Law as a Discovery Procedure: 
An Informational Rationale for Broad Judicial Decisions? 

Justin Fox* and Georg Vanberg †

November 11, 2011

1 Introduction

Unlike constitutional courts in civil law countries, which can rule on the constitutionality of governmental policies “in the abstract,” the US Supreme Court can exercise constitutional review only in the context of specific “cases or controversies.” The fact that the Court’s powers of review are so closely tied to particular disputes has naturally given rise to competing views regarding the appropriate scope for Supreme Court decisions.¹ One position, exemplified among current justices by Antonin Scalia, holds that while the Court’s decisions are issued in the context of specific disputes, opinions should not be tied too closely to the facts of particular cases. Instead, the justices ought to develop broad rules that enhance predictability in the law and provide clear guidance to policymakers, lower courts, and society more generally (e.g., see Scalia 1989). Others, including former Justice Sandra Day O’Connor and Chief Justice John Roberts, have argued for the opposite approach. In this view, judicial opinions should be narrow, that is, they should “stick to the issues at hand” and avoid, to the extent possible, rules that wander beyond the current case. As Chief Justice Roberts put it in a commencement address at Georgetown University Law School in 2006: “If it’s not necessary to decide more to dispose of a case, in my view, it’s necessary not to decide more.”

¹For reasons that will become clear, we focus on judicial review of governmental policy. However, the question of scope applies not only to the Court’s review of policies, but to “regular” cases as well.
The difference between these approaches - often reflected in barbs traded by the justices in their opinions – can best be illustrated with the help of examples. In the early 2000s, Jeff Quon worked as a police officer in Ontario, California, and was issued a city-owned text-message pager. When the city repeatedly incurred “overage charges” for exceeding the limit on messages sent and received, police administrators audited Quon’s communications to determine whether the charges were the result of work-related messages. The audit revealed that Quon had been using the device extensively for private purposes, and he was disciplined. Quon sued, arguing that the audit constituted an unreasonable search. In 2010, the Supreme Court denied Quon’s petition.\(^2\) The Court’s decision was narrow, focusing on the fact that, in this particular case, police administrators had a valid, work-related reason for auditing Quon’s messages (namely, to determine whether the city’s message allotment was sufficient to allow him to perform his job). Importantly, Justice Kennedy’s opinion did not explore the conditions under which government employees have a legitimate expectation of privacy, and explicitly rejected the notion of devising a general rule to govern searches of the electronic communications of government employees. Given its narrow nature, the decision provides only limited guidance to governments, lower courts, and employees in related circumstances.

In contrast, consider Justice Scalia’s opinion in Employment Division v. Smith, a 1990 case.\(^3\) Two drug counselors were dismissed from their jobs at a private clinic as a result of consuming peyote, a controlled substance, during a native American religious ceremony. Because they had been fired for “misconduct,” the state of Oregon rejected their applications for unemployment benefits. The employees sued, arguing that the denial constituted a violation of their First Amendment right to the free exercise of religion. The Supreme Court rejected this claim. In doing so, Justice Scalia’s opinion crafted a broad rule to govern the implications of the First Amendment for government’s ability to regulate religious conduct. The opinion established that governments are generally free to impose restrictions that affect religious practice without violating the First Amendment if there exists a legitimate (non-religious) reason for regulating the behavior.\(^4\)

\(^2\)See City of Ontario v. Quon, 560 US. \\
\(^3\)Employment Division, Department of Human Resources of Oregon v. Smith, 494 U.S. 872. \\
\(^4\)As the opinion puts it: “It is a permissible reading of the text, in the one case as in the other, to say that, if prohibiting the exercise of religion (or burdening the activity of printing) is not the object of the tax, but merely the incidental effect of a generally applicable and otherwise valid provision, the First Amendment has not been offended... Our decisions reveal that the latter reading is the correct one. We have never held that an individual’s religious beliefs excuse him from compliance with an otherwise valid law prohibiting conduct that the State is free to regulate. On the contrary, the record of more than a century of our free exercise jurisprudence contradicts that
That is, rather than restrict itself to the issue at hand (“Denial of unemployment benefits is constitutionally unobjectionable when an employee has been fired for consuming an illegal drug as part of a religious ceremony”), the opinion announced that restrictions of religious behavior are in general constitutionally acceptable as long as the government can legitimately regulate the behavior at issue in a non-religious context. As a result, the opinion provides relatively clear guidance to lower courts, governments, and citizens with respect to the constitutionality of a wide range of potential restrictions on religious behavior. Indeed, the scope of the rule is so broad that Justice O’Connor - a champion of narrow rulings - refused to sign Scalia’s opinion, even though she concurred in the Court’s judgment. Instead, she urged a narrow resolution restricted to the specific facts at issue.\(^5\)

In part, this difference in approaches reflects different views of the process by which “the law” ought to evolve. The implications of constitutional provisions for the scope of governmental power are dynamic. A case presents a court with the opportunity to interpret a constitutional norm with respect to a particular policy or set of circumstances. This decision changes the legal landscape, and policymakers and individuals may adjust policy and behavior. Eventually, new cases arrive at the court, providing an opportunity to revise or extend “the law” in light of experience. A prominent defense of the “minimalist” approach argues that in such an open-ended process, judges often lack the knowledge that would be required to reliably develop comprehensive rules that are appropriate for (unknown) future circumstances. Rather than risk announcing broad rules that turn out to be unworkable or inappropriate ex post, judges ought to stick closely to a case, and only extend rules “piece-meal” as new cases allow them to do so. In short, on this argument, a court “does best if it proceeds narrowly and if it avoids steps that might be confounded by unanticipated circumstances” (Sunstein 2005, 1903). A narrow approach is thus no more than an acknowledgment on the part of the court “that there is much that it does not know” (Sunstein 1999, ix).

In this paper, we consider this “epistemological” argument for judicial minimalism. Specifically, we ask whether judges with limited knowledge may – under certain circumstances – have reason to issue broad decisions precisely because they know that there is “much that they don’t know.”

\(^5\)As she put it in her concurrence, “I would...hold that the State in this case [emphasis added] has a compelling interest in regulating peyote use by its citizens, and that accommodating respondents’ religiously motivated conduct ‘will unduly interfere with fulfillment of the governmental interest.’”
Perhaps surprisingly, our answer to this question is “yes.” There are good informational reasons for judges to issue broad opinions. The intuition behind this result rests on the fact that narrow and broad rulings communicate different messages to policymakers about what they may (or may not) do. And because judicial decisions shape the policies that are implemented in response, they shape the issues and policies that can come before the Court in the future. As we show, in this dynamic setting, broader rules – even if they risk being “wrong” – can be desirable from the justices’ point of view because they induce policy responses that give rise to cases that make it easier for judges to craft “good law.”

Before proceeding, an important caveat is in order. We are engaging a particular argument for the desirability of narrow decisions, namely the claim that judges have limited knowledge of the consequences of broad rules and that therefore, they ought to act cautiously in pronouncing on issues not yet presented to them. There are, of course, arguments in favor of judicial minimalism that derive from other considerations. Most important, perhaps, is a concern for the proper role of judges in a democratic society. As Sunstein has argued forcefully, narrow decisions have the virtue of preserving maximum scope for decision-making by democratically-elected (and accountable) institutions. Our argument does not negate this objection to broad decisions; we merely aim to muddy the waters by suggesting that broad rulings can, from the perspective of judges with limited knowledge, serve the purpose of developing “better” regal rules more efficiently than than narrow opinions, at least on occasion.

In making this argument, the model we develop departs significantly from most models of judicial decision-making in political science. The first difference concerns what judges care about. Standard models typically assume that judges are, largely, “legislators in robes” (e.g., Ferejohn and Weingast 1992; Epstein and Knight 1998; Vanberg 2005; Epstein, Knight and Shvetsova 2001). They have policy preferences, and pursue those preferences subject to the constraints imposed by other political actors and the public at large. In this paper, we make a fundamentally different assumption, namely that judges care about legal principles. Specifically, we assume that judges subscribe to a legal philosophy that separates “constitutional” and “unconstitutional” (government-
tal) actions, and that they are motivated by a desire to see prevailing legal rules come as close as possible to reflecting their legal principles. Putting it differently, in our model, judges are not “legislators in robes;” they care about a fundamentally different dimension of decision-making than ordinary policymakers.7

Second, as we explain in more detail below, we capture the spirit of the “epistemological” objection to broad rulings by assuming that judges face uncertainty regarding the application of their preferred legal principles to public policy. That is, while judges have clear conceptions of the legal principles they value, they are – in the abstract – uncertain about how they would evaluate specific policies in light of those legal principles. In hearing challenges to a particular policy, they “learn” about the implications of their legal principles for the policy at issue (and they can, on the basis of this knowledge, make educated guesses about other policies). For example, a judge may believe that coercive interrogation techniques are unconstitutional; nevertheless, she is uncertain how she would evaluate specific interrogation protocols under that standard until she has heard arguments and seen evidence. The critical implication of thinking about judicial preferences in this manner is that judges always face some uncertainty about how they would evaluate policies that have not yet been challenged in front of them. This uncertainty captures the epistemological objection because it introduces the risk that broad rules – which make pronouncements with respect to policies the court has not yet reviewed – could be “mistaken” in declaring certain policies (un)constitutional.

