The New Judicial Politics of Legal Doctrine

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Abstract

A new judicial politics of legal doctrine has the potential to resolve foundational dilemmas and reconcile long-standing and counterproductive scholarly divisions by bringing together legal concerns and political science priorities. This doctrinal-politics approach highlights a relatively new formal apparatus known as the case-space model, and it invokes close ties between theoretical and empirical work and between the study of judicial behavior and actual legal practices and institutions. The case-space model is an adaption of standard policy-space modeling, tailored for the distinguishing features of judicial policy making. It allows for ideological differences between judges while expressing those differences in terms of legal rules that partition fact-filled legal cases into different dispositions. I explore the intellectual origins and primary contributions of the approach, focusing on how legal policy is affected by collegiality (the multi-member nature of appellate courts) and hierarchy (the multi-level division of court systems).

A LOOK BACK ON "A LOOK BACK, A LOOK AHEAD"

A decade ago, Epstein & Knight (2000) documented a "sea change" in the field of judicial politics: the "strategic account" was replacing the social-psychological paradigm, which had itself triumphed over both legal formalism and earlier scholarship on judicial strategy. Their essay, "Toward a Strategic Revolution in Judicial Politics: A Look Back, a Look Ahead," had three focal arguments (p. 626): "(1) social actors make choices in order to achieve certain goals, (2) social actors act strategically in the sense that their choices depend on their expectations about the choices of other actors, and (3) these choices are structured by the institutional setting in which they are made."

One goal was the "unification of judicial specialists and their counterparts in other fields of political science, as well as of those within the law and courts area—especially scholars who study legal doctrine and those who focus on judicial behavior" (Epstein & Knight 2000, p. 652). But although a sequel a decade later indeed recounted a "tsunami" of strategic account scholarship (Epstein & Jacobi 2010), the desired unification of scholars has not occurred. The legal academy still shows little interest in and is given little attention by judicial-politics scholarship (Friedman 2006, Fischman & Law 2009). One culprit is the rigidly divided framework popular in judicial-politics research—"legal model" versus "attitudinal model" versus "strategic model"—a framework that obscures as much as it reveals. "Attitudinal" variables are pitted against "legal" variables and sometimes against "strategic" variables, with the balance sorted out empirically but rarely theoretically. While clarifying key disagreements, the legal-attitudinal-strategic framework has also stunted theory development and blocked the sort of fruitful intersections Epstein & Knight likely had in mind (to be sure, Epstein & Jacobi and others might read this history differently). The opposition encouraged by that framework has limited the impact of political science scholarship on courts and prevented useful borrowing across the divisions.

Despite these problems, my own assessment is optimistic. Recent developments have the potential to reconcile long-standing divisions, divisions that I argue have hampered progress and have left major questions unresolved or even unresolvable. This reconciliation—this new judicial politics of legal doctrine, or "doctrinal politics" for short—builds on a vast body of previous work of a political science bent, particularly the "legal realist" movement as adapted from the legal academy, the "behavioralist revolution" and its empirical successes, the "strategic revolution," the rise of positive political theory, and the new emphasis on "Empirical Implications of Theoretical Models" (EITM, the NSF-supported pedagogical program on theory testing). But it also puts the primary concerns of the legal academy (and what some political scientists call the legal model) at the heart of judicial politics.

Scholars have begun to incorporate legal practices—not to flash that overused badge "interdisciplinary" but to better understand judicial politics. It has become more clear that the accoutrements of law are not just superfluous details to be set aside by modelers and other sophisticated political scientists; the idiosyncracies of legal policy making are critical for building useful theories, be they formal or informal. Meanwhile, theories of adjudication are incorporating the plural and interactive nature of judging to a much greater extent, exploring both collegiality (the multi-member nature of appellate courts) and hierarchy (the multi-level division of court systems). At the same time, some progress has been made in burning false bridges to legislative politics. Some of the intriguingly different features of explicitly judicial policy making are beginning to receive the dedicated attention they deserve. First-generation models borrowed heavily from legislative politics. Now the action is in creating models that are distinctively judicial.

My goal is to pull together these trends in the literature to articulate a new "doctrinal

politics," an approach that can serve as a unifying framework, synthesizing the best of current and previous work across paradigms. Indeed, I see it as a natural outgrowth of such work. Rather than focus on differences across the legal-attitudinal-strategic and other other divides, I extract the core messages of each separate approach and show how they can speak to each other. This synthesized approach has had strong successes in recent years both within existing lines of research and in raising new ones, and I argue it shows great promise.

This doctrinal-politics approach has two key arguments that organize and concretize the strategic account. One is that judicial preferences and goals are structured by the choices available to judges: dispositions and the rules that denote general sets of case dispositions. The second is that judicial choices, rule creation, and rule application are deeply affected by collegial and hierarchical (horizontal and vertical) divisions of power.

I argue in favor of continuing to develop the strategic account into a more concrete approach, rather than a generalist approach highlighting only that justices interact (see Epstein & Knight 2000, Epstein & Jacobi 2010). Much of the progress over the past decade has been made in line with the following four priorities.

First, our models of courts should recognize judicial structures. One formal tool for doing so is the "case-space model," which is designed to capture them explicitly. This model highlights legal cases as the vehicles for policy making, but of course judicial policy making is more than simply case disposition after case disposition. When appellate courts address judicial policy more generally, they typically do so in opinions that establish (new or modified) legal rules for deciding current and future cases. The possible set of cases is the "case space." A rule is a partition of the case space into winners and losers (see **Figure 1**). Different judges can have different preferences over legal rules, which is to say different partitions of the case space. Battles over law are struggles over partitions of the case space. Development of the law occurs through articulation of and movements in this partition. A case-space model thus reconciles competing modes of analysis of judicial behavior, integrating the practice of law with a political, policy-seeking perspective. Judicial behavior can be consistent with legal theory in form and function, while consistent with political accounts of the incentives faced by judges.

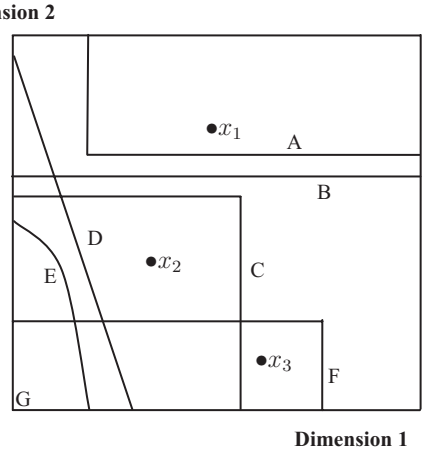

Figure 1

This sample case space is two-dimensional, continuous, and bounded. Each point in this space represents a potential fixed case (instead of representing a policy, as in policy space). On dimension 2, case x_1 is the most extreme and x_3 the least. On dimension 1, x_3 is the most extreme and x_2 the least. Seven lettered rules are given. A case is decided as *Yes* if it falls on or below the rule and *No* if it is above (too extreme for) the rule. Thus, all seven rules given would say x_1 should be decided *No*. Case x_2 is decided as *Yes* by only rules A, B, and C. Case x_3 is decided as *Yes* by only rules A, B, and F. Rule G at most accepts the limiting case at the origin. Rules A, B, C, and F establish a fixed threshold on each dimension. Rules D and E balance the two dimensions. Rule C and Rule F are conjunctive rules for getting a *Yes*; the case must lie within the threshold for dimension 1 and the threshold for dimension 2. Rule A is a dichotomous rule for getting a *Yes*; the case must lie within the threshold for dimension 1 or the threshold for dimension 2. If a *Yes* outcome is the conservative outcome, then Rule A is the most conservative and Rule G the least, but not all Rules B through F could be ordered straightforwardly (we could still say, e.g., Rule D is more conservative than Rule E).

A second priority of doctrinal-politics research should be empirical investigation of the structure of judicial choice. One empirical tool for doing so that is well suited to the case-space theoretical model is the fact-pattern approach, which is already familiar to judicial scholars. In addition, we need more data on the content and structure of judicial preferences and legal opinions (that is, more data on how judges want the case space partitioned).

Third, we should continue to study collegiality and hierarchy, theoretically and empirically, but also focus more on how they interact. One new line of scholarship has demonstrated striking incentives for doctrinal choice that arise because of collegiality, hierarchy, and how they intersect.

Finally, scholarship on doctrine should (following the lead of Fallon 2001, Shapiro 2006, Heytens 2008, etc.) focus more on how judges use doctrine to get what they want (and the work on doctrine flowing from Kornhauser 1992a,b should receive more attention from political scientists). This can feed back into further formal and empirical work and vice versa.

Epstein & Knight realized that the strategic account would not resolve all scholarly conflicts. The new politics of legal doctrine will not either. Rather, to adapt from Epstein & Knight (2000, p. 638), my "broader claim is that the strategic account [as enacted in this new politics of legal doctrine] not only helps us to elucidate the 'right' questions but it also provides a methodology to help scholars answer them, to understand the range of choices that contribute to the development of law."

