *ex post*, the parties may respond by modifying or renegotiating their agreement. If one side or the other fails to add new consideration—for example, if the renegotiated deal simply increases the price that the seller receives for the same goods and services as before—a court may invoke the preexisting duty rule and refuse to enforce.²⁵⁶ In that event, the difficulty is not formal, but substantive. Thus, even if the issues are focused and adjudicable, courts have traditionally been concerned that honoring such renegotiated arrangements may encourage extortionary tactics.²⁵⁷ A trend is under way for courts to overcome such concerns and to enforce contract modifications and renegotiations.²⁵⁸ The problem-solving perspective explains this tendency better than do other rationales, including the bargain theory. As with the earlier-described trend favoring new methods of contract formation,²⁵⁹ courts are willing to support *ex post* adjustments when the parties can demonstrate (largely through objective, circumstantial evidence) that renegotiation represents a flexible, middle-ground solution between full performance and no performance at all.

The problem-solving perspective also helps to explain judicial responses when parties ask courts to fill minor gaps in contract language.²⁶⁰ Judicial willingness to grant such relief is primarily a function of the judge's perception that doing so will assist the deal makers' efforts to participate in a problem-solving, solution-implementing enterprise.²⁶¹ Thus, courts are more likely to supply missing terms when the parties are engaged in ongoing, future-oriented interactions necessarily requiring

252. See HILLMAN, *supra* note 8, at 147.

253. *Id.*

254. *Id.* at 148

255. *Id.* at 148–49.

256. See *supra* note 179 and accompanying text.

257. See *supra* note 204.

258. See *supra* note 179 and accompanying text.

259. See *supra* notes 199–202 and accompanying text.

260. See 2 FARNSWORTH, *supra* note 184, at 346–81; HILLMAN, *supra* note 8, at 253–58.

261. See HILLMAN, *supra* note 8, at 244, 254–55.

flexibility in responding to unforeseen eventualities.²⁶² And when courts do fill in terms, they rely on specific standards such as trade custom and prior dealings, thereby reducing the polycentricity of the issues presented.²⁶³ As long as courts remain—even if barely—within the limits of their institutional capabilities, judicial gap filling is hardly surprising. After all, from this Article’s perspective, one would expect courts to make it marginally easier, rather than more difficult, for the parties to make effective use of contract’s constitutive core.

It remains to consider a possibility about which contracts scholars sharply disagree: whether courts are ever justified in rewriting deals. Although case law and commentary reject the possibility,²⁶⁴ a few courts²⁶⁵ and several scholars²⁶⁶ support it. Substantively, it can be argued that altering clear terms so that agreements will fulfill their problem-solving objectives enhances the usefulness of contract’s constitutive core. At the same time, it can be argued formally that making such changes based primarily on open-ended principles of fairness presents polycentric problems that are beyond the institutional capability of courts to accomplish. To be sure, as observed previously, courts recognize a number of grounds for excusing nonperformance, filling minor gaps in language, and allowing the parties to modify or renegotiate. But in all of those contexts, courts rely on relatively specific legal standards.

This Article’s analysis of courts’ limited problem-solving capabilities helps to explain why U.S. courts have refused to alter critical terms in contracts. Quite simply, such an endeavor, however well-intentioned substantively, would require courts to evaluate the reasonableness of bargained-for agreements to an even greater extent than when disadvantaged parties ask courts to nullify contracts based on substantive unfairness. As explained in the earlier discussion of fairness-based judicial review of the content of contracts, the many-centeredness of contract reformation would place it beyond the traditional capabilities of courts institutionally to accomplish.²⁶⁷ Addressing judicial capability, one supporter of limited contract reformation argues that courts decide complex

262. See Clayton P. Gillette, *Commercial Rationality and the Duty to Adjust Long-Term Contracts*, 69 MINN. L. REV. 521 (1985); Robert A. Hillman, *Court Adjustment of Long-Term Contracts: An Analysis Under Modern Contract Law*, 1987 DUKE L.J. 1; Richard E. Speidel, *Court-Imposed Price Adjustments Under Long-Term Supply Contracts*, 76 NW. U. L. REV. 369 (1981).

263. See *supra* note 238 and accompanying text.

264. See, e.g., *Terwilliger v. Terwilliger*, 206 F.3d 240, 245 (2d Cir. 2000); see also authorities cited in 2 FARNSWORTH, *supra* note 184, at 594 n.10; authorities cited in John P. Dawson, *Judicial Revision of Frustrated Contracts: The United States*, 64 B.U. L. REV. 1, 23–26 nn.54–61 (1984); Hillman, *supra* note 262, at 2 n.5.

265. See, e.g., *Aluminum Co. of Am. v. Essex Grp., Inc.*, 499 F. Supp. 53 (W.D. Pa. 1980) (leading case); *McGinnis v. Cayton*, 312 S.E.2d 765, 769–70 (W. Va. 1984) (dictum).