The paper proceeds as follows. In the next section, we provide greater detail on the “informational rationale” for narrow opinions. In the third section, we present a model that formalizes the choice between narrow and broad opinions confronting judges, and demonstrates that under a broad range of conditions, judges with limited knowledge can achieve better legal rules by issuing broad rulings. A final section interprets the results and concludes.

7That is, judges in our model care about “policy” only in so far as it is constitutional (or unconstitutional); they have no preferences among policies that are constitutional. We should note that there is an affinity between this approach and recent work that makes use of “case space” models. For example, Lax explores the choice between rules and standards for a court attempting to control lower courts in a judicial hierarchy. In our approach, the goal for the court is to develop a legal rule over time that approximates its preferred rule as much as possible. For Lax, the goal for the court is to develop a legal rule that results in case dispositions by lower courts that reflect the court’s preferred dispositions as much as possible.
2 The Virtues of Minimalism

For purposes of the paper, we focus on judicial review of policy choices by legislative or executive actors. In this context, the epistemological defense of judicial minimalism stresses that the adversarial process typically ensures that judges are supplied with relevant information on the policy at issue, its implementation, impact, and the “fit” between that policy and various legally-relevant criteria. In general, judges lack such detailed knowledge with respect to policies that differ from those before them. As a result, narrow rules that are restricted to the issues/policy presented are less likely to have unanticipated, undesirable consequences than broad rules which are, by design, intended to delineate implications for circumstances/policies that are beyond the immediate case. Judges who are aware of the limits of their own knowledge might thus be well-advised to take a narrow approach. Indeed, Justice Kennedy’s opinion in *Quon* stresses this “knowledge problem” as a rationale for its limited scope:

> The judiciary risks error by elaborating too fully on the Fourth Amendment implications of emerging technology before its role in society has become clear... Prudence counsels caution before the facts in the instant case are used to establish far-reaching premises that define the existence, and extent, of privacy expectations enjoyed by employees when using employer-provided communication devices... A broad holding concerning employees privacy expectations vis--vis employer-provided technological equipment might have implications for future cases that cannot be predicted. It is preferable to dispose of this case on narrower grounds.

The majority opinion in *NASA v. Nelson* (2011) similarly illustrates such caution in the face of limited knowledge. Several NASA contract workers had challenged background checks that included questions regarding drug use and treatment on the basis of a constitutional right to “informational privacy.” The Court unanimously rejected the challenge, but the justices disagreed about the appropriate scope for the ruling. Justice Scalia urged a broad decision that would, as a general matter, dismiss the notion of a right to “informational privacy.” In contrast, Justice Samuel Alito’s majority opinion declined to address the existence of such a constitutional right, and focused narrowly on the facts surrounding the employment process at NASA. Alito justified his narrow approach by arguing that the current case had not provided the Court with adequate
information to rule more broadly:

The opinions concurring in the judgment disagree with this approach and would instead provide a definitive answer to the question whether there is a constitutional right to informational privacy... It is undesirable for us to decide a matter of this importance in a case in which we do not have the benefit of briefing by the parties and in which potential amici had little notice that the matter might be decided... Particularly in cases like this one... the Court has repeatedly recognized the benefits of proceeding with caution... We therefore decide the case before us and leave broader issues for another day.\(^8\)

One way to think about the “knowledge problem” that Justices Kennedy and Alito are concerned about, and which leads them to favor narrow decisions, is to consider the relationship between legal principles and the implications of these principles for specific public policies. Suppose judges have a deep commitment to a legal philosophy or set of legal principles. Because such principles are typically abstract and general, applying them to particular circumstances and policies is not (necessarily) a straightforward matter. As a result, judges may face some uncertainty about how they would evaluate specific public policies in light of the legal principles they are committed to. For example, a judge may believe that regulations that impose an “undue burden” on a fundamental liberty are unconstitutional. But knowing whether any particular regulation fails by this standard only becomes clear in the judge’s mind when she considers the regulation and its impact in the context of the evidence and arguments presented in a concrete dispute. Justice Potter Stewart’s famous concurrence in \textit{Jacobellis v. Ohio}\(^9\) provides a colorful rendition of this point. While he agreed that hard-core pornography may be constitutionally criminalized, Stewart stressed that knowing what qualifies under this label can be “discovered” only on a case-by-case basis: “I shall not today attempt further to define the kinds of material I understand to be embraced within that

\(^8\)Scalia’s concurrence takes direct aim at the narrow focus of the majority opinion: “At this point the reader may be wondering: ‘What, after all, is the harm in being ‘minimalist’ and simply refusing to say that violation of a constitutional right of informational privacy can never exist? The outcome in this case is the same, so long as the Court holds that any such hypothetical right was not violated.’ Well, there is harm. The Courts never-say-never disposition does damage for several reasons... It provides no guidance whatsoever for lower courts. Consider the sheer multiplicity of unweighted, relevant factors alluded to in todays opinion... It will dramatically increase the number of lawsuits claiming violations of the right to informational privacy. Rare will be the claim that is supported by none of the factors deemed relevant in todays opinion... in those circuits that recognize (rather than merely hypothesize) a constitutional right to “informational privacy,” lawyers will always (and I mean always) find some way around todays opinion: perhaps the plaintiff will be a receptionist or a janitor, or the protections against disclosure will be less robust.”

shorthand description, and perhaps I could never succeed in intelligibly doing so. But I know it when I see it, and the motion picture involved in this case is not that.”

Long before he became a Supreme Court justice, law professor Felix Frankfurter wrote a series of articles critical of the judicial practice of issuing advisory opinions. His objections similarly focused on the contingent character of applying legal principles to public policies, and the resulting epistemological challenges confronting judges. Like broad rulings, advisory opinions imply that judges pronounce on the legality of policies in the absence of facts presented in a concrete dispute. Frankfurter argued that advisory opinions are dangerous precisely because they involve decisions that are not grounded in concrete facts:

Constitutionality is not a fixed quality; in crucial cases it resolves itself into a judgment upon facts...the history of modern legislation amply proves that facts may often be established in support of measures after enactment, although not in existence previously...In the attitude of court and counsel, in the availability of facts which underlie litigation, there is a wide gulf between opinions in advance of legislation or executive action, and decisions in litigation after such proposals are embodied into law or carried into execution (Frankfurter 1930, 478).

We capture the fact that the evaluation of policies in light of legal principles has this contingent character – the fact that judges may not know what the implications of their general commitments for specific policies are until they hear a dispute – by assuming that judges face uncertainty about how their legal preferences “map onto” the public policies they are asked to judge. They have some general expectations about what their reaction to specific policies is likely to be (e.g., a “liberal” judge expects that she will not find herself in agreement with legislation that restricts access to abortion). But, like Potter Stewart, they do not know how they feel about a policy until they hear a case. In light of such uncertainty, a plea for narrow decisions seems eminently reasonable. Rather than pronounce on policies that they do not yet fully understand, judges should restrict their decisions to the issues at hand, and develop legal rules “piece-meal” as new cases emerge. In the next section, we present a model that explores the underlying logic of this epistemological argument against broad opinions. Surprisingly, the analysis leads to the conclusion that judges with limited knowledge are often served better by broad than by narrow rules.
3 The Model

We rely on a simple, one-dimensional spatial model to develop our argument. The dimension represents the policies that can be adopted and challenged before a judge. Recall that we assume that the judge is committed to a legal principle, and evaluates the constitutionality of policies in relation to it. That is, the legal principle identifies some legally-relevant quality of policies (e.g., the degree to which a regulation burdens a fundamental liberty), and then evaluates policies against this criterion. Like other models of this type, we assume that policies can be meaningfully ordered in terms of the legally-relevant quality. For example, as we move from left to right, regulations become increasingly burdensome, or interrogation protocols become increasingly coercive, or search procedures become increasingly intrusive.\(^{10}\)

The legal principle that the judge is committed to separates policies that are “constitutional” from policies that are “unconstitutional.” Leaving aside the contingent character of applying legal principles for the moment (we return to it in the next paragraph), this implies that we can characterize the preferences of the judge over policies with a “cut-point.” Figure 1 provides an illustration. Given her legal principles, judge \(i\) regards regulations that fall to the left of \(x_J\) as constitutional (they do not impose an excessive burden), and regulations that fall to the right of \(x_J\) as unconstitutional (they impose an excessive burden). In other words, her “ideal” legal rule – given the principles she is committed to – is located at \(x_J\).