In the next section, I argue that the doctrinal-politics approach resolves foundational dilemmas in judicial politics. I explain the origins of the approach and then offer an assessment of the literature to date that grounds the recommendations above. Before concluding, I highlight the main contributions of this new approach. The Appendix gives a nontechnical review of the case-space model, which might be helpful for understanding some of the discussion that follows.

EVIDENCE FOR THE ATTITUDINAL MODEL

The authors claim no decisive test, but rather "clear and convincing evidence of the overwhelming importance of the justices' attitudes and values" in predicting the final vote in each case (Segal & Spaeth 2002, p. 97). There is negative evidence that rules out legal factors (e.g., Segal & Spaeth 2002, 2003; Spaeth & Segal 1999), but see Friedman (2006) and Bailey & Maltzman (2008). The most direct positive evidence is in tables 8.2 and 8.3 (Segal & Spaeth 2002, pp. 320, 326): Controlling for the facts of each case, ideology scores correlate strongly with vote probabilities, and postestimation predictive success is high. If law acts as a pressure on all justices (indeed, any force that is constant across cases and justices), it can only enter this model through the intercept. What the attitudinal model explains then is differences in voting between justices, differences that match intuitive ideological patterns. Before the model is run, one cannot make point predictions (for why Justice Brennan's attitude score correlates to a specific search-and-seizure liberal vote rate). Attitudes cannot directly explain the "base" level of liberalness captured by the intercept in the model.

ROADBLOCKS AND A ROADMAP

In moving forward, we have faced three roadblocks, three challenging questions that have resisted resolution: What is law? What is legal discourse? What is policy?

Roadblock 1: What is Law?

The founding debate of judicial politics—whether judges find law or make law—yielded an uneasy relationship with legal doctrine. Whereas legal formalists rejected any role for ideology and politics in judicial decision making, the legal-realism movement and attitudinalists rejected law as prime mover. But as a result, any invocation of legal rules, doctrine, or precedents became suspect. Even legal scholars who agree that judging can be political complain that much political science trivializes law and the legal enterprise (e.g., Friedman 2006, Tiller & Cross 2006). That is, a significant number of legal scholars accept legal realism but believe ideology plays a smaller role in judicial behavior than do attitudinalists (see sidebar, "Evidence for the Attitudinal Model").

The founding debate between legalists and attitudinalists recognizes only two roles for law: as a constraint on policy making or as a cloak for it. The legal model as defined by Segal & Spaeth (2002) is a set of arguments that ideology has no or little effect on judging and that standard legal concepts such as precedent and text do almost all the work in deciding cases. Attitudinalists

say only ideology affects final votes in Supreme Court cases (and that ideology likely trumps law at other stages as well). When law is invoked by the justices, it is only to cloak or disguise ideological behavior (perhaps consciously, perhaps as self-delusion). Finally, in the strategic account, law is epiphenomenal; it matters as the output of the judicial process: "[L]aw, as it is generated by the Supreme Court, is the result of short-term strategic interactions among the justices and between the Court and other branches of government" (Epstein & Knight 1998). Or it is a normative constraint to be strategically accommodated (Knight & Epstein 1996). The lack of a mutually acceptable answer to the question "What is law?" is, in my opinion, the reason why the various blocs of scholars "talked past each other for decades, exhibiting fundamental disagreements over how best to study judicial decisions" (Epstein & Knight 2000, p. 653).

Resolution: Doctrinal Instrumentalism

One contribution of the doctrinal-politics approach is that it invokes a different way of thinking about law (specifically the role of legal rules and doctrines), which I call "doctrinal instrumentalism." In short, judges make policy using legal rules. They dispose of cases and more generally craft rules for case dispositions. A case-space model is one formalization of this. The key difference in a case-space model is that instead of each policy or choice being a point in space as in the standard policy model, the points in the case space are legal cases and a legal policy is a partition of the case space into two or more sets. A case-space model thus places judge-created case-sorting rules at the heart of judicial policy making. (Note that this also answers the question, "What is policy?")

Law, in this sense, is not merely compatible with the view of judges as policy seekers, but must be understood in order to properly understand such policy-seeking behavior. Thinking of judges as political creatures does not obviate the need to think about cases and rules. Judicial preferences will be over legal rules that govern cases. This resolves the conflict between attitudinalists and strategists on one side and legal scholars on the other by arguing that preferences and law work together, that we can emphasize policy goals but should not neglect the instruments by which they might be pursued. (This does not rule out that law can be cloak and constraint as well.) Attitudinalists are correct to argue that Supreme Court justices have great ideological freedom; strategists are right to prioritize larger policy goals and to point out complexities in achieving them; and legalists are right to argue that doctrine matters. The doctrinal-politics approach is a "legal model" I hope both attitudinalists and strategists can accept. It is also a strategic account that largely incorporates attitudinalist priorities and yet should resonate with legal scholars.

Roadblock 2: What is Legal Discourse?

In attitudinalism, law is only used to hide politics. As Friedman (2006, p. 266) notes, attitudinalism seems to argue that "what lawyers, judges, and legal academics spend years learning, practicing, and theorizing about is meaningless, . . . and that the entire discourse of law is an illusion." As Knight & Epstein (1996) point out, the justices talk about precedents and other legal accoutrements all the time, even in their private memos, which is strange if law is just a cloak to deceive outsiders.

Resolution: Legal Instrumentalism

Another possibility, what I call "legal instrumentalism," arises from a new line of work in both political science and legal scholarship: To make policy effectively, higher court judges need not only to formulate legal rules but also to communicate them, which requires engagement in the very legal discourse that is dismissed out of hand by pure attitudinalism. Even a dictatorial judge could not list every possible case along with its desired disposition. Even

the most ideological appellate judge must make policy by telling lower court judges what case facts to consider and how much, just as a judge bound by legal principle would. They will thus care about precedents, legal philosophies, and the like because they wield these as communicative devices to achieve policy goals. What separates legal instrumentalism from attitudinalism is that attitudinalism sees legal discourse as only a cloak; legal instrumentalism argues reliance on legal discourse can affect actual behavior and outcomes. What separates legal instrumentalism from the concept of law as norm is that reliance on legal discourse constrains policy seeking whether or not a judge respects the norm of precedent.

The uses and usefulness of legal instrumentalism are constrained by the limitations of legal discourse as tool. (The same could be said of any tool; consider how the legal-attitudinal-strategic framework both helps and hinders scholarly communication!) Legal discourse is inherently ambiguous, so it can be difficult to convey exactly how the higher court wants a legal rule, generally stated, to be applied specifically, in the range of possible cases that can arise. Indeed, if attitudinalists are right that Supreme Court justices need to hide just how much ideology enters into their decisions, they cannot speak to the lower courts freely but must wink and nod and otherwise communicate using legal discourse to convey ideological goals in the language and grammar permitted them.

To make policy, a policy-seeking judge must use the language of judicial policy making. She must make use of the standard mechanisms of legal discourse as inculcated in law school, not to figure out the right answer but to enact her preferred (i.e., "right") answer. To generalize from Bueno de Mesquita & Stephenson (2002), it is not that judges care about law instead of or in addition to policy; judges care about law *because* they care about policy. Law is both the substance of policy (as per the strategic account) and the means of policy making. Using law instrumentally, a judge can cite precedent, using actual case examples to "highlight which factors [she] considers important" and can use "analogical anchoring" and "analogical reasoning" (Shapiro 2006, pp. 315, 325). She must make use of, and is thus constrained by, the entire legal web in which judicial behavior is embedded. Although casting a vote may be a relatively trivial act, crafting an effective legal opinion is obviously not. Note that some formal models respect legal instrumentalism in the form of uncertainty and error; they model the justices as actively crafting their opinions to achieve their desired policy outcomes, inhibited by such uncertainty, ambiguity, and complexity (e.g., Bueno de Mesquita & Stephenson 2002, Lax 2007b, Lax & Cameron 2007).

Roadblock 3: What is Policy?

I now connect the doctrinal-politics approach to the question "What is policy?" and show why answering this question is so important for making further progress building on the strategic account. I argue that insufficiently specific answers to this question prevented the work in the generalized strategic account from reaching its full potential. In building on attitudinalism, the impact of the strategic account was still limited because we lacked a structure for understanding the content of the policy battles at its heart. The strategic account is not a specific strategic model but rather a "conception of judicial decision making" consisting of "a range of explanations . . . that typically emanate from the findings of previous empirical investigations—rather than from any overarching theory" (Epstein & Knight 1998, p. xii). The fault may lie on the side of theorists who did not give strategic empiricists a rich enough apparatus to explain the obviously complex web of interactions they were uncovering. Standard policy-space models only take us so far, as "models based in 'policy space' are too far removed from the details of adjudicatory practice to explain much of judicial activity" (Kornhauser 2008, p. 5). One hears echoes in this complaint of similar concerns decades earlier in the legislative literature:

> In their quest for analytical generality, most formal theorists had suppressed institutional details . . . , thinking that to include them would be to specialize and render idiosyncratic otherwise general theories . . . . However, . . . by suppressing these details altogether, they robbed their own theories of any generality by modeling rational behavior in the most spartan of all institutional settings—that described only by a simple rule of preference aggregation. (Shepsle 1989, p. 135).

