EMPIRICALLY TESTING DWORKIN'S CHAIN NOVEL THEORY: STUDYING THE PATH OF PRECEDENT

STEFANIE A. LINDQUIST*
& FRANK B. CROSS**

In this article, Professors Lindquist and Cross empirically study the effect of precedent on judicial decisionmaking. The framework for their analysis is Ronald Dworkin's "chain novel" metaphor, an influential theory of the role of precedent whose validity has not previously been empirically tested. The chain novel metaphor suggests that the judicial use of precedent can be likened to a group of authors writing a novel seriatim, in which the accumulation of chapters increasingly constrains the choices and freedom of subsequent writers. Precedent is one of the most important areas of legal research, but currently there is no dominant working theory, and only limited empirical evidence, about its role in judicial decisionmaking.

The first part of the authors' study examines cases of first impression using a statistical model of judicial voting data from four United States Courts of Appeals between 1984 and 1988. Examining the influence of ideology on judicial decisionmaking in cases of first impression, and controlling for a number of external factors such as regional effects and litigant identity, Lindquist and Cross find that judicial ideology plays a statistically more significant role in cases where judges acknowledge that they are not bound by precedent (as in cases of first impression) than in cases where prior precedent exists. These findings provide preliminary support for the chain novel theory, as the existence of prior precedent appears to limit the degree to which judges are free to decide cases based on their own ideological preferences.

The second part of this study tests the evolving role of precedent over time. Lindquist and Cross examine over seven hundred decisions from five United States Courts of Appeals interpreting the phrase "under color of" state law from 42 U.S.C. § 1983. To test whether the gradual accretion of precedent increasingly constrains judicial behavior, the authors select cases over a thirty-year period subsequent to the Supreme Court's liberalization of the § 1983 cause of action in 1961. Controlling for other factors, including potential agenda effects based on the kinds of cases brought before the courts, Lindquist and Cross find that the importance of precedent in judicial decisionmaking is initially stable or increasing over time. However, contrary to the chain novel hypothesis, as the number of prior decisions grows further, precedent plays a decreased role. Judges appear to be relatively more free to decide cases based on their ideological preferences as precedents accumulate, rather than (as Dworkin suggests) more constrained.

The study thus provides only limited support for the chain novel theory of judicial decisionmaking, finding that judges are indeed more free to decide based

 Stefanie Lindquist, Associate Professor of Political Science, Vanderbilt University; Associate Professor of Law, Vanderbilt Law School.

** Frank Cross, Herbert D. Kelleher Centennial Professor of Business Law, McCombs School of Business; Professor of Law, University of Texas School of Law; Professor of Government, University of Texas at Austin.

on their ideological preferences where no prior precedents exist. However, the fact that judicial discretion expands with the gradual accretion of precedent suggests that the chain novel thesis does not describe fully the operation of U.S. law.

INTRODUCTION

Perhaps the most important, yet understudied, area of legal research involves precedent. Courts routinely recite precedents as dictating or at least directing their conclusions. Many academics and laypersons accept these recitations as authentic. Yet there has been only limited theorizing about, and relatively little empirical investigation of, the operation of precedent. Some critics dismiss precedent as a judicial mask, irrelevant to actual judicial decisionmaking.[1] Others claim that law affects, and may even constrain, judges' decisionmaking.[2] The result has been a pattern of assertion and counterassertion, with little progress in understanding precedent.

This article undertakes the task of empirically studying the effect of precedent on judicial decisions.[3] We endeavor to measure the effect of precedent on judicial decisions quantitatively over different case areas and over time. While we cannot purport to determine whether particular decisions were based on precedent or not, we can

---

[1] *See* JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED 81 (2002) [hereinafter SEGAL & SPAETH, ATTITUDINAL MODEL] (concluding that precedent provides "virtually no guide" to decisionmaking on U.S. Supreme Court); HAROLD J. SPAETH & JEFFREY A. SEGAL, MAJORITY RULE OR MINORITY WILL: ADHERENCE TO PRECEDENT ON THE U.S. SUPREME COURT 287 (1999) [hereinafter SPAETH & SEGAL, MAJORITY RULE] (documenting failure of Supreme Court justices to adhere to precedents from which they originally dissented); MARK TUSHNET, RED, WHITE AND BLUE: A CRITICAL ANALYSIS OF CONSTITUTIONAL LAW 191–92 (1988) (suggesting that legal reasoning enables judges to "assemble diverse precedents into whatever pattern" they choose).

[2] *See* Harry T. Edwards, *The Judicial Function and the Elusive Goal of Principled Decisionmaking*, 1991 WIS. L. REV. 837, 856 (arguing that judges for most part feel themselves to be "meaningfully constrained" by legal principles); Howard Gillman, *What's Law Got to Do with It? Judicial Behavioralists Test the "Legal Model" of Judicial Decision Making*, 26 LAW & SOC. INQUIRY 465, 490–95 (2001) (arguing that behavioralists' definition of legal constraint is contested and cataloguing research findings supporting influence of legal considerations); Mark J. Richards & Herbert M. Kritzer, *Jurisprudential Regimes in Supreme Court Decision Making*, 96 AM. POL. SCI. REV. 305, 315 (2002) ("Law matters in Supreme Court decision making in ways that are specifically jurisprudential.").

[3] Attempts to measure precedent empirically are rare. The best known is probably William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249 (1976). This research studied the age of typical citations to precedents from the Supreme Court and lower courts. *Id.* at 250–55. In MAJORITY RULE, *supra* note 1, Spaeth and Segal evaluate whether Supreme Court justices shift from their original dissenting position in landmark precedents to support those precedents in later progeny cases. More recent research has empirically examined the effect of precedent in particular areas of the law. *See infra* Part I.E.

evaluate the degree to which the accretion of precedent constrains judicial discretion. The framework for this study is Ronald Dworkin's famous chain novel metaphor for the development of legal precedent,[4] though the study also measures the effect of the path dependence of precedent more generally.