<table>
<thead>
<tr>
<th>“Constitutional”</th>
<th>“Unconstitutional”</th>
</tr>
</thead>
<tbody>
<tr>
<td>(x_J)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Legal rules as cut-points

Of course, a critical ingredient of the epistemological objection to broad rules is that judges face uncertainty over the application of legal principles to specific contexts and policies until they have heard the relevant arguments and seen the evidence. We can express the fact that the judge

\(^{10}\)The model we develop has close affinity to “case space models,” which derive from seminal work by Kornhauser (1992), and have become increasingly common in modeling courts and judicial behavior (e.g., Lax and Cameron 2007; Lax 2007; Carrubba et al. 2011). While these models conceive of the space as representing the legally relevant “facts” that characterize a case, the space in our model represents the policies a judge can be asked to review.
is uncertain about the implications of her legal principles by assuming that she does not know precisely where her “ideal” legal rule falls. Consider Figure 2. Judge $i$ knows that she regards undue burdens as unconstitutional, but is unsure what this standard implies for a particular regulation until she hears a case involving it. Specifically, the judge believes that her preferred legal rule $x_J$ falls somewhere in the interval $[0, T]$. Asked “in the abstract” whether policies in that interval are constitutional, she cannot say for certain. But once she reviews a specific policy $\hat{p}$, and is presented with evidence and arguments, she learns whether $\hat{p}$ falls to the left (“$\hat{p}$ is constitutional”) or right (“$\hat{p}$ is unconstitutional”) of her threshold. That is, in evaluating the constitutionality of specific policies, she “knows it when she sees it.” For simplicity, we assume that the judge’s initial belief is that the legal rule implied by her preferred legal principle is uniformly distributed between 0 and $T$, i.e., $x_i \sim U[0, T]$.

![Figure 2: Modeling Uncertainty over Preferences](image)

Suppose our judge reviews $\hat{p}$ and discovers that she regards it as constitutional. She has now “learned” something about the relationship between her legal principles and her derived preferences over legal rules: Given that she regards $\hat{p}$ as constitutional, her ideal legal rule must lie somewhere between $\hat{p}$ and $T$. Her “updated” belief over the location of her preferred threshold is $x_i \sim U[\hat{p}, T]$. (Similarly, if she regards $\hat{p}$ as unconstitutional, her threshold must lie somewhere between 0 and $\hat{p}$. Her “updated” belief over the location of her preferred threshold is $x_i \sim U[0, \hat{p}]$. Of course, as she hears more and more cases (and reviews more and more policies), the judge “learns” more and more about the implications of her legal principles for policies (and may, ultimately, know precisely where her threshold is located.) This modeling approach captures (in a simple way) the intuitive notion that a judge who is unsure about the implications of her legal principles for a specific policy area becomes more certain as she hears more and more cases surrounding that issue. As a result,

---

11 We consider the implications of more general distributional assumptions in the appendix.
she can formulate legal rules with greater accuracy and confidence: She is more certain where her preferred legal rule lies.\textsuperscript{12}

When the judge is confronted with a case, she must issue an opinion. Suppose she wants to declare $\hat{p}$ constitutional. We assume that there are two possible opinions the judge can write (the corresponding opinions for declaring $\hat{p}$ unconstitutional are symmetric):

- A \textit{narrow} opinion, which confines itself to declaring $\hat{p}$ constitutional.

- A \textit{broad} opinion, which announces a rule $R \in \{r \in \mathbb{R} | r > \hat{p}\}$, which declares that all $\hat{p} < R$ are constitutional.

Both opinions announce a “rule.” In the case of the narrow decision, the rule is “implicit” (Niblett 2010, 24): If $\hat{p}$ is constitutional, then by implication (since regulations are ordered in increasing severity), all $\hat{p} < \hat{p}$ are constitutional in the judge’s eyes as well, \textit{and the judge knows this}. Thus, a narrow rule makes definite pronouncements only for policies about which the judge is certain. In contrast, a broad rule goes beyond the current case because it declares regulations constitutional that the judge has not yet considered (specifically, $\hat{p} \in (\hat{p}, R)$). Because such broad opinions apply to policies she has not yet reviewed, they may get it wrong: A broad rule might declare constitutional policies that the judge would regard as \textit{unconstitutional} were she to review a case involving them (and vice versa). Consider how the two opinions used as illustrative examples in the introduction fit into this modeling approach. In \textit{Quon}, Kennedy’s opinion was narrow. It declared that $\hat{p}$ (the audit of Quon’s messages) was constitutional, but it explicitly refused to speculate whether other policies (i.e., searches) might raise concerns – that is, it made no decision about policies to the right of $\hat{p}$. In contrast, Scalia’s opinion in \textit{Employment Division} was broad. It announced that $\hat{p}$ (withholding of benefits) was constitutional \textit{and} that other restrictions that the Court had not yet confronted would be constitutional as well, i.e., in the model presented here, the opinion announced a rule to the right of $\hat{p}$.\textsuperscript{13}

\textsuperscript{12}It is this uncertainty over the precise location of the judge’s preferred legal threshold – and the possibility of learning about her legal preferences by hearing cases – that marks one distinction between our model and existing case space models, which assume that judges know precisely where their preferred thresholds lie.

\textsuperscript{13}Naturally, this is not the only possible characterization of narrow and broad rules. Most obviously, one could conceive of a broad rule as one that announces a “bright line” $R$ such that all $\hat{p} > R$ are unconstitutional while all $\hat{p} \leq R$ are constitutional. The advantage of the current formulation is that it implies that narrow and broad rules are comparable in the sense that both make pronouncements about what is permissible while remaining silent on what \textit{may}
Once the judge has issued an opinion, the legal landscape has changed – some policies have been declared constitutional or unconstitutional. As a result, judicial opinions affect the policies that policymakers can adopt in response. For example, if the judge announces that all \( \hat{p} > R \) are unconstitutional, no regulation above \( R \) will be implemented.\(^{14}\) Return to Figure 2. If the judge learns that she considers \( \hat{p} \) unconstitutional, and writes a broad opinion that establishes legal rule \( \hat{R} \), policymakers will only adopt regulations to the left of \( \hat{R} \). Critically, this implies that some policies about which the judge is uncertain (those between \( \hat{R} \) and \( \hat{p} \)) can never come before the judge in a future case because they are never implemented. And this, in turn, has implications for the manner in which the law can develop in the future since the judge can never “learn” how she would have evaluated these policies in light of her preferences.

In other words, the issues/policies that can come before the judge are influenced – at least indirectly – by the opinions issued at earlier points in time. Because the judge’s ability to “learn” about the relationship between her legal principles and public policy depends on the cases she hears, the judge has reason to consider how current decisions may affect the development of law in the future. In light of this, the central issue we want to pursue is what opinions a judge who cares about establishing a legal framework that reflects her (as yet unknown) preferences over legal rules will choose to write.

We consider a simple, two-period model.\(^{15}\) The interaction begins when a policymaker implements a regulation \( p_1 \in [0, T] \). For convenience we assume that this initial regulation is chosen not be permissible (and vice versa). Broader rules simply have a wider scope of constitutionality (unconstitutionality) that goes beyond the immediate case. As we show below, this formulation also has the advantage of providing greater scope for “rule development” that is consistent with common notions of stare decisis. Most importantly, as the examples in the text illustrate, this formulation captures the spirit of broad and narrow rules we see in actual opinions; Quon and Employment Division make definitive statements about what is constitutional; they remain silent on what is unconstitutional.

\(^{14}\)Put differently, we assume that opinions are respected. There is, obviously, a large literature that deals with issues of compliance with judicial rulings, including Vanberg (2005), Staton and Vanberg (2008), Staton (2010), Carrubba (2009). We do not deny that implementation is potentially problematic. Rather, we assume that opinions are respected in order to create the best case against broad opinions: Broad opinions are problematic to the extent that they may be “wrong” – which only matters if they are actually respected. This approach is consistent with the approach by (Niblett 2010) in a similar model. Niblett assumes that judges issue narrow rulings, and that cases than arise only with the fact space that has not yet been declared impermissible. He investigates the implications for the development of legal rules if rules develop in a decentralized fashion among a multiplicity of judges who issues narrow rules but respect stare decisis.

\(^{15}\)We discuss the implications of restricting the model to two periods, and the impact of relaxing this assumption, in the conclusion.
“sincerely,” i.e., it is the regulation the policymaker prefers most. The judge then hears a challenge to \( p_1 \). Without loss of generality, we assume that the judge regards the regulation as unconstitutional (ensuring that there is some conflict between the policymaker and the judge). She then issues a first period ruling, which can either be narrow or broad. In the second period, a policymaker responds by adopting a new regulation in light of the judge’s initial opinion. The court then hears a challenge to the second period regulation, and issues an opinion that contains a “final” legal rule, bringing the game to an end. Specifically, the interaction looks like this:

1. **Initial Period**: A policymaker implements a regulation \( p_1 = x_P \in [0, T] \).

2. **Period 1**: The judge hears a challenge to \( p_1 \). WLOG, it is assumed that she regards \( p_1 \) as unconstitutional. The judge issues an opinion that strikes down \( p_1 \) and issues an initial rule \( R_1 \in [0, p_1] \). If \( R_1 = p_1 \), she has issued a narrow opinion. If \( R_1 < p_1 \), she has issued a broad ruling.

3. **Period 2**: A policymaker adopts a new regulation \( p_2 \in [0, R_1] \). The judge reviews the new regulation, and learns whether \( p_2 \) is constitutional. She issues an opinion that upholds or strikes down \( p_2 \) and issues a final rule \( R_2 \).

We assume that the judge would like to establish a legal regime that reflects her preferences over legal rules as much as possible, and that she views the process of adjudicating cases as a means towards achieving that end. This implies that the judge is motivated by the final rule \((R_2)\), and would like for that rule to be as close as possible to what she believes her ideal legal rule to be. Formally, given (a known) ideal legal rule \( x_j \), the judge’s payoff from legal rule \( R \) is given by

\[
U_J(R) = -(x_j - R)^2 \tag{1}
\]

Of course, the judge in the model is uncertain about what ideal rule \( x_j \) is implied by the legal principle she is committed to - that is the heart of the epistemological objection to broad rulings. Thus, if the judge believes that her ideal rule \( x_j \) is distributed uniformly over \([a, b]\), she is seeking a legal rule \( R \) that will maximize the following expected utility:

\[
EU_J(R) = \int_a^b \frac{-(x_j - R)^2}{b - a} \, dx_j \tag{2}
\]

This assumption eases exposition because it eliminates an additional parameter from the model. However, the results reported below are robust to any policymaker ideal point such that \( x_P \geq p_1 \).
We assume that the policymaker is motivated by the policy that is implemented; he cares about the legal rule that is in force only to the extent that it shapes which policies he is able to adopt. Since the outcome of the first period is invariant in the model (the policy is struck down by the judge), it is irrelevant to the ultimate policymaker payoff, and we can focus on the second period policy. If \( p_2 \) is struck down, the policymaker suffers a cost \( k > 0 \). This cost can be interpreted as the opportunity cost of an unsuccessful legislative effort, or as the payoff from an implicit reversion policy that is adopted following a negative court decision. If \( p_2 \) is upheld, it is implemented, and the policymaker receives the following policy-payoff:

\[
EU_P(p_2) = -(x_p - p_2)^2
\]

This model captures, in a simple manner, the essential dynamics laid out above. Legal rules emerge out of a repeated process of adjudication, policy is adjusted in light of judicial decisions, judges are uncertain about their preferences regarding policies they have not yet reviewed, and are able to “learn” about their preferences as they hear more cases. The critical question we want to answer is: How will the judge rule in the initial period? Are there conditions in which – despite the fact that she is uncertain about how she will view policies she has not yet reviewed in light of her legal principles – the judge prefers to issue a broad ruling? To answer this question, we consider two variations of the model. These variations capture alternative assumptions we can make about the extent to which the judge is constrained by stare decisis, a potentially critical element since broad rules are presumably problematic because it may be difficult to correct them should they turn out to be inappropriate.

In the context of the current model, we conceptualize stare decisis by considering which second-period rules are consistent with the first-period rule:

**Definition 1** A rule \( R_2 \) is consistent with rule \( R_1 \) (i.e., respects stare decisis) if \( R_2 \leq R_1 \).

The logic of this definition is that the meaning of \( R_1 \) is: “Regulations above \( R_1 \) are unconstitutional. Nothing is implied about regulations below \( R_1 \).” As long as \( R_2 \) is below \( R_1 \) the rules

---

17To be sure, there are other assumptions one could make about the ultimate policy that emerges after a judicial veto or endorsement, including allowing the policymaker to adjust policy one more time in response to the second period ruling. We ignore this possibility for the moment because it leads to an infinite regress – the court could then review the new policy, etc. While we are interested in this issue for future extensions, for current purposes we assume that there are transaction costs that are sufficiently significant to prevent further adjustment of the policy by the policymaker following \( R_2 \). Alternatively, one could interpret this assumption to capture the fact that policymakers may have short time horizons in which policy implementation in the current period (which is relevant for reelection) is what matters.
are therefore consistent in the sense that all regulations ruled out by \( R_1 \) are also ruled out by \( R_2 \); \( R_2 \) simply extends the reach of the rule by also declaring unconstitutional some regulations about which \( R_1 \) was silent. We assume that stare decisis constrains the judge if rules in the second period must be consistent with the opinion issued in the first period. If the rules do not need to be consistent, the judge is not constrained by stare decisis.

### 3.1 No Stare Decisis

Suppose the judge is not constrained by *stare decisis*, that is, the second period rule \( R_2 \) does not need to be consistent with the first period rule \( R_1 \). If she discovers that \( R_1 \) is “wrong” in the sense that it declares some regulations unconstitutional that the judge – given the new information that has emerged in reviewing \( p_2 \) – believes are constitutional, she is free to issue a new rule that is inconsistent with the first. Because she is unconstrained, she will issue the rule that best approximates her legal preferences, given what she has learned over the course of hearing the two cases \( p_1 \) and \( p_2 \). There are two possibilities (recall that she regards \( p_1 \) as unconstitutional):

1. If she believes that \( p_2 \) is unconstitutional, her optimal second period rule is \( R_2 = \frac{p_2}{2} \).
2. If she believes that \( p_2 \) is constitutional, her optimal second period rule is \( R_2 = \frac{p_2 + p_1}{2} \).

If the judge regards \( p_2 \) as constitutional, it is therefore possible (for \( p_2 \) sufficiently close to \( R_1 \)), that she would prefer to “correct” \( R_1 \) by setting \( R_2 > R_1 \) because she has “learned” that her threshold is closer to \( p_1 \) than she had originally believed. Because stare decisis does not bind the judge, she is free to do so.

Of course, which policy the judge will review in the second period depends on the policymaker’s response to the first period ruling. The policymaker would like to adopt a policy that is as close as possible to his ideal point, given the constraints imposed by the threat of review. Which regulation will the policymaker adopt? Let \( p^* \leq R_1 \) denote the policymaker’s preferred response to a narrow first period ruling. Recall that if the judge upholds \( p^* \) as constitutional, it is implemented. If the judge strikes down \( p^* \), the policymaker suffers a cost of \( k \). Following the court’s invalidation of policy \( p_1 \), the policymaker believes that the judge’s threshold (which is relevant to the judge’s

---

18 All results are proved in the appendix.
evaluation of the constitutionality of \( p^\ast \) is uniformly distributed on \([0, p_1]\). The policymaker’s decision problem is therefore given by:

\[
\arg\max_{p^\ast \leq R_1} EU(p^\ast | p_1 \text{ unconstitutional}) = \arg\max_{p^\ast \leq R_1} -\frac{p^\ast}{p_1}k - \left(1 - \frac{p^\ast}{p_1}\right)(p_1 - p^\ast)^2
\]  

(4)

The solution to this problem is given by:

\[
p^\ast = p_1 - \frac{1}{3}\sqrt{3\sqrt{k}}
\]  

(5)

Consider the intuition behind this policy response. Knowing that \( p_1 \) has been declared unconstitutional, the policymaker chooses a new policy that is more “moderate” than the initial policy (that is, the new policy may be constitutional in the judge’s eyes). However, the degree to which the policymaker plays it safe by moving below \( p_1 \) depends on how unpleasant a negative judicial decision in period 2 would be: The larger the penalty for an unconstitutionality ruling (\( k \)), i.e., the worse the (implicit) reversion policy, the more the policymaker engages in “autolimitation” and moves policy in a direction that increases the likelihood of a constitutionality ruling.\(^{20}\) In contrast, as the penalty for a judicial veto becomes negligible, the policymaker becomes increasingly aggressive and implements a second period policy that differs only marginally from the original.

Consider the judge’s decision in period 1. The judge knows that a narrow ruling will induce the policymaker to adopt \( p^\ast \). The expected utility for the judge of a narrow ruling is therefore given by:

\[
EU_{J}(\text{Narrow}) = \int_0^{p^\ast} -\frac{-(x_J - \frac{p^\ast}{2})^2}{p_1} \, dx_J + \int_{p^\ast}^{p_1} -\frac{-(x_J - \frac{p^\ast + p_1}{2})^2}{p_1} \, dx_J
\]  

(6)

Alternatively, the judge could issue a broad ruling that sets \( R_1 < p^\ast \) and thereby forces the policymaker to adopt a policy below the policy he would like to set. The question is whether there exists a broad rule that provides the judge with higher utility than the narrow ruling. The following result is proved in the appendix:

\(^{19}\) Of course, the policymaker never needs to adopt a policy below 0, so when \( p^\ast < 0 \), the optimal response is to set policy at 0. This is the case for \( k > 3p_1^2 \).

\(^{20}\) This result is consistent with the kind of “autolimitation” that (Sweet 1992) has identified as an important consequence of judicial review: Legislative majorities may limit their own proposals in anticipation of judicial review, and increasingly do so as judicial review poses a larger threat. See also (Vanberg 1998).
Proposition 1 In the absence of stare decisis, the judge prefers to issue a broad ruling $R_1 = \frac{p_1}{2}$ to a narrow ruling for $k < \frac{3}{4}p_1^2$.

Consider the substantive interpretation of this result. If $k$ is small (i.e., the threshold of Proposition 1 is met), the policymaker responds to the judge’s first round decision by adopting a new policy that is relatively close to the policy that has been struck down in period 1. That is, given that the costs of another judicial defeat for the policymaker are low, the policymaker responds aggressively to the first period ruling, and does not modify his behavior considerably. From the judge’s perspective, this results in a second period case in which she is presented with a policy that is not very informative: A second policy close to $p_1$ is highly likely to be unconstitutional, and does not provide the judge with much new information about the implications of her legal principles for the policy area in question. As a result, the judge prefers to issue a broad ruling that forces the policymaker to adopt a more moderate policy that provides more information because it is significantly different from $p_1$. In other words, precisely because the judge is unsure about her preferences over legal rules, and therefore would like to review policies that allow her to “learn more,” she is induced to issue a broad ruling in order to ensure that the policies that are adopted in response to her decision provide her with meaningful information. Rather than leading to narrow decisions, lack of knowledge induces broad decisions.

3.2 Stare Decisis

Of course, without stare decisis, the “costs” to the judge of engaging in broad decision-making are limited. The judge is free to adjust the second period rule and to “correct” an overly restrictive first period decision. Do our conclusions change if stare decisis binds? That is, what if the potential costs to the judge of engaging in broad decision-making are higher because she is “stuck” with first-period decisions in the sense that the second-period rule must be consistent with the original ruling? Under these circumstances, the “deck is stacked” against ruling broadly more so than in the previous case. The following result demonstrates that while stare decisis mitigates the incentive to rule broadly, it does not eliminate it:

Proposition 2 If stare decisis binds the judge, she prefers to issue a broad ruling $R_1 = \frac{2p_1}{3}$ to a narrow ruling for $k < \left(\frac{17}{18} - \frac{\sqrt{21}}{6}\right)p_1^2$.

Given the constraints of stare decisis, the judge’s behavior in the initial period has changed
in two respects. First, the judge will now rule narrowly in some cases in which she would have ruled broadly in the absence of stare decisis (this is true for \( k \in \left[ \frac{17}{18} - \frac{\sqrt{21}}{6}, \frac{3}{4} p_1^2 \right] \)). Intuitively, given the fact that broad decisions are now more costly because they may “lock in” undesirable legal rules, the judge is willing to issue narrow rulings that result in less informative second period policies, even though she knows that this will provide her with less information about her rule preferences than other regulations. Second, when she decides to issue a broad ruling in order to “force” the policymaker to adopt policies that are more informative, she issues a rule that is more “conservative” in the sense that it is closer to \( p_1 \) then the broad rule she issues in the absence of stare decisis. She is hedging her bets by reducing the likelihood that she will be stuck with a “wrong” rule in the second period.

The bottom line in both versions of the model is that – whenever the costs of a judicial veto for the policymaker are sufficiently moderate – the judge confronts incentives to issue broad rulings. This is the case precisely because she is uncertain about her legal preferences. Rather than making the judge “humble” in the sense of restricting herself to ruling on policies she is actually presented with, the desire to review policies that allow her to discover the implications of her legal principles for policy leads her to issue broad decisions because in doing so she can shape future cases. This will be the case if the policymaker is likely – in the absence of a broad ruling – to respond to a narrow ruling by adopting a policy that is close to the policy that has been struck down, and therefore provides the judge with little “new” information.

3.3 Random Case Generation

One question may be to what extent the results we have just presented depend on the fact that a strategic policymaker responds to decisions by adopting the “closest” policy that he believes he can “get away with.” Would the incentive to rule broadly disappear if the judge did not have to be concerned about forcing a recalcitrant policymaker to adopt regulations that provide information to the judge about her preferences? We address this possibility by considering an alternative “policy-generating process” in the second period. Suppose the second period policy \( p_2 \) is randomly chosen from the regulations that are still permissible after \( R_1 \).

\(^{21}\)Niblett (2010) makes the same assumption. In his model, individual judges rule narrowly, new cases arise randomly from the range of still permissible policies, and over time, the permissible range is shrunk to a “bright line rule” as a sequence of narrow rulings increasingly reduce the permissible range.
such a process is as a policy area in which a multitude of policymakers with diverse preferences react to the initial decision and implement a variety of policies in response, some of which may be challenged. For example, if the court strikes down a specific type of police interrogation technique, police departments are likely to use a variety of techniques, and some of these may end up before the court subsequently. Because there is a multiplicity of responses, which policy the court will get to review in the next period may be hard to predict – all the court knows is that it will come from among the policies that are still permissible following the initial decision. For simplicity, we assume that $p_2 \sim U[0, R_1]$. The following proposition, which is proved in the appendix, states that with a random policy-generating process, the judge will always prefer to rule broadly, and that this is true whether the judge’s decisions are bound by stare decisis or not.

**Proposition 3** If $p_2 \sim U[0, R_1]$, then $\forall p_1, \exists R_1 < p_1$ such that the judge prefers a broad ruling at $R_1$ to a narrow ruling at $p_1$. This is true regardless of whether $R_2$ must be consistent with $R_1$.

In other words, the incentive to rule broadly in the face of “judicial ignorance” does not merely arise out of a desire to force a strategic, recalcitrant policymaker to adopt policies that are more informative for the judge. A random policy-generating process induces the same incentive. The underlying intuition is similar: By ruling broadly, the judge can shape the kinds of policies she will review in the future. When facing a policymaker with known preferences, she does so by forcing that policymaker to adopt a different policy than he would have adopted in the absence of a broad ruling; if she faces a multitude of policymakers (or uncertainty about the policymakers preferences) she does so by shaping the distribution of policies she is likely to review in the future.

### 4 Conclusion

Narrow opinions that are limited to the facts in dispute before a court are often thought superior to broad rulings that announce more general rules that venture beyond the current case. There are, to be sure, a variety of arguments that can be advanced in defense of such “judicial minimalism” (e.g., Sunstein 1999). In this paper, we have considered one. This argument – which is regularly featured in opinions by Supreme Court justices – rests on the claim that the implications of legal principles for particular policies and cases are often difficult to ascertain in the abstract. Especially where competing values must be balanced, judges may only know what the legal principles to which they are committed demand when they adjudicate a particular dispute. As a result, judges risk
error when they announce general rules that apply to circumstances or policies with which they have not yet been confronted. In light of such uncertainty, the argument goes, narrow opinions are desirable because they limit judicial error. As Justice Kennedy put it,

Prudence counsels caution before the facts in the instant case are used to establish far-reaching premises... A broad holding... might have implications for future cases that cannot be predicted.²²

We have challenged this argument. The intuition underlying the claim we make is simple. To the extent that judges are uncertain about the implications of their legal principles for specific policy areas, they “learn” about them as they hear cases over time. Moreover, current decisions have an effect on the kinds of cases that judges hear in the future: They define the set of policies that remain permissible, and that can therefore be challenged before the Court. As we show, this dynamic can provide an incentive for judges to rule broadly because they know that they are uncertain about their preferred legal rule. Inducing policymakers to adopt policies that provide judges with useful information about their preferences can lead to broad rulings. Another way to put the point is to say that the epistemological argument for judicial minimalism focuses only on one (although important) consequence of the limits of judicial knowledge: The desire to avoid making mistakes. Our argument points out that, as with most things in life, there is a trade-off involved: If current decisions shape future policies, then the ability of judges to develop “good” legal rules in the face of limited knowledge may be enhanced by broad rulings.

