Practical insight is like perceiving in the sense that it is non-inferential, non-deductive; it is, centrally, the ability to recognize, acknowledge, respond to, pick out certain salient features of a complex situation.¹

I. INTRODUCTION

This Symposium commemorates the publication of Karl Llewellyn’s assault on the canons of statutory interpretation. This Article seeks to situate Llewellyn’s view of statutory interpretation within the ongoing debate between advocates of practical reason and formalism.² Many critics of practical reason question its compatibility with the rule of law. If we cannot precisely describe the operation of practical reason, can we have any confidence in its ability to guide judicial decisions? Or, on the contrary, does formalism provide a greater degree of

². These terms are defined below, at text accompanying notes 26 to 40.

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democratic accountability, certainty, stability, and predictability than practical reason? These questions are the primary concern of this Article.

Part I lays the groundwork by describing Llewellyn's views and their relationship to current writing on practical reason. It then sketches the formalist counterattack against practical reason. Formalists argue that a jurisprudence of rules—to be interpreted primarily according to their “plain meaning”—provides legal certainty, predictability, and objectivity. Part II critiques formalist interpretation, arguing that formalism cannot deliver on its promise to provide greater implementation of these important “rule of law” virtues. Formalist methods of statutory interpretation neither eliminate the need for practical reason nor ease communication between legislatures and citizens. Thus, formalist methods cannot achieve the formalists’ own normative goals. Part II then turns to the criticism that practical reason is incoherent, subjective, and unpredictable—an “appeal to an unverifiable and even unknowable faculty.” Cognitive psychologists have shown, however, that experts rely on a variety of cognitive skills (such as Llewellyn's “situation sense”) to solve problems rather than simply executing a battery of formal rules. We have confidence in the operation of these cognitive skills in other contexts, and they are presumably also reliable enough to provide legal predictability and stability.

Formalist interpretation, ultimately, relies on a faith in the raw power of the word to communicate, as if the perplexities of statutory interpretation were due merely to legal sophistry. Unfortunately, however, the need to understand context and purpose is inherent in lan-


4. David E. Van Zandt, An Alternative Theory of Practical Reason In Judicial Decisions, 65 Tulane L. Rev. 775, 791 (1991). See also Nancy Levit, Practically Unreasonable: A Critique of Practical Reason (book review), 85 Nw. U. L. Rev. 484, 500, 517-18 (1991). Van Zandt does agree that one form of practical reason, or commonsense reasoning as he calls it, is involved in some judicial decisions and is utilized in making difficult normative judgments. He considers common-sense reasoning to be a reversion from technical reasoning to “formative contexts” shared generally in society. See David E. Van Zandt, Commonsense Reasoning, Social Change, and the Law, 81 Nw. U. L. Rev. 894, 912-38 (1987). Van Zandt's analysis usefully identifies one significant aspect of practical reason. He seemingly goes astray, however, in assuming that practical reason involves a discrete domain of justifications for actions, rather than being a more general form of decision-making. The differences between our approaches can be seen in connection with the studies of expertise discussed in Part III of this article. One of the studies involves interpretation of X-rays by radiologists. Unless a radiologist invokes lay information, which is likely to be a rare occurrence, Van Zandt would not view the radiologist as utilizing practical reason. Yet, expert reasoning by radiologists closely resembles Llewellyn's “situation sense,” which I view as one form of practical reasoning. See notes 11-25 and accompanying text. In short, Van Zandt attempts to dichotomize between practical reason and technical reasoning, and seems to have an unduly formalist concept of how experts solve problems when they do not invoke “common sense.”
guage itself; it is not merely an invention of post-modernism. In this sense, reliance on practical reason is not so much desirable as necessary.

II. PRACTICAL REASON VERSUS FORMALISM IN STATUTORY INTERPRETATION

A. Llewellyn and Practical Reason

Today, Llewellyn’s article on statutory interpretation is best known for his “fiendishly deconstructive” attack on the canons. Although Llewellyn’s list of “dueling canons” has become the most famous portion of the article, that list is only an appendix to his analysis of statutory interpretation. That analysis itself follows a lengthy introduction about common-law judging.

His introductory discussion shows that Llewellyn was not an advocate of ad hoc decisionmaking. Instead, he spoke of the desirability of adopting a “solving rule” to deal with the “type of situation” before the court rather than the “particular controversy between particular litigants.” Moreover, he clearly did not accept the view that judges decide cases purely on the basis of their view of public policy. Instead, he stressed the “continuing duty of the courts to make sense, under and within the law.” Thus, Llewellyn by no means thought that the court’s role is simply to announce what it believes to be the just outcome on the facts of a particular case.

Llewellyn’s introductory discussion of the common law also sheds light on his objections to the canons. He discussed the various ways to deal with precedent and reported having seen a good court use twenty-six such methods on a single day. He then added:

What is important is that all 26 ways (plus a dozen others which happened not to be in use that day) are correct. They represent not “evasion,” but sound use, application and development of precedent. They represent not “departure from,” but sound continuation of, our system of precedent as it has come down to us. The major defect in that system is a mistaken idea which many lawyers have about it—to wit, the idea that the cases themselves and in themselves, plus the correct rules on how to handle cases, provide one single correct answer to a disputed issue of law.

5. It is for this reason, indeed, that computer translation of even simple texts has proved so difficult, because computers lack this crucial contextual knowledge. See, for example, Edwina L. Risland, Artificial Intelligence and Law: Stepping Stones to a Model of Legal Reasoning, 99 Yale L. J. 1957, 1961 (1990).
8. Id. at 399.
9. Id. at 396.
The parallel misconception about statutes is that the statutory texts themselves provide one “correct” answer to a disputed issue of law. Thus, Llewellyn’s quarrel with the canons, like his objection to the mechanical use of precedent, is based on their relationship with formalism.

Although Llewellyn sketched his alternative to formalism briefly in the canons article, he discussed it more fully elsewhere in his writings. According to Llewellyn, in the early nineteenth century, American judges exhibited a vitality, honesty, and creativity that faded by the end of the century.\(^{10}\) Llewellyn identified a number of traits of these early American judges, which he referred to as the Grand Style of judging.

Perhaps the most important of these traits was what Llewellyn called “situation sense”: the ability to take a complex set of facts, identify the key relevant attributes, and understand their societal significance.\(^{11}\) Having done this, the judge could approach the case as an example of a broader situation, giving the peculiar facts of the case some weight but assessing them in regard to the broader implications of the case.\(^{12}\) Using situation sense to put the particular facts of the case into context, Llewellyn said, was “a formula for avoiding both ‘Hard cases make bad law’ and any splintering of ‘the law’ into narrow jack-straw-decisions which offer to neither the bar nor tomorrow’s court any helpful pattern for guidance.”\(^{13}\)

His advice to judges, then, was simple:

As you size up the facts, try to look first for a significant life-problem-situation into which they comfortably fit, and only then let the particular equities begin to register; so that when the particular equities do begin to bite, their bite is already tempered by the quest for and feel for an appropriate rule that flows from and fits into the significant situation-type.\(^{14}\)

After typifying the case appropriately, the judge could then decide the case, not by deductive logic, but by a less structured problem-solving process involving common sense, respect for precedent,\(^ {15}\) and an appreciation of society’s needs.\(^ {16}\) This process of decision, while not an exercise in formal logic, involved the use of reason:

