Rational Choice Attitudinalism?

A Review of Epstein, Landes and Posner's *The Behavior of Federal Judges: A Theoretical and Empirical Study of Rational Choice*

By

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Abstract

This essay reviews Epstein, Landes, and Posner's *The Behavior of Federal Judges: A Theoretical and Empirical Study of Rational Choice.* Their book systematically asks how the role of ideology varies across the tiers of the federal judicial hierarchy. A major finding is that the impact of ideology increases from the bottom to the top of the judicial hierarchy. Their typical methodology formulates an *ex ante* measure of judicial ideology such as the political party of the appointing president, and demonstrates that this measure correlates with later judicial behavior, often voting on case dispositions. Along the way, they investigate a multitude of topics, including some quite under-explored ones.

We argue that ELP's theory is only weakly connected to their empirical practice, for the latter focuses on the role of ideology in judging while the former says almost nothing about that relationship. In fact, though, their empirical practice does embed a theory of law and ideology, but one quite different from that suggested by the book's rhetoric. In the penultimate section of the essay, we explore this disconnection between ELP's theory, practice, and interpretation. Its origin (we argue) lies in an extremely thin conceptualization of law. We conclude with the issue posed in ELP's final chapter, "The Way Forward," but suggest a rather different path.

Introduction

Beginning in the late 1940s, C. Herman Pritchett initiated a paradigm shift in the study of courts by political scientists. Prior to Pritchett, political scientists studied courts much the way that lawyers did; they read and interpreted the opinions of judges. Pritchett shifted attention from the content of the opinions to the votes that judges cast. In particular, Pritchett asked which judges voted together and when. Over the course of the next 50 years, through the inspired work of political scientists such as Fred Kort, Glendon Schubert, Sidney Ulmer, and

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Harold Spaeth, the approach blossomed into *attitudinalism,* the dominant research program in "judicial politics."

The name "attitudinalism" reflects the school's origins in social psychology; the attitudes of the judge structure her response to the stimuli that she receives. In its early formulations, and in some more recent incarnations, the facts of the case constituted the stimulus for the decision.[3] But, the main thrust of the current incarnations of attitudinalism has largely turned from the study of the stimulus to the measurement of the attitudes.

As an empirical research program, attitudinalism has been hugely generative and successful. It has spurred the collection and coding of numerous data bases, most prominently the ones studied and supplemented by Epstein, Landes, and Posner in their richly detailed study of the federal judiciary: The Spaeth database of Supreme Court decisions from 1946 to 2014, the Songer database of decisions of the federal appellate courts, and the Sunstein data base of Courts of Appeals decisions in selected areas for a variety of years. These data bases, and others, have facilitated and structured the study of judicial behavior for over 40 years.

More substantively, again inspired by the psychology literature, the attitudinalists have generated a number of increasingly sophisticated measures of judicial attitudes. These measures evolved from the external measures of party affiliation (or party affiliation of the appointing president) to internal measures derived from item response theory. These measures – Martin-Quinn Scores, etc – typically array judges, usually Supreme Court justices, along a one-dimensional scale, usually interpreted as a "liberalism-conservatism" scale.[4]

Attitudinalism then deploys this highly developed empirical apparatus to determine the extent to which actual judicial decisions reflect the attitudes or "ideology" of the judge rather than the dictates of the "law." Epstein, Landes and Posner (hereinafter "ELP") join and to a certain extent modify this quest. Their book systematically asks how the role of ideology varies across the tiers of the federal judicial hierarchy. A major finding is that the impact of ideology increases from the bottom to the top of the judicial hierarchy.[5] Their typical methodology formulates an *ex ante* measure of judicial ideology such as the political party of the appointing president, and demonstrates that this measure correlates with later judicial behavior, often voting on case dispositions. Along the way, they investigate a multitude of topics, including some quite under-explored ones. Indeed the book is chock-full of novel mini-analyses – the authors thank some 40 research assistants, and the labor of this army of servitors is readily

[3] See Kort (1957, 1963) and Segal (1984).
[4] Some recent work explores multi-dimensional scales, or allows a unique one-dimensional scale for different doctrinal areas (see Lauderdale and Clark (2012, 2014)).
[5] The first empirical demonstration of this relationship was Zorn and Bowie (2010). That study examined voting in 334 cases, each of which was heard at all three levels. Obviously, such cases are quite unusual.

apparent. Throughout, ELP suggest how one might provide more systematic content to the attitudes of the judges through the application of a simple heuristic drawn from economics: judges as workers.

The book consists roughly of three parts. The first part, Chapter 1, sets forth ELP's theory of rational choice attitudinalism. We discuss that theory immediately below. The second part, chapter 2, provides a fairly comprehensive review of the empirical literature on federal courts. The third and largest part, chapters 3 – 8, reports the results of ELP's empirical investigation of the federal judiciary. We briefly discuss these chapters.

We find that ELP's theory is only weakly connected to their empirical practice, for the latter focuses on the role of ideology in judging while the former says almost nothing about that relationship. In fact, though, their empirical practice embeds a theory of law and ideology – but one quite different from that suggested by the book's rhetoric. In the penultimate section of this essay, we explore this disconnection between ELP's theory, practice, and interpretation. Its origin (we argue) lies in an extremely thin conceptualization of law. We conclude with the issue posed in ELP's final chapter, "The Way Forward," but suggest a rather different path.

The Theory of Rational Choice Attitudinalism

In chapter 1, ELP present their rational choice account of judicial attitudes. This reliance on economics constitutes a significant departure from the traditional reliance of attitudinalism on psychology.

A rational choice theory of behavior has several elements. First, it identifies the agents; specifically, it defines preferences of each agent. Second, it identifies the set of choices available to the agent. Third, it identifies the environment in which the agent acts.

ELP explicitly address only the first of these elements of a theory of rational choice. The utility function posited in ELP has a grab bag of arguments -- job satisfaction, "external satisfaction," judicial salary, outside income, leisure, and a generic "other" category (pp. 48-50) – but no functional form is specified. We thus have no indication how a judge might trade off among the various aspects of her preferences.