Policy-space models did not offer strategic empiricists or formal theorists a structure for considering differences in judicial preferences nor the full range of choices justices make. The case-space model is just such a structure.

Resolution: Case-Space Modeling

Epstein & Knight (1998) write of *The Choices Justices Make*; these choices can be modeled as dispositions and rules. When Maltzman et al. (2000) write of the Supreme Court as playing a *Collegial Game*, I see this game as one over case-space partitions. This provides the missing structure for understanding strategic collegial court politics as well as hierarchical politics. As Kornhauser (2008, p. 2) puts it,

> Models grounded in policy space abstract from the specific cases that, in actual adjudication, trigger judicial intervention and are the occasion for whatever policy-making courts do. Policy space models treat policies as fundamental and cases as nonexistent. Models grounded in case space, by contrast, take cases as fundamental; policies are described in terms of case dispositions. . . . [They] have a certain priority over policy space models . . . [because] case space provides microfoundations for policy space.

(Other ways to provide structure might also be compatible with EITM, of course.) I now outline the origins of the doctrinal-politics approach to clarify ideas and relationships across literatures.

Intellectual Origins of the Doctrinal-Politics Approach

Legal formalism, formal legalism, and empirical connections. The prioritization of legal rules and doctrinal structures flows naturally from both the legal literature and political science scholarship. Indeed, the formal incarnation of this approach in the case-space model is, when stripped of formalism, standard fare in the first year of legal education and basic textbooks on legal reasoning (see Levi 1949). The difference from legal formalism is that rules are not logically derived "right answers" but rather capture the preferences of judges who can disagree. The case-space model (see Appendix) originated in the work of Kornhauser (1992a,b, 1995) but is only now gaining real traction in political science work on courts. I have discussed roadblocks to progress from the political science side, but a symmetric problem existed from the other side. Traditional legal scholarship and interpretive theory ignored the collegiality of appellate courts (Kornhauser & Sager 1986, Vermuele 2005). The case-space framework arose in part to make room for collegiality in legal theory while still recognizing legal practices.

The case-space model is an alternative to the paradigmatic policy-space model from political science and economics. The case-space model is tailored to capture the substance and institutional features of judicial policy making, putting cases and doctrine at the analytic center without rejecting a role for judicial preferences. Unlike a policy-space model, it can easily represent facts, cases, legal rules, and dispositions. Kornhauser specified the idea of a doctrine as a function that establishes equivalence classes of cases to be decided similarly on the basis of the factual dimensions that make up a case space. He suggested various lines of inquiry, some of which are now receiving greater attention. Cameron (1993) and Grofman (1993) articulated a spatial structure within Kornhauser's general approach and raised further questions. Cameron et al. (2000) formalized a compliance game between a higher court and a lower court in a

unidimensional case-space model. Lax (2003, 2007a) and Landa & Lax (2009) extended different types of case-space modeling to study the high court as a collegial multi-member court, to explore differences over preferred rules. Lax (2007a,b) and Landa & Lax (2009) also returned to the multidimensional analysis of case space started by Kornhauser (1992b) and Cameron (1993).

Taking legal rules seriously does not require jettisoning notions of ideological preferences and their dominance over Supreme Court voting. The case-space approach is not incompatible with the attitudinal model. Indeed, though not called such, the attitudinal model is cast in a one-dimensional case space (Segal & Spaeth 2002, p. 90). Each judge has a cut-point in this space, so that judges vote "yes" in cases that lie to their left and "no" in cases that lie to their right (or vice versa). The location of each case depends on its facts. The generalization of this one-dimensional case space is a multidimensional case-space model, not a standard policy-space model. The doctrinal-politics approach differs from atttitudinalism in that it focuses more on the larger policy battles over partitioning the case space rather than only on case dispositions.

Turning to the legal literature, a new wave of scholarship focuses on how Supreme Court justices achieve their goals using rule structures. This work casts justices as picking those structures while looking ahead to the application thereof (Fallon 2001, Friedman 2005, Shapiro 2006, Heytens 2008). As Fallon puts it, the judicial task is that of implementation. A judge seeking to implement her preferred set of case outcomes must choose from a varied judicial toolbox, containing rules, formulas, and tests, which themselves break down into bright-line rules, standards, balancing tests, multiple-prong tests, etc. Shapiro focuses on the need to communicate these structures accurately though actual exemplar case dispositions (see Bueno de Mesquita & Stephenson 2002 for a similar argument using a formal model of precedent). The case-space model is a natural formalization of these ideas and allows a fruitful overlap between formal and informal work on doctrinal choice. See, for example, case-space models of doctrinal choice between "rules" and "standards" (Jacobi & Tiller 2007, Lax 2007b) and the analysis of other rule structures (Lax 2007a, Landa & Lax 2009).

One final thread to this intellectual account flows from the empirical analysis of judicial decisions in the form of fact-pattern analysis. This empirical approach comports nicely with case-space theorizing. Building on the foundation established by Kort (1957), Segal (1984) and other scholars have demonstrated that the presence or absence of certain case facts can successfully predict judicial decisions, and the relationship holds both across issue areas and across courts. This is an empirical invocation of qualitative fact-pattern analysis as practiced in law school. Since Segal's path-breaking work on Fourth Amendment cases [updated and extended by Segal & Spaeth (1993, 2002) and Songer et al. (1994)], fact-pattern analyses have been applied to several other areas of the law.[1] In fact-pattern analysis, the court or justice vote is regressed (using logistic regression or probit given the dichotomous dependent variable) on a set of case facts. The resulting coefficients can be thought of as weights on the various facts, measuring how much the fact in question "pushes" or "pulls" a particular case toward receiving a conservative or liberal classification. Cameron et al. (2000) showed how to use the weights from such an approach to form an aggregate case-location score. This approach assumes that the court's preferred rule is a balancing test, a weighted function of facts into a one-dimensional space, creating an aggregate score that is compared to a cut-point in that space. More complicated functions of these inputs could be assumed in a regression, and justices could disagree about those functions. One could also connect fact-pattern modeling to multidimensional case-space modeling. Another approach is that of Kastellec (2010), who

[1] Kastellec & Lax (2008) provide a list. Friedman (2006) argues that some work in this vein misunderstands the law–fact distinction.

uses classification trees to estimate the structure of the relationship between facts in their joint production of a disposition.

In a highly influential paper, Richards & Kritzer (2002) adapted traditional empirical fact-pattern analysis into a "jurisprudential regimes test" to detect the influence of law. This again comports nicely with case-space theorizing. A jurisprudential regime is a structure for case decisions in a given area. Such regimes are said to influence the justices themselves, so we can compare voting patterns before and after key precedents and test for changes in the fact weights. [Lax & Rader (2010a) show, however, that typically employed statistical methods do not reliably test doctrinal change of this form, and conclude that there is little to no evidence of regime change; see also Segal & Spaeth 2003, Kritzer & Richards 2010, Lax & Rader 2010b.]

The strategic account. I now explain the doctrinal-politics approach as a natural extension of the strategic account. Pritchett's (1948) seminal work on the Roosevelt Court, which brought legal realism to political science and focused our attention on ideological preferences, and Murphy's (1964) *Elements of Judicial Strategy*, the first work to fully embrace the strategic account, highlighted interactions between justices in the pursuit of legal policy. They provided stylized stories to support the central thesis but did not systematically analyze strategic behavior (Epstein & Knight 1998, p. 629). So far, there was no particular structure in mind for what legal policy was. Jumping ahead to Epstein & Knight (1998), the goal was not to provide a specific structure but rather to document "empirical support for the plausibility of the assumption of strategic interaction" and for the frequency and potential impact of such interactions (Epstein & Knight 2000, p. 640). The next step was to systematically analyze these interactions, work spearheaded by Maltzman, Spriggs, and Wahlbeck (Maltzman et al. 2000). These scholars developed state-of-the-art empirical models with variables creatively drawn from intuitive hypotheses about strategic incentives and behavior, producing an impressive set of data, hypotheses, and tests. The next step after that would have been to aggregate these findings into a bottom line. But that is where the enterprise got stuck, despite the impressive number of statistical findings and wealth of new data, so that the whole was not necessarily much greater than the sum of the parts.

To show what I mean, I break the strategic account into a hierarchy of claims, from least to most controversial.

- S1: The justices care about more than just the final votes they cast.

Segal & Spaeth (2002, p. 357) concede that the "opinion of the Court . . . constitutes the core of the Court's policymaking process." As Epstein & Knight (1998, p. 50) put it, "Why would justices bother recrafting their opinions if they believed that their writings would be ignored, if they thought their opinions would lack the force of law?"

- S2: The justices have preferences over legal policy and take each other's positions and preferences into account when crafting opinions and responding.

Because a judicial opinion in a Supreme Court case (not just the disposition) must get majority support to be directly binding on lower courts, justices will join opinions with which they disagree in part and make accommodations to other justices when writing opinions. They may cast only sincere final "merits votes" (as in the attitudinal model), but they write or join opinions insincerely, making sophisticated/strategic choices to get to a majority. (Note that attitudinalists do not assume the justices are so myopic that they fail to take strategic constraints into account—rather, they argue these constraints are effectively negligible when it comes to the final vote in each case.)

Most of the empirical evidence for the strategic account concerns only propositions S1 and S2 and aims at research questions that legal scholars will not see as important, all related to the meta-question, "Are justices strategic?" Indeed, Friedman (2006) argues that too much effort in the strategic account seems aimed

solely at the hegemony of the attitudinalists and their focus on case dispositions, or speaks against a legal model in which the justices are seen as having clean hands, purely devoted to what they believe to be legally required: "For [strategists], . . . 'strategic' often means only that the justices are paying attention to one another's arguments . . . . Outside the subfield of law and courts, however, does anyone reasonably doubt that the justices take account of one another's views?" Friedman would likely also argue that no one would doubt that justices use their opinions to make new law and care about the content thereof (as in Knight 2009, p. 1532).

So far, it is not clear why any of the choices in this "collegial game" (Maltzman et al. 2000) matter. For example, why does it matter in which order justices join the majority opinion, how long it takes them to do so, when suggestions get incorporated, etc.? What exactly is it they are bargaining over and how does it affect law? Epstein & Knight (1998) use to great advantage the example of *Craig v. Boren* (1976), in which Justice Brennan pushed an intermediate scrutiny standard for gender discrimination claims, despite sincerely preferring a strict scrutiny standard. This is indeed bargaining over a legal rule, as compatible with case-space modeling. But this example does not mean that such bargaining did more than achieve the rule preferred by the median justice, that Brennan had to compromise in how far he could pull law. A naive legalist might be shocked by this; most legal scholars would not.

What is implicit, but generally unexplained or undocumented—and what I take most strategists to believe—is actually a third claim:

- S3: The collegial game has actual consequences for legal policy.

Maltzman et al. (2000) make clever use of an exchange between justices about the case of *Pennsylvania v. Muniz* (1990). Justice Brennan wrote an opinion that restricted *Miranda* rights, privately explaining in a written memo to Justice Marshall that he was being strategic: "If Sandra [Justice O'Connor] had gotten her hands on the issue, who knows what would have been left of *Miranda*?" So the argument is not just that the justices have to compromise and work with each other, accepting opinion language they do not like, but that their interactions, reactions, and anticipatory actions matter—different preferences and choices would play out differently, and not necessarily straightforwardly. For the *Muniz* anecdote to speak against the Friedman (2006) critique, it must be that if Brennan had not maneuvered as he did, then the exception carved out of *Miranda* would have been larger. To speak in case-space language, it must be that he managed to keep the cut-point partitioning the case space from lying at O'Connor's preferred partitioning point (assuming she was the median justice in a single dimension). If not, then the strategic account could be accused of explaining only the path to the median voter result.

Finally, *Muniz* might also serve as an example of a still more controversial possibility, since Justice Brennan actually voted to restrict *Miranda:*

- S4: Justices might cast insincere merits votes if it means trading the case disposition for better policy content in the opinion.

This claim is the only strategic-model claim that directly attacks the core of the attitudinal model.

Why did the strategic account produce so little evidence at the level of S3? Epstein & Knight (2000, p. 641) recognize the contributions of the empiricists "translating the strategic intuition into variables that they include in their statistical models of judicial behavior" and of the formal theorists seeking to explain observed behavior in the form of equilibria analytically derived from explicitly defined incentives. Much was learned even though each strand developed independently. But some argue there remained too wide a disconnect between theory and empirics, despite the urges of the EITM movement (Empirical Implications of Theoretical Models). Indeed, Cameron (2010) argues that too much of judicial empiricism is not EITM, but "MUSH" (Multiple Un-Structured

Hypotheses)—that the empirics invoking informal intuitions are not robust enough to establish clear "stylized facts," nor are the deductions that lead to the hypotheses tight enough to stand as theory in their own right. MUSHy works are those that do not advance theory, either by challenging theorists with interesting unavoidable facts or by making tight deductions themselves.

It is difficult to explore judicial interactions without thinking more about the structure of choice. For example, for Maltzman et al. (2000), what does it mean for a justice closer to the justice authoring the opinion to have "more" influence? Does it move "policy" closer to him and away from the author, in a spatial sense? Why would an opinion author be more willing to move policy toward a proximate justice? And how does this affect how other justices respond? Do not these shifts move policy toward or away from the other justices too? Are such accommodations merely idiosyncratic or cosmetic? In the standard one-dimensional median-voter model, it is hard to understand these strategic moves. The most basic challenge to the strategic account is, why does it matter who controls the majority opinion in the Supreme Court? It is not obvious that it should: If the Median Voter Theorem applies, then opinion authorship and assignment are irrelevant. If one potential majority author would find it necessary to make concessions to build a majority, why would not any other justice have to make the same concessions? To put it informally, if the price of forming a majority coalition is always the same, why does it matter who writes the check? Unless the bargaining process leaves some "surplus" for the opinion author to capture, it does not matter who writes the majority opinion nor who assigns it. Much of the strategic literature assumes the existence of such a surplus but does not explicitly tie it to the strategic-account analysis that ensues. Subsequent analysis proceeds from that point, so it is not tied to any specific explanation for this "median justice puzzle." Lax & Cameron (2001) challenged scholars to solve this puzzle, and a cottage industry (discussed below) has arisen around this very problem.

In the absence of the critical microfoundations that might explain the scope of bargaining power, empirical explanations have invoked a rather mixed bag of motivations (from "egalitarian impulses" to "fostering good will" to "organizational needs"; see Lax & Cameron 2007) and have failed to specify sequentially rational behavior over the course of bargaining, as if the justices could not think ahead. For example, Maltzman et al. (2000) analyze the various stages of majority-opinion drafting separately, chapter by chapter, from studying opinion assignment to dealing with responses to the majority-opinion draft. This is chronologically correct, but the "wrong" order from the perspective of strategic analysis. Opinion assignment is studied before the following bargaining process is studied, responses to the initial majority opinion are studied before accommodations to such responses are studied. Empirically, the data at each stage are treated as though they were not the result of a complicated strategic screening process, even though that has been established in the preceding chapter. Theoretically, at each stage, what we know about future choices is not invoked. Rather, what are tested are plausible incentives for the choices an author or other justice might make, instead of the patterns we would observe given the interaction of these incentives. This tests latent unobservable incentives or strategies instead of observable equilibrium outcomes. Cameron (2010) points out that it is not clear which strategic-account hypotheses could be supported by a rational model and whether they could be compatibly supported within a single model. This is perhaps why Epstein & Knight (2000, p. 642) argued that the informal-intuitions-as-empirical-hypotheses approach might best be interpreted as a "transitional bridge between traditional behavioral research and strategic analysis."

The case-space model has moved scholarship forward by giving a formal structure to the elements of judicial choice as articulated so well by the strategists, while also opening up a line of inquiry about legal doctrine of interest to legal scholars. At the same time, it can speak to

existing empirical work (see, e.g., Lax & Cameron 2007). It can attack questions such as: What exactly is being bargained over? What form do legal preferences and legal policies take? How do political preferences over legal rules interact to shape legal policy? How can legal rules be aggregated? What are the normative implications of legal doctrine formed by policy seekers?

COLLEGIAL POLITICS

In the remainder of this article, I analyze the literature on collegial and hierarchical court politics, focusing on case-space models and work that speaks to similar issues.[2] I first consider collegial adjudication, then bargaining models, and finally empirical evidence.

Collegial Rule Application and Aggregation

What consequences does collegiality have for adjudication? The seminal work of Kornhauser & Sager (1986) evaluates how collegiality interacts with common issues of legal and interpretive theory. The authors compare different modes of aggregating judicial choices and subchoices and articulate a number of dimensions on which collegial adjudication can be assessed, such as consistency and coherence. Too little of this work has made its way into the political science literature on courts, I suspect because it is assumed that coherence is simply a normative goal. However, the ability of a collegial court to speak in one articulate voice may affect the court's efficacy within the judicial hierarchy; incoherence might endanger communication with and the management of lower courts.

Easterbrook (1982) argues that collegial courts could cycle over a list of rule choices (given Condorcet's Paradox and multidimensional Chaos Theorems for policy space). What then does a case-space approach say about consistency, that is, about a collegial court making similar decisions across cases and over time? In any single yes-or-no case heard by a collegial court, it would seem that the judges can vote to resolve their conflicts, but even a single case can present challenges for collegial adjudication. Suppose judges are applying a legal rule to a single case, but they disagree as to whether different parts of that rule are satisfied in that given case (i.e., they disagree as to the legal findings). Suppose this rule involves multiple findings that in some logical relationship (a conjunctive or disjunctive rule) induce a particular case disposition (e.g., a judge will decide "guilty" if and only if both intent and causation are established). Then a Doctrinal Paradox (Kornhauser & Sager 1986) can arise. The decision in the case can vary depending on how the findings are aggregated: (*a*) taking majority votes on each finding one by one (e.g., first on intent, then on causation) and putting those majoritarian findings together or (*b*) majority votes by judge, with each judge following the legal findings as she sees them to vote on the aggregate finding (guilty or not). Kornhauser (1992b) discusses actual Supreme Court cases in which the justices' findings produce this paradox. This paradox has inspired a growing body of literature on collegial rule application and judgment application, spanning legal theory, social choice theory, and deliberative democratic theory [see literature reviews by List (2003) and Landa & Lax (2008, 2009)].

The Doctrinal Paradox means that collegial adjudication need not be consistent across identical cases, if the judges aggregate their views differently at different points. This aside, Kornhauser & Sager (1986) assert collegial courts would always reach the same decision in identical cases, thus yielding consistency. Kornhauser (1992a) extends this to argue that *stare decisis* and what he denotes a "result-bound" judicial system will result in path-dependent but consistent law. Stearns (2000) adds that standing doctrine can induce consistency.

[2] I regretfully must "ignore" an important subject of the strategic account, namely battles between branches of government. For a review of formal models of adjudication embedded in a constitutional system, see Kornhauser (1999). See Clark (2011) for a recent book-length treatment, with some of the best evidence to date of such external constraints on judicial choice.

Kornhauser & Sager (1986) argue, however, that consistency is not enough. Besides making consistent decisions in identical cases, a form of logical or reasoned consistency across cases is necessary for a larger body of law to be "coherent." Each judge might have a coherent view, but judges acting collegially might not yield a coherent body of decisions. One concern is that different judges might prefer different rules. Even if they agree on legal findings, appellate judges can disagree about which legal findings matter and how much. That is, besides the challenge of collegial rule application, they also face a potentially larger challenge, that of collegial rule creation. A newer literature discusses the questions that arise. If a judge decides cases according to his or her preferred legal rule, when can judges sitting on a collegial court come together to create a meaningful legal doctrine? What will the "collegial rule" be?

The starting inquiry is whether there is a meaningful way to construct a collegial rule that reflects differences among individual judges but still captures their preferences in a majoritarian fashion. Can a higher collegial court give a lower court a rule to follow that mimics what the higher court would do? Kornhauser & Sager (1986) call this requirement "fit" (as part of what they call "representation"; see also discussions of "authenticity" and "reliability"). The key result of Lax (2007a) is that in case space the judges can always find a representative rule, a legal rule that captures the effect of their voting case by case. The de facto rule induced by the set of individually majoritarian case dispositions is called the "implicit collegial rule," or "implicit median rule" if the case space is "proper." The Median Rule Theorem states the main point: There will always exist a median rule even without a median judge.

However, this de facto rule can differ from individual legal rules in that it might not be possible for the Supreme Court (or other collegial court) acting as a whole to form the same type of rule as any individual justice might have. One feature of coherence that can be maintained under aggregation is properness (a type of monotonicity), but the implicit collegial rule might lack properties fulfilled by the justices' individual rules. Lax (2007a) and Landa & Lax (2008, 2009) show when and how this problem can arise. First, the implicit collegial rule need not be the rule of any one justice on the Court. This means that, although philosophical or other principles may indeed be found to support this amalgamated product, there is no reason to believe these will exist; at the very least, the justices may have to go outside their collective set of such principles, and the resulting rule loses the presumption of principled justification that we might associate with the opinions of justices taken as individuals [as Kornhauser & Sager (1986) suggested]. Moreover, the implicit collegial rule can be more structurally complex than any individual rule, indeed quite different in structure from the individual rules that induce it. Another finding is that the preferred rule of the collegial court as a whole can be sensitive to the individual rules of many different justices, each pivotal for different ranges of cases, even if they are in dissent in the particular case heard by the Court (Lax 2007a). Replacing any of these justices, and not just a single so-called swing justice, can affect legal policy in nontrivial ways. Focusing only on which justice is the swing voter in a particular case will then omit much of interest in the collegial formation of legal doctrine.

Kornhauser (1992b) offers the following structure for a case space. Doctrine breaks legal decisions into dichotomous questions. Facts determine whether a given issue is satisfied or not; each issue is a bundle of facts that go together. A form of action details and organizes which facts are relevant for which issues. Causes of actions are legal characterizations of issues, and legal findings must support all these issues for a victory on the cause of action as a whole (a conjunctive test). That is, to win a case, you need win only one cause of action, but can win any one (a disjunctive test among causes of action). Causes of action can overlap in terms of which issues are invoked. A doctrine is a set of one or more causes of action for a given area of the law. Judges can disagree about doctrine, which is to say they can disagree about the facts of the

case (though appellate courts do not generally review case facts de novo), findings (which can produce the Doctrinal Paradox), which findings should be necessary, and which causes of action should be permitted for a given type of legal claim. (For a typology of disagreements on collegial courts in policy space and case space, and the literature thereon, see Landa & Lax 2008.)

In Kornhauser's terminology, Landa & Lax (2009) study properties of aggregating doctrines across judges, where each judge's doctrine consists of one or more causes of action, but all judges agree as to facts and findings. The implicit collegial rule can require a more complicated relationship between the issues involved in causes of action and can increase or decrease the number of causes or action relative to the individually preferred doctrines of the judges. In a continuous case space, relatively straightforward partitions setting a threshold on each dimension can aggregate into rules that cannot be represented by simple thresholds on each dimension (Lax 2007a).

Another form of inconsistency can arise because there are different algorithms by which judges might form a collegial rule. The implicit collegial rule is equivalent to case-by-case voting, but a collegial rule can also be constructed by considering each element (or factor or dimension). Landa & Lax (2009) show that using the implicit collegial rule may not satisfy majority will on particular elements of the rule. Even where a majority of judges think an issue relevant, the collegial rule might not treat it as relevant. Aggregating individual preferred case dispositions may lead to different outcomes than disposing of cases with the rule that is arrived at by aggregating individual dimensions of the preferred rules; and deliberating over a case outcome can yield a different result than deliberating over the rule first and then applying it to the case. This implies a different type of doctrinal paradox, at the level of rule creation instead of rule application. Landa & Lax (2009) provide necessary and sufficient conditions for this to occur and show connections to the standard Doctrinal Paradox. Lax (2007a) shows a similar result where judges have thresholds for each dimension, disagreeing on the threshold for the legal findings on these dimensions.

A final form of inconsistency can arise even for a single judge considering connected cases. Most recent work assumes preferences over cases are separable: Everything that is consequential for deciding a case is a function of the rule and the facts in that case alone, not how other cases are decided. If cases are nonseparable, then a judge may face tension between the instant case before him and past case dispositions. An example of nonseparable preferences might be Justice Stewart's vote in *Eisenstadt v. Baird* (1972), to extend the right to possess contraceptives to unmarried people, given his dissent in *Griswold v. Connecticut* (1965), in which the Supreme Court held that married couples had such a right. Because he could not overturn *Griswold*, he perhaps preferred to grant the right to all. Since this means that justices might cast final merits votes insincerely (with respect to the single case at hand), this represents a challenge to the attitudinal model. This may also explain why justices sometimes implicitly go along with precedents they do not like (see Spaeth & Segal 1999). See Kornhauser (1992a) on path dependence and separability.

Collegial Rule Games

What explains what doctrine the Supreme Court will choose? Recall that any claim that collegial bargaining matters implicitly raises—and preferably explicitly resolves—the "median justice puzzle" (how a bargaining window remains open given the Median Voter Theorem). Some models below are explicitly in case space, others in policy space. Models also vary in how they capture the Supreme Court's bargaining protocol and how much case-space technology they invoke.

Monopoly theories. In one family of models, only one justice within the majority has any influence over opinion content, so the opinion is placed precisely at her ideal point. There are three contending monopolists: the median justice, the majority-median justice, and the author. The "open-bidding" model of Hammond

et al. (2005) is the normal Median Voter Theorem model. A variant with the same bottom line is their "median-holdout" model, which assumes the median justice refuses to vote for any opinion other than her own ideal point. The majority-median hypothesis is discussed by Westerland (2003) and can arise in the formal model of Carrubba et al. (2007), when no justice in the initial majority will accept an offer from the opposing side (doing so is either ruled out by assumption or prohibitively unattractive). This yields the Median Voter Theorem applied within the initial majority coalition. Finally, the author himself might have total control over opinion location. No formal model, but some empirical work, suggests this.