266. See Hillman, *supra* note 262, at 33; Speidel, *supra* note 238, at 206–09.

267. See *supra* notes 147–54 and accompanying text. The legitimacy of judicial reformation would be determined by extrinsic norms that constrain judges from exercising their intrinsic problem-solving capabilities.

issues in other contexts such as securities, patent, and antitrust cases,²⁶⁸ and that judges can always rely on special masters, magistrates, and court-appointed experts for assistance.²⁶⁹ Both of these arguments miss the mark. While it is true that the areas the author references are technically complex, that sort of complexity is not necessarily the same as many-centeredness. In those other legal areas courts apply specific rules of decision that render claims adjudicable.²⁷⁰ Regarding the availability of special masters and court-appointed experts, the powers of such court officers are traditionally limited to assisting trial judges with procedural matters and with out-of-court settlements, as explained earlier.²⁷¹ Even were a trial judge to assign the polycentric task of contract reformation to a special master, the litigants would enjoy no greater opportunity to participate meaningfully in the master's decision than if the judge had retained the task.²⁷²

Contracts scholars seem generally to share these misunderstandings regarding the problem-solving capabilities of courts. It will be recalled from an earlier discussion of judicial review of the fairness of bargained-for deals that a pair of coauthors writing about incomplete contracts made similar errors in concluding that courts are able to perform the problem-solving tasks the authors are ready to assign to them.²⁷³ This failure to appreciate the insights provided by the problem-solving perspective has led some contracts writers to chafe under what they view as unjustified constraints on judicial power and authority. They have gotten half of the story right—the substantive half that reflects the problem-solving, solution-implementing potential of contract's constitutive core. But they do not (yet) grasp the second half—the half concerned with institutional structures and limits—that allows for a more complete understanding of contract law.

268. See Hillman, *supra* note 262, at 25–26.

269. *Id.* at 26.

270. Securities law is composed of highly specific rules. See generally Lawrence A. Cunningham, *A Prescription to Retire the Rhetoric of "Principles-Based Systems" in Corporate Law, Securities Regulation, and Accounting*, 60 VAND. L. REV. 1411, 1446–53 (2007). Antitrust law, even though it is mostly judge made, has numerous rules and standards that enable the parties to build their claims through the process of adjudication. See generally Mark A. Lemley & Christopher R. Leslie, *Categorical Analysis in Antitrust Jurisprudence*, 93 IOWA L. REV. 1207, 1212–25 (2008). Patent law, mostly judge made too, is far from lacking rules and standards. See DAN L. BURK & MARK A. LEMLEY, *THE PATENT CRISIS AND HOW THE COURTS CAN SOLVE IT* 104–07 (2009) (discussing “patentability criteria,” “legal standards,” and “industry-specific standards”). It is true that some commentators have argued that patent law is too unpredictable. See, e.g., Craig Allen Nard, *Legal Forms and the Common Law of Patents*, 90 B.U. L. REV. 51, 76 nn.122–23 (2010). The fact of the dispute precisely makes the point: lack of specificity in legal rules and standards is an anomaly.

271. See *supra* note 159 and accompanying text.

272. See *supra* notes 79–82 and accompanying text.

273. See *supra* note 216 and accompanying text.

VI. CONCLUSION

This Article argues that problem solving, both private and public, is the primary focus of U.S. law generally and contract law in particular and that many different decision makers, including individuals, small groups of collaborators, deal-making adversaries, and governmental institutions, rely on a variety of processes in reaching and implementing solutions. The Article uses this problem-solving perspective to explain aspects of U.S. contract law that traditional bargain theories cannot explain adequately, if at all. In developing its central thesis, the analysis distinguishes between contract's constitutive core and its regulative penumbra. The core empowers private actors to reach and implement solutions to private problems. The penumbra consists of normative regulations that courts apply both to deal making and to deals to solve public coordination problems.

For courts to enforce promises and deals, plaintiffs must demonstrate an effort to use contract's core to solve problems. Gift promises do not satisfy this condition, nor do gambling contracts or penalty clauses. Once assured that an arrangement meets this problem-solving criterion, courts lend assistance, sometimes enthusiastically, in interpreting, implementing, and salvaging deals struck by the parties. At the same time, contract's regulative penumbra reins in excessive judicial enthusiasm in these regards. Thus, when vague, open-ended reasonableness norms threaten to become the primary legal standards for decision, concerns for the limits of adjudication as a problem-solving process steer courts in directions that some contracts scholars believe to be unnecessarily cautious and constrained. Instead of judging the moral rightness of these judicial responses, this Article contents itself with explaining why contract law plays out the way it does.

By developing the central role of problem solving in contract law, hopefully this Article's analysis will prove useful in helping to explain other areas of U.S. law, both private and public. The author is working on a paper using the problem-solving perspective to analyze U.S. tort law;²⁷⁴ similar projects focusing on property and civil procedure may follow. Other applications might include a comparative analysis: do foreign legal systems share U.S. law's strong commitment to problem solving? This author believes that they do not—at least not to the same extent—and it would be interesting to compare the relevant data. In any event, U.S. contract law is a good place to begin to develop a problem-solving perspective on U.S. law.

274. The author has worked on the limits of adjudication aspects of tort for several decades. See, e.g., Henderson, *Expanding the Negligence Concept*, *supra* note 151; Henderson, *supra* note 222; Henderson, *Lawlessness*, *supra* note 151. Only recently has the author begun to appreciate the significant constitutive dimensions of U.S. tort law, inspired in part by the work of civil recourse theorists. See generally Zipursky, *Rights, Wrongs, and Recourse*, *supra* note 11.