ELP identify only two explicit choice variables: the amount t_j of time allocated to judicial activities and the amount t_{nj} of time allocated to non-judicial activities. Similarly, they identify only one constraint: that $t_j + t_{nj} + t_l = T$ where t_l is the amount of time allocated to leisure and T the total amount of time available to the judge. Of course, analysts cannot observe either of these two variables directly.

Most importantly, ELP do not specify how the choice that implicitly underlies much of the empirical work in the rest of the book affects judicial utility. The dependent variable in many of their estimations is the ideological direction of the judge's vote on the disposition of the case (coded as "liberal" or "conservative"). ELP do not elaborate how the ideological direction of a vote determines the outcomes that the judge cares about. What is the relation between the dispositional vote and job satisfaction, external satisfaction, salary, and leisure; i.e., how does the judge's vote affect the arguments in the agent's utility function? How do judges value the direction of this disposition? Do they value it at all? The theory is silent on these questions.[6]

Similarly, though ELP devote an entire chapter to a discussion of dissent aversion and address opinion writing extensively throughout the prior three chapters, they never indicate how the writing of an opinion contributes to or undermines the authoring or joining judge's utility. Presumably, this effect is incorporated in the argument *S*, judicial satisfaction; but ELP provide no indication how the judicial effort of the opinion writer produces such satisfaction. Does satisfaction vary with the content of the opinion? Does it vary with the number of joins that the opinion attracts? Does it vary with the legal craftsmanship of the opinion? How does a judge who joins an opinion value that opinion? I.e., how does joining an opinion provide satisfaction?

ELP answer none of these questions. Consequently, it is unclear what predictions their labor market attitudinalism makes.[7] The theory of chapter 1 does not guide the empirical work of chapters 3 – 8 except in a heuristic sense.

Perhaps this theoretical reticence follows from their focus on the federal courts rather than state courts. Ash and Macleod (2015) systematically develop and test a labor market theory of adjudication. In fact, they present the model as a formalization of the ELP framework. They derive numerous hypotheses from their simple model and take them to data using a

[6] As an example, in Chapter 8 ELP argue that federal judges who desire elevation to the Supreme Court tend to alter their dispositional voting in order to appear tough on crime (pp. 361-3). Does voting insincerely to convict a defendant charged with a capital offense incur some disutility? If so, how do judges weigh the trade-off between the prospect of promotion and the distaste of a dubious conviction? The issue is never addressed.

[7] The aridity of the theoretical landscape in ELP is quite surprising. Epstein is the co-author of a book and article (Epstein and Knight (1997), (2000)) heralding the arrival of a new theoretical, *strategic* approach to the study of courts in Political Science, an approach that in fact gradually unfolded over the next two decades. ELP appears to have been written by someone with no awareness of that approach. Posner brought, often in collaboration with Landes, the theoretical insights of micro-economics to virtually every area of law; those insights often relied on strategic analyses, see, e.g., the work of a different ELP trio – Easterbrook, Landes and Posner (1980) on settlement under joint and several liability. Landes, an economist, has also made major contributions to economic analysis of law, perhaps most notably in the study of the choice between settlement and litigation, an area in which strategic interaction is of central concern. None of the analysis in this book even hints at the strategic elements inherent in judicial decision making.

structural econometric model. But their approach relies on the institutional variation across states; the federal courts, by contrast, provide little institutional variation in factors that affect the value of time in different activities.[8]

Empirical Investigation of the Federal Judiciary

The first three chapters of the empirical section of the book focus on the US Supreme Court, the United States Courts of Appeal, and the United States District Courts successively. These three chapters serve primarily to support ELP's central claim that ideology plays an increasingly important role in explaining judicial decisions as one ascends the judicial hierarchy. The theory from Chapter 1 plays a limited, though interesting, role in this discussion.

Chapter 3 on the Supreme Court contains one of ELP's empirical innovations, the investigation of the unanimous dispositions of the Supreme Court. Prior literature has largely ignored these because dispositional unanimity precludes learning about the relative alignment of justices from their dispositional votes.[9] ELP view unanimous opinions on a highly political court like the U.S. Supreme Court as an "embarrassment" for attitudinalism because unanimity smacks of legalism (p. 386). But ELP manage to uncover the traces of ideology even in unanimous dispositions by examining first the differential reversal rates across circuits and then the relative number of significant reversals of precedent that occur in unanimous vs. non-unanimous decisions. This analysis is an imaginative and interesting extension of the traditional attitudinalist literature.

Chapters 6, 7, and 8 address successively "dissent aversion," judicial behavior in oral argument, and how the prospect of promotion influences judicial behavior. The analyses of dissent aversion and promotions are topics that fit naturally within the framework outlined in chapter 1.[10] ELP's argument about dissent aversion rests directly on their informal comments

[8] A recent paper exploits a natural experiment in the federal judiciary to examine the leisure-work tradeoff of federal judges (Clark, Engst and Staton (2015)). This paper finds strong support for such a tradeoff.

[9] It is a small mystery of intellectual history why attitudinalists have generally focused solely on the justices' dispositional votes rather than examining their join decisions as well. The rhetoric at least sometimes suggests that judges make policy and the judge's join decision, as observable and objective as the dispositional vote, more directly reflects a judge's policy views than her dispositional vote.

Beim, Cameron, and Kornhauser (2011) provides an exploratory analysis of the US Supreme Court that includes unanimous opinions, attempting to distinguish the ideological content of the policy announced in the decision from the "ideology" of the disposition. BCK argue that majority policy coalitions are more ideologically diverse than typically believed and that the ideology of the policy in the majority opinion depends on the ideology of the majority rationale.

[10] The empirical investigation of dissent aversion in chapter 6 includes measures that reflect a concern for collegiality as well as effort measures. See, e.g., page 292.

about "effort aversion"; similarly, the idea that promotion might influence judicial behavior is straightforwardly a "labor market" idea.

As noted earlier, none of these chapters, however, offers a rational choice model to guide the empirical investigation. The authors do not provide a more precise specification of judicial preferences or identify either choice sets or the decision environment in order to derive predictions of judicial behavior. Their theory serves a heuristic role only; and its implications derive from the application of simple common sense.