Using this hypothesis as our framework, we test the manner in which, and degree to which, precedent influences judicial decisions by evaluating whether it limits the ideological decisionmaking of circuit court judges. Our study has two parts. First we examine "cases of first impression." These cases are definitionally free from precedent. Thus, if precedent does have a constraining effect on judges' abilities to decide cases in conformity with their own ideological preferences, we would expect outcomes in such cases of first impression to differ from those where governing precedent is available. Using a statistical model of voting data from the United States Courts of Appeals, we evaluate whether judges' policy preferences have a more pronounced impact on judicial voting behavior in cases of first impression.

Second, we consider the relative ideological decisionmaking discretion of judges in the federal circuit courts in a discrete area of federal statutory civil rights law. In particular, we evaluate the impact of attitudinal preferences on judicial decisionmaking as judges interpreted and applied the Ku Klux Klan Act, 42 U.S.C. § 1983, after 1961, the year in which the Supreme Court "liberalized" that statute as a meaningful constraint on state action. From 1961 forward, judges struggled with the parameters of § 1983, developing an impressive body of precedent over time. By evaluating the impact of judges' attitudes over the course of this precedential development statistically, we are able to test whether the steady accumulation of precedent increasingly constrains judges' abilities to decide cases based on their own attitudes and preferences.

I
THE NATURE OF PRECEDENT

A. Conventional Explanations

All those who have studied the law have at least an intuitive notion of precedent or stare decisis. Precedent is typically defined as "[a] decided case that furnishes a basis for determining later cases involving similar facts or issues" and may be divided between binding precedent that a court "must" follow and persuasive precedent that is

[4] *See* RONALD DWORKIN, LAW'S EMPIRE 228–38 (1986).

"entitled to respect and careful consideration."[5] Regardless of the use of words like "binding" to describe precedent, stare decisis is an informal norm that judges follow for prudential or other reasons.[6] Although we have no dominant working theory regarding why judges follow precedent,[7] the commonplace notion of deciding according to precedent is widely understood.

Deciding based on precedent is considered "one of the core structural features of adjudication in common-law legal systems."[8] Precedential decisionmaking implies that like cases be treated alike. Of course, no two cases are ever identical in every factual respect, so the ascertainment of "likeness" is central to stare decisis. A key aspect of precedent is the extraction from prior cases of principles that "can be defined as general doctrine" to guide future decisions.[9] Then those principles are applied to the present case before the court to guide its resolution of the controversy.[10] Reliance on precedent arose from the common law process. As judges crafted their own rules for contracts, torts, and property law, they had no statutory text on which to draw. Prior judicial decisions were their only external source material. Judges thus developed several rationales relating to broad principles of equity, efficiency, and predictability to support this reliance on prior decisions.

In particular, reliance on precedent has several theoretical virtues. Of central importance is the notion that stare decisis produces "coherence in interpretation of particular provisions over many cases" and the associated stability and predictability in the operation of the

---

5 BLACK'S LAW DICTIONARY 1214–15 (8th ed. 2004).

6 Erin O'Hara, *Social Constraint or Implicit Collusion?: Toward a Game Theoretic Analysis of Stare Decisis*, 24 SETON HALL L. REV. 736, 745–49 (1993) (judges agree to follow each other's precedents to avoid nonproductive competition). The reasons why judges might choose to follow precedent are explored further in Part I.B, *infra*.

7 *See, e.g.*, Larry Alexander, *Constrained by Precedent*, 63 S. CAL. L. REV. 1, 3 (1989) ("[O]ur theoretical understanding of the practice [of relying on precedent] is still at a very primitive stage."); Frank H. Easterbrook, *Stability and Reliability in Judicial Decisions*, 73 CORNELL L. REV. 422, 422 (1988) (pointing out that "no Justice has produced a consistent theory" of precedent and "no one has a principled theory to offer"). *But see* O'Hara, *supra* note 6, at 748–53 (offering game theoretic model of judges' adherence to precedent).

8 Alexander, *supra* note 7, at 3.

9 *See* Earl Maltz, *The Nature of Precedent*, 66 N.C. L. REV. 367, 373 (1988) (sometimes cases can be decided based on general principles or postulates that "govern the system as a whole"); *see also* Edward D. Re, *Stare Decisis*, 79 F.R.D. 509, 510 (1979) (noting that in stare decisis, "[t]he decided case is said to establish a principle").

10 *See* Re, *supra* note 9, at 514 (noting that courts "must determine whether the principle extracted from the prior case is applicable" and then "determine to what extent the principle will be applied").

law over time.[11] To this end, Justice Brandeis contended that "in most matters it is more important that the applicable rule of law be settled than that it be settled right."[12] With greater legal stability and predictability, private parties may better plan their actions. This predictability is also fundamental to the notion of "rule of law" and may be considered "definitive for the idea of a rational legal discourse."[13] Legal decisionmaking according to precedent is considered a "bulwark against arbitrary or personal judicial lawmaking," the rule of man rather than of law.[14] A distinct defense of reliance on precedent is the assurance that judges will not decide capriciously, for personal rather than legal reasons.[15] This assurance may in turn strengthen the credibility and authority of the decisionmaking institution.[16] Reliance on precedent is also grounded in notions of fairness and equity. Litigants in similar cases should receive similar judgments.[17] Otherwise, the law inevitably seems unfair and arbitrary in its application.[18] Use of precedent also offers efficiency gains for the judiciary as an institