

The Trouble with Cases

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3.1 Introduction

The recent hearings on Judge Sonia Sotomayor's and Solicitor General Elena Kagan's nominations to the Supreme Court vividly exemplify the enthusiastic concurrence between the senators and the nominee that judges make neither law nor policy. Judges decide particular cases between particular litigants, the questioners and the responders agree, and in doing so they apply laws and policies made by the allegedly more representative legislative, administrative, and executive branches of government.

Thus goes the collusive charade played out before each Supreme Court nomination, one designed simultaneously to reassure and mislead the general public. Denying the law- and policy-making role of the courts is the standard mantra, and no nominee intelligent enough to find herself in that position would dare acknowledge at the hearing that judges serve, at least in part, as lawmakers and policymakers.

Most of us, of course, know better. Courts make law and set policy all the time, an inevitable consequence of the indeterminacy and open-endedness both of the common law and of the vague language in which many constitutional and statutory provisions are drafted. When the Supreme Court

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concludes that tying arrangements¹ and resale price maintenance² violate the Sherman Act's prohibition on "[e]very contract, combination . . . , or conspiracy, in restraint of trade or commerce . . .",³ for example, the Court is establishing antitrust policy no less than if those prohibitions had been explicitly set forth in the statute or adopted as formal regulations by the Federal Trade Commission. And so too with the determination of which types of searches and seizures will be deemed "unreasonable" and consequently in violation of the Fourth Amendment, of what forms of discrimination constitute denial of "the equal protection of the laws," and of which varieties of nondisclosure to investors will count as "device[s], scheme[s], or artifice[s] to defraud" for purposes of Section 17(a) of the Securities Act of 1933⁴ and of Rule 10b-5 issued by the Securities and Exchange Commission.⁵

Policy-making by appellate judicial interpretation is well-known to the cognoscenti, and almost certainly to the senators and nominees who in publicly denying it tell a form of white lie to reassure a legally unsophisticated polity. But policy-making also occurs at the trial level when decisions in particular cases influence the nonlitigants who contemplate acting similarly to or differently from those whose behavior has previously been the subject of litigation. When a jury or judge convicts a particular defendant of negligent homicide for unintentionally killing someone while driving under the influence of barbiturates, for example, it is likely to affect the decisions and behavior of countless other drivers who might be considering taking barbiturates before getting behind the wheel or getting behind the wheel after taking barbiturates. More commonly, when a jury determines that a manufacturer of a chainsaw is negligent and responsible for user injuries as a result of not having fitted its products with a particular safety device or not having provided sufficiently vivid warnings of the dangers associated with using a chainsaw, the verdict, especially if accompanied by a large damage award, will affect the future conduct of chainsaw manufacturers as much (or more) as if the safety device or warnings had been required by an act of Congress or by the regulations of the Consumer Product Safety Commission or the Occupational Safety and Health Administration.

Our goal in this chapter is to examine policy-making in response to par-

1. See, for example, *Illinois Tool Works, Inc. v. Independent Ink, Inc.*, 547 U.S. 28 (2006); *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2 (1984); *Northern Pacific Railway v. United States*, 356 U.S. 1 (1958).

2. See, for example, *Continental T.V., Inc. v. GTE Sylvania Inc.*, 433 U.S. 36 (1977); *Dr. Miles Medical Co. v. John D. Park & Sons*, 220 U.S. 373 (1911). Minimum resale price maintenance agreements are now subject to a so-called rule of reason rather than being per se invalid, *Leegin v. Creative Leather Products, Inc.*, 551 U.S. 877 (2007), but that does not detract from the fact that finding such agreements to be legally problematic, regardless of the degree of scrutiny, is a product of judicial law-making in the common-law style that the vague language of the Sherman Act has plainly (and intentionally) spawned.

3. 15 U.S.C. §1 (2006).

4. 15 U.S.C. §77q (2006).

5. 17 C.F.R. §240.10b-5 (2008).

ticular cases. When commentators refer to "regulation by litigation," this is what they typically mean, but we shall argue that the problem is not one peculiar to litigation, because much legislation and some administrative rule-making is shaped by particular cases—or highly salient examples—as well. Still, we focus initially on litigation, and suggest that litigation's focus on the particular litigants and their particular actions, while necessary and desirable for determining liability and awarding compensation, is a flawed platform for more broad-based policy-making. And this problem is not, we emphasize, a function of the errors that juries or judges may make in the decision of cases. Although such errors are often the subject of commentary and outrage, our claim is not dependent on the possibility of judge or jury error in deciding the case before the court. Rather, the argument is premised on the distinction between particular adjudication and the inherent generality of policy-making. This distinction would be of little moment were the particulars of particular litigation representative of the kinds of problems likely to arise in the future. But that is not the case. Instead, the goals and incentives of the litigation process are likely to contribute to aberrational rather than representative cases being the subject of lawsuits, and a collection of phenomena—most notably the availability heuristic—will cause the policy that emerges from litigation to be systematically based on an imperfect picture of the terrain that the policy is designed to regulate.

Yet although it is tempting and not wholly inaccurate to see the problem as one caused by litigation and thus intrinsic to it, in fact the problem is larger, and is a consequence of a focus on one or a few particular events, regardless of the setting in which the stories about those events may be told. Thus we will argue that even outside of the context of litigation, many regulatory policies also flow from experience with one or a few cases, and that the same problems that flow from case-based policy-making in litigation also flow from case-based policy-making with ex ante rule-making. The thrust of our argument is that the individual cases that receive sufficient attention to affect policy significantly are often both salient and, systematically, highly unrepresentative, and so the strategy of using such cases to provide the principles that inform policy is broadly misplaced.

3.2 The Generality of Policy

Policies are general, both by definition and necessity. Bobbie had a bowl of cereal for breakfast this morning, but it is her *policy* to have a bowl of cereal for breakfast *every* morning. Officer Smith may stop Susan Jones for driving at 47 miles per hour at a particular point on Main Street on a particular day, but it is a policy if all police officers are expected to stop all drivers driving more than 40 miles per hour at all points on Main Street. A policy is not an action. Rather, it is a course of action. Policies, by their very nature,

are decisions about what is to be done in a multiplicity of cases involving a multiplicity of acts by multiple people at multiple times.

The observation that policy is general is banal, but the banality is worth emphasizing because doing so makes clear that *policy-making* involves setting a policy that will cover many acts by many actors in many places at many times. Good policy-making, therefore, involves making an aggregate determination of what ought to be done over a multiplicity of instances.⁶ But in order to make this aggregate determination, the wise policymaker must be able to assess initially just what these instances in the future are likely to be. The optimal speed limit is not the speed limit that would be optimal for the worst driver, nor is it the one that would be optimal for the best driver. Rather, it involves determining what the full range of driving abilities covered by the policy will look like, as well as assessing the expected benefits and costs consequent upon applying alternative policies to that range. But although the assessment of benefits and costs is difficult and important, it is subsequent to the determination—our principal concern in this chapter—of just what the future array of applications of any policy will look like. Thus, it is a necessary condition of good policy-making that the policymaker be able to assess the current range of relevant behaviors (and their consequences) and the range of behaviors likely to exist under various different policy options.