Chapter 6 does contain a section titled "A Formal Model of Deciding Whether to Decide" at pages 274-281. The model is indeed formal but it is not a rational choice model. It does not identify the preferences of judges. Nor do judges maximize their unspecified utility. Rather the model serves to guide the authors' calculation of some probabilities of dissent that are, at best, behaviorally motivated. This model illustrates a curious feature of the book: the only formal model that appears in it is not a rational choice model. (The discussion in Chapter 1 is too incomplete to constitute a model).

The discussion in chapter 1 suggests a model of dissent that could have been formalized and tested: dissent is costly both to the author of the dissenting opinion and to the author of the majority opinion. This simple idea, when given formal expression, has significant implications. We know this because Fischman (2008) has already formulated such a model and derived and tested its implications on data on immigration appeals in the U.S. Court of Appeals for the Ninth Circuit.[11] He estimates that at least one judge voted strategically – i.e., suppressed a dissent – in approximately 45% of the cases in his sample. More strikingly, he estimates that *two* judges voted strategically in roughly 8% of the cases in his sample. These numbers suggest that a judicial concern for effort has a powerful effect on behavior.

ELP spend considerable time analyzing ideological peer effects in the Courts of Appeals. Their motivation is again the seeming embarrassment to attitudinalism from unanimity rates upward of 90% despite ideologically diverse panels; such rates seem to smack of "legalism." They attribute very high unanimity rates to effort aversion. By focusing on ideological peer effects, they side-step the many studies of peer effects in specific areas of the law – e.g., the impact of a female panel member in sexual discrimination cases (Farhang and Wawro (2004), Boyd et al (2010)), African-American judges in affirmative action cases (Kastellec (2013)) or in capital punishment cases (Kastellec (2014)). Although the peer effects in such cases may well be accounted for by dissent aversion, their existence also raises interesting issues about

[11] Neither this paper, nor its successor (and published) version Fischman 2012, is apparently cited in ELP. It is difficult to determine because the book lacks a comprehensive bibliography at the end, an unfortunate omission of the publisher. Given the comprehensive review of the empirical literature, a bibliography would be a useful resource for the discipline.

deliberation, persuasion, and sheer embarrassment that lie outside the frame of "ideological motivation + effort aversion" preferred by ELP.[12] On the other hand, Fischman (2013) re-analyzes eleven different data sets on peer effects and argues strongly that dissent aversion can rationalize the findings in all the previous studies.

ELP primarily study each tier in isolation from the other two tiers. Only small sections of chapter 5 on district courts, chapter 6 on dissents, and chapter 8 on career concerns address hierarchy, a central feature of modern court systems. In Chapter 5, one section examines a database on rulings on motions to dismiss to study the effect of reversal aversion on district court judges. Another considers whether "activist" circuit court judges diminish the impact of *ex ante* ideology on district court dispositions. A regression analysis of ideological voting in the district courts finds little impact from the percentage of Republican judges in the circuit (Table 5.6). A small section in Chapter 6 (pp. 291-2) acknowledges dissents in the Courts of Appeals as signals to others (often called "fire alarms"). But ELP immediately dismiss the idea as implausible on its face; no empirics in the book address fire alarm dissents in the circuits either to colleagues on the bench or to the Supreme Court. Chapter 8 limits its attention to the role that the desire for promotion plays in the voting behavior of lower court judges.

In contrast, a rich theoretical and empirical literature demonstrates many implications of hierarchy for judicial behavior. Cameron (1993) considered the tournament structure of the hierarchy, an idea explored additionally in McNollgast (1995). Daughety and Reinganum (2000) analyzed a strategic, incomplete information model of trial court decision and appellate court review. Cameron, Segal, and Songer (2000) and Spitzer and Talley (2000) considered the interactive relationship between the Supreme Court and the Courts of Appeals, treating certiorari as strategic auditing. The former paper derived a "Nixon goes to China" principle in which a liberal lower circuit court facing a conservative Supreme Court escapes review when taking a conservative action. The authors tested this proposition empirically using an explicit statistical model of search and seizure doctrine. Although these two papers were cast in an error correction framework, later papers showed that the basic insights readily extended to doctrinal deviations in the lower courts (Carrubba and Clark (2012), Clark and Carrubba (2012)). Clark and Kastellec (2013) further considered certiorari as an optimal stopping problem with circuit splits. Lax (2003) examined how the Supreme Court's Rule of Four alters the incentives facing lower courts. Whistle-blowing in the hierarchy, introduced in Cross and Tiller (1998), found an elegant formalization in Beim, Hirsch, and Kastellec (2014) with empirical application to en banc review in Beim, Hirsch, and Kastellec (2015) (see also Beim and Kastellec (2014)). More broadly Kastellec (2007) and Clark (2009) created principal-agent models of en banc review. Kastellec (2011) explicitly considered the effects of hierarchical control on panel effects

[12] Spitzer and Talley (2013) consider peer effects arising from judicial deliberation. Landa and Lax (2008) provide a non-technical but theoretically sophistical discussion of deliberation and its effects on collegial courts.

in the U.S. Courts of Appeal. Beim (2015) offers an alternative understanding of the judicial hierarchy, as a smart organization in which high court judges learn about the value of doctrinal innovations from lower court cases. Spitzer and Talley (2013) reconsidered peer effects from the perspective of deliberation rather than effort aversion. Collectively these papers create what can be called a strategic account of the judicial hierarchy.[13] So far as we can discern, none of the ideas in the strategic account inform the empirical analyses of hierarchy in ELP.

ELP's analysis of decision-making on the U.S. Supreme focuses on the role of *ex ante* ideology on the ideological direction of dispositional voting in unanimous and non-unanimous cases (as noted above, the former analysis is quite innovative). Considerable effort is devoted to showing that the peer effects so notable on the Courts of Appeal play little role in dispositional voting on the high court despite the frequency of unanimous dispositions. Chapter 6 examines the impact of caseload on the propensity to dissent. There they also show that citations to dissenting opinions are rare. Chapter 7 considers whether the number of questions directed at the parties in oral argument predicts a justice's later dispositional vote (it does).