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14. Id.
16. See, for example, Llewellyn, Common Law at 401-03, 422-23 (cited in note 10).
"Reason" in law work always implies more than reasoning; it implies also the use of reason in choosing premises, which have a reason, and it implies in addition the use of reason in judging the reasonableness of any outcome or any goal. "Reason" is thus the main guide and measure by which "experience" works its way into legal results, whereas "logic," in legal work, tends powerfully to take authoritative premises as given and to reason simply thence.17

For some, this might seem an invitation to judicial subjectivity, but Llewellyn had confidence in the power of craft and tradition to guide the judge's decision.18

Immediately after his discussion of the common law in the canons article, Llewellyn added: "What we need to see now is that all of this is paralleled, in regard to statutes."19 More specifically, he listed several factors that the court should consider when construing a statute:

1. The court's sense of the situation20
2. The overall coherence of the legal system21
3. The presumed purpose of the statute22
4. The legislative history, at least if the statute is recent23
5. The statutory language (a factor of particular importance).24

Overall, he said, the judge's search (not always attainable) is for "[t]he good sense of the situation and a simple construction of the available language to achieve that sense, by tenable means, out of the statutory language."25

Llewellyn's jurisprudence is closely allied with a contemporary school of thought. An impressive array of legal commentary26 has sug-

17. Llewellyn, Jurisprudence at 180 (cited in note 13).
18. This is the basic thesis of Llewellyn's The Common Law Tradition. See Llewellyn, Common Law at 18-61, 200-35 (cited in note 10).
20. Id. at 398.
21. Id. at 399. More specifically, Llewellyn states:
But a court must strive to make sense as a whole out of our law as a whole. It must, to use Frank's figure, take the music of any statute as written by the legislature; it must take the text of the play as written by the legislature. But there are many ways to play that music, to play that play, and a court's duty is to play it well, and in harmony with the other music of the legal system.
22. Id. at 400.
23. Id.
24. Id.
25. Id. at 401.
gested a movement away from grand theory toward a perspective variously called "intuitionism,"27 "prudence,"28 and "practical reason."29 Several of these commentaries are connected to the emerging interest in republicanism30 and feminist legal theory,31 others to reappraisals of important figures in American academic legal analysis,32 and still others to more general inquiries about legal reasoning.33 All of them, however, are linked to the familiar Anglo-American legal method described by Llewellyn. As Frank Michelman explained it, practical reason seems always to involve "a combination of something general with something specific," so that "[j]udgment mediates between the general standard and the specific case." To apply the standard, we must interpret it, Michelman says, and thereby reconstruct "the standard's meaning and rightness." He adds that "[t]his process, in which the meaning of the rule emerges, develops, and changes in the course of applying it to cases is one that every common law practitioner will immediately recognize."34

As both Michelman and Llewellyn indicated, practical reason does


28. See Kronman, 94 Yale L. J. at 1569, passim (cited in note 26).

29. See Michelman, 100 Harv. L. Rev. at 23, 28-30 (cited in note 26); Wellman, 57 U. Colo. L. Rev. at 45, 87-109 (cited in note 26).

30. See Michelman, 100 Harv. L. Rev. 4 (cited in note 26); Sherry, 72 Va. L. Rev. 543 (cited in note 26).


32. See generally Kronman, 94 Yale L. J. 1567 (cited in note 26) (analyzing the work of Alexander Bickel); Teachout, 70 Minn. L. Rev. 1073 (cited in note 26) (analyzing the work of Lon Fuller).

33. See Burton, 62 S. Cal. L. Rev. 747 (cited in note 26); Wellman, 57 U. Colo. L. Rev. 45 (cited in note 26).

34. Michelman, 100 Harv. L. Rev. at 28-29 (cited in note 26). See also Burton, 62 S. Cal. L. Rev. 747 (cited in note 26); Kronman, 94 Yale L. J. at 1605-06 (cited in note 26).
not mean—as is sometimes mistakenly thought—an embrace of ad hoc decisionmaking. Rather, it means a rejection of the view that rules and precedents in and of themselves dictate outcomes. In common-law cases, Llewellyn said, it is the “business of the courts to use the precedents constantly to make the law always a little better, to correct old mistakes, to recorrect mistaken or ill-advised attempts at correction—but always within limits severely set not only by the precedents, but equally by the traditions of right conduct in judicial office.”

Practical reason, unfortunately, is easier to invoke than to define. Advocates of practical reason are a diverse group, both politically and intellectually. Like many groups, they are most united by what they reject—the primary (or even exclusive) reliance on deduction as a method of analysis. At the level of legal theory, practical reason means a rejection of foundationalism, the view that normative conclusions can be deduced from a single unifying value or principle. At the level of judicial practice, practical reason rejects legal formalism, the view that the proper decision in a case can be deduced from a pre-existing set of rules. Both of these rejected techniques rely heavily on deductive logic (i.e., the syllogism) as the primary method of analysis. Both endorse a procedure in which a court first explicitly identifies the applicable abstract rule or principle for a class of situations and then determines whether a particular situation belongs to the class.

Formalism and foundationalism are not inherently linked. A person who is a formalist but not a foundationalist might support practical reasoning at the normative level—that is, she might believe that the best set of rules cannot be deduced from any single value—yet still believe that the best method of judicial application of those rules is deductive. For example, a nonfoundationalist formalist might think that judges lack the intellectual training or capacity to engage effectively in practical reason; therefore, the legal system will work better if judges simply

35. Llewellyn, 3 Vand. L. Rev. at 399 (cited in note 7). Or, as Kronman puts it, any institution “will always require, at the point of its actual application to human affairs, a tolerance for compromise and the ability to work, by means of a practical wisdom irreducible to rules, toward greater coherence and overall good sense.” Kronman, 94 Yale L. J. at 1611 (cited in note 26).
37. Joseph W. Singer, Legal Realism Now, 76 Cal. L. Rev. 465, 496-501 (1988). For example, the foundationalist tax professor might reason:
   1. The proper tax base is Haig-Simons income.
   2. A rise in the value of a person’s stock portfolio is Haig-Simons income.
   3. Therefore, a rise in the value of a person’s stock portfolio should be taxed as income.
A formalist judge would resolve a tax case by reasoning:
   1. Income tax is imposed only after a realization event.
   2. A mere change in the market value of a stock portfolio is not a realization event.
   3. Therefore, a change in portfolio value is not subject to tax.
38. Kronman, of course, believes just the opposite: that judges are distinctively capable of
“follow the rules laid down.” Similarly, a foundationalist might not be a formalist. Moreover, formalism and foundationalism both represent tendencies rather than discrete categories; one judge might be considered more formalist than another, or a scholar might be considered relatively inclined toward foundationalism.

Although foundationalism and formalism are not inseparable, a common understanding of cognition often unites them. Under this view, “reason” consists of a set of logical procedures, which may be difficult to follow in a given case, but which will lead to a unique correct conclusion if correctly employed. Any other method of reaching decisions can only be described as raw intuition, prejudice, or purely arbitrary—the opposite of reason. To the extent that a person shares this view of cognition, she will lean toward both foundationalism and formalism. On the other hand, someone who believes that reason includes a broader range of cognitive activities will be inclined to think that those forms of cognition are properly used both in legal theory and in judicial decisions. Thus, the key distinguishing trait of practical reason advocates may be their view that “unreasonable” means something broader than “illogical.” That trait was, of course, characteristic of Llewellyn’s thought.