3.3 Surveying the Field of Policy Applications

How, then, are policymakers expected to survey the range of applications of any policy, and predict the distribution of behaviors that one or another policy option will produce? There is of course no single method of empirical assessment and prediction that will apply for all policies or for all types of policies. Still, the goals of the assessment are clear. They are not merely to gauge what activities are now taking place, but also to assess what change in those activities will be brought about by some policy, or indeed by other changes in society. If a policymaker were contemplating, to take an issue recently in the news, a prohibition on the use of cellular telephones while driving, the policymaker would want to know, among other things, what percentage of drivers owned cellular phones, how many of those drivers used the phone while driving and in what fashion, how many accidents and of what kinds and with what consequences were caused by cellular phone use, and how cell phone use while driving will evolve in the future, say through Blue Tooth and other methods of hands-free calling, or, as is now the greatest concern, with the capacity to send and receive text messages. Finally, it is crucial to be able to predict with some accuracy what changes (and at what cost) in all of the foregoing would be brought about by various different

6. See generally Stokey and Zeckhauser (1978).

potential policy interventions. And we can imagine and understand similar exercises with respect to workplace safety, misrepresentation in the sale of securities, tobacco-related illnesses, environmental hazards, and much else.

Whatever methods might be used to pursue an empirical survey of this type, it should be clear that assuming too quickly that any one event or practice is representative of all of the events or practices to be encompassed by some policy is a recipe not for accuracy but for distortion. To be sure, an accurate evaluation of expected benefits and costs will recognize that it is often (or at least sometimes) desirable to engage in strategic overregulation as regards the average case as the only or most effective way of controlling low probability events with serious negative consequences. Nevertheless, it is a mistake to assume that unrepresentative events or practices are in fact typical or representative, and making that kind of empirical error at the outset of a policy-making exercise is the path to ineffective and perhaps harmful policy.

3.4 When Easy Availability Makes for Bad Law

With this broad goal of empirical accuracy across multiple instances in mind, we are now in a position to evaluate litigation and *ex ante* rule-making along the dimension of fostering or impeding an accurate assessment of the terrain of potential policy application.⁷ And from this perspective, litigation appears to present significant risks of distortion, and in at least two different ways.

At times, a court making a decision will announce a rule that is to be applied in cases other than the one actually before the court. Typically, this is a feature of appellate decision-making rather than decisions (by judge or jury) at trial, for an appellate court will justify its decision with an opinion that implicitly or explicitly announces a rule of decision to be applied in other cases. In part the extension of a decision beyond the immediate case is a function of the logic of reason-giving, for to give a reason is to make a claim about a type or category that is necessarily broader than the particular instance that the reason is a reason for.⁸ And the extension of application beyond the immediate case is even more apparent when an appellate court explicitly announces a rule rather than simply giving a reason. That is because a rule, even more than a reason, necessarily and by reason of its generality encompasses instances other than the one that initially inspired the

7. Some of the existing literature describes the relevant choice as one between litigation and regulation (e.g., Viscusi 2002), but this strikes us as a poor characterization. Because the entire point of the inquiry is to understand and evaluate litigation as a regulatory strategy, the real question is about the relative merits of regulation by *ex post* litigation and regulation by *ex ante* rule-making; we will frame the issue in terms of litigation versus rule-making and not litigation versus regulation.

8. See Schauer (1995).

announcement of the rule.⁹ When an appellate court, for example, upholds a trial court verdict against a franchisor that required its franchisees to purchase napkins and cleaning products from the franchisor as a condition of being allowed to use the franchisor's trademark and food recipes,¹⁰ the appellate court will announce a rule regarding tying arrangements that represents a policy about some general category of tying arrangements, and not just about the particular tying arrangement at issue in this particular case. Maybe it will be a policy about all tying arrangements involving non-food products in the food industry, maybe about all tying arrangements in the food industry, maybe about all tying arrangements within a particular market structure, and maybe about all tying arrangements, but the rule will be about *all* of something, for that is just what a rule is and just what rules do.

There is considerable debate in legal theory over the extent to which the court that announces such a rule is or should be constrained by the rule in subsequent and different cases. Some argue that the rule announced in the first case exerts genuine pressure on the determination of a subsequent and different case that lies within the linguistic contours of the rule announced in the first case, and others claim that it is the characteristic virtue of the common law that the so-called rules it announces are little more than weak guides, rarely if ever requiring a court to reach a result other than the one it would have reached on its all-things-considered best judgment about how the particular case should be resolved.¹¹ But even if this latter view is empirically and jurisprudentially correct, the rule announced in the first case will still be a rule that lower courts are expected to follow, and, more importantly, will still be a rule that primary actors and their lawyers will look to in trying to predict what will happen in a case that appears to be encompassed by the rule.

Once we realize, therefore, that the rule announced by an appellate court is a policy, and, further, that the rule is a policy that will affect numerous agents other than the ones before the court, all of the aforementioned considerations about assessing the terrain of policy application come into play. The question, then, is whether the decision of a particular case involving a particular dispute between particular parties is the optimal or even a desirable vehicle for announcing a rule and a policy that will affect the behavior of parties other than the ones whose dispute prompted making the rule, and thereby will influence actions at least somewhat at variance with the actions that were adjudicated in the initial case.

There is a view, and one embodied in much of American constitutional

9. See Schauer (1991).

10. This is a frequently-litigated scenario. See, for example, *Queen City Pizza, Inc. v. Domino's Pizza, Inc.*, 124 F.3d 430 (3rd Cir. 1997); *Ungar v. Dunkin' Donuts of America, Inc.*, 531 F.2d 1211 (3rd Cir. 1976); *Siegel v. Chicken Delight, Inc.*, 448 F.2d 43 (9th Cir. 1971).

11. The respective positions are described and analyzed in Schauer (2009, 108–18).

doctrine, that seeing a real “case or controversy” between real litigants is the best way for a court to understand the actual landscape that will be affected by one of its rulings.¹² By delving into the detailed facts of a genuine controversy, so it is said and so it has been held countless times, a court can truly know what the impact of its rulings is likely to be.¹³

With respect to making the best decision in the particular controversy, there is much to be said for the traditional view. A judicial decision will produce, typically, a real winner and a real loser, and only by serious immersion in the situation can the court appreciate the consequences of its decision, as well as understand the fit (or lack thereof) between an outcome and the relevant legal language and legal doctrine.

As a result of understanding, however, that at the appellate level the consequences and reach of a decision will extend beyond the particular parties and the particular decision, substantial new problems become apparent. If a court is making a decision whose influence goes beyond the particular case, and thus beyond the identical situation before the court, one might think that the court should, ideally, have some sense of the range of instances encompassed by its rulings. If the decision in this case is to have consequences for other cases, other disputes, and other actions, it seems plainly desirable for the court to know what those other cases, disputes, and actions are likely to look like before issuing a ruling that will affect them. One problem, however, is that the structure of appellate courts makes them especially ill-equipped to assess the full field of potential applications of any ruling, even though it is entirely appropriate, at the appellate level, for an appellate court to take account of the effect of a ruling on future cases. It would not be in the interests of the parties themselves to provide information about other potential cases, though they might provide it for strategic purposes.¹⁴ Moreover, apart from cases in the Supreme Court, and to some

12. See, for example, Eisenberg (1988); Calabresi (1982). See also Shavell (1995, 379–423) (“appeals courts sometimes can learn about opportunities for lawmaking only from disappointed litigants”).