Absent from this analysis is any sense of bargaining over the content of the majority opinion. This bargaining is manifest in the private papers of the justices, as so memorably documented in Epstein and Knight (1998). It also is redolent in the behind-the-scenes accounts of former clerks and investigative journalists. In contrast, ELP portray justices as almost entirely atomistic, casting votes on case dispositions as pure expressions of personal ideology. What majority opinions might be doing other than costing their authors effort is not clear. Dissenting opinions seem to be inconsequential fits of pique made possible by an (over) abundance of clerks.

Again, this view of the business of the U.S. Supreme Court stands at a considerable distance from contemporary theoretical models of the Court. Although this rapidly developing area remains unsettled, efforts such as Lax and Cameron (2007) and Carrubba et al (2012) assume justices care intensely about the policy content of the majority opinion and bargain among themselves using procedures that frequently yield non-median outcomes. Both papers incorporate empirical analyses of the U.S. Supreme Court. In a novel departure, Iaryczower and Shum (2012) create an alternative "common values" approach to dispositions on collegial courts. In their model, justices have no ideological agenda at all but simply try to "get it right." Nonetheless, disagreement among justices is frequent, reflecting their private information, skill, and evidentiary thresholds. They structurally estimate their formal model on dispositional votes

[13] A number of other empirical papers informally adopt notions of a strategic account so that judicial behavior emerges from the mutual interaction of rational actors, e.g., Westerland et al (2010). A larger set adopts a partial equilibrium approach in which one actor anticipates the response of another but the latter's actions do not reflect the resulting incentive effects. ELP cite several of these (often interesting) studies in footnote 4 of Chapter 6. ELP's nods to hierarchy (discussed above) seem to reflect this partial equilibrium approach.

from the U.S. Supreme Court, deriving estimates of judicial skill and evidentiary bias for the justices. Their approach to case dispositions can be seen as highly "legalistic" so that theoretically and empirically it stands in stark opposition both to ELP's attitudinalism and to the new bargaining models of the High Court.

Because the emerging strategic account of the Supreme Court is so recent and potentially so revolutionary for our understanding of that institution, it seems unfair to task ELP for failing to embrace topics like case selection, strategic dispositional voting, opinion assignment, opinion content, and join decisions. However, the strategic accounts of hierarchy and collegial courts raise deep questions about the relationship between law and ideology as manifested in the attitudinalist project, a central issue to which we turn.

Law and Ideology

At the heart of *The Behavior of Federal Judges* is a theoretical understanding of the concept of law and the role of values in adjudication. This understanding emerges from nearly a century of debate and reflection in the legal academy, departments of political science, and (recently) departments of economics. ELP are candid about its importance for their project and they are remarkably consistent in using it to structure their empirical work.

Yet, ELP's understanding of law and adjudication is more problematic than they acknowledge. First, contemporary theories of courts tend to conceptualize the relation between "law" and "ideology" quite differently from them. For example, dispositions are not seen as inherently liberal or conservative based on the identity of the prevailing litigant, as in ELP. Rather, doctrines are characterized in a policy space according to their differential treatment of classes of cases. This shifts the focus from the atomistic disposition of cases to the substantive content of law. Because ELP resolutely ignore those theories, readers of their work may not fully perceive the differences.[14] At stake is more than "mere" theory. Rather, ELP's theoretical understanding necessarily undermines their interpretation of their central empirical

[14] ELP provides an admirably comprehensive review of the *empirical* literature on courts – but to a really remarkable extent their review resolutely ignores the *theoretical* literature. The footnotes contain virtually no references to formal models of adjudication and the text never discusses the content of these models. For example, footnote 7 in chapter 1 cites Daughety and Reinganum (1999) and Miceli and Cosgel (1994) for the proposition that economics "has . . . contributed to the realistic theory of judicial behavior by emphasizing the judge as a rational actor" (ELP at 29), hardly a startling revelation and one supported by the non-formal cites in that footnote as well. Footnote 24 in chapter 1 cites Gennaioli and Shleifer (2007) for the proposition that the practice of distinguishing makes the law more reliable. Footnote 4 of chapter 2 cites Lax (2011), a survey of the theoretical literature, *solely* for the proposition that Pritchett "is rightly regarded as the founder of the quantitative social-scientific study of judicial behavior." The Appendix to Chapter 2 cites Cameron, Segal and Songer (2000) (creating a formal model of certiorari) and Clark (2009) (creating a formal model of en banc review) but only because these articles also employ data. The theoretical motivation behind the empirics in those papers is entirely elided from ELP's acknowledgement of their existence.

finding. They simply cannot accomplish what they set out to do with such a cramped conceptual apparatus.

ELP's Concept of Law

The title of Chapter 1 --"A Realistic Theory of Judicial Behavior" – is more than a jaunty assertion of empirical potency; it wittily signals the authors' allegiance to the jurisprudence of legal realism. This allegiance is explicit in the book's General Introduction where ELP approvingly quote Karl Llewellyn and associate themselves with Bentham, Holmes, Cardozo, and Hand. However, they go on to fault traditional legal realism as merely a jurisprudential theory "that lacked both an articulated model of judicial behavior and the data and empirical methodology required to test such a model." (p. 3). In contrast, they declare, "we aim in this book to present a realistic model of judicial behavior that is sufficiently simple and definite to be testable empirically, and then to test it."(p 5).

A cursory reading of ELP would suggest that the "realistic model" is the labor market theory gestured at in Chapter 1, with its focus on judges' labor-leisure tradeoff. But, as noted above, that theory as presented is utterly silent on the law-ideology tradeoff animating much of the empirical work. However ELP go to some lengths to explicate this trade-off at least informally.

First, ELP explicitly distance themselves from what they call extreme or "indefensible" legal realism (p. 28). Indefensible legal realism holds that all judicial decisions are simply raw expressions of ideology. They associate this view with the late Fred Rodell of Yale Law School as well as law school "crits" (p. 3) though ELP also seem to suggest that it is the "dominant theory in political science, which exaggerates the ideological component in judicial behavior." (p. 14). Elsewhere, though, they state that extreme legal realism comports with a "possible reading of some of the early empirical studies of judicial behavior but is an inaccurate description of more recent studies." (p. 61) (They cite neither to the extreme early studies nor to the reasonable recent ones.)