A variation on the median result, where policy reduces to the median rule, but not necessarily the rule of a median justice, is given by Lax (2007a), who considers multidimensional case-space bargaining games. In the "case-by-case" game and the "opinion coalition" game (and under some conditions in the "explicit collegial rule" game), the implicit collegial rule results. Anderson & Tahk (2007) use a policy-space model to argue that a dimension-by-dimension median will be stable, assuming that each section of a Court opinion deals with movement only on one policy dimension and that justices can join sections one by one. This establishes, for the judicial setting, well-known results from social choice theory about dimension-by-dimension voting.

Influence theories. In another family of theories, the opinion author is constrained to take into account the preferences of the other justices but still maintains some influence. To start with non-case-space work (but noting that it might be possible to reinterpret such work in case space), for Schwartz (1992), the policy alternatives available to the opinion author are exogenously fixed, and the author can only control the level of precedent written into the majority opinion. Authorship influences the level of precedent, with preferences over precedent levels given by assumption. Maltzman et al. (2000) do not make an explicit prediction as to where the opinion will fall, but its location is positively related to author ideology. They argue that opinion assignors will, all else equal, prefer more proximate opinion assignees. For Lax (2001), dissent retards policy change and this creates a "take-it-or-weaken-it" bargaining game, as compared to the normal "take-it-or-leave-it" game. The Court majority is constrained in cases in which dissent would weaken policy change (e.g., when the power of the Court is threatened, such as in the desegregation cases). Finally, in the "agenda-control" variant of Hammond et al. (2005), it is assumed that only the initial majority opinion author can write an opinion. The other justices can only accept that opinion or let policy revert to the status quo. (Hammond et al. note it is not clear why justices would cede so much power to the opinion writer.) This is then the familiar take-it-or-leave-it bargaining model, in which the author's choice set is the range of points between the status quo and the reflection point of the status quo on the other side of the median.

The role of the status quo in this model is also controversial (Brenner & Whitmeyer 2010). What does it mean for the justices to decline to join the majority opinion, but instead "choose the status quo"? As Cameron & Kornhauser (2008) point out, this resembles the bargaining protocol of a legislature, not the Supreme Court. Legislators vote a single bill up or down against the status quo, perhaps after an amendment process, perhaps with no alternatives permitted. The Supreme Court has a very different protocol for bargaining. The justices can offer alternative opinions, join the majority, concur in part, vote with the majority but concur separately, or dissent. There need not be a single alternative to the status quo, and the fate of a particular alternative does not rest on a single up or down vote. All this is done in the context of a particular case to be decided.

The agenda-control model has the Court operate under closed rule, not open rule, in the jargon of legislatures—only one alternative is permitted on the floor, which is voted up or down. If there is a status quo legal rule in place, a justice could certainly write an opinion in

favor of it. But she is not restricted to choose only that rule or the one offered by the initial majority opinion author. And if no one writes to offer this status quo legal rule, there is no mechanism by which the justices may invoke it, other than to get the case dismissed. Even when affirming the disposition from the lower courts, the justices are free to write their opinions as they wish, announcing a new or modified legal rule. Once the Court takes a case, barring dismissal, doctrine never simply reverts to the status quo. (The status quo would seem far more relevant to case selection; the justices would compare the status quo to the expected value of taking the case and having a bargaining game.)

Lax & Cameron (2001, 2007) present the first explicitly case-space model of bargaining. Opinions target a particular partition of the one-dimensional case space, but they have a second dimension, legal quality, which determines how close the enacted case partition comes to the desired case partition (one could more simply assume that the justices care directly about quality). Producing higher-quality opinions is costly, and this creates a wedge that the assignee can exploit. The Chief Justice (or other assignor) anticipates the bargaining game and strategically assigns opinion authorship. The degree of author power, opinion location, and opinion quality vary with bargaining leverage and various model parameters, and therefore so does assignment. The opinion's cut-point will be located between the median and the author. In contrast to the proximity prediction of other models, the optimal opinion assignee is one *more* extreme than the assignor: Given the moderating pull of the median, and given the additional pressure to invest in quality, this produces an opinion closer to the assignee than would assigning to his ideological twin. The model generates a large number of comparative statics for bargaining and assignment, explaining well-known empirical regularities previously without microfoundation, as well as generating novel predictions.

Carrubba et al. (2007) were the first to explicitly model justices who care both about the instant case disposition and opinion content. In their model, which I call CFMV (after the authors' names), justices can join the majority opinion or write separately, trading extra value from the majority opinion against expressive payoffs based on what opinion a justice joins. Other justices can join (adding authority to the majority opinion) or write separately to better express their preferences over policy. Justices prefer to endorse proximal opinions associated with the "correct" case disposition. The model of Cameron & Kornhauser (2008), or CK, is similar in many respects. These papers go beyond opinion location to predict coalition and concurrence patterns in addition to the case disposition. Carubba et al. solve their model for the case in which correct dispositions are valued so highly that bargaining is restricted to the initial majority, setting aside the other case for the most part. CFMV specifically models the added value from having an official majority opinion rather than just a plurality opinion for the majority disposition. It treats production of the majority opinion as a public good and invokes specific assumptions to make predictions to avoid free-riding problems and the like. CK also recognizes that an authoritative majority opinion is a public good, as is gathering enough votes to get the "correct" disposition, but CK resolves this by assuming that only the majority author cares about authoritativeness. Legal practice suggests a big difference between a majority opinion (which counts as precedent for all lower courts) and a plurality opinion, but this is set aside in CK. CK focuses more on strategic dispositional voting than does CFMV.

I next turn to empirical work on opinion "location," work that attempts to test the predictions produced by the theoretical work above.

Empirical Evidence of Opinion Location

Epstein & Knight (1998) and Maltzman et al. (2000) present clear if circumstantial evidence that nontrivial bargaining is occurring (i.e., something more than median monopoly). Bonneau et al. (2007, pp. 896–97) conclude

that their agenda-control model better explains final vote data than does a median-monopoly model. The assumption driving their test is that the status quo lies in between the group of justices who voted to grant certiorari and the group who voted to deny it. If this means the status quo tends to fall near the median justice already, then the bargaining range is small to negligible. But more importantly, it is unclear why the justices would want to take cases in which current legal policy is already so close to the median on the Court. Lax & Rader (2008) present evidence against the monopoly theories (opinion assignment affects changes in merits votes, which it would not if assignment were irrelevant), as well as evidence against the proximity-assignment hypothesis, and in favor of the extreme-assignment hypothesis unique to Lax & Cameron (2007). Carrubba et al. (2007) use concurrence patterns to argue that opinions do not lie at the median justice. They show that the author, the median, and the majority-median all affect location, ruling out a pure median-monopoly model (see also Westerland 2003). Clark & Lauderdale (2010) develop a scaling model to estimate opinion location and ideal points on a common scale, using citations. They present evidence against the median- and author-monopoly models, in favor of models that predict location within the initial majority coalition (the majority-median model outperforms the other monopoly models). Finally, Beim et al. (2010) show, using the Clark-Lauderdale scores, that opinion content responds to both opinion and disposition coalitions—evidence against monopolist models. They also present evidence of "cross-over joins;" justices do not always prioritize the disposition over the policy.

HIERARCHICAL POLITICS

I first argue that the hierarchical division of adjudication (combined with a discretionary high court docket) raises challenges for empirical work on other issues, such as the role of law and ideology. I then discuss theoretical and empirical work on doctrine making in a hierarchy. I focus on what is called the agency approach to studying judicial hierarchy, which highlights disagreements between and within levels thereof. For the team approach, which focuses on hierarchical error rates and error correction in models of common legal preferences, see Kornhauser (1995, 1999), Cameron & Kornhauser (2006), and Westerland et al. (2010).

The Empirical Implications of Hierarchy

The Supreme Court and the lower federal courts play distinct roles. The top tier of the judicial hierarchy, having a discretionary docket, concentrates far more on doctrine—rule creation and articulation—while the bottom tier concentrates on application of rules to specific cases. This hierarchical division of labor is often downplayed in both empirical and theoretical work, which instead operates as though the Supreme Court handles "normal" cases. Work on case selection (e.g., Ulmer 1984, Caldeira & Wright 1988, Perry 1991, Boucher & Segal 1995) is set aside.

The implicit picture in much empirical work on the Court, and in some formal models, is that of routine law application, or simple case sorting, in which the Court can correct mis-sorting by lower courts. But the Supreme Court is the Court of Last Resort, not Last Re-Sort. Most Supreme Court cases are unusual or novel in some way, or they are taken because enough justices want to change the law. To be sure, they take some cases to rectify noncompliance or mistakes by lower courts. But they do not expend most of their docket on routine case sorting. Indeed, Shapiro (2006) argues the Court does not do enough of it, so that there are too few examples of what the high court wants.