13. In *Valley Forge Christian College v. Americans United for Separation of Church and State, Inc.*, 454 U.S. 464 (1982), for example, the Supreme Court noted that “a concrete factual context” will generate “a realistic appreciation of the consequences of judicial action.” 454 U.S. at 472. See also *Baker v. Carr*, 369 U.S. 186 (1962) (concrete disputes “sharpen . . . the presentation of issues” and thus aid “the illumination of difficult constitutional questions”); Fletcher (1988) (a concrete case will inform a court of “the consequences of its decisions”).

14. One such exception would arise in the common situation in which an undesirable claimant of constitutional rights has a strong incentive to show a court how many other and more desirable claimants would benefit from a ruling in favor of the undesirable litigant before the court. When groups such as the American Nazi Party and the Ku Klux Klan claim free speech rights under the First Amendment, for example, it is obviously in their interest to show how rulings in their favor would benefit less repulsive dissident organizations.

Participants in criminal proceedings may also seek to identify realms of applicability beyond the specific case. Thus, when the generally guilty claimants of criminal procedure rights under the Fourth, Fifth, and Sixth Amendments argue that their convictions should be overturned because of a violation of such rights, they similarly have an interest in informing the court of the existence of innocent or less culpable defendants who would be among the beneficiaries

extent even for Supreme Court cases, the information provided in amicus curiae submissions, even opposing ones, is likely to be highly selective and hence incomplete. And most significant is the absence of any way in which an appellate court, lacking an investigate arm and often even the rudiments of non-case-specific factual research capabilities, can actually go out and find the information it might need to understand the full import of one of its rulings.¹⁵

Even more serious, however, is the way in which the particular case, the particular facts, and the particular litigants are likely to dominate a judicial assessment of the relevant terrain. The particulars of the case are *available*, in the technical sense of that term,¹⁶ and the risk is that their very availability will lead a court to assume, mistakenly, that future cases will resemble the cognitively available case now before the court.¹⁷ Just as someone who has just learned about a death from a rattlesnake bite is likely to overestimate the number of deaths caused by rattlesnake bites compared to the number caused by bee stings,¹⁸ so too can we expect a court immersed in the details of particular litigation with particular parties and particular facts to assume, possibly mistakenly, that other and future events within the same broad category will resemble the events involved in the case now before the court. The case before the court may indeed be representative of the full population of cases of that broad type, but the availability of this case may lead to an assumption of representativeness even when such an assumption is unwarranted.¹⁹ Thus, although it is possible that the single case before the court accurately represents the larger array, and although it is possible that a court will properly assess the particular case as exemplary of many cases,

of such a ruling. Prosecutors may argue for consideration beyond the particular case either to achieve appropriate outcomes or to promote deterrence: "Let this defendant go, and precedent would require granting dozens of future captured terrorists their freedom. Moreover, terrorist acts will become more common."

Appellate judges could craft their opinions to explain how broadly or narrowly they believe they should apply in future cases. However, we expect such guidance to be limited for multiple reasons: (a) the availability of the facts and arguments in the current case makes them seem more general than they are, thus requiring less parsing of how the circumstances do and do not extend than might be desirable; (b) In many circumstances, it is difficult to conjecture what future cases might arise with facts that call for the same decision, or somewhat similar facts that call for a different decision; (c) the decision reflects the legal arguments presented by the lawyers as well as the facts. The judge may be reluctant to comment on precedent when the skill of present or future lawyers will affect the outcome. And finally, (d) the judge, particularly if he or she feels overloaded, may feel that his or her role is to decide present cases effectively, not to speculate on extensions to future cases.

15. An important analysis of the informational dimensions of regulation by litigation is Schuck (2005).

16. See Tversky and Kahneman (1973). Useful overviews include Plous (1993, 125–27, 178–80); Sherman and Corty (1984); Reyes, Thompson, and Bower (1980); Taylor (1982).

17. For an earlier and more rudimentary presentation of this argument, see Schauer (2006).

18. See Anderson (1991).

19. See Kahneman and Frederick (2002).

it is precisely the ease of recall²⁰ of the case before the court that may lead the court to assume from the ease of recall that the case is representative when in fact it is not.²¹

Litigation is also especially likely to exacerbate the availability problem because the judge or court is obliged not only to see the details of the case before it, but also, and more importantly, because the judge or court must *decide* that case. Whatever possibility a decision maker may have of ignoring the most available event and thus transcending the availability-produced mischaracterization of the larger array, that possibility is likely to decrease when the decision maker has a particular *task* to perform with respect to the available example. Because tasks narrow a decision maker's focus, and because tasks thus make it more difficult for those performing a task to see beyond what is necessary to perform that task,²² a decision-making situation in which the primary task is to decide a particular case will narrow the focus of the decision maker on the facts of that case. That makes it less likely that the decision maker will perceive the broader set of facts necessary to perform the secondary task of establishing a precedent, setting forth a rule, making law, or making policy.

A good example of this phenomenon in practice is the United States Supreme Court's 1964 decision in *New York Times Co. v. Sullivan*.²³ The case dramatically changed American law with respect to libel actions brought by public officials, setting forth the rule that in all such cases the plaintiff would henceforth be required to show with "convincing clarity" not only that what was said or published about him was false, but also that it was published with knowledge by the publisher (or writer or speaker) of its falsity at the time of publication. In placing such a heavy burden on a public official libel victim, the Court set out a rule that has been followed by no other country in the world, a rule that has virtually eliminated official defamation suits in the United States.

Seeing such a result, it is logical to inquire how it came about. The answer is that it is in many respects a *celebrity case*, and one with a quite uncharacteristic fact pattern. And it is the combination of celebrity, or high salience, combined with the unusual fact pattern that led to an extreme change in policy. The plaintiff was the Montgomery, Alabama, city commissioner in

20. See Shah and Oppenheimer (2009).

21. See Schwarz and Vaughn (2002) *op. cit.*, pp. 103–19. In fact, the broad field of behavioral decision-making throws up other cautions about the dangers of inappropriate extrapolation. Individuals substantially underestimate the uncertainties in the world, and are overconfident about their ability to predict ranges of outcomes, expecting that the outcomes will lie closer to our experiences to date than they actually do. See Taleb (2007). Individuals often do not recognize that the world presents us with fat-tailed distributions (which produce many extreme outliers), not the normal distributions found in most textbooks. And courts are likely to be subject to the same bias, believing that the world will present us with situations that cluster reasonably closely, when in fact many deep outliers are to be expected.