As with Llewellyn’s general jurisprudence, his views of statutory interpretation fit well with the views of current advocates of practical reason. The five factors listed earlier, for example, are quite similar to the Eskridge and Frickey “funnel of abstraction”—their own hierarchy of relevant factors in statutory interpretation. Like Llewellyn, they and

38. For an expression of concern about these points from an advocate of practical reasoning, see Philip P. Frickey, Congressional Intent, Practical Reasoning, and the Dynamic Nature of Federal Indian Law, 78 Cal. L. Rev. 1137, 1232 (1990). (Note, however, that Frickey does identify some successful judicial exhibitions of practical reasoning. See id. at 1232-37.) Acceptance of practical reason does not mean that rules are never appropriate. It is clearly possible to believe in practical reason and yet believe that lower echelon legal officials—say police officers—should not be given discretion to make complex normative judgments, but instead should be given clear-cut rules to follow. See Frederick Schauer, Rules and the Rule of Law, 14 Harv. J. L. & Pub. Pol’y 645, 684-86 (1991). Indeed, police officers themselves apparently crave “bright line” rules. See David Dolinko, Book Review, 8 Const. Comm. 560, 594 (1991) (reviewing H. Richard Uviller, Tempered Zeal: A Columbia Law Professor’s Year on the Streets with the New York City Police (Contemporary Books, 1988)).
40. A person might believe that the ideal normative principles governing some issue can be deduced from a single value, but that given the existing legal system, a judge must make nonformalist judgments. For example, someone who thinks that the sole goal of tort law should be to maximize economic efficiency might find that judicial decisions in tort law involve both complicated inductive judgments about transactions costs and complex normative judgments about how to accommodate current precedent to the efficiency goal.
41. See William N. Eskridge, Jr. and Philip P. Frickey, Statutory Interpretation as Practical Reason, 42 Stan. L. Rev. 321, 353-62 (1990). The list also corresponds with the factors actually
other advocates of practical reason argue that statutory interpretation cannot be a mechanical application of rules to statutory texts, but instead involves a complex judgment about how to best harmonize text, legislative history, statutory purpose, and contemporary public policy.

B. The Formalist Counterattack

Until about five years ago, practical reason was a somewhat heretical academic position, but it rather quickly has become a widespread intellectual movement. One measure of its success is that it has now attracted a significant body of critics. The most frequent criticisms of practical reason are that it is anti-intellectual, inconsistent with the academic mission, and at most a disquieting mood afflicting certain academics.42 These criticisms arise from practical reason's critique of foundationalism as a preferred form of legal scholarship; they are part of an internecine dispute within law schools about how to assess good legal scholarship.43 Significant (or not) as this dispute may be, the subject at hand is how judges should apply statutes, rather than how professors should write articles.44

Perhaps the next most frequent criticism of practical reason is that it relies on a purely intuitive, ad hoc method of reaching conclusions. According to two recent commentators, "[t]he theory of 'practical reason' assumes that there exists such a thing as objectively 'sensible' answers to issues, which can and should be universally acknowledged and accepted without the benefit of logical argument."45 This criticism is understandable because adherents to practical reason have not fully explained what cognitive processes in addition to deductive logic they view as legitimate.

utilized by the Supreme Court with some consistency over the past century. See Nicholas S. Zep-pos, Authority, 70 Tex. L. Rev. (forthcoming April 1992). A similar hierarchy of interpretive fac-


42. See, for example, Levit, 85 Nw. U. L. Rev. at 498 (cited in note 4) (stating that "Posner's version of practical reason relies on untutored and nonreflective techniques of reasoning, a visceral appeal to common sense as good judgment, and the unjustified supposition that values are shared by the judiciary and the populace"); Van Zandt, 65 Tulane L. Rev. at 787-91 (cited in note 4) (arguing that the criteria used by practical reason writers to test legal theory are too high, and that pragmatism "provides no basis for a satisfactory positive or normative theory").

43. See, for example, Steven D. Smith, The Pursuit of Pragmatism, 100 Yale L. J. 409 (1990) (arguing that pragmatism is not a valid approach to theorizing); Edward L. Rubin, The Concept of Law and the New Public Law Scholarship, 89 Mich. L. Rev. 732, 809-10, 827 (1991) (same).

44. Some of the points made about practical reason in this setting, however, are relevant to its suitability as a judicial methodology. For example, if practical reason is an incoherent or nonexistent methodology, it clearly will be no more usable by judges than by scholars.

On the other hand, it is clear that pragmatists believe that they are advocating something more substantial than the use of raw intuition.\textsuperscript{46} Richard Posner, for example, provides an extensive list of cognitive techniques, including analogy, induction, pattern recognition, tacit knowledge, and reliance on social experience.\textsuperscript{47} Anthony Kronman rejects intuitionism more explicitly. He admits that if good judgment requires more than deduction, it is “tempting to conclude” that good judgment instead must consist of intuition.\textsuperscript{48} But someone who has good judgment “is not someone who from time to time merely makes certain strikingly appropriate oracular pronouncements—that is what prophets and seers do—but who is able, as well, to provide a compelling framework of ideas for the decisions he or she arrives at.” These decisions are “not deducible by reason alone, but neither is their soundness entirely self-evident—something we either see or not depending on our own powers of intuitive comprehension.” In short, Kronman says, “good judgment . . . has an argumentative dimension which its equation with intuitive genius obscures.”\textsuperscript{49}

Whatever practical reason may be, it is neither deduction nor intuition. Nevertheless, pragmatists have admittedly been unclear about just what mental processes, other than deductive logic, they believe are properly used by judges. Thus, while it is overstated, there is some truth to the argument that we have been “left in the dark” about the operation of practical reason.\textsuperscript{50} This lack of clarity has opened practical reason to another criticism that is more directly relevant to statutory interpretation. If practical reason is only a vague description of how judges should decide cases, it seemingly provides no method to criticize their decisions. Nor does it provide any constraint on outcomes, but leaves judges free to impose their own social values at the expense of the legislatures. “Judges,” one commentator has remarked about practical reasoning, “will be free to perpetually trump legislators’ intent since there is no check on judicial discretion.”\textsuperscript{51}

This vision of unrestrained judicial discretion is troublesome for several reasons. With respect to statutory interpretation, it evokes fears about the erosion of democratic legitimacy.\textsuperscript{52} More generally, it arouses anxiety about the cluster of values that go under the rubric “the rule of

\textsuperscript{46} See Frickey, 78 Cal. L. Rev. at 1218-19 (cited in note 39).
\textsuperscript{48} Kronman, 54 U. Chi. L. Rev. at 848 (cited in note 38).
\textsuperscript{49} Id. at 849-50.
\textsuperscript{50} Van Zandt, 65 Tulane L. Rev. at 789-91 (cited in note 4).
\textsuperscript{51} Levit, 85 Nw. U. L. Rev. at 514 (cited in note 4).
\textsuperscript{52} This objection is discussed extensively in Frickey, 78 Cal. L. Rev. at 1212-16 (cited in note 39).
law.” A system of complete judicial discretion seems to provide little in the way of certainty, stability, or notice. Thus, we find Justice Scalia's assertion that “[a] government of laws means a government of rules.”

These concerns have led to a revival of formalism among some scholars. Formalist writers stress that law contains a good many rules, and that in many contexts, the application of those rules requires little more than a grasp of English usage. They recommend a heavier reliance on plain meaning in statutory interpretation for several reasons. It would improve democratic legitimacy, since most legislators vote on the language of a bill and “that language is often ordinary language.” It would also encourage careful drafting and would avoid the need for judges to make complex legislative judgments for which they are ill-suited. More importantly, “judicial adherence to the ordinary meaning of ordinary words in the statute restricts the opportunity for strong-willed judges to substitute their own personal political views for those of the legislature with respect to ends and means.” Finally, adherence to ordinary meaning provides fairer notice to the public. These, in short, are the virtues of the democratic rule of law.

It is important to distinguish these claims from the related argument that judges, having interpreted a rule, should normally then implement the rule regardless of their own view of the best outcome. Such judicial obedience to legal rules is certainly a desirable if not essential attribute of a legal system, putting aside extreme cases in which


55. Id.

56. Id. at 1321.

57. Frederick Schauer, *Statutory Construction and the Coordinating Function of Plain Meaning*, 1990 Sup. Ct. Rev. 231, 232. Schauer also argues that ordinary language has been increasingly adopted by the Supreme Court because that approach allows judges who do not share substantive values to decide cases easily and quickly. Id. This assertion seems empirically questionable. If ordinary language were adopted in order to economize on disputes between judges with varying values, it should have been adopted around 1975-1980, when the Court had the greatest range of ideological positions. In the 1989 Term, which is Schauer's subject, only a few liberals were left on the Court, so that overall the Court was much more ideologically homogeneous. It is also unclear that the plain meaning approach actually does create consensus. Consider, for example, *Regan v. Wald*, 468 U.S. 222 (1984), in which a bare majority thought that the outcome was dictated by the plain meaning of the statute, id. at 237, while the dissenters found “nothing in the language of the statute” to support the majority's result, id. at 256 (Blackmun dissenting). The court of appeals had found “as a matter of common sense and common English” that the statute meant just the opposite of the interpretation adopted by the majority of the justices. *Wald v. Regan*, 708 F.2d 794, 796 (1st Cir. 1983).

civil disobedience might be appropriate. This argument sheds little light, however, on how judges should engage in the initial interpretation of the rule. The question remains: are plain language and related formalist methods of interpreting rules necessary aspects of the rule of law?

One difficulty of evaluating the merits of formalism is that academics are elusive about just what approach they are proposing. Professor Schauer, for example, explicitly excludes the case of ambiguous or vague statutory language from his analysis, perhaps on the assumption that such language is infrequent. Thus, the proper role of the judge when such linguistic lapses occur remains quite unclear.

It is also unclear just what constitutes plain meaning. Professor Schauer defines plain meaning as the competence that makes it possible for him “to converse with an English speaker with whom I have nothing in common but our shared language.” In reality, such a conversation might be risky. For instance, Judge Posner cites the case of an employee who is told to “bring all of the ashtrays you can find” and responds by ripping ashtrays off the wall. If Schauer’s definition of plain meaning is to be taken at face value, the employee has properly understood the “plain meaning” of the ashtray request. Understanding why the employee’s response is inappropriate requires more than “a shared language”; it requires tacit understandings about the purpose and limitations of the request. Because of his restrictive understanding of textual meaning, however, Schauer argues that, in a case in which a murderer was not allowed to inherit under his victim’s will, the court violated the plain meaning rule by conjuring up such tacit understandings.

Professor Summers advocates a different approach to plain meaning. Summers would argue that the employee clearly violated the plain meaning of the “ashtray” instruction because no ordinary speaker of English would have intended that response. Indeed, Summers explic-
itly classifies the "disinherited murderer" decision as a correct application of plain language, since no reasonable legislature would want the wills statute to be interpreted to benefit a testator's killer. He does not view this, however, as an example of the speaker's subjective intent or the interpreter's moral principles overcoming the textual meaning, as Schauer would. Rather, Summers views this decision as correctly implementing the objective textual meaning.

Neither Schauer nor Summers has clearly articulated the formalist approach to other troubling issues, such as how big a chunk of text should be interpreted under the plain meaning rule, when ordinary meaning should be replaced by technical meaning, what role legislative history should play, and how to fill gaps or ambiguities. Without a clearer definition of the plain meaning rule (or some alternate formalist approach), it is difficult to evaluate its benefits.

Judicial advocates of formalism have been forced to explain their approach in more detail by the necessity of deciding concrete cases. Justice Scalia's dissent in *Chisom v. Roemer* offers a useful introduction to the approach taken by the judicial formalists. The issue in *Chisom* was whether the anti-vote-dilution provisions of the 1982 amendments to the Voting Rights Act applied to judicial elections. Justice Scalia prescribed the following approach to determine whether judges are "representatives" under the Act:

The Court, petitioners, and petitioners' amici have labored mightily to establish that there is a meaning of "representatives" that would include judges . . . and no doubt there is. But our job is not to scavenge the world of English usage to discover

ence does exist, but is considerably less clean than he supposes. Because communication inevitably relies on the existence of tacit understandings about purposes and social practices, the meaning of a rule necessarily incorporates some of those understandings.

65. The case is precisely one raising a question of possible statutory overgenerality in which the court, in the absence of anything more specific, must reason about what a legislature in using ordinary language may reasonably be considered to have taken for granted. One line of reasoning would be that, in light of widely accepted moral principles, the legislature took it for granted that a court would assume the legislature did not mean to reward murderers. Summers, 89 Mich. L. Rev. at 1323.

66. Both clearly think that smaller pieces of text should be given relatively more weight than the surrounding context, but just how much more weight is unclear. See Schauer, 1990 Sup. Ct. Rev. at 246 (cited in note 57); Summers, 89 Mich. L. Rev. at 1318.


68. Certainly, it will not do to compare the benefits of a plain meaning rule with a straw-man approach under which the text of the statute counts for nothing. See Schauer, 1990 Sup. Ct. Rev. at 250-53; Summers, 89 Mich. L. Rev. at 1316-25. The leading proponents of practical reason in statutory interpretation give considerable weight to text, though they are skeptical of the plain meaning approach. Eskridge and Frickey, 42 Stan. L. Rev. at 382-84 (cited in note 41). On the other hand, it is also unfair to compare some other approach with a relatively mindless version of formalism.

whether there is any possible meaning of "representatives" which suits our preconception that the statute includes judges; our job is to determine whether the ordinary meaning includes them, and if it does not, to ask whether there is any solid indication in the text or structure of the statute that something other than ordinary meaning was intended.  

Justice Scalia explains that the Court's "regular method for interpreting the meaning of language in a statute" is to "first, find the ordinary meaning of the language in its textual context; and second, using established canons of construction, ask whether there is any clear indication that some permissible meaning other than the ordinary one applies." Unless such a clear indication appears, he says, the Court is to adopt the ordinary meaning "especially if a good reason for the ordinary meaning appears plain."  

Justice Scalia's summary of this "regular method of interpretation" is followed by citations to illustrative cases which explain some of the nuances of the method. For example, the canons of construction do not apply "when the whole context dictates a different conclusion." Similarly, the Court may put even unambiguous statutory language aside "in rare and exceptional circumstances" when it produces a result "demonstrably at odds with the intentions of its drafters." When statutory language is ambiguous, the Court gives it "that permissible meaning which fits most logically and comfortably into the body of both previously and subsequently enacted law" because the Court's duty is "to make sense rather than nonsense out of the corpus juris."  

To deride this approach as mindless literalism would clearly be a mistake. On the contrary, Justice Scalia's approach extends beyond the dictionary meaning of the phrase in dispute to include a fairly rich array of other factors. Indeed, apart from his steadfast refusal ever to consider legislative history—a position in which he is now apparently alone on the Court—his approach seems to contain nearly the full range of considerations that might be thought relevant. This richness, however, makes it questionable whether Scalia's approach can eliminate
the need for practical reason.77

III. Formalism, Practical Reason, and the Rule of Law

A. Do Formalist Judges Need Practical Reason?

The problem is most obvious in connection with the canons. As Llewellyn demonstrated, the traditional canons can be readily arranged in conflicting pairs.78 Typically, the two canons in a given pair are not directly contradictory, but instead their domains are defined by qualifications such as “unless the context dictates otherwise.” Application of these conflicting canons may require a good deal of judgment. Moreover, the statutory language in any given case may trigger more than one canon; for example, different grammatical features of the text may evoke conflicting canons, or a text-based canon may cut against a policy-based canon like the rule of lenity.79

The possibility of such conflicts cannot be eliminated without drastic surgery on the body of canons. As Cass Sunstein, a leading recent advocate of renewed reliance on canons of interpretation, points out, “[t]he only way to reduce the risk of conflicting interpretive principles is to produce a system with one or very few such principles” but any such “simple system will contain an unacceptably high potential for an unacceptably large number of errors.”80 Given the traditional set of canons, which Scalia endorses, statutory interpretation must sometimes involve conflicting canons and therefore the need to exercise judgment.

Even eliminating the canons in favor of pure textualism would not leave statutory interpretation a mechanical task. Modern courts often confront statutes that are lengthy and complex. Deciding what interpretation of a particular clause best fits the overall text of the Internal Revenue Code, the Clean Air Act, or the Uniform Commercial Code is a demanding process.81 The judge must determine which conflicting interpretation coheres best with the overall sense of the statute; this determination obviously requires a good deal of judgment (not to mention

77. For general critiques of plain meaning, see Cass R. Sunstein, Interpreting Statutes in the Regulatory State, 103 Harv. L. Rev. 405, 416-23 (1989); Zeppos, 12 Cardozo L. Rev. at 1629-33 (cited in note 76).
79. Moreover, as Zeppos points out, the “plain meaning” of two provisions may conflict. Zeppos, 12 Cardozo L. Rev. at 1627 (cited in note 75).
81. The search for “horizontal” coherence within a statute is an important part of Justice Scalia’s method. See Eskridge, 37 UCLA L. Rev. at 660-63 (cited in note 3). For an insightful discussion of statutory interpretation in tax law, see Michael Livingston, Congress, the Courts, and the Code: Legislative History and the Interpretation of Tax Statutes, 69 Tex. L. Rev. 819 (1991).
Justice Scalia's textualism is ultimately based on his desire to cabin judicial discretion in order to avoid reliance on the "judge's own views of justice, fairness, or social welfare." If the issue, however, is not the dictionary meaning of a particular clause, but the interpretation that produces the best "fit" with a complex statute, the judge's decision involves sufficient intangibles to leave the door open to such "subjective" factors.

These difficulties could be avoided by resorting to clause-bound plain meaning. Under that approach, the judge would first determine the clause of the statute that controls the dispute. She then would pick the meaning that would be most likely adopted by an English speaker who knew nothing about the purpose of the statute, the remaining statutory language, surrounding provisions of the statute, the statute's history, other aspects of the legal context, or American social and cultural norms. The reasons for eschewing that approach are sufficiently obvious to deprive it of any support among writers on jurisprudence, let alone practicing judges. Any method of interpretation sufficiently complex to be seriously considered will at least sometimes require the use of practical reason. Thus, no plausible system of interpretation can truly be distilled to noncontrovertial deductions from a set of rules.

Judicial formalism is as much an attitude toward interpretation as a jurisprudential approach. The "law of rules" espoused by judicial formalists depends heavily on the tenacity of their adjectives: we use the ordinary meaning unless there is a "clear" indication of a contrary one; there must be a "solid" indication of a contrary legislative intention; plain language governs unless "demonstrably" at odds with the drafter's intent. Thus, the judicial formalist establishes a strong presumption in favor of clause-bound ordinary meaning, and it is the enduring strength of this presumption that brings his approach close to formalism. Similarly, academic formalists like Summers and Schauer leave the door open to other methods of interpretation: Schauer's rules have only prima facie force, and Summers concedes that "[n]o single type of interpretive argument, when appropriately in play, always prevails." Their formalism is grounded in their palpable reluctance to invoke non-literalistic methods, not in a complete rejection of those methods. In this respect, formalism might be considered to be more of a "mood" than a theory.

The real issue, then, is the utility of a strong literalism presum-

82. See, for example, Livingston, 69 Tex. L. Rev. at 826-31.
83. Zeppos, 12 Cardozo L. Rev. at 1619 (cited in note 75) (footnote omitted).
86. This proposition is implied by Smith, 100 Yale L. J. at 444-49 (cited in note 43).
tion in statutory interpretation. Whatever else such a presumption might be expected to do, it cannot eliminate the need for practical reason by appellate judges. As Llewellyn pointed out, clear-cut cases are unlikely to be appealed. Once a strong presumption in favor of ordinary meaning is in place, the cases most likely to reach appellate courts (and the Supreme Court in particular) are those that remain debatable even given the presumption, either because the ordinary meaning seems ambiguous or because the countervailing considerations are unusually strong. In those cases, operating at the margin of the domain of ordinary meaning, the judge must exercise judgment about whether the totality of other relevant principles overcome ordinary meaning. In short, as H.L.A. Hart recognized, any system of rules will inevitably require the exercise of "discretion" in hard cases, and our vision of the rule of law must acknowledge that reality.

B. Formalism and Effective Legislative Communication

What a formalist might hope, however, is that a more formalist method of interpretation will limit the number of contestable cases. Although practical reason cannot be eliminated from the appellate courtroom, the appeals process itself might be marginalized by strong interpretive presumptions. In the vast majority of cases, one would hope, the ordinary meaning would not be controversial. Legislators and ordinary citizens would nearly always find the law clear and predictable, and appellate judges would confine their work to rare, esoteric disputes. In such a situation, the work of appellate judges might be relatively lawless by formalist standards, but the legal system as a whole would be heavily imbued with the "rule of law" virtues of certainty, stability, and predictability. Thus, the best argument for formalism is that it makes the meaning of legal texts more transparent, and therefore more accessible to ordinary citizens, legislators, and others who (unlike appellate judges) are more concerned with the "ordinary" case than the "hard" case.