One problem is that we rely on observed Supreme Court cases to study the preferences of Supreme Court justices, constraints on their decision making, the treatment of case facts, the role of law, and ideological change on the Court. We often try to ascertain the doctrine the justices want to see applied more generally

in cases they do not take by inspecting statistical patterns in the cases they do take. But the precise selection strategy employed by the justices will affect the set of Supreme Court cases we observe in a given area of the law in a given time period. It is now well known that the cases that make it to trial or appeal are a nonrandom set of cases, and so generalizations from these cases (e.g., to infer legal rules) that ignore this selection bias can be highly misleading (see Priest & Klein 1984 and related work). Kastellec & Lax (2008) study selection bias in the context of various common judicial-politics research designs. They show that ignoring case selection severely undercuts inferences about which case facts matter to the Court and how much (making it harder to study changes therein, and undercutting jurisprudential regimes tests); about aggregate liberalism in the votes of the Court and individual justices (and therefore comparisons thereof); and about the degree of compliance in the lower courts (when extrapolating to lower court decisions from high court fact weights). One way around these problems is, as per the doctrinal-politics approach, to focus more on doctrine as described in opinions instead of only on dichotomous votes. We also might better observe the Supreme Court's desired legal doctrine (or jurisprudential regime changes) by examining lower court cases, to the extent that such cases are representative and straightforward applications of law.

Selection bias can create particular problems for nuanced uses of judicial-ideology scores, which tend to assume a static case distribution and a common case distribution across all issue areas. For this and other reasons, "the interpretation of scores as measures of 'ideology' in the strong sense is not warranted by the data. The scores are simply a descriptive summary of the single dimension that best characterizes differences in merits votes of the justices" (Ho & Quinn 2009, p. 27). [See also Martin & Quinn (2005), Fischman & Law (2009), and Farnsworth (2007).]

Of course, case selection is also a research opportunity. One important qualification in the attitudinal model is often forgotten: "Many meritless cases undoubtedly exist that no self-respecting judge would decide solely on the basis of his or her policy preferences" and "[t]hose that the Court does decide tender plausible legal arguments on both sides" (Segal & Spaeth 2002, p. 93). It is not that Supreme Court justices will do whatever they want, only that they will do what they want in the cases they choose—which are those in which they can do what they want. This suggests another way of testing the limits of attitudinalism and of assessing law as constraint: to focus on the case-selection stage. This boundary assumption may be where the real action is in the law-ideology divide, but it is not where enough scholarly action has been. The Segal-Spaeth position assumes only two types of cases, cleanly divided into those that allow for attitudinal decision and those that are legally bound. A continuum of legal-boundedness seems more plausible: If there are some cases that the justices would not take to exert their attitudes because of clear law, why could they not at least partially respect law in the cases they do take? Full respect for law at case selection seems inconsistent with zero respect for law in case dispositions.

Compliance as De Facto Doctrine

The Supreme Court lacks the most common weapons in principal-agent problems—the power to hire and fire, to reward and punish—but it does have the power to audit. In one line of work, incentives for certiorari (auditing of the lower courts) and compliance (by the lower court with the higher court's preferred doctrine) come together to produce a de facto partition of the case space. Doctrine as applied will fall short of the preferred partition due to noncompliance.

According to Cameron et al. (2000), noncompliance arises because the lower courts exploit ambiguity in case facts. The higher court strategically and probabilistically audits based on the lower court's ideology, observable case facts, and the lower court decision. A conservative (liberal) higher court reviews only liberal

(conservative) lower courts and only when they make liberal (conservative) decisions. Empirical support for these propositions is provided.

Lax (2003) shows that collegial court politics and hierarchical politics intersect. The "rule of four," a nonmajoritarian rule, creates a more credible threat to review cases, which increases lower court compliance, and so actually increases majority power. What is countermajoritarian in appearance is majoritarian in effect. There are also incentives for the justices to hide their true preferences and engage in strategic reputation building, to limit the degree of noncompliance by lower courts. Kastellec (2007) connects hierarchical compliance politics to collegial "panel effects" within the Courts of Appeals, analyzing formally the effects of a whistle-blower on such a panel (see Cross & Tiller 1998). Clark (2009) extends analysis of the type above to en banc review.

Looking Down

Some work takes on doctrinal choice explicitly (in contrast to the de facto doctrine games above). The potential for noncompliance also has an effect on what doctrine the higher court might choose in the first place. In the legal literature, Heytens (2008) argues that the reasons we observe so much compliance is that the Supreme Court looks ahead when crafting doctrine. One such inquiry invokes the well-known dichotomy in the legal literature between rules and standards. This distinction is defined variously, but usually a "rule" is a determinate rule elaborated in full a priori, whereas a "standard" involves some degree of indeterminism, requiring case-by-case consideration of less than perfectly concrete factors. The puzzle is why the Court chooses standards in some areas of the law or at some points in time but not others, and why some justices prefer rules while others prefer standards, often inconsistently across different areas of the law.

Jacobi & Tiller (2007) model the choice between a determinate rule and an indeterminate standard, which depends on the content of each, the degree of conflict between higher and lower courts, and bias toward some types of litigants. The rule and standard chosen between are both fixed by assumption, so the rule is a simplified partition rather than the exact partition desired, and the standard is represented as a region of the space left uncontrolled by the doctrine. The areas of the regions in question are given exogenously. Lax (2007b) models the incentives driving the choice between determinate doctrines in the form of bright-line rules and more flexible or indeterminate doctrines (standards). A standard differs by incorporating a factual dimension that lacks full transparency or objectivity. The rule and the standard choices are defined endogenously (in terms of content, structure, and legal quality). The trade-off between the optimal rule and the optimal standard is affected by ideological conflict across the levels of the judicial hierarchy, judicial expertise, issue complexity, issue salience, and the sensitivity of the desired doctrine to varying case facts. Lax's model then makes predictions for the degree of transparency, indeterminacy, precision, doctrinal complexity, and lower court discretion, which all emerge endogenously.

In another line of attack, Staton & Vanberg (2008) offer a policy-space model in which justices are strategically vague in their opinions to build institutional strength and prestige, manage limited resources, and defer to those with informational advantages, at the expense of some policy control. Specificity can increase compliance by making noncompliance more visible to external monitors such as the public, but can risk laying bare judicial weakness if other actors will still not comply. Their model identifies incentives new to the analysis of hierarchy and delegation. In both their model and Lax's (2007b), relationships between legal clarity and political factors are nonmonotonic.

Finally, McNollgast (1995, p. 1641) describes a policy-space model of how the Court might choose doctrine to maximize compliance. Doctrine is a "statement by the Supreme Court about the range of lower court decisions that it finds acceptable." The Supreme Court might induce lower courts to comply by

granting some permission to be noncompliant, which isolates the remaining lower courts for review. The higher court cannot tell the location of a lower court decision until it takes a case for review, but it can tell whether the lower court has been compliant. Also, auditing of noncompliant courts is random (subject to a budget constraint).

Looking Up

Rather than study rules flowing downward from the top of the judicial hierarchy, two recent papers investigate rule development percolating up from below, with the higher court auditing rule selection. This should be the beginning of an exciting new branch of work on judicial hierarchy. Clark & Kastellec (2010) model the Supreme Court's decision to step in to resolve conflict among the lower courts as an optimal stopping problem in which the Court trades off learning more about what rule it would prefer against the costs of allowing conflict to persist. In the case-space model of Carrubba & Clark (2010), the lower court declares a rule and decides an instant case. The instant case and hierarchical conflict affect rule creation and auditing of the lower court.

CONTRIBUTIONS OF THE DOCTRINAL POLITICS APPROACH

This section highlights some key works, findings, and contributions within the doctrinal-politics approach, with some special attention to those using case-space models in particular. (The list is not meant to be comprehensive, and I regret any oversights.)

Knight (2009, pp. 1554, 1538) comments that "the case-space . . . approach has real analytical promise, but claims that the framework has important methodological implications for empirical studies have yet to be supported" and "there have not been any serious efforts to translate the results of the case-space analyses into an empirically meaningful research agenda." Although I respect these concerns, I read the record differently. I think that case-space work now not only directly raises empirical implications but has engaged such implications. I also think that the general approach highlights gaps in current empirical knowledge, and in some cases calls into question well-established facts. Finally, it seems unlikely that many questions currently being studied with case-space models would have arisen in policy-space approaches, or that a policy-space approach would give more leverage. To be sure, Knight is correct that more needs to be done connecting theory and data. Empiricists need models that speak to the richness of their findings; theorists need data on rules and doctrines and changes therein, and not just votes.

A list of key works, findings, and contributions:

- The incentives for certiorari and lower court compliance intersect, leading to predictions for auditing probabilities and doctrinal enforcement, predictions supported by the data (including the "Nixon goes to China" finding that a conservative Supreme Court does not audit a liberal lower court that takes a conservative action). These patterns would likely not have been uncovered without a case-space model (Cameron et al. 2000).
- Clark (2009) presents and tests a theory of en banc review.
- The case-space model of Kastellec (2007) delineates the conditions under which a potential whistleblower on a lower court panel increases compliance with the high court.
- The rule of four for selecting cases in the Supreme Court increases lower court compliance, increasing majoritarian control over the lower courts, as shown by a case-space model (Lax 2003).
- Collegiality complicates adjudication and rule creation. Collegial adjudication creates paradoxical complexities even in a single legal case (Kornhauser & Sager 1986). This finding led to an important literature on this dilemma from both positive and normative perspectives (e.g., Kornhauser & Sager 1993, List & Pettit

2002, List 2003). Collegial court output can depend sensitively on court membership, not just on a single swing/median justice. Collegial rules can be quite different from individually preferred legal rules. Collegiality can force choices between coherence and representativeness (Kornhauser & Sager 1986; Lax 2007a; Landa & Lax 2008, 2009).