Second, they explicitly reject what they call "legalism," which they consistently use as a foil for their own defensible legal realism. They define legalism as "the conventional theory of judicial behavior, in which judges decide cases strictly in accordance with orthodox norms of judicial decision-making. That theory allows no room for . . . policy preferences to influence decisions, or allowing ideological or other subjective preconceptions to contaminate the impartial application of legal rules and principles given to rather than invented by the current judges. On this account legal reasoning is impersonal, even algorithmic; judges are human computers." (p. 50). They deny that legalism is a straw man with few actual advocates; instead

they assert without much evidence that legalism is widely subscribed to by the legal professoriate and most judges.

Their own position, at least as announced in words, is more nuanced though less clear. They state that "realists do not deny that *most* judicial decisions are legalistic, though not in the Supreme Court" (p. 54). They then assert that "legalism is a *category* of realistic judicial decision-making" by which they seem to mean that legal doctrines and *stare decisis* are handy props that allow economy of effort and minimize controversy (ibid). But in many places ELP go farther. They indicate that for many cases the mechanical application of legal materials and methods fully or substantially determines the judicial outcome so that judicial ideology plays no role in judicial behavior; but in a portion of cases, those materials are indeterminate so that judges have discretion and if so, judicial ideology and other subjective influences may matter for judicial behavior (see inter alia p. 28). Such statements hint at but do not clearly specify a theory of partial constraint and partial discretion. (Which cases are constrained, which not, and how can one tell the difference? Is constraint black and white or is there a gray area, and if so what determines the scope of ideology there?) However, ELP state that "a major focus [of Chapters 3 through 8] is on the *relative weight* of ideology and legalistic analysis in decision-making in the different tiers" (p. 7, emphasis added).The "relative weight" frame suggests a law *versus* ideology trade-off in individual cases. If this is the case, what determines the balance in this trade-off in different cases and across the tiers? But perhaps this language simply means again that in some portion of cases judicial behavior is fully constrained by law but in another portion it is not.

What Do the Empirical Results Mean?

The Behavior of Federal Judges contains many interesting empirical findings but the central one, and one rightly emphasized by ELP, is that judicial ideology plays an increasing role in dispositional voting as one ascends the judicial hierarchy. More precisely, ELP find that a proxy for pre-existing judicial ideology (party of the appointing president) does not much influence dispositional voting in the federal trial courts; moderately influences dispositional voting in the intermediate courts of appeal; and strongly influences dispositional voting on the U.S. Supreme Court. Call this important finding the "differential impact of ideology" (DII) result.[15]

DII is an important empirical regularity that raises the obvious but significant question: what explains the DII phenomenon? Here are three possible mechanisms.

[15] Zorn and Bowie (2010) refer to this phenomenon as the "hierarchy postulate" but this nomenclature doesn't seem particularly evocative of the finding.

1. *Partial constraint plus "management by exception."* Ideology affects voting in indeterminate cases but not in determinate ones. Indeterminate cases are relatively rare; but they tend to be pushed upward and concentrated into the caseload at the top of the hierarchy. So the DII result is an artifact of the concentration process for indeterminate cases.
2. *Principal-agent struggles in the hierarchy.* Ideology affects voting to the extent judges perceive the benefits as high and the costs as low. Hierarchical control of judges is strong and effective at the bottom tier, moderately effective in the middle tier, and non-existent at the top. So the DII result reflects institutional incentives and controls.
3. *Judicial selection.* Some judges are ideologues while others are legal technicians. Ideologues are differentially concentrated across the layers of the hierarchy because the judicial selection process tends to slot technocratic judges into the trial courts, somewhat ideologically motivated judges into the circuits, and highly ideological and partisan judges onto the Supreme Court. So the DII result reflects differential recruitment of judges.

Notice that explanation 1 rests on a theory about the relation between law and ideology that does not on its face derive from a labor market theory of judicial behavior. Explanations 2 and 3 have more direct connections to the theoretical approach sketched in chapter 1. Explanation 2, after all, suggests that the control of moral hazard declines as one moves up in the hierarchy while Explanation 3 says that adverse selection increases with such moves.

Nevertheless, as ELP make clear, they strongly favor Explanation 1. But their empirical methodology cannot distinguish among the three explanations. Typically ELP run a regression of the general form:

$$\Pr(v_{it} = 1) = \Phi(\gamma_0 + \gamma_1 p_i) \quad (1)$$

where v_{it} is the "ideological direction" of judge *i*'s dispositional vote in case *t* (coded 0 or 1 for liberal or conservative), and p_i is a proxy for the *ex ante* ideology of the judge, typically the party of the president who appointed the judge (coded 0 or 1 for Democrat or Republican).[16] The DI result is that the coefficient on γ_1 is small for district court judges, larger for judges on the Courts of Appeals, and larger yet for Supreme Court justices.

It should be clear that nothing in the regression explains *why* the coefficients display this pattern. It is just a brute fact.

[16] See Tables 3.16, 4.7, 4.8, 4.19, and 5.6. ELP also often include the percentage of senators who are Republican at the time of the judge's confirmation as this may also be a proxy for judicial ideology. They also include various controls.

What would it take to be able to explain ELP's provocative finding? What causal mechanism underlies this phenomenon? In principle, the answer is fairly simple: The stark Equation (1) needs modification or supplementation based on adequately articulated theories of adjudication. For example, Explanation 1 would supplement Equation (1) using a theory of determinant and indeterminate cases, a theory of appeals, and a theory of case selection (for the U.S. Supreme Court). Only if Explanation 1 passed a battery of empirical tests, indicated by those theories, would we really consider Explanation 1 a live contender. Similarly, Explanation 2 would supplement Equation (1) based on principal-agent theories of judicial hierarchy. Those theories should indicate a variety of empirical tests beyond Equation (1); only if those tests succeeded would we see Explanation 2 as plausible. And so for Explanation 3: the third explanation would supplement Equation (1) by exploiting an explicit theory of technocratic (legalistic) decision-making (so we could recognize it when we see it) and a theory of judicial appointments.

In short, empirical findings like the DII result do not speak for themselves. *Explaining* the findings from regressions like Equation (1) requires reasonably well-articulated theories of adjudication – models of law in operation. Unfortunately, when it comes to the role of ideology in adjudication, ELP contains no such theories or models.

How to Understand Law and Ideology

It would be utterly graceless to fault ELP's methodology for failing to perform the impossible.[17] But we aren't demanding the impossible; at least, we don't think so. We believe we have at least some of the theoretical tools available to construct empirically testable models that offer a richer account of "law" and, correspondingly, a more complex interaction of law and ideology.

Perhaps ironically, a significant step toward choosing among Explanations 1-3 lies in the past practices of attitudinalism. These past practices incorporated a vision of realism that was more consistent with Karl Llewellyn's moderate version of realism than the version of realism implemented in ELP's regressions.[18] As we discuss shortly, ELP's empirical practice embeds a much more extreme view of realism, one that sees judicial decisions as not governed by legal rules, either implicit or explicit, or indeed governed by any rules at all.

At its core, the realists believed that published opinions often did not articulate the "true," or at least complete, grounds for the decision. But this belief is consistent both with an

[17] This section addresses issues raised by contemporary behavioral approaches to the study of judicial behavior.
[18] As noted above, attitudinalists, including ELP, often understand their approach as a natural consequence of realism, referring to the American Legal Realist movement of the 1920s and 1930s. But that movement, like most movements, encompassed a wide variety of positions, not all of which are clearly compatible with attitudinalism.

extreme attitudinalism that explains judicial decision without reference to any rules at all and a more moderate view that sees judicial decision as nonetheless rule-governed. The incomplete articulation of the grounds of decision thus did not necessarily entail that the judge's ideology explained the decision while law played no role. Rather some realists, such as Llewellyn, believed that decisions resulted from a "situation-sense" that often drew finer distinctions among fact patterns[19] than those explicitly drawn by the "governing" legal rules. Indeed, Llewellyn believed that appellate decisions were quite predictable, on bases independent of the identity of the judge. Judges did not simply respond to the case facts; they understood and reflected on the type of situation that the dispute exemplified and the way in which the parties dealt with the underlying disputes and transactions. The judge applied a well-honed sense of fairness to these situation-types and resolved the disputes in a predictable and fair manner.[20]

The strain of attitudinalism called fact pattern analysis, introduced by Kort (1958 and 1963) and exemplified more recently by Segal (1984) and Kastellec (2010), attempted to implement this strain of realism empirically. In their formulation, judges perceive the facts in the case while judicial votes favor one litigant or the other *as required by legal doctrine.* In other words, the aim of the fact-pattern analysis is to infer a statistical model of doctrine from the decisions of judges.[21]

Contemporary versions of attitudinalism have drifted far from the initial psychological account in which judicial voting behavior is a response to a stimulus. Rather, as in Equation (1), independent variables focus on the judge's attitudes; none of them reflect the nature of the stimulus she faces in any detail, in particular the facts in the case.

Modeling Law

Our account of law accepts Llewellyn's insistence that the situation-sense of judges operates to structure judicial decisions. We think this idea leads to a formal notion of doctrine, though not necessarily official doctrine but the set of factual distinctions that structure legal decision. The precise mechanism and nature of this structuring remains difficult to articulate. However, the "case-space approach" to formal models of adjudication, now widely employed in

[19] On situation-sense see Llewellyn, *The Common Law Tradition* at pages 121 et seq (1962).

[20] On this point see Llewellyn, *The Common Law Tradition* at pp 16-17. The literature on the realists is vast; for a statement of the position taken here see, e.g., Leiter (2004, 2013).

[21] These studies are sometimes understood as supporting the attitudinalist position that law has little impact on judicial decision, at least at the level of the Supreme Court of the United States, a position endorsed by ELP. But this understanding derives from an incorrect understanding of the underlying decision process and the way in which law may be structuring judicial decisions. We think, as the text below will suggest, that fact pattern analysis may implicitly capture some of the doctrinal structure of the law.

the strategic accounts of judicial hierarchy and of bargaining on collegial courts, offers one way in which to understand and elaborate this connection.

The starting place for case space is the recognition that the primary job of courts is to resolve disputes.[22] Any adequate model of judicial decision should thus be, at least in principle, grounded in the case-by-case decisional practice of a court.[23] Kornhauser (1992a, 1992b) provided a formal account of case space that includes a mathematical representation of cases and doctrine. This formal account allows the analyst to integrate cases and policy. In particular, a case is a vector (a point) in a metric space and a policy is simply a partition of that case space. In the typical context of adjudication, a policy partitions the case space into a set in which plaintiff prevails and a set in which she loses.[24] Actors may then have preferences over the best partition of the case space. All the actors may agree on the best partition of the case space (a "common values" situation, to borrow the terminology of auction theory) or they may not (a "private values" situation).[25] In the private values situation, the disagreement might be explicable by a difference in the "ideologies" of the judges.

Specifically, the case space approach represents each judge's view of the law, as a partition of case space; the partition identifies how the judge would (ideally) rule on a case. So, on this account, a liberal justice and a conservative justice may prefer somewhat different partitions of a case space. Applying their preferred partitions to a specific case may yield identical dispositional votes (and hence a unanimous disposition) if the two partitions classify the case before the court in the same way. But application of the two partitions may yield different dispositions (and a split dispositional vote) if the two classify the case differently. In neither case, however, are the justices acting lawlessly as they would if they had accepted bribes, were influenced by racial prejudice, or simply rendered judgment for the party they preferred. Rather, in both situations – including when they disagree – they act in accordance

[22] This observation stands in opposition to the rhetoric of the attitudinalists as well as the formalisms in the "policy space" models of courts that flowed naturally from the early Congress-inspired literature on courts (e.g., Ferejohn and Shipan (1990)). The idea is that courts make policy; deciding cases is either ignored or secondary. The empirical practice of attitudinalism does not quite conform to its rhetoric because the dependent variable is typically the (direction of) the judge's dispositional vote. A genuinely policy-based investigation would more naturally investigate the join behavior of the judges because joins reflect a judge's endorsement of the reasons for a particular disposition.

[23] This case-by-case decision making is true of courts in both common law and civil law systems. It may not apply to Kelsenian constitutional courts that engage in abstract review of the constitutionality of statutes. In this context, judges do in fact make a judgment primarily about the policy embedded in the statute.

[24] For a survey of the literature that adopts this approach see Lax (2011).

[25] Private values model of judicial hierarchy lead to principal-agent models; common values models lead to team models of hierarchy. Private values models of collegial courts lead to bargaining models; common values models (like Iaryczower and Shum (2012)) often lead to models of information aggregation or learning. Kornhauser (1995) provided an informal model of adjudication by a team of judges.

with law, just somewhat different understandings of law as captured in the different versions of the possible partitions of the case space.

The case-space approach creates an apparatus for considering the doctrinal structure of law. But actual judicial behavior depends on the interaction of the case-space approach with the incentives created by the institutional structure of law. The interaction of the two can be profound indeed, as explored in the strategic accounts of hierarchy and collegial courts. As an example, in some of the new bargaining models of the U.S. Supreme Court, only the justices in the majority dispositional coalition may participate in the bargaining that determines the policy (partition) announced in the majority opinion (see e.g. Carrubba et al. 2013). This creates an incentive for strategic voting on the disposition in order to participate in the policy bargaining. But how aversive strategic voting may be (since it requires a "wrong" disposition of the instant case) depends on the location of the case in the case space. As a result, case selection may lead to different majority dispositional coalitions and thus strongly affect policy outcomes. Consequently, some cases may be better vehicles (from an actor's perspective) for policy making than others. Additionally, in some bargaining models the assigned author of the opinion has a degree of control over the content of the majority opinion (see e.g., Lax and Cameron (2007)). Because the Chief Justice assigns the opinion when he is in the majority dispositional coalition, his incentive to cast a strategic dispositional vote may be compelling.[26]

Bringing Models of Law to Data

Attitudinalists typically regress the ideological direction of the judge's vote on some proxy for her ideology such as the party of the appointing president without controlling for either the location of the case or the judge's view of controlling doctrine. The style of analysis embodied in ELP's Equation (1) is an example of this practice. A positive coefficient on the proxy for ideology is interpreted as support for the attitudinalist model. This interpretation, however, is not strictly correct if the estimated equation has not controlled for the doctrinal structure and the location of the case. Some notation will help clarify the issues.

Consider judge *i* faced with deciding case $x_t \in \mathbb{R}$ (that is, the case is characterized by a location on the real line, reflecting the facts in the case). She will cast a dispositional vote $v_{it} \in \{0,1\}$ on case *t* and we will measure her ideology $p_i \in \mathcal{I} = \{-1,1\}$ by party affiliation. Note that here v_{it} denotes not an ideological direction but a disposition favoring plaintiff or defendant. We represent judge *i*'s legal views by an ideal partition of the real line that is defined by a simple cut-point $\bar{x}_i$. The judge favors one disposition when $x_t \leq \bar{x}_i$ and the other disposition when $x_t > \bar{x}_i$.

[26] The discussion in this paragraph draws on joint unpublished work on bargaining on collegial courts.

Within this framework, we might estimate the relative importance of judge *i*'s legal and ideological views as follows:[27]

$$\Pr(v_{it} = 1) = \Phi(a_0 + a_1 p_i + a_2(\bar{x}_i - x_t)) \quad (2)$$

Equation (2) incorporates both law and ideology. Ideology is represented by the independent variable p_i while the expression $\bar{x}_i - x_t$ incorporates a particular conception of doctrine and of judicial preferences. The variable $\bar{x}_i$ identifies judge *i's* view of the law, i.e., how she partitions the one dimensional case space underlying this particular model. The variable x_t represents the case location; the difference between the two represents a particular view of judicial preferences, of how the judge assesses correct and incorrect decisions. More realistic understandings of this assessment process would have different functional forms.[28]

If extreme attitudinalism (a la Rodell and the "crits") holds, estimation of Equation (2) would yield $a_1 \neq 0$ and $a_2 = 0$, at least if the model were estimated in a single area of the law so judgments for plaintiff tend to have a consistent ideological tenor. If in fact $a_1 \neq 0$ and $a_2 = 0$, the structure of the law as reflected in the distance of the case facts from the judge's cut-point would have no impact on the judge *i's* resolution of the case and voting would reflect only raw ideology. Conversely, if legalism holds we would expect to find the opposite pattern: $a_1 = 0$ and $a_2 \neq 0$. If so, judge *i* adheres to her understanding of the law; her ideology plays no direct role in rendering her decision.

An extreme attitudinalist might offer the following "improvement" to Equation (2): since we know law and facts play no role, we might as well drop them (i.e., force $a_2 = 0$). And, for convenience, one might re-code dispositional votes from pro-plaintiff or pro-defendant into "liberal direction" or "conservative direction" since it is all ideology anyway. Then one could pool votes across many areas of the law and obtain more statistical power. Of course, this suggestion results exactly in Equation (1), the equation estimated in ELP. In other words, by ignoring case facts and doctrine, Equation (1) offers no test of realism (extreme or reasonable) vs legalism; rather, it silently *assumes* an extreme form of realism. Moreover, if case facts and doctrine actually do play a role in dispositional voting (so a_2 in Equation (2) is not zero), then

[27] This equation differs from the typical attitudinalist estimation in several important respects. First, typically, attitudinalists use a different dependent variable, the *direction* of the vote of judge *i* rather than the actual vote. Second, often the attitudinalists ignore both the law, represented here by the cut-point $\bar{x}_i$, and the case facts represented here by x_t. Fact pattern analysis explicitly considers the facts but does not explicitly address the doctrinal structure that determines how these facts dictate dispositions. It is important to notice, moreover, that equation (2) implicitly contains both a doctrinal structure and a judicial utility function.