In closing, several caveats are worth noting. The first emerges from the last point. Our argument rests squarely on the fact that current decisions shape policy responses and therefore future cases. Although this assumption is plausible, especially when judges rule on public policies that are likely to be revised in light of judicial decisions, it is worth emphasizing that our argument does not apply if the issues brought before the court in the future are independent of current decisions. A second caveat is closely connected. We should be clear that the central thrust of our argument is not explanatory. We are not claiming that in choosing between a narrow and a broad approach to decisions, judges are primarily concerned with influencing public policy responses in an effort

²²City of Ontario v. Quon
to generate “informative” future cases. Rather, the aim of the argument is to demonstrate that a prominent normative argument in favor of narrow opinions – the epistemological objection – is insufficient to establish that broad opinions are undesirable. Judicial ignorance is not always an argument for narrowness; judges with limited knowledge may, in fact, want to write broad opinions in order to confront their uncertainty.

The final two caveats emerge from technical aspects of our modeling approach. Like arguments grounded in case-space models more generally (e.g., Lax and Cameron 2007; Lax 2007; Carrubba et al. 2011), our claims depend on the fact that policies can be ordered in a meaningful way according to the legally-relevant criterion implied by a legal principle (e.g., the “intrusiveness” of a search). Only if this is the case can policies that are constitutional and unconstitutional be arrayed along a single dimension and separated by a threshold. In some policy areas, this is plausible (e.g., the burdensomeness of abortion restrictions), in others it may be less so. The final point concerns the restriction of our model to two periods. In part, our conclusions are driven by the fact that the judge in our model is “stuck” with the second period rule. As a result, she is eager to use the first period rule in order to learn as much as possible about her preferences. This leads her (sometimes) to rule broadly. To take the polar opposite of our model, imagine an infinitely patient judge confronting an infinite series of cases (and policies). She would have no reason to rule broadly, since she can adjust the legal rule piece-meal over time, and (because she is infinitely patient) is content to work slowly towards the ideal rule, taking no risks in ruling broadly. Clearly, our argument does not apply to this judge. In the “real world,” of course, judges fall somewhere between these poles. On the one hand, there are multiple, recurring opportunities to refine legal rules, and judges therefore do not face the same pressures as the judge in our model. On the other hand, judges do face some time pressures. Some policy areas provide only infrequent opportunities to revise the law. More importantly, judges are not likely to be infinitely patient in developing “good” legal rules. Rules that are revised frequently, or that turn out to be sub-optimal, are undesirable for a number of reasons. Most obviously, they impose reliance costs on individuals who must make decisions in light of the currently prevailing rule. As a result, judges will feel some urgency to arrive at a “good” legal rule. And if this is true, the trade-off we have identified rears its head.

23Having said that, we would be surprised to learn that judges do not consider potential policy responses, although for reasons that may be more closely tied to the desire to influence public policy directly. See Staton and Vanberg (2008).
E Appendix

E.1 Second Period Decision

Let \( x_J \) be the “ideal legal rule” implied by the legal principles judge \( i \) is committed to, i.e., \( x_J \) partitions the set of permissible regulations from the set of impermissible regulations. The judge receives payoff \( u(R_2, x_J) \) when he issues a final ruling \( R_2 \) given \( x_J \), where \( u(R_2, x_J) = -(R_2 - x_J)^2 \).

Represent the judge’s uncertainty over the true location of \( x_J \) with the probability density function \( h \). The judge’s expected payoff from issuing a final regulation of \( R_2 \) is

\[
U(R_2; h) = \int u(R_2, x_J) h(x_J) dx_J = \int -(R_2 - x_J)^2 h(x_J) dx_J
\]

Thus, the judge’s problem in a world with no stare decisis is

\[
\max_{R_2} \int u(R_2, x_J) h(x_J) dx_J \quad (A7)
\]

In contrast, the judge’s problem in a world with stare decisis is

\[
\max_{R_2} \int u(R_2, x_J) h(x_J) dx_J \text{ subject to } R_2 \leq R_1. \quad (A8)
\]

Before characterizing the solutions to (A7) and (A8), we note that \( U(R_2; h) \) is strictly concave in \( R_2 \). To prove this, it is sufficient to show that the the second derivative of \( U(R_2; h) \) is strictly negative at each \( R_2 \). To see this, note that,

\[
\frac{\partial U}{\partial R_2}(R_2) = 2 \int x_J h(x_J) dx_J - 2R_2,
\]

and so

\[
\frac{\partial^2 U}{\partial R_2^2}(R_2) = -2.
\]

**Fact 1** \( U \) is strictly concave in \( R_2 \).

Note that the first-order condition \( \frac{\partial U}{\partial R_2}(R_2) = 0 \) has a unique solution in \( R_2 \). Denoting this solution by \( R_2^* \), we have that \( R_2^* = \int x_J h(x_J) dx_J \). Because \( U \) is strictly concave, it follows that \( U \) is strictly maximized at \( R_2^* \), and is strictly increasing on \(( -\infty, R_2^* \] and strictly decreasing on \([ R_2^*, \infty ) \).

**Fact 2** \( U \) is strictly maximized at \( R_2^* = \int x_J h(x_J) dx_J \), is strictly increasing on \(( -\infty, R_2^* \] , and is strictly decreasing on \([ R_2^*, \infty ) \).
Fact 2 is sufficient to establish the solutions to (A7) and (A8), summarized in the following Lemma.

**Lemma 1**  
(a) The solution to (A7) is \( R_2^* = \int x_j h(x_j) dx_j \).  
(b) The solution to (A8) is \( R_2^* = \min\{R_1, R_2^{ns}\} \).

### E.2 First-Period Decision

We now explore the judge’s incentive to rule broadly in the first period. Recall that the judge’s legal principles imply a partition of the policy space into two set, \( P^{con} \) and \( P^{uncon} \), where

\[
P^{con} = \{ p \in \mathbb{R}_+ : p < x_J \}
\]

and

\[
P^{uncon} = \{ p \in \mathbb{R}_+ : p \geq x_J \}.
\]

The judge does not know \( x_J \). But once he reviews a policy \( p \), he learns whether \( p \in P^{con} \) or \( p \in P^{uncon} \), and he can draw an inference about the location of \( x_J \) since \( p \in P^{uncon} \) implies \( x_J < p \) and \( p \in P^{con} \) implies \( p < x_J \).

#### E.2.1 Beliefs

As in the main text, suppose that \( p_1 \in P^{uncon} \). Thus, the judge knows that \( x_J \in [0, p_1] \). Let the probability density function \( f \) represent the judge’s beliefs about the location of \( x_J \) in light of the fact that \( p_1 \in P^{uncon} \). Suppose the judge reviews a second policy, \( p_2 \in [0, p_1] \). If \( p_2 \) also belongs to \( P^{uncon} \), then he knows that \( x_J \) lies in the interval \([0, p_2]\). The judge’s posterior belief about the threshold \( x_J \) in such a case is given by

\[
\mu(x_J|p_2 \in P^{uncon}) = \begin{cases} 
  \frac{f(x_J)}{\int_0^{p_2} f(x) dx} & x_J < p_2 \\
  0 & x_J \geq p_2
\end{cases}.
\]

However, if the judge learns that \( p_2 \in P^{con} \), he knows that \( x_J \) lies in the interval \([p_2, p_1]\). His posterior belief is given by

\[
\mu(x_J|p_2 \in P^{con}) = \begin{cases} 
  0 & x_J < p_2 \\
  \frac{f(x_J)}{\int_{p_2}^{p_1} f(x) dx} & x_J \geq p_2
\end{cases}.
\]

#### E.2.2 The Value of Policy

We have shown that the policy a judge reviews affects the inferences he can draw about the location of \( x_J \), which in turn influences the extent to which he is able to craft a final rule that is close to
actual value of \( x_J \). This implies that the judge has (induced) preferences over the second period policy that he reviews, regardless of whether stare decisis is operative.

**No Stare Decisis.** Let \( v^n(p_2) \) be the judge’s expected payoff for reviewing policy \( p_2 < p_1 \) (before he knows whether \( p_2 \in P_{uncon} \) or \( p_2 \in P_{con} \)). The solution to \( \max_{p_2} v^n(p_2) \) identifies the policy the judge would choose to hear if he had control over the policies that come before the court.

To derive \( v^n(p_2) \), note that the judge will learn whether \( p_2 \in P_{uncon} \) or \( p_2 \in P_{con} \). This knowledge will affect the judge’s beliefs about \( x_J \), which in turn will shape the final rule. Write 
\[
R_2^*(p_2 \in P_{uncon}) = \int x_J \mu(x_J | p_2 \in P_{uncon})dx_J
\]
for the judge’s optimal second-period rule when \( p_2 \in P_{uncon} \). Write 
\[
R_2^*(p_2 \in P_{con}) = \int x_J \mu(x_J | p_2 \in P_{con})dx_J
\]
for the judge’s optimal second-period rule when \( p_2 \in P_{con} \). Whether \( p_2 \) lies in \( P_{uncon} \) or \( P_{con} \), of course, depends on the threshold \( x_J \), which is distributed on \([0, p_1]\) according to the probability density function \( f \). Thus, the judge’s expected payoff, or value, of reviewing policy \( p_2 \) is
\[
v^n(p_2) = \int_0^{p_2} u(R_2^*(p_2 \in P_{uncon}), x_J) f(x_J) dx_J + \int_{p_2}^{p_1} u(R_2^*(p_2 \in P_{con}), x_J) f(x_J) dx_J.
\]

**Stare Decisis.** Given stare decisis, the final rule \( R_2 \) must be consistent with the rule from period one: \( R_2 \leq R_1 \). Thus, the interim value of reviewing policy \( p_2 \) depends not only on the information it conveys about \( x_J \), but on the extent to which this information can be incorporated into the final rule, \( R_2 \), which, of course, depends on the stringency of the initial rule, \( R_1 \). Let \( v^s(p_2; R_1) \) be the judge’s expected payoff for reviewing policy \( p_2 < p_1 \) (before he knows whether \( p_2 \in P_{uncon} \) or \( p_2 \in P_{con} \)), given that his final rule must be consistent with the first period rule.

To derive \( v^s(p_2; R_1) \), note that the judge will learn whether \( p_2 \in P_{uncon} \) or \( p_2 \in P_{con} \). This knowledge will affect the judge’s beliefs about \( x_J \), which in turn will shape the final rule. We restrict attention to the case in which \( p_2 \leq R_1 \). Thus, the requirement that \( R_2 \leq R_1 \) will only bind when \( p_2 \in P_{con} \). Moreover, if the restriction \( R_2 \leq R_1 \) is to bind, it must be the case that \( p_2 \) is large enough such that 
\[
E[x_J | p_2 \in P_{con}] = \int_{p_2}^{p_1} x_J \mu(x_J | p_2 \in P_{con})dx_J \geq R_1.
\]
As \( E[x_J | p_2 \in P_{con}] \) is strictly increasing in \( p_2 \) (since \( f \) has full support on \([0, p_1]\)), and \( E[x_J | R_1 \in P_{con}] \geq R_1 \), we can define \( p_2(R_1) = \min\{p_2 \in [0, R_1] : E[x_J | p_2 \in P_{con}] \geq R_1\} \).

With the above in mind, write 
\[
R_2^*(p_2 \in P_{uncon}) = \int x_J \mu(x_J | p_2 \in P_{uncon})dx_J
\]
for the judge’s optimal policy when \( p_2 \in P_{uncon} \). Write \( R_2^*(p_2 \in P_{con}; R_1) \) for the judge’s optimal policy when...
\[ p_2 \in P^{\text{con}} \] subject to the constraint that \( R_2 \leq R_1 \). Thus,

\[
R_2^*(p_2 \in P^{\text{con}}; R_1) = \begin{cases} 
\int_{p_2}^{p_1} x \mu(x, p_2 \in P^{\text{con}})dx, & \text{if } p_2 \leq \bar{p}(R_1) \\
R_1, & \text{if } p_2 > \bar{p}(R_1)
\end{cases}
\]

Thus, if stare decisis binds, the judge’s expected payoff from reviewing \( p_2 \leq R_1 \) is

\[
v^*(p_2; R_1) = \int_0^{p_2} u(R_2^*(p_2 \in P^{\text{uncon}}, x), f(x)dx + \int_{p_2}^{p_1} u(R_2^*(p_2 \in P^{\text{con}}, R_1), x) f(x)dx.
\]

### E.3 The policymaker’s problem

The policymaker has single-peaked preferences over the policy space with ideal policy \( x_P \geq p_1 \). We assume that his payoff is \(- (p - x_P)^2\) when he proposes policy \( p \) and the judge upholds \( p \) (i.e., he issues a final ruling of \( R_2 \geq p \)). In contrast, we assume that if \( p \) is proposed but the judge strikes it down, the policymaker incurs a payoff of \(- k\). Thus, the policymaker’s preferences over policy and final rule pairs are given by a function \( z(p, R_2) \), where

\[
z(p, R_2) = \begin{cases} 
-(p - x_P)^2, & \text{if } R_2 \geq p \\
-k, & \text{if } R_2 < p
\end{cases}
\]

For simplicity, we consider the case in which \( p_1 \in P^{\text{uncon}} \) (and so \( x_J \in [0, p_1] \)). Like the judge, the policymaker knows that \( x_J \) is distributed according to \( f \), the support of which is \([0, p_1]\). The policymaker respects the rule the judge crafts in the first period, i.e., \( p \leq R_1 \). Regardless of whether stare decisis binds, the policymaker knows that the final rule \( R_2 < p \) if \( p \in P^{\text{uncon}} \) and that \( R_2 \geq p \) if \( p \in P^{\text{con}} \). Thus, the policymaker’s expected payoff from proposing \( p \), \( Z(p) \), is given by

\[
Z(p) = Pr(x_J < p)[-k] + Pr(x_J \geq p)[- (p - x_P)^2]
\]

\[
= \begin{cases} 
-k \int_0^p f(x)dx + [- (p - x_P)^2] \int_{p}^{p_1} f(x)dx, & \text{if } p \in (0, R_1) \\
-(p - x_P)^2, & \text{if } p \leq 0
\end{cases}
\]

Thus, the policymaker’s problem is to choose \( p \) so as to solve the following problem:

\[
\max_{p \leq R_1} Z(p). \tag{A9}
\]

### F Analysis

In the main text, we take \( f \) to be uniform on \([0, p_1]\). Thus, \( f(x, J) = \frac{1}{p_1} \). Further we set \( x_P = p_1 \).

#### F.1 Strategic policymaker.

**Lemma 2** (a) If \( k \geq 3p_1^2 \), then the solution to (A9) is \( p = 0 \). (b) If \( k < 3p_1^2 \), then the solution to (A9) is \( p = \min\{p_1 - \frac{1}{3}\sqrt{3} \sqrt{k}, R_1\} \).
Proof: The first derivative of $Z$ on $(0, R_1)$ is

$$\frac{\partial Z}{\partial p} = \frac{3(p_1 - p)^2 - k}{p_1}.$$ 

Begin by supposing that $k \geq 3p_1^2$, then $\frac{\partial Z}{\partial p} < 0$ for all $p \in (0, R_1)$, which thus implies that $Z$ is decreasing on $[0, R_1)$. As $Z$ is increasing on $(-\infty, 0]$, we thus have that the solution to (A9) is $p = 0$.

Now suppose that $k < 3p_1^2$. Inspection reveals that $\frac{\partial Z}{\partial p}(p) > 0$ as $p \to 0^+$ and that $\frac{\partial Z}{\partial p}(p) < 0$ as $p \to p_1^-$. Further, $Z$ is increasing on $(-\infty, 0]$. Thus, the solution to (A9) must lie on $(0, p_1)$. Further, since $Z$ is differentiable on this interval, if the constraint $R_1$ does not bind, it must be the case that the solution to (A9) is a solution to the first-order condition $\frac{3(p_1 - p)^2 - k}{p_1} = 0$ on $(0, p_1)$. The only such critical point that belongs to $(0, p_1)$ is $p = p_1 + \frac{1}{3}\sqrt{3}\sqrt{k}$. Thus, the solution to (A9) is $p = \min\{R_1, p_1 - \frac{1}{3}\sqrt{3}\sqrt{k}\}$. ■

**Proposition 4** In the absence of stare decisis, the judge has a strict incentive to rule broadly only if $k < \frac{3}{4}p_1^2$. The broad ruling that maximizes the judge’s welfare in this case is $R_1 = \frac{p_1}{2}$.