- Case-space models of collegial court bargaining raise and present possible resolutions to a key puzzle for students of the Supreme Court, the median justice puzzle: Why, given the seeming applicability of the Median Voter Theorem, does bargaining not simply devolve to the median justice, making all the strategic bargaining and opinion assignment we study irrelevant? There are multiple reasons (e.g., Carrubba et al. 2007, Lax & Cameron 2007, Cameron & Kornhauser 2008). These case-space models invoke the actual bargaining protocol of the Court and give a more specific account of such bargaining than a generalized strategic approach. The connection between the instant case and general rule simply cannot be studied with a standard policy-space model. Traditional strategic-account literature argued that the justices of the Court may make "insincere" policy choices even if they always cast sincere dispositional votes. The case-space literature shows why, how, and when this will occur (from hierarchical influences to collegial influences).
- Even in a complex case space and even without a median justice, there will always exist a median rule (Lax 2007a, Landa & Lax 2009). Collegiality alone, then, cannot explain why strategic interactions affect policy (as some work seems to suggest).
- The previous two points together raise a theoretical challenge. The median-rule result implies that any other bargaining-induced rule the Supreme Court announces would yield case dispositions different from those reached if the Court heard all cases itself. If a lower court then faithfully applied the bargained rule, the higher court would have an incentive to reverse some applications of its own rule. A lower court could even evade the de jure rule and follow the de facto median rule, and a majority of justices might support that act of noncompliance. All of the answers to the median justice puzzle (how can bargaining matter if all bargaining comes down to the median voter?) then create a "median rule puzzle": How can bargained rules that differ from the median rule be enforced, since they will not capture what the Court majority wants in a set of cases?
- Friedman (2006, p. 267) argues that "by focusing on votes rather than opinions, real differences in judicial ideology are obscured." Lax (2007a,b) and Lax & Landa (2008, 2009) unpack these differences. Such case-space work confirms that judicial preferences can interact in ways that a standard policy-space approach does not allow us to study and explores more complicated connections between ideology and doctrinal preferences than can be understood without case space.
- Data analysis separating opinion coalitions from disposition coalitions using a case-space perspective finds novel implications of bargaining theory for judicial replacements, highlighting replacement and peer effects across natural courts (Cameron et al. 2009, Beim et al. 2010).
- Carrubba & Clark (2010) construct and test a case-space model of rule creation in the judicial hierarchy from the opposite perspective, with lower court rules percolating upward. The instant case before the court affects the legal rule adopted, a finding impossible in policy space.
- Case-space models have also been invoked to study legal development in the form of incremental partitioning over time. Examples of this include work

on *stare decisis* and path dependence by Kornhauser (1989, 1992a); analyses of incremental partitioning (Cameron 1993, Gennaioli & Shleifer 2007) and the Kornhauser (2008) critique of the latter; and Landa & Lax's (2009) discussion of incremental partitioning in the context of problems of rule aggregation.

- Selection bias is not a unique concern of the case-space approach, but the particular bite of it is highlighted by case-space priorities (see discussions in Kastellec & Lax 2008, Lax & Rader 2010a).
- Fischman (2011) estimates a structural model (based on a case-space model) of judicial panels operating under a norm of consensus, showing that there is a high rate of strategic voting, that dissent rates understate disagreement within panels, and that consensus voting obscures the impact of ideology. This work also generates new estimates of ideology parameters for individual judges.

CONCLUSION

Much of the progress made in the past decade of judicial politics scholarship has been made by reconciling legal concerns and political science priorities in a new judicial politics of legal doctrine. This doctrinal-politics approach highlights a relatively new formal apparatus known as the case-space model, and it invokes close ties between theoretical and empirical work and between the study of judicial behavior and actual legal practices and institutions. Taking law seriously and taking adjudication seriously may both be required for good modeling of judicial choice. But taking judicial politics seriously may be just as important for understanding law and adjudication.

The case-space model allows for ideological differences between judges while recognizing that these differences will be expressed in terms of legal rules that partition fact-filled legal cases into different dispositions. Battles over these partitions are the heart of judicial politics.

APPENDIX: THE CASE-SPACE MODEL

The most fundamental unit of judicial policy making is the disposition of a legal case, which is presented as a bundle of facts, discovered and revealed through legal processes such as trials. The more general unit of judicial policy making is a legal rule governing case dispositions. Rules, cases, and case facts are core legal concepts—yet political models of judicial policy making, formal and otherwise, often pay little attention to them. When early judicial-politics scholars separated themselves from the legal academy to join up with mainstream political science, they ported over a positive political theory apparatus (the now standard spatial policy model) from the study of legislatures. But courts are not legislatures, and judges are not legislators. Cameron & Kornhauser (2008, p. 1) argue that further progress requires more attention to the "institutional features that actually distinguish courts—especially collegial courts—from legislatures."

Legislatures announce general statutes. Courts take up specific cases even when they announce more general rules, yet cases do not exist in the standard spatial modeling apparatus. In using a policy-space model to study courts, does a case raise simply an issue area, creating an opportunity to make policy for that issue? Is a policy point the outcome within a specific case? If so, what makes one case different from any other? What is a legal rule? If it is the policy point, then what is the case disposition, and how do rules and dispositions relate? The standard modeling apparatus cannot readily speak to the most striking feature of appellate court policy making: the joint production of a case disposition and a general rule. A case-space model can.

Case space and policy space share a geometric setup with the space containing points defined along various dimensions (a one-dimensional line, a two-dimensional plane, etc.). However, these models differ in what these points represent, and therefore in how they view the structure of preferences and

choice (see **Figure 1**). In a policy space, each point is an alternative policy, and a judge typically has a preferred policy point, wanting policy to be as close as possible to this point. The space can be unidimensional, a line from liberal to conservative (or across some other quantity or quality), or multidimensional, with each dimension capturing some aspect of the policy in question. Although on the surface a case space looks similar to a standard policy space, it differs in the assumptions made about the structure of choice. Each point represents, not a policy, but a specific legal case. Given a case, a court chooses a disposition for it. Typically, this disposition is a dichotomous judgment for one side or the other, a yes (Y) or a no (N). Judicial policy making is the mapping of these points (cases) to dispositions. The judicial choice is not "Which point shall I pick?" but rather "Which disposition shall I choose for this given point?"

A case is an exogenously fixed point in the case space, capturing its location on each factual dimension. There can be one or more factual dimensions, depending on what the judges think relevant for the issue in question. These dimensions could be, for example, the location in which a search and seizure took place, the degree to which a law potentially violating the establishment clause creates an entanglement with religion, or something as simple as the velocity of a car when pulled over for speeding. Courts then make policy by sorting cases dichotomously into winners and losers on the basis of the facts in those cases. An evidentiary search is admissible or inadmissible. A law violates the establishment clause or it does not. A driver is speeding or she is not.

In one dimension, in a proper continuous case space (see Lax 2007a), a rule is itself a cut-point dividing Ys and Ns—and may seem similar to an ideal point in a standard policy space. In a multidimensional case space, however, a proper rule can no longer be just a point itself, as it generally takes more than a point to partition cases into Ys and Ns. To divide points in a two-dimensional case space (such as **Figure 1**), we would need a (one-dimensional) plane curve, such as a line. And so on. In multiple dimensions, differences between the two modeling apparatuses become more apparent, but even a one-dimensional case space focuses one's attention differently than does a one-dimensional policy space. [See also Kornhauser (2008) and Landa & Lax (2008), showing that case space and policy space are not equivalent even in one dimension.] Besides dimensionality, another variation is a dichotomized case space (each case takes a value of 0 or 1 on each factual dimension, e.g., Landa & Lax 2009) as compared to a continuous case space (with continuous values on each dimension as in **Figure 1**). Most policy-space models of courts are unidimensional or restrict a second dimension, to avoid well-known cycling and "chaos" results. In case space, dimensionality need not have the same effect; we can explore the structure of legal rules in more detail.

Although applied case-space modeling is on the rise, the approach is still relatively new, and there is still much to be done on the mathematics of case space and relations to policy space (see Kornhauser 2008). Kornhauser (1999, p. 52) discusses another way to model doctrine, a two-dimensional policy space of policy versus precedent/deference (Ferejohn & Shipan 1990, Gely & Spiller 1990, Schwartz 1992, Cohen & Spitzer 1994), but argues it "remains inherently political and nonlegal; it makes no reference to the facts of a case or features of legal discourse that appear in an opinion."

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