[28] We can understand fact pattern analyses as implementing some version of these accounts. Segal (1984) uses logit estimations on the facts of the case; this implicitly adopts a doctrinal view as a cut-hyperplane in the multi-dimensional case space. Kort (1963) by contrast envisions in his Boolean Algebra model something closer to the account of doctrine stated in Kornhauser (1992b) that might well be implemented by CART, classification and regression trees. Kastellec 2010 provides an entrée to fact pattern analysis with CART.

estimates of Equation (1) will suffer from omitted variable bias and inferences about $\gamma_1$in Equation (1) become problematic.

What approach would be more in the spirit of ELP's reasonable realism? Let us suppose a weak or *reasonable legalism* in which ideology does not exert a direct influence on voting (so $a_1 = 0$ in Equation (2)) but does play an *indirect* role in rendering her decision. In words, in cases where facts leave some discretion judge *i*'s view of the law – her understanding of the most appropriate cut-point – might be a function of her ideology, for example:

$$\overline{x_i} = b_0 + b_1 p_i$$

Substituting into Equation (2) then yields

$$\Pr(v_{it} = 1) = \Phi(\beta_0 + \beta_1 p_i - \beta_2 x_t) \quad (3)$$

where $\beta_0 = a_0 + a_1 b_0$, $\beta_1 = a_1 b_1$ and $\beta_2 = a_1$. The equation features both a measure of judicial ideology and a measure of case facts. Taking the equation to data seems quite feasible.

Because case facts, preferred doctrine, and judicial discretion vary across doctrinal areas, Equation (3) would need to be estimated doctrinal area by doctrinal area. But having done so, the coefficients β_1 and β_2 would provide estimates of the amount of discretion judges at a given tier have in a doctrinal area, and (roughly) how important ideology is when they do have discretion. This is very close to what ELP wanted to accomplish. From this perspective, ELP needed a theory of reasonable legalism much more than words about reasonable realism.

In sum, by ignoring law and suppressing case facts when estimating Equation (1), ELP implicitly assumed an extreme form of realism. As a result, their key regressions do not actually address the relationship between law and ideology because their methodology assumed law away.

The Way Forward

For ELP, the way forward consists exclusively of improving the data available for the study of judicial behavior.[29] For example, they suggest investing in data bases of bankruptcy, magistrate and other non-Article III judges so that one can estimate versions of Equation (1) in those venues. They advocate the application of computerized text analysis to Supreme Court opinions to see, for example, whether the size of a justice's vocabulary predicts liberal or conservative dispositional voting. They urge a more professional re-working of the error-ridden Songer data base on circuit judges as well as re-coding parts of the Spaeth data so that the relationship between ex ante ideology and ex post behavior can be more clearly delineated.

[29] Their conclusion lists not a single theoretical project as required for improving our understanding of courts.

Despite the many painstaking and interesting empirical studies in ELP, we wonder whether, roughly 70 years after Pritchett's revolutionary work, how much further value there is in demonstrating yet once again that a proxy for *ex ante* ideology correlates somewhat with "conservatism" in crude *ex post* measures like direction of dispositional voting? To be provocative, we will go one step further and ask: Has the attitudinalist research program so well exemplified in ELP reached an intellectual dead end? And if so, whence lies the way forward?

In our view, the recent theoretical work points to exactly the needed innovation for empirical work: *bringing the law back into the study of courts.* Many readers of this essay probably endorse the goal of "bringing the law back in," at least in the abstract. But the hard-nosed empiricist is obliged to ask, how exactly are we supposed to do that? The prior section identifies the key data improvement: we must "locate" cases in case or fact space. Then, we must empirically map the boundaries of the equivalence classes created by legal doctrine. With statistical models of doctrine in hand we could then meaningfully address the prevalence of horizontal and vertical stare decisis, the dynamics of legal change, racial bias in the application of law, the impact of case load and resources on law creation and implementation, the workings of the selection mechanism propelling "hard" cases upward in the judicial hierarchy, the substantive import of "the choices justices make" – and the relationship between judges' ideological commitments and the doctrines they struggle to create.

The starting place, then, is to code the facts of cases.[30] Lauderdale and Clark (2014) have attempted something close to this by locating cases in an ideological space.[31] Nonetheless, coding case facts presents at least two serious challenges. First, case facts are often disputed, particularly when a court is developing doctrine when judges are apt to disagree about the facts necessary to establish the relevant cause of action.[32] But, typically, the conflicting opinions identify both the legal disputes over which facts are legally relevant and how the different rules would treat those facts. Second, and perhaps more challenging, the analyst must understand how doctrine uses the case facts. Phrased differently, the analyst needs to infer how doctrine partitions the case space. While some doctrine is simple in the sense that the dimensionality of the fact space is low and the partition consists of a single point in a one-dimensional space or simple hyperplane in a multi-dimensional space, much legal doctrine has a more complex structure.

[30] Thus, if the discipline decides, as ELP urge, to invest in the recoding of the Spaeth data base the coders should add facts to the case information and not simply correct the errors in the "direction" of the dispositional vote.
[31] A closely related effort would locate opinions in a relevant policy space. Clark and Lauderdale (2012,2013) have begun this project by scaling opinions in an ideological space.
[32] It is important to distinguish "evidence" from "facts" (or perhaps "legal facts"). At trial, evidence is submitted to prove the presence of the facts required to satisfy the antecedent of a legal rule in the form "if facts A, B, C, D . . ., then legal consequence L." The facts A, B, C, and D are the facts that must be coded, not the underlying evidence.

We see the further development of explicit, micro-founded theories of judicial institutions as at least as urgent an endeavor as marginal advances in the traditional attitudinalist project. Scholars can and will disagree about this evaluation. As a practical matter though, because producing high quality theory and producing high quality empirical work require substantial but different investments in human capital, few individuals will be active in both research endeavors. This specialization may create problems. Empiricists may readily accede to the proposition that theorists should be aware of new empirical findings lest their models become ungrounded in actual practices. Thus, they will heartily endorse Leonardo da Vinci's observation that "Theory without practice cannot survive and dies as quickly as it lives." But empiricists may wish to ponder the possible wisdom in his counter-maxim: "He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may cast." Is it time for attitudinalists to consult the compass of theory and cast in a new direction?

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