Proof: Consider a setting without stare decisis. It the judge rules narrowly, the policymaker will propose $p^*$ and the judge’s payoff will be $v^n(p^*)$. Can the judge do better with a broad ruling?

Recall that

$$v^n(p_2) = \int_0^{p_2} u(R_2^*(p_2 \in P_{\text{ancon}}, x, j)) f(x, j) dx + \int_{p_2}^{p_1} u(R_2^*(p_2 \in P_{\text{con}}, x, j)) f(x, j) dx = \int_0^{p_2} -(\frac{p_2}{2} - x, j)^2 \frac{1}{p_2} dx + \int_{p_2}^{p_1} -(\frac{p_2 + p_1}{2} - x, j)^2 \frac{1}{p_1 - p_2} dx$$

Taking the first derivative of $v^n$ yields

$$\frac{\partial v^n}{\partial p_2} = f(p_2)[u(R_2^*(p_2 \in P_{\text{ancon}}, x, j)) - u(R_2^*(p_2 \in P_{\text{con}}, x, j))] = \frac{1}{6}(p_1 - 2p_2)$$

First notice that $\frac{\partial v^n}{\partial p_2}(p_2) < 0$ as $p_2 \to p_1^-$ and $\frac{\partial v^n}{\partial p_2}(p_2) > 0$ as $p_2 \to 0^+$. Thus, the solution to $\max_{p_2 \in [0, p_1]} v^n(p_2)$ lies on $(0, p_1)$. Further, since $v^n$ is differentiable on this interval, the solution to $\max_{p_2 \in [0, p_1]} v^n(p_2)$ must be a critical point of the first-order condition $\frac{1}{4}(p_1 - 2p_2) = 0$. The unique solution of this equation is $p_2^* = \frac{p_1}{2}$. Hence, $v_n$ is maximized at $p_2^* = \frac{p_1}{2}$.
If \( p^* > p_2^* \), it thus follows that judge does best by setting \( R_1 = p_2^* \). Given \( p^* = p_1 - \frac{1}{2} \sqrt{3} k \), this is the case if and only if \( k < \frac{3}{4} p_1^2 \). If \( p^* < p_2^* \), the judge lacks an incentive to rule broadly. To affect policy, the judge must set \( R_1 < p^* \leq p_2^* \). However, since \( \frac{\partial v^*}{\partial p_2} > 0 \) on \((0, p_2^*)\), the judge prefers \( p^* \) than \( R_1 < p^* \). ■

**Proposition 5** With stare decisis, the judge has a strict incentive to rule broadly only if \( k < (\frac{17}{18} - \frac{\sqrt{27}}{6}) p_1^2 \). The broad ruling that maximizes the judge’s welfare in this case is \( R_1 = \frac{2}{3} p_1 \).

**Proof:** Let \( p^* \) denote the optimal policy response by the policymaker when \( R_1 = p_1 \). Note that the judge lacks an incentive to issue a rule \( R_1 \in (p^*, p_1) \). Such a rule will have no effect on the second period policy; however, it can constrain the final legal rule in a way that makes him worse off compared to a narrow decision (i.e. setting \( R_1 = p_1 \)).

So if \( R_1 \) is to affect the second period policy, the judge must set \( R_1 < p^* \), which will elicit \( p_2 = R_1 \). Writing \( \tilde{v}^*(R_1) \) for the value of issuing a rule \( R_1 < p^* \), we have that

\[
\tilde{v}^*(R_1) = v^*(R_1, R_1) = \int_0^{R_1} u(R_2^*(R_1 \in P^{uncon}), x_j) f(x_j) dx_j + \int_{R_1}^{p_1} u(R_2^*(R_1 \in P^{con}), x_j) f(x_j) dx_j
\]

\[
= \int_0^{R_1} u(R_2^*(R_1 \in P^{uncon}), x_j) f(x_j) dx_j + \int_{R_1}^{p_1} u(R_1, x_j) f(x_j) dx_j
\]

\[
= \int_0^{R_1} -(\frac{R_1}{2} - x_j)^2 \frac{1}{R_1} dx_j + \int_{R_1}^{p_1} -(R_1 - x_j)^2 \frac{1}{p_1 - R_1} dx_j
\]

Thus, the first-derivative of \( \tilde{v}^* \) is

\[
\frac{\partial \tilde{v}^*}{\partial R_1}(R_1) = f(R_1)[u(R_2^*(R_1 \in P^{uncon}), R_1) - u(R_1, R_1)] + \int_{R_1}^{p_1} \frac{\partial u}{\partial R_1}(R_1, x_j) f(x_j) dx_j
\]

\[
= \frac{1}{p_1} [-\frac{R_1}{2} - R_1]^2 + \frac{1}{p_1} \int_{R_1}^{p_1} [-2(R_1 - x_j)] dx_j
\]

\[
= p_1 - 2R_1 + \frac{3R_1^2}{4p_1}
\]

Now observe that \( \frac{\partial \tilde{v}^*}{\partial R_1}(R_1) < 0 \) as \( R_1 \to p_1^- \) and \( \frac{\partial \tilde{v}^*}{\partial R_1}(R_1) > 0 \) as \( R_1 \to 0^+ \). Thus, the solution to \( \max_{R_1 \in [0, p_1]} \tilde{v}^*(R_1) \) lies on \((0, R_1) \). Further, since \( \tilde{v}^* \) is differentiable on this interval, the solution to \( \max_{R_1 \in [0, p_1]} \tilde{v}^*(R_1) \) must be a critical point of the first-order condition \( p_1 - 2R_1 + \frac{3R_1^2}{4p_1} = 0 \). The unique solution of this equation on \((0, p_1)\) is \( R_1^* = \frac{2}{3} p_1 \). Hence, \( \tilde{v}^* \) is maximized at \( R_1^* = \frac{2}{3} p_1 \).

If \( p^* < R_1^* \), the judge lacks incentive to rule broadly. To affect policy, he must set \( R_1 < p^* \leq R_1^* \), but \( \frac{\partial v^*}{\partial R_1} > 0 \) on \((0, R_1^*) \). Thus, a broad ruling that affects policy can only lower welfare. So suppose
that $p^* > R_1^*$. The payoff to setting $r = R_1^*$ is $\tilde{v}^s(R_1^*) = -\frac{p_2^2}{27}$. In contrast, the payoff to ruling narrowly (i.e., setting $R_1 = p_1$) is $v^s(p^*, p_1) = v^n(p^*) = \frac{1}{12}(-p_2^2 + \sqrt{3}\sqrt{k}p_1 - k)$. The former is greater than the latter if and only if $k < (\frac{17}{18} - \frac{\sqrt{21}}{6})p_2^2$.

**Proposition 6** If $p_2 \sim U[0, R_1]$, then $\forall p_1, \exists R_1 < p_1$ such that the judge prefers a broad ruling at $R_1$ to a narrow ruling at $p_1$. This is true regardless of whether $R_2$ must be consistent with $R_1$.

**Proof:** Begin by considering a setting in which stare decisis does not bind. Then, the expected payoff of issuing a rule $R_1$, $W^n(R_1)$, is

$$W^n(R_1) = \int_{0}^{R_1} v^n(p_2) \frac{1}{R_1} dp_2$$
$$= \frac{1}{24}(-2p_1^2 + 3p_1R_1 - 2R_1^2)$$

Thus, the first-derivative of $W^n$ is

$$\frac{\partial W^n}{\partial R_1} = \frac{p_1}{8} - \frac{R_1}{6},$$

which is negative for $R_1$ sufficiently close to $p_1$, and so an incentive to rule broadly exists.

Now consider a setting in which stare decisis does bind. Then, the expected payoff of issuing a rule $R_1$, $W^s(R_1)$, is

$$W^s(R_1) = \int_{0}^{R_1} v^s(p_2) \frac{1}{R_1} dp_2$$

Now for all $R_1 > \frac{p_1}{2}$,

$$\frac{\partial W^s}{\partial R_1} = \frac{1}{48} (16p_1^2 - 5p_1^3 R_1 - 24p_1R_1 - 5R_1^3 \frac{p_1}{p_1}),$$

which is negative for $R_1$ sufficiently close to $p_1$, and so an incentive to rule broadly exists.
References


Carrubba, Cliff, Barry Friedman, Andrew Martin and Georg Vanberg. 2011. “Who controls the content of Supreme Court opinions?” *Typescript*.


URL: http://www.loc.gov/catdir/toc/cam051/2004045894.html