Justice Scalia has suggested that the primary goal of an interpretive method is to "giv[e] Congress a sure means by which it may work the people's will." We may begin, then, by asking whether the Scalia

87. See Llewellyn, 3 Vand. L. Rev. at 398 (cited in note 7).
88. H.L.A. Hart, The Concept of Law 138-44 (1961). This discussion should not be read to imply that practical reason is absent from the decision of easy cases. It is an open question whether hard cases trigger additional cognitive skills, or whether instead easy cases merely involve very simple applications of the same cognitive skills involved in deciding hard cases.
89. Chisom v. Roemer, 111 S. Ct. 2354, 2376 (1991) (Scalia dissenting). In principle, this strikes me as a questionable normative premise. Because it focuses entirely on the effect of an interpretive method on later legislation, it ignores the duty to do justice to those governed by the
approach (taken as a paradigm of formalism) makes it easier for legislators to enact statutes that will accomplish their intended goals. There are at least three reasons for doubt.

First, Scalia asks the judge to begin by reading the statutory provision in isolation, with an awareness of language usage but no other understanding of the statute. Only then does the judge expand her horizon to consider the broader statutory and legal context. The drafter's approach is just the opposite. Consider, for example, the drafter of an amendment exempting certain activities from a statute. She begins with an overall understanding of the statute as a whole and the reasons for seeking an exemption. She then attempts to write language that will accomplish this goal. In performing this task, it is unlikely that she will be able to put the larger context out of mind and assume the mental state of someone who knows only the language of the exception but not the context. She may seek to assume the Scalian state of mind, of course, but complete success is highly unlikely. Thus, the Scalia approach requires the drafter to reverse her natural mindset, thereby making her job more difficult.

Second, the Scalia approach makes it more difficult for the drafter to rely on the shared understandings that are critical to successful communication. In response to the command to “grab all the ashtrays in the building,” the Scalian judge may not rip ashtrays off the wall, but may grab anything that is not actually nailed down, including ashtrays that people are holding and ashtrays that are broken. As one communications expert points out:

[O]ur talk exchanges do not normally consist of a succession of disconnected remarks, and would not be rational if they did. They are characteristically, to some degree at least, cooperative efforts; and each participant recognizes in them, to some extent, a common purpose or set of purposes, or at least a mutually accepted direction.

mass of existing statutes. For discussions of the proper standards for assessing judicial decisions from the perspective of practical reason, see Frickey, 78 Cal. L. Rev. at 1209, 1217-18 (cited in note 39); Burton, 62 S. Cal. L. Rev. at 789-90 (cited in note 26). Even from a formalist perspective, Justice Scalia’s view seems somewhat dubious. From what text does he derive the Supreme Court’s authority to adopt interpretive rules designed to affect future legislative behavior? This intrusion into the functioning of a coordinate branch would, one would think, be questionable given Scalia’s strict views about the separation of powers.

90. For example, in Chisom Scalia begins with the dictionary meaning of “representatives” and only then looks at broader considerations. 111 S. Ct. at 2372 (Scalia dissenting).

91. After all, to desire an exemption, one must have some idea of what she is exempting herself from.

92. Indeed, at least in the tax context, the committee considers only the “concept” of a tax provision, and the staff then drafts the specific language. Livingston, 69 Tex. L. Rev. at 833 (cited in note 81).

Thus, the Scalian approach contrasts with normal methods of communication, which assume a cooperative listener. The Scalian judge values implementing ordinary meaning over cooperation with the drafter's purposes. Again, the Scalian approach frustrates the drafter's task by establishing an abnormal, noncooperative communication relationship between the drafter and the court.\(^9\)

In certain situations a drafter may wish to approach a statute as a communication with an uncooperative or uninformed party. Indeed, in an era of divided government, Congress may view this as an accurate description of the attitude of administrative agencies. Treating all statutes as if they were addressed to reluctant bureaucrats, however, seems an unlikely way to improve the drafter's ability to communicate.

Third, the Scalia approach encourages the drafter to write a statute containing detailed provisions, each of which is written in clear language that can be understood without much knowledge of the legal context. Although this is not necessarily a bad way of writing a particular statute, it is only one of a variety of approaches a drafter may choose. Thus, the Scalia approach eliminates some other drafting options, an effect that can only be justified on the basis of judicial paternalism toward the legislature. The factual basis for such paternalism is unclear, and it seems an offensively patronizing way to treat a coequal branch of government. If drafters are smart and knowledgeable, they do not need tutoring from the justices, and whatever inevitable mistakes they make are better treated sympathetically than as opportunities for condescending judicial lectures. On the other hand, if drafters are stupid or lazy, making their assignment harder will only be counterproductive.

The contention that formalism impedes communication of the legislature's intentions assumes that legislatures can be properly conceived as having intentions. Judge Easterbrook has argued on the basis of social choice theory, however, that legislatures have outcomes but not collective purposes.\(^95\) This argument would be equally inconsistent with Justice Scalia's view that a plain meaning rule makes it easier for Congress to express its will. In addition, Easterbrook's assertion that Congress has no overall purpose means at most that it has no overall coherent preferences about public policy. But this is irrelevant to whether an individual statute has purposes. Individual members of Congress may have had inconsistent motives for favoring the adoption of certain statutory language, but the adoption of that language itself


generally indicates a purpose to enact a statute specifying a certain domain in policy space—the vaguer the language, the broader the domain.\footnote{96} The “purpose” that matters here is the purpose of specifying that part of policy space, and the Scalia approach makes it more difficult for the drafter to accomplish that purpose.\footnote{97}

Notably, from the drafter’s perspective, the formalist approach suffers from defects like those of the most extreme antiformalist approach, in which the primary factor in interpretation is the judge’s view of public policy, with statutory language and legislative purpose receiving only subsidiary attention. Both approaches give the drafter an uncooperative audience with little interest in furthering the drafter’s purposes. Neither audience lightens the drafter’s task.\footnote{98}

Another argument for formalism might be that it provides citizens with greater legal stability and certainty. But a relatively literal-minded\footnote{99} reading of statutes can be only marginally helpful to ordinary citizens\footnote{100} and may sometimes be counterproductive. Formalism may merely confuse ordinary citizens by forcing legislators to resort to more specific but also more numerous and complex rules. As Judge Posner points out, “[s]tandards that capture lay intuitions about right behavior (for example, the negligence standard) and that therefore are easy to learn may produce greater legal certainty than a network of precise but technical, nonintuitive rules covering the same ground.”\footnote{101} It is possible, in other words, to be blinded by an excess of bright lines.

Furthermore, most important statutes today are not addressed to the ordinary citizen. Rather, they are addressed to more specialized audiences—sometimes federal agencies (directions to engage in rulemaking), legal specialists (corporate tax revisions), or particular in-

\footnote{96} More precisely, ambiguous or vague language may specify a lottery over the policy space.

\footnote{97} This should not be taken to imply that “purpose” should always be the touchstone of analysis. See Sunstein, 103 Harv. L. Rev. at 428 (cited in note 77).

\footnote{98} Nor of course, does the speaker want an audience that is attentive only to presumed purpose but not to the specific language used; it’s hard to communicate with someone who thinks she knows what you are trying to say better than you do.

\footnote{99} The adverb “relatively” refers to the qualifications discussed earlier. See notes 72-74, 81-83 and accompanying text.

\footnote{100} Formalism might be helpful to the citizen who actually looks up the statute but lacks any other expertise—but how often does this happen?

\footnote{101} Posner, The Problems of Jurisprudence at 48 (cited in note 47). Unfortunately, the executive branch seems not to share Posner’s view. The Office of Management and Budget recently has issued a directive to all federal agencies regarding the drafting of regulations. Under this directive, regulations are required to provide “a clear and certain legal standard for affected conduct rather than general standards, while promoting simplification and burden reduction.” 60 U.S.L.W. 2282 (Oct. 29, 1991). Unfortunately, the two halves of this directive may be in conflict: replacing general standards with “clear and certain” legal standards may reduce simplicity and increase burdens.
dustries (public utility regulation). Less sophisticated individuals often rely on official compliance guides or publications by experts to understand the statute, rather than deciphering the statutory language themselves. The more sophisticated audience approaches the statute with a rich contextual understanding of previous law, the politics of the enactment, the affected business activity, and the dynamics of legal implementation in the area. If the official interpreters of the statute downplay these factors in favor of dictionary meaning, more knowledgeable interpreters of the statute must artificially attempt to put aside their sophistication and seek to understand how a willfully ignorant outsider would read the statute. As with the drafter of the statute, the need to perform these mental gymnastics will make it more difficult for them to understand the meaning of the statute.

A naive judicial interpretation of a particular statutory provision obviously has the capacity to upset the expectations of insiders regarding that provision. The repercussions may be broader, however. If insiders have evolved a unified concept of the statute as a whole and its connection with other legal rules and with industry practices, a single important judicial decision may require far-reaching adjustments that go well beyond the particular section of the statute in question. Unlike insiders such as regulatory agencies and members of a regulated industry, a formalist judge lacks any understanding of these broader repercussions.

Given nonspecialized courts, insiders will always face this problem to some extent. To minimize the problem, judges might be encouraged to defer to those with greater sophistication, such as agencies or leading scholars. They might also attempt to educate themselves sufficiently to grasp the factors which insiders understand intuitively. Such judges would still make mistakes. The question is whether they would be more likely to make mistakes than judges who (like Professor Schauer)\textsuperscript{102} think the issues at stake are too boring to be worth immersing themselves in.

Advocates of practical reason should be prepared to recognize that the formalists have legitimate concerns. In some contexts, it is important to have bright lines and to resist arguments for exceptions. Moreover, when courts too quickly abandon the ordinary meaning of a provision based on global readings of the entire statute, arguments about statutory purpose, or beliefs about public values, it hinders the drafter's ability to communicate her intentions. But the judgment of when interpretation has become too free-wheeling can only be made in context. Formalism errs when it seeks to convert context-specific practi-

\textsuperscript{102} Schauer, 1990 Sup. Ct. Rev. at 246 (cited in note 57).
cal considerations such as these into a noncontextual interpretive method. Ultimately, what drafters and the public need are not "rule book" judges, but judges who are sensitive to the legislature's policymaking prerogatives and who are aware of the value of legal stability and predictability.

Perhaps the ultimate defense of formalism is that there is no alternative: either you engage in formalist decisionmaking, based on application of rules, or you are engaging in an exercise in arbitrary choice. The advocates of practical reason, however, believe that there are other cognitive abilities besides deduction on which judges can rely. If there were not, the only alternatives would be formalism (with all its faults) or judicial tyranny. Are those the only choices?

C. Does Practical Reason Exist?

Advocates of practical reason have attempted to explain the methods that they believe judges (and particularly the best judges) use to decide hard cases. Those efforts are often attacked as banal or vacuous, and admittedly they are much less precise than one might wish. On the other hand, many other cognitive skills also are extremely difficult to explain—for example, the ability to determine the correct trajectory for throwing a ball—yet these skills obviously exist. Given our general ignorance of the functioning of the human brain, it is not surprising that we cannot give a convincingly detailed account of how a difficult task such as deciding a hard case is accomplished. We can ask, however, whether the current state of psychological knowledge makes the existence of practical reason more or less credible as a distinct mode of legal decisionmaking.

Although only a limited amount of work has been done regarding legal decisionmaking, a broader body of literature has examined how experts in general make decisions. This has been a fruitful field of study for psychologists over the past twenty years. Some of this interest grows out of the field of Artificial Intelligence, motivated by a desire to learn how to design computer systems that can mimic the decisions of human

One of the first efforts at artificial intelligence was chess-playing, and for this reason, chess expertise has been the subject of considerable study. The basic strategy for building a chess-playing computer is to project the play forward as many moves as possible, considering variables such as each possible move, the opponent's possible responses, and the machine's best counter-responses. The initial assumption was that chess masters differed from novices by being able to see more moves ahead in the game. As it turned out, however, chess masters do not typically look farther ahead in the game; if they did, they would be unable to perform such feats as “lightning chess” against multiple opponents. Instead, they differ from novices in another respect, which was revealed by a classic series of experiments.

In these experiments, the subject was shown a slide of a chess board briefly and afterwards asked to recall the positions of the pieces. Novices were lucky to be able to remember the positions of five or six pieces after seeing a board for five seconds, while chess masters were able to reconstruct the positions of twenty pieces. Chess masters were also much better at retaining this knowledge after interruptions. But in other areas, chess masters have no better than average memories (nor typically, are they particularly intelligent outside of their field).

What makes these results interesting is that chess masters do not have a particularly good recall for the positions of individual pieces. Their advantage was limited to those positions that might result from real games. When chess pieces were randomly placed on the board, the chess masters did little better than the novices. Moreover, when recalling real chess positions, chess masters did not place the pieces on the board on an individual basis but in clusters which were strategically meaningful groups, like pawn chains. Based on experiments of this sort, researchers have concluded that chess masters have learned something on the order of fifty thousand different chess patterns, along with typical tactics associated with each position. Thus, chess masters normally do not have to reason laboriously about which piece to move and how their opponent may respond, because they immediately “see” the next move. In short, the experts “chunk” the information into meaningful units; they recognize patterns and associate those patterns with potential strategies.

Other studies of expertise confirm the crucial importance of sophis-

107. Perhaps it is not unfair to note that this project is in some sense the epitome of formalism, literally trying to reduce a decisionmaking process to the mechanical application of rules. The ideal formalist judge would be a well-programmed computer.

ticated pattern recognition. In a study of how experts and novices solve physics problems, researchers found that experts actually took longer to categorize the problems than the novices. The novices tended to classify on the basis of superficial features ("this involves an inclined plane"), while the experts looked for deeper principles ("this involves energy conservation"). Once they had classified the problem, however, the experts proceeded much more directly, quickly, and accurately to the solution. Their mental categories also were connected with solution methods, which could be readily called up once the problem was classified.

Another particularly interesting study involved expert radiologists. As with physicists, experts interpreting X-rays spent more time than novices in their preliminary assessment of how to categorize the problem situation. After they made this categorization, the experts moved rapidly to solutions. Their categorization tended to be much more accurate and to provide more coherent explanations, but notably, they were more willing than novices to discard their preliminary assessment in the light of new information (or newly noticed features of the X-ray).

Medical diagnosis seems closer to the messiness of legal reasoning than other commonly studied areas like physics, chess, or computer programming, so this study seems especially relevant. But, as the authors of the radiology study report, their findings are consistent with the three main conclusions of this entire body of research:

The expert spends proportionally more time building up a basic representation of the problem situation before searching for a solution. . . . The novice takes much longer but devotes a small proportion of his total processing time to finding/generating an initial problem representation. In some domains, even the absolute time spent on building the right initial representation is longer for experts.

A scheme with a high probability of being at least in the right problem space is invoked very rapidly by the expert. This scheme guides further processing, including the building of a basic representation.

Experts are able to tune their schemata to the specifics of the case. This permits them to test more completely whether the scheme they have invoked is in fact the right one.

Admittedly, the study of expertise by psychologists is relatively

110. Id. at 139.
primitive, and current psychological dogma may be unseated by further research. Moreover, legal expertise may require skills different than those involved in the areas that have been studied most intensively. Nevertheless, the current view of expertise does focus to a striking extent on what Llewellyn called “situation sense”—the ability to classify a situation in the most useful and appropriate manner. Although psychologists’ efforts to explain this ability offer little more illumination than Llewellyn’s, they have compiled strong experimental evidence of its existence.\footnote{113. These studies of expertise have positive implications for advocates of practical reason. Another body of work, however, raises some potentially disturbing questions. Bluntly, the problem is that experts are very good at recognizing the salient features of problems, but they are poor at making decisions under uncertainty. For example, in a classic study, experienced psychiatrists turned out to be only a bit better than undergraduates in diagnosing psychosis using a standardized personality test. Indeed, expert decisions are often less reliable than the predictions of very simple statistical formula based on the same data. As one author says, “[t]he surprisingly poor performance of experts has been replicated across a broad range of seemingly unrelated task domains, and [statistical] models are often twice as good (in terms of variance explained) as expert judges.” Eric J. Johnson, Expertise and Decision Under Uncertainty: Performance and Process, in Nature of Expertise at 209, 212 (cited in note 106). For example, simple formulas give better predictions of medical school performance than the individualized judgments of admissions experts. Id. at 218-19. Essentially, the problem seems to be that experts (like other people) tend to give insufficient weight to their knowledge of base rates, focusing too much attention on the unusual features of the individual case. Id. at 224. These well-established results sound like good news for formalists. On the other hand, it turns out that humans in general are also very poor at formal logic, which is \textit{bad} news for formalists. See generally Anderson, Cognitive Psychology and Its Implications at 261-300 (cited in note 108). The reason that experts perform poorly under uncertainty seems to relate to the difficulty of amassing a sufficiently large statistical data base, plus inherent human limitations in processing statistical data. Johnson, Nature of Expertise at 225. This difficulty may not have any close analogue in legal analysis; and of course the formalist is in no position to use the equivalent of regression analysis to establish rules of decision. In other areas of expertise, such as physics and chess, where statistical judgments are not involved, expert competence cannot be questioned. Nisbett and Ross summarize the research as showing that “people’s inferential strategies are well adapted to deal with a wide range of problems, but that these same strategies become a liability when they are applied beyond that range.” Richard Nisbett and Lee Ross, Human Inference: Strategies and Shortcomings of Social Judgment xii (Prentice-Hall, 1980). Legal reasoning seems closer to everyday thought than to formal statistical or mathematical inference, so these ordinary strategies should be workable. Although these results do not carry over directly to legal expertise, they do give rise to concerns about overreliance on individualized decisionmaking. If medical school admissions committees do poorly in predicting success, judges are unlikely to do much better in predicting dangerousness or other individual characteristics of criminal defendants. Thus, to the extent we are interested in reliability of outcome (as opposed to process values), we may want to substitute roughly accurate rules for ad hoc individual judgments, just as the formalists argue. But this is not itself contrary to practical reasoning, which favors the adoption of rule-based decisionmaking in appropriate contexts. Indeed, practical reason usually seems to involve some interaction between general rules and specific cases, rather than standardless balancing. See Michelman, 100 Harv. L. Rev. at 28-30 (cited in note 26).}
Typically, it is acquired by following examples (problems previously solved by others) and through learning by doing—the latter being required in large doses. Herbert Simon estimates that chess masters have spent ten to twenty thousand hours staring at chess positions—the equivalent of full time study for ten academic years of a single subject. Similarly, a radiologist’s data base may range from ten thousand to two hundred thousand films examined. The life of expertise, like that of the law, seems to be experience rather than logic.

Moreover, these studies reveal expertise to be more than an act of intuitive perception. Expert radiologists did not merely perceive X-rays more accurately, they gave better reasons for their interpretations and were better able to test them against additional information. Similarly, the exercise of situation sense by judges is not a mystical intuitive act, but an effort to understand and reason through a problem, which is subject to criticism and assessment by legal observers.

IV. Conclusion

Although Llewellyn’s description of problem solving by judges is far from complete, and is in some respects conclusory, it gains considerable credibility from more rigorous studies of other forms of expertise. If physicists, radiologists, chess players, and computer programmers can all exercise “situation sense” effectively, it seems reasonable to assume that judges can do so as well.

Indeed, we had all better hope that judges have some capacity to engage in practical reason, because in hard cases—by definition—the ability of rules to dictate results straightforwardly has been exhausted.

115. Lesgold, Nature of Expertise at 312 (cited in note 111).
116. Id. at 310-13, 320-23.
117. If this assessment is to take place, judges must be candid in explaining the reasons for their decisions. Professor Zepos has suggested, however, that judicial candor may cause excessive judicial activism. See Nicholas S. Zepos, Judicial Candor and Statutory Interpretation, 78 Georgetown L. J. 363 (1989). He theorizes that so long as policy considerations are excluded from statutory opinions, judges will be forced to write opinions that plausibly link outcomes with statutory language and legislative intent. Once policy considerations are legitimized by being discussed in opinions, he fears, they will become increasingly dominant, resulting in a loss of legislative supremacy. In short, a little judicial hypocrisy can be a good thing. The underlying assumption is that only the need to conceal their value judgments can hold in check the natural inclination of judges toward unlimited activism. That assumption seems misguided. If judges were so strongly outcome-oriented, it seems unlikely that the need to draft an opinion relying on statutory language, purpose, and legislative history would operate as a powerful check. Unless judges actually have some respect for legislation as an outcome of the democratic process, the mere need to write minimally plausible opinions cannot be expected to operate as much of a constraint, particularly in the kinds of difficult cases that often reach the Supreme Court. On the other hand, judges who do have a genuine belief in democracy can truthfully explain their decisions without undermining legislative supremacy.
and some form of practical reason is necessary. Formalism cannot eliminate the existence of hard cases, and deciding those hard cases will remain a major part of the work of the appellate judge.

Unlike appellate judges, most people (whether citizens or legislators) are not in the business of deciding hard cases. One goal of the legal system clearly should be to make the law as understandable and predictable as possible for those people. But heavy reliance on plain meaning may not, contrary to the hopes of its advocates, increase the communicative effectiveness of legal texts. For those who must draft and vote on legislation, the plain meaning approach can be a snare, because their own understanding of a particular statutory provision is situated in a rich legal and political context, which the “plain meaning” interpreter seeks to rely upon as little as possible. For ordinary citizens, the precise language of complex statutes may be much less accessible than an understanding of its general purposes, as they relate to shared social norms, so “plain meaning” interpretation may be more effective in creating traps for the unwary than in easing their way.

The vices of formalism are excessive confidence in the power of “the word” and excessive distrust of the ability of judges to exercise good judgment. At the other extreme, too much “informality” in statutory interpretation can give short shrift to statutory language and leave too much to the unguided discretion of judges. Practical reason seeks to avoid both vices.