22. See Bazerman and Chugh (2006); Chugh and Bazerman (2007).

23. 376 U.S. 254 (1964).

charge of the Montgomery police, and his libel suit was based on an advertisement placed in 1960 by a group of civil rights leaders in the *New York Times* charging Sullivan with, among other things, hostility to the civil rights movement in his treatment of civil rights demonstrators. The case arose in a context, therefore, in which it was highly questionable whether the plaintiff had suffered any reputational damage at all, in which the factual errors in the advertisement were largely trivial, in which the underlying substance of the issue was a matter of great national social and political importance at the time, in which only forty-three copies of the offending publication were sold in the entire state of Alabama, and in which the jury-awarded damages—\$500,000 in 1964 uninsured dollars—were substantial. In short, this was both a celebrity case and an outlier case.

Despite the case's unusual nature, unusual even when compared to other libel cases brought by public officials against the media, the Supreme Court (and a Court highly protective of the civil rights movement) set out a rule—made law, if you will—that governed the full array of public official libel cases, even though most of the libel cases controlled by the rule bear little resemblance to the actual events that, but for the rule, would have generated libel litigation. Now it is possible that the so-called actual malice rule of *New York Times v. Sullivan* is the best rule, or at least a good rule, but the case nevertheless presents a good example of a rule whose content would almost certainly have been quite different had the case before the Supreme Court been more representative of the typical libel case—a newspaper accusing a local official of financial malfeasance, for example—involving a public official.²⁴

3.5 Selection Effects and the Battle over Availability

The availability problem in litigation would be substantial even if the cases that prompted rule-making were ones that were randomly selected from the larger array, because there would still remain the problem of assuming from a small sample size—typically a sample of one—a set of characteristics for the full array.²⁵ But the problem is actually far larger, because the incentives to litigate (or refrain from litigating) are likely to make unrepresentative cases especially likely to be the ones that wind up before appellate courts.²⁶ If ordinary events are disproportionately unlikely to generate disputes, if ordinary disputes are disproportionately unlikely to generate litigation, if ordinary litigated disputes are disproportionately likely to settle, if ordinary trial court verdicts are disproportionately unlikely to be appealed, and if ordinary appellate cases are disproportionately unlikely to generate the pub-

lished opinions that are the vehicles for appellate rule-making, then the result will be that the cases that prompt rule-making are likely to be especially unrepresentative of the events that the rules that emerge from appellate rule-making will encompass.

In the American legal system, all of the conditional “ifs” in the previous paragraph are likely to be satisfied, in large part because litigation is quite costly. And thus the cases that make it to the appellate level will represent an extreme selection. Karl Llewellyn famously referred to appellate cases as “pathological.”²⁷ To illustrate, a tobacco manufacturer may settle two dozen cases, accept the trial court's verdict in a dozen more, but appeal the case in which the warnings to the particular smoker were especially obvious and in which the smoker persisted in smoking even after health problems emerged. And a plaintiff's attorney who represents numerous smokers (individually, and not part of a class action) who have incurred smoking-related illnesses will similarly, say, settle two dozen cases, accept as unfortunate another dozen dismissals or defendant's verdicts, and appeal the case in which a sympathetic and largely nonnegligent smoker was not, because of a grant of a motion to dismiss, or grant of a defendant's motion for summary judgment, or grant of a motion for a directed verdict, even allowed to present his case to a jury. Thus, the mere fact that a case is appealed suggests from that alone that the case lies outside the norm.

The outlier status of the decided case would not be a problem if that outlier case was decided in a way that focused either narrowly on that case or set forth a rule only for other outliers sharing similar characteristics. The problem, however, is that the availability problem makes the outliers look more representative than they are, and thus the court deciding an outlier case and setting forth a rule on the basis of it will underappreciate the outlier's outlier status. Indeed, because any legal rule will produce some number of compliers, and some number of withdrawers from the activity, a court's understanding of the nature of the issue or problem will be informed only by the violators and the parties whose violation is unclear.²⁸ We might expect that the clear violator cases will settle or not be litigated in the first place, but that does not solve the problem because the court will still have seen not a representative sample of uncertain cases, but only those on the line between clear violations and unclear violations. By not seeing the compliers, the withdrawers, or the ones on the fuzzy edges of compliance and withdrawal, the court will still see a field that is far less representative than the court is likely to perceive.

Although most of the foregoing analysis addresses appellate rule-making,

27. See Llewellyn (1930, 58). Llewellyn observed that litigated cases bear the same relationship to the underlying pool of disputes “as does homicidal mania, or sleeping sickness, to our normal life.” And if we expand the pool from disputes to rule-governed events, Llewellyn's point becomes even stronger.

28. See Hadfield (1992).

24. See Epstein (1986).

25. See Cohen (1969, 1992).

26. See Hadfield (1992); Heiner (1986); Roe (1996).

policy-making, and lawmaking, in fact trial court verdicts have generated most of the controversy about regulation by litigation.²⁹ Whether it be the widely reported verdict against McDonald's for failing to warn customers about its especially hot coffee, or the verdicts and settlements in the tobacco litigation, or the extremely large punitive damage awards in some environmental and products liability cases, or the potential policy impact of litigation about guns, lead paint, breast implants, automobile insurance, fast food, and the managed health care industry, much of the concern about policy-making by litigation turns out not to be so much a function of rules set forth by appellate courts, but rather is directed at the opinion-free verdicts by juries at the trial level, verdicts (or settlements) that are often not appealed, and which, even when appealed, often have their behavior-influencing effects as soon as the verdict is issued, and without regard to any ultimate resolution of the controversy or opinion on appeal.

Because trial verdicts do not involve opinions and hence do not involve published statements of reasons,³⁰ it might seem as if the concerns about availability and selection effects (or, to make the same point positively, about their representativeness) drop out with respect to such judgments. In fact, however, the biased-sample problem may be even worse for trial verdicts than it is with appellate rulings. Large verdicts and settlements may be highly unrepresentative, but they are the cases that get reported in the general press and in industry-specific publications. Given the thousands of trial court decisions every year in this broad domain, only cases that are remarkable in some way will get noticed. Thus, the set of reported verdicts will be a distorted sample of the set of verdicts and an even more distorted sample of some larger class of lawsuits, disputes, injuries, or simple events.

Billion dollar awards, after all, get everyone's attention.³¹ Restaurants considering what kinds of warnings to issue in conjunction with serving hot beverages, for example, are unlikely to know about hot beverage lawsuits that were dismissed, or that were settled for small amounts because of the nuisance value of the lawsuit. These restaurants are even more unlikely to be aware of an even larger number of hot beverage injuries that generated no litigation at all, to say nothing about the literally billions of hot beverages consumed every year that produce no injury whatsoever. So although a verdict against McDonald's as a result of a hot coffee spill will be especially available to public knowledge because of the various media incentives that lead to reporting of the unusual story and not the routine event—man bites dog versus dog bites man—what becomes known will be especially unrepresentative.

Nevertheless, the ease of access to the unrepresentative but highly publi-

29. A good survey is in Lytton (2008).

30. Even though the cases often involve published preliminary rulings by the trial judges, especially the rulings denying motions to dismiss or motions for summary judgment.

31. See the February 23, 2000, comments of Theodore Olson, available at: <http://www.manhattan-institute.org/pdf/mics2.pdf>.

cized verdict may still lead potential defendants to assume that such a verdict is more representative than it actually is.³² And when potential defendants overestimate the likelihood of such exceptional verdicts, as the availability heuristic tells us they will, and when those potential defendants alter their day-to-day behavior based on an inflated view of the likelihood of liability, then the policy of potentially excess caution on the part of potential defendants is as much if not more a product of an availability problem as is a distorted rule emanating from an appellate court.

Just as the wise policymaker assesses the full field of potential applications of a policy before adopting it, so too would a wise primary actor considering serving very hot coffee, for example, want to survey the full field of potential applications of that practice in order to be able to determine, *inter alia*, what percentage of customers would spill hot coffee, how many of those would be injured as a result, how many of those would initiate a dispute, and what benefits the company would reap by offering very hot versus tepid coffee. But if the availability of a hot coffee verdict leads the same primary actor to overestimate the likelihoods of spilling, of injury, of litigation, and of an unfavorable verdict, then that actor's behavior will be no different from, and no more optimal than, its behavior in response to an administrative regulation that required a too-low temperature because of the administrator's mis-assessment of the likelihood of injury. Even if potential defendants could calculate accurately the likelihood of an extreme award,³³ they must also be concerned with the mind-set of potential plaintiffs. If potential plaintiffs believe large awards are possible, they will be more likely to bring suit, making it even more important for defendants to try to limit their exposure. And thus we suspect that coffee temperatures dropped across America after the McDonald's decision, even for defendants who knew the odds.

Although it may be hard to grasp the social disadvantages of corporate hyper-caution in the context of serving hot rather than very hot coffee, or of selling serviceable and reliable tires rather than ultra-high-performance tires for consumer use,³⁴ these disadvantages may be more apparent when the hyper-cautious actors are pharmaceutical companies, newspapers engaged in investigative reporting, or physicians refraining from performing risky but potentially life-saving operations, for in such cases the societal losses or public harms from inaction are more easily grasped.³⁵ But even if these

32. The point is made forcefully in the context of more and more consequential events in Posner (2004).

33. Which will, ideally, take into account the way in which juries will also know something about outlier previous awards, and thus will have outlier information about award size and possibly outlier information about a jury's belief that a defendant should have been on notice.

34. See, for example, *LeBoeuf v. Goodyear Tire & Rubber Co.*, 623 F.2d 985 (5th Cir. 1980).

35. Breast implants represent a case in which medical device manufacturers essentially gave up, establishing a \$4.25 billion compensation fund for "injured" recipients in the biggest class action settlement in history, even though the best scientific studies showed no evidence of harm. As is commonly the case, the most salient lawsuits involved the most sympathetic plaintiffs. See the book by former *New England Journal of Medicine* editor Marcia Angell (1997).

harms are understood, hyper-caution is a concern because in many psychological and legal contexts errors of commission count far more heavily than errors of omission, implying that there is already a background tilt in the direction of insufficient action.

Still, our goal in this chapter is not to enter into the debate about the socially optimal degree of caution that a manufacturer or other primary actor should adopt, assuming that the actor conducts an accurate empirical assessment of the expected social costs of the Type I errors of engaging in too much harmful conduct and the Type II errors of failing to engage in sufficient beneficial conduct. Rather, our two aims here are only to argue: (a) that such an assessment, a prerequisite to any determination of the proper risk level, cannot proceed wisely if the frequency of various potential events is miscalculated or misestimated; and (b) that such miscalculation or misassessment is especially likely to occur when aberrational events are highlighted because of the incentives of those—especially but not only the institutional press who report and the plaintiff's bar who litigate—who would be in a position to provide information about litigation.

Although it seems likely that the problem of misassessment is especially likely with respect to nonrepresentative verdicts for plaintiffs, from our perspective the misassessment would be equally problematic where the informational availability of aberrational defendant's verdicts distorted the behavior of primary actors so that they underestimated the likelihood of liability. Did the extreme availability of the verdict of acquittal in the trial of O. J. Simpson, for example, lead potential spouse-killers to overestimate the possibility of acquittal? Might the well-known appellate reversal of the multibillion dollar jury verdict in the Rhode Island lead paint litigation case³⁶ cause manufacturers of other potentially toxic substances to underestimate the possibility of liability?

The problem we highlight is one that is likely to be exacerbated because of the incentives that determine the identity of litigation parties as well. In class action lawsuits, for example, it would be a foolish plaintiff's attorney who selected a representative plaintiff rather than one who is especially sympathetic. It is true that Rule 23(a)(3) of the Federal Rules of Civil Procedure requires the judge to determine that the class representative present claims that are "typical of the claims . . . of the class," but such a determination will take place on only one side of the range. Some potential class representatives will in fact be typical of some class of plaintiffs, others will be atypically sympathetic, and some will lie in between. But none, unless the plaintiff's attorney is an idiot, will be atypically unsympathetic, and thus a judge faced with determining representativeness from candidates only on the sympathetic side of the typicality distribution can be expected systematically to incline the class of all class representatives in the direction of

36. *State v. Lead Industries Ass'n, Inc.*, 951 A.2d 428 (R.I. 2008).

the atypically sympathetic. To the extent that this is so, the litigation-based policy-making that ensues from class action judgments is especially likely to suffer from judge or jury misassessments of the aggregate character of the class, thus compounding the perceptual misassessments that are the product of the way in which only exceptional and thus unrepresentative verdicts are publicized, and even beyond the extent to which only unrepresentative disputes are litigated and only unrepresentative suits get to verdict without dismissal or settlement.

3.6 On Case-Based Rule-Making

On the basis of the foregoing, it may be tempting to perceive litigation itself as the problem, but in fact that is not so. Litigation does indeed present an example of the problem, but the problem—or at least the availability/unrepresentativeness problem—is one that comes with an overemphasis on specific cases in the policy-making process, whether the policy originates in a court of law, an executive agency, or a legislature, and whether it is formal policy or simply a prescribed practice. Overemphasis on unrepresentative specific cases in policy-making appears across a wide range of regulatory/rule-making institutions, and is hardly restricted to litigation-based policy-making.

A good indication of the increasing tendency toward case-driven *ex ante* rule-making is the proliferation of laws named after particular individuals, of which Megan's Law, requiring the registration with local authorities of released sex offenders, is perhaps the most famous. Megan's Law, first enacted by the California legislature and then copied in many other states, is hardly unique, however, and federal laws dealing with missing children and adults include Kristen's Act, Jennifer's Law, and Bryan's Law, while among the federal laws dealing with sex offenders are Aimee's Law, the Jacob Wetterling Crimes Against Children and Sex Offender Registration Act, and the Hillary J. Farias and Samantha Reid Date-Rape Drug Prevention Act. Although many of these laws deal with missing persons and sex offenders, there are also case-generated laws dealing with drunk driving, including the Burton H. Greene Memorial Act; with crime on campus, as with the federal Jeanne Clery Act and the Michael Minger Act in Kentucky; with physically abusive dating partners, the object of Idaho's Cassie's Law; with hit-and-run driving in Brian's Bill in Maryland; with conditions of release for violent offenders, exemplified by Jenna's Law in New York; and many others.

These and similar named bills were drafted in response to celebrity cases, many of them representing the extremes of the bad behavior that winds up being the subject of the law. The Brady Law, for example, is a prime piece of federal gun control legislation, and it is named after President Reagan's press secretary, severely and permanently injured by a bullet meant for the president. But although gun control is mostly targeted at professional crimi-

nals and domestic violence, it is the celebrity attack on President Reagan and the injury to James Brady that spurred the legislation. And although most of these laws were prompted by crimes committed against the particular victims whose names are now on the laws, New York's Son of Sam Law—after which many other state laws restricting profitable activities by convicted felons are named—draws its title from the nickname for David Berkowitz, the perpetrator of a particularly notorious series of murders in New York in the 1970s.

It is of course difficult to avoid feeling sympathy for the victims of horrendous crimes and for their families, and it is understandable that many of these families view a law targeted at the specific crime from which their loved ones suffered as a fitting and enduring memorial. Nevertheless, the more a law, of necessarily general application, is designed in view of a specific example or specific case, the more risk there is either that the problem that prompted the law is itself rare or that the law is designed to deal with cases resembling the prompting case even though the highly salient prompting case is in fact unrepresentative of the problems that the ensuing law will in fact cover. Legislators who enact such laws are thus engaged in a two-level game with their constituents. The legislators may recognize the case-based law as somewhat misdirected, but feel they have no choice but to respond to public outrage over a heinous act, and a law enshrining a victim, even an uncharacteristic victim, is often the easy path to follow.

Sometimes, of course, a celebrity case is in fact representative. Lou Gehrig was medically a very representative example of people afflicted with what is now known as Lou Gehrig's disease. And the Megan of Megan's Law may well be a representative example of the problem that the law was aimed at preventing. But not infrequently the celebrity cases will be unrepresentative, and it is unlikely that a regulatory agency or legislature that is prompted to act by a celebrity case will come up with a solution that does not address that very case, or cases just like it, and thus the celebrity status of the celebrity case may make it close to impossible for a regulator to produce a rule that implicitly understands the outlier status of the celebrity cases and thus ignores the problem.

Even when a law is not prompted by a specific event, it has increasingly become part of the law-making process for legislative hearings to feature victims and case studies rather than experts on the relevant fields. Using vivid examples is of course a good rhetorical and persuasion strategy, and it is no surprise, for example, that President Obama's speeches about health care reform have invariably described at least several scenarios involving more or less worthy citizens who through no fault of their own have found themselves in health-care related difficulties due to absent or inadequate health insurance. But no public speaker of the president's caliber—or, indeed, well below his caliber—is going to pick unsympathetic examples, even if the unsympathetic examples may in fact be more representative. Moreover, and

most importantly, it is extremely unlikely that the ensuing legislation would fail to “solve” the problem for the exemplar individuals, even though any law and any policy will of course not solve every problem. By relying on specific examples in circumstances in which specific and possibly unrepresentative examples are made salient and thus dominate the process, legislation may increasingly resemble litigation in being beholden to the unrepresentative and distorting example.

3.7 The Lessons to be Learned—The Penumbra Problem

In trying to draw together the lessons to be learned, the metaphor of a shadow may be useful, and may illustrate the ideal situation for case-based policy-making. The policy can be thought of as a light beam, and the case a specific object. The policy should apply to all situations that fall directly in the shadow of the specific case, closely resembling the specific case in terms of the critical elements of some principle. The difficulty, we have argued, is that salient cases tend to get exaggerated, and thus to cast perceived shadows that are far larger than the real shadows created by a more careful extrapolation from any one case. The result is a policy applicable not merely in the actual shadow, but across a much broader range of situations, and where the lessons from the original case do not apply.

Thus it is not a case's actual shadow, but its penumbra, its space of partial but not complete illumination, which winds up defining policy. And because the danger is that a case-based policy will be applied to a case's penumbra and not just to its shadow, it can be useful to think of the area of misapplication as the *penumbra problem*.

We have argued that the availability heuristic is the principal cause of the penumbra problem. Because availability leads individuals to judge the frequency of an event by how readily one can bring an instance to mind, it influences the extrapolation process. When a case comes into mental focus easily, as with a salient litigation instance or a prominent case that prompts legislation, the availability heuristic tells us that there is a tendency to overestimate its relevance, and thus to think it applies much more broadly than it does. When this happens, future events merely falling in the penumbra will be mistakenly treated as if they were directly in the case's shadow.

The problem of the penumbra is exacerbated when we encounter the phenomenon of the *celebrity case*. Some situations gain prominence because of media attention, sometimes because of their extreme and thus newsworthy facts, and sometimes because of the celebrity of the people involved. Almost by definition, newsworthy events are outliers, and celebrities are unusual. Basing policy on celebrity cases thus typically assures that their shadow will cover relatively few situations, but celebrity cases, like real world celebrities, appear larger than life, and their shadows will be exaggerated.

Consider a recent celebrity case that gained international publicity even

though no crime was committed, few people were involved, no money was lost, and no physical injury was suffered. In July 2009, Sergeant James Crowley of the Cambridge, Massachusetts, police department arrested Harvard Professor Henry Louis "Skip" Gates in his Cambridge home. Gates, an African American and probably America's leading professor of Afro-American studies, was, with the help of his driver, trying to force the door to his own house, which somehow had jammed. The two were reported by a passerby as possible burglars. Sergeant Crowley responded to the call, and a series of misunderstandings and missteps ensued, with charges of racism and unruliness flying. As the encounter became increasingly angry, an enraged Gates was arrested for disorderly conduct. Ultimately, the charges were dropped, with the Cambridge mayor, the Massachusetts governor, and the president of the United States all getting involved.

Commentators of varying political stripes chimed in, including the aforementioned three political leaders, all African Americans. The thrust of their comments was that this case provided an excellent learning opportunity for some of the most important lessons for achieving an effective and peaceful multiracial society. So far so good, but the difficulty was that different commentators tended (and intended) to draw extremely different lessons. To some, the case illustrated the ever-present dangers of racial profiling, if even a small, neatly dressed, middle-aged, cane-carrying extremely distinguished Harvard professor could be subject to such an indignity in his own home. To others, however, the most important facts were that Sergeant Crowley was a highly respected police officer, known to go by the book, and known not only as nonracist, but as someone who taught courses to other officers about avoiding racial profiling. And thus many people understood the event not as an example of racial profiling, but rather as an elitist attack on a dedicated police officer, or a reflexive response by black leaders—including the president—who tended to see racism in every case of disagreement between people of different races.

The charges against Gates were dropped, and Gates dropped his threat to sue, so there will be no formal legal precedent from these events. Nevertheless, Cambridge has appointed a distinguished commission whose recommendations will surely influence future policy, quite possibly in the form of administrative edicts or city ordinances. And Gates has stated his intention to create a television series about racial profiling, thus increasing the likelihood that the events will have a major influence on policy more broadly, and possibly on specific legislation.

Yet although the effects of this case are likely to be major, it is hard to imagine a more unrepresentative case to address the twin issues of racial profiling by the police and respect for the police in minority communities. Each of the two protagonists was an extraordinarily appealing and extreme outlier on his side of any conceivable profiling situation. Gates is a highly distinguished African American whose profession and appearance are extremely unthreatening. Crowley is a very well-respected police officer, as deeply

engaged in combating racial profiling as any white officer. Moreover, the locale and circumstances of the arrest were highly unrepresentative of typical racial profiling situations. The police officer was legitimately responding to an act reasonably arousing suspicion, yet the professor was in his own home. And thus the case is far afield from the much more common occurrence in which a white police officer asks young black men just hanging out to move along, or in which a black person driving in a white neighborhood is stopped on general suspicion, thus explaining the facetiously-named crime of "driving while black."

In short, any policy that emerges from this celebrity case will be built on a highly unrepresentative foundation. That failing, we have argued, is common to most policies that are built on the salient cases that tend all too often to be the basis for regulatory policy, whether that policy emerges from litigation, from legislation, or from action by an administrative agency.³⁷

Although the pressures of politics and the ever brighter spotlights of the media have increasingly caused *ex ante* rule-making, especially by legislatures and occasionally by administrative agencies, to be plagued by the pitfalls of the available but unrepresentative case, these pitfalls are more of an unfortunate tendency of some legislative and administrative policy-making processes than something that is endemic or necessary to the process. By contrast, however, litigation cannot escape these risks, because having a real and present controversy between real parties is a defining feature of litigation. In this respect, therefore, the problem of the distortingly available example is almost always a problem with regulation by litigation, but only sometimes—even if increasingly—a problem with *ex ante* rule-making.

Still, the lesson is not that litigation is inferior to *ex ante* rule-making as a regulatory strategy. Rather, it is that case-based regulation entails risks of regulatory mismatch between regulatory goals and regulatory targets wherever case-based regulation appears, and that it is as problematic when it influences legislative and executive policy-making as when it distorts the policy-making that is an inevitable part of the litigation process.

Our goal here, however, is not to compare the negative aspects of case-based policy-making to the various positive features that it may possess, or with which it may contingently be coupled. Litigation-based policy-making, for example, may occasionally or usually bring advantages of nonbureaucratization—private versus public regulation³⁸—that will outweigh the disadvantages that a case-based approach to policy-making entail. Litigation may also at times be a useful spur to agency-based or legislature-based *ex ante* rule-making.³⁹ But some forms of so-called regulation by litigation may avoid some of the desirable procedural constraints incorporated in

37. We recognize the irony, apparent throughout this chapter, of using available and potentially unrepresentative examples of unrepresentativeness to illustrate the problem of unrepresentativeness.

38. See Shavell (1984).

39. See Jacobson and Warner (1999). See also Mather (1998); Wagner (2007).

congressional rules or the Administrative Procedure Act.⁴⁰ And regulation by litigation can at times be unnecessarily complex, costly, unpredictable, and lengthy.⁴¹ Numerous other factors also incline one way or another in the litigation versus *ex ante* rule-making debate, and it is far from our aim to even survey all of those factors, let alone evaluate them in general or in the context of particular policy-making topics. In short, any cost-benefit analysis would have to tally many elements on the benefit and cost sides of the litigation and regulatory rule-making approaches. But we leave that tally to others.

Our conclusion, therefore, is not that regulation by litigation is superior to or inferior to regulation by *ex ante* rule-making. It is simply that case-based policy-making is, *ceteris paribus*, a risky strategy, and that any approach to regulation is less desirable insofar as it relies too heavily on potentially unrepresentative examples, and more desirable insofar as it avoids this problem. This chapter has sought to identify one large negative factor. Determining which form of regulation is—all things including this factor considered—more desirable is a more ambitious goal than we have had for this chapter.

Appendix

Toward a Formal Model of Case-Based Law

This chapter proceeds by logic, not formal analysis.⁴² Nevertheless, it is worth inquiring what a formal model of case-based decision-making law might tell us.⁴³ Justifiable simplicity is a prime quality for a model. Thus, we start with the simple situation where all cases are arrayed along a single dimension, say the extent of a defendant's degree of misrepresentation in a securities case, a variable ranging from 0 to 1. Moreover, we posit, as is common in legal decisions, that only binary outcomes are possible; there are no shades of gray.

The framework sketched later posits either that there is agreement on the facts, such as the extent of misrepresentation and the size of an award should liability be established, or that no further investigation of facts is permitted.

40. See Center for Regulatory Effectiveness, "What is Regulation by Litigation?" at www.thecre.com/regbylit/about.html.

41. See Kagan (2001).

42. We thank John Horton for conducting the simulations contained in this appendix, and Ashin Shah for preparing the figure.

43. Our referee recognized, correctly, that our chapter provides its empirical evidence by example, as opposed to more traditional economic methods, such as regression analysis. Thus, he argues, we may have been subject to availability bias ourselves. Given that, he suggested that we consider the potential for a formal model of how case-based law might perform, a model that would help determine whether the "evolution of decisions helps to correct the problem" posed here. This appendix provides a response.

In effect, information on the case is held in common, though the outcome for that information is unknown. The "no further investigation" proviso applies in appellate cases, which are our primary concern. Thus, the fundamental uncertainty is how the court will decide.

Priest and Klein (1984) address a quite different situation, where the contending parties differ in their assessments due to imperfect information about what the other party knows. Thus, if the parties start with overoptimistic assessments that the facts will favor their side, they will proceed to trial. They only stop once sufficient information, as uncovered by discovery or through arguments at trial, makes their assessments converge sufficiently to make settlement more attractive to both parties, rather than incurring additional transactions costs.

Returning to our assumptions of common knowledge and a one-dimensional framework, the system would quickly yield definable outcomes. Lawyers would only contest situations where the degree of misrepresentation lay in an interval where among prior decisions the next highest misrepresentation level led to a decision for the defendant and the next lowest led to one for the plaintiff. For example, if to date the greatest misrepresentation level associated with a finding of not liable was 0.64, and the lowest misrepresentation level leading to a finding of liable was 0.72, only cases between those two values would be potentially contested. Calculating the likelihood of a potentially contested case turns out to be a complex matter. Hence, we turned to simulation. The results are given in table 3A.1.

Matters become more complex if there is a second dimension. In the securities case, that dimension might be the extent of reliance by the plaintiff. Nevertheless, the system would still yield results once the number of cases becomes large. Following the securities example, say that x and y define the degrees of misrepresentation and reliance, respectively, of the defendant and plaintiff. We posit them to be continuous variables that are independent. We also posit that these are scale-free parameters arrayed along the positive line. Thus, the trade-off between x and y in determining liability is always strictly positive, but its value at any point is not related to trade-off values elsewhere.

Figure 3A.1 illustrates for all points above the curve, the defendant is liable; for all points below, he is not. The point x_j, y_j is said to dominate point x_i, y_i if $x_j > x_i$ and $y_j \geq y_i$.

There are two decisive conditions. Condition A: If a defendant's case dominates any prior case where he has been found liable, he is sure to be found liable in the current case, since both fact conditions are at least as bad for him. Condition B: If a defendant's case is dominated by any prior case where he has been found not liable, he is sure to get off in this case, since both fact conditions are at least as favorable for him. The potential for litigation arises when neither Condition A nor Condition B holds. If so, relying solely on precedent, the outcome in this case cannot be determined.

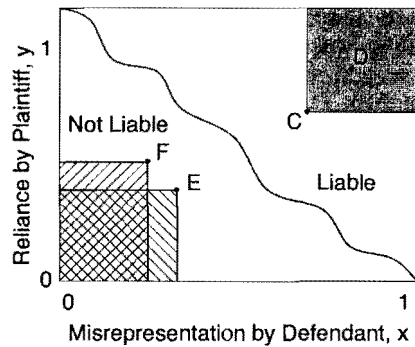


Fig. 3A.1 Relationship among reliance, liability, and wrongfulness

The figure shows a situation where there are four prior cases: C, D, E, and F. Here the relevant cases for precedent are C, E, and F. Case D dominates C, where less incriminating facts led to a finding of liability. Hence, C is the relevant precedent. Cases E and F, both of which found not liable, are both relevant, since neither dominates the other. The shaded portions of the figure represent regions where cases would not be contestable. In the unshaded area, however, it would be unclear whether liability would be found. Thus, cases that fell within that area are potentially contestable.

We conducted a simulation, drawing a random value from 0 to 100 for each unknown variable. These values can be thought of as the percentiles of the underlying density function, making no assumption about the form of that function. We then determine how likely it is that a new case will be potentially contestable.

Table 3A.1 shows the results for the one-, two-, three-, and ten-dimensional situations, where z is the third dimension.

The first crucial point to note is that moving up a dimension makes a potentially contestable case much more likely. With 100 prior cases, the likelihood jumps from less than 2 percent to more than 20 percent when we move from one to two dimensions. For three dimensions, the probability is almost 50 percent, and with ten dimensions it is almost a certainty. (In 1,000 trials, no case for the ten-dimensional case was resolved when there had been 100 prior cases.)

Of course, not all potentially contestable cases get contested, particularly if litigation costs are high. Condition A or Condition B may be almost satisfied, or the participants may think they can predict the court's trade-off rates in the contestable range. In either situation, if the outcome was fairly predictable, a case might not be contested.

But false reassurance should not be taken. We would argue that the real world presents a far more complex situation. There are dozens of dimen-

Table 3A.1 The percent likelihood of a potentially contestable case (each entry based on 1,000 simulated histories)

	Number of prior cases resolved		
	10	100	500
One-dimensional cases	17.9	1.8	0.3
Two-dimensional cases	57.5	20.6	10.2
Three-dimensional cases	80.4	48.8	29.7
Ten-dimensional cases	100	100	99.5

Notes: The cutoffs for determining liability were $x > 0.5$ in the one-dimensional case, $x + y > 1$ in the two-dimensional case, and $x + y + z > 1.5$ in the three-dimensional case. (For small numbers of cases, the cutoff matters. More extreme cutoffs—those closer to 0 or 1—give lower likelihoods of a contestable case. For any specific number of prior cases, when the numbers of cases gets large, the likelihoods converge for all cutoffs.) In the ten-dimensional case, the cutoff had a total value of 5 on the ten dimensions.

sions on which cases may differ. When there are many dimensions, potential contestability becomes extremely likely.

What of the possibility of giving weights to the different dimensions, and adding up the scores? Posit once again a radical simplification: there is no disagreement on the facts or the dimensions, and performance on each dimension can be readily measured quantitatively. This would still leave the problem of determining what weights are appropriate to apply to each dimension.⁴⁴ The lawyers could be expected to battle mightily over appropriate weights for a case until vast numbers of cases had been decided. Moreover, previously unexplored dimensions would continuously be introduced, particularly as the underlying world itself evolved. In real-world cases, of course, lawyers focus on the dimensions where the implicit scores are most favorable for their client, and may find it desirable to simply ignore some unfavorable dimensions. In effect they give zero weight to ignored dimensions, though the other side may stress its importance. And, of course, there would be disagreements on facts as well, although the general inability of appellate courts to correct lower court fact-finding will incline appellate decision-making to issues of law and not issues of fact.

The binary nature of many legal decisions plays a major role retarding the swift convergence of the case-law process. When a jury decides in favor of one party or another, it does not provide an estimate of how close the decision may have been. Indeed, it does not write an opinion. This dramatically reduces the information available to guide future cases. Appellate courts do provide opinions. But they too do not convey how close their decisions were.

44. Note, regression would not yield an answer, since our scale independence assumption implies that the weights would vary depending on the scores. If we assumed that x and y had some cardinal properties, as opposed to scale independence, then the court might draw inferences from trade-off rates away from current values, as say, through a regression analysis.

Indeed, it would be surprising if an appellate opinion gave the impression it could easily go the other way, even if the balance was close. Although appellate opinions typically speak with confidence, and equally typically set out their conclusions in strong rule-like fashion, the confidence of the opinions often masks the reality of underlying uncertainty, well captured in Justice Brandeis's remark to Justice Cardozo that, in rendering an opinion, "[A]fter all, you only have to be 51 percent right."⁴⁵

At worst, if there was a contrary consideration, if addressed in the opinion, it would have to be explained why it was not decisive, thus undercutting any ability to determine if the decision was close. In some appellate courts, most obviously the Supreme Court of the United States, the presence (or absence) of concurring or dissenting opinions will give some indication of whether a decision was a close one. But in many other appellate courts, such as panels of the federal courts of appeals, informal unanimity norms mask underlying disagreement and thus the degree of difficulty of the case.

Obviously, if both parties are willing to incur the costs of going to trial, or going to appeal, each must have thought it had a nontrivial probability of winning. Litigants in a future case, whether they are both private parties or if one is the government, as with regulatory or criminal proceedings, have limited information to guide them from past decisions. Say your case is a little stronger than that of a plaintiff who lost. If her case would have had a 60 percent chance of winning a priori, then you probably should go to trial, but probably not if it was 10 percent. But after the fact, if it was a jury decision, you get no information from the court itself beyond the decision. Moreover, juries have neither the ability nor the requirement to take guidance from prior jury decisions.

If an appeals decision determined the prior case, an opinion would have been issued, which could guide future cases, but opinions are usually crafted to justify the outcome chosen. And the whole process is made more difficult still because a case is not a case in the sense that the facts determine the decision. The decision in a case may well depend on how well it was argued by both sides. Thus, in judging one's own prospects, one must guess how relevant past cases would have come out had they been argued more effectively or differently by one side or the other, and how effectively your case will be argued by both sides.

The thrust of the argument we are making is that a formal model of the way the case system actually operates would show that the process would be extremely difficult for future parties to assess for a broad array of cases, quite apart from any role for the behavioral propensities that played a prominent role in our analysis. In a world where cases are complex to begin, where change is to be expected, and where case outcomes are usually binary, the guidance provided by precedent will often come extremely slowly. This is particularly true when opinions are not provided, or are crafted to justify the

choice in a close decision. Two unfortunate consequences result: many cases come to trial because outcomes could not be predicted and, after a decision is made, many participants feel the court system treated them unfairly.

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45. See Rauh (1979, 12, 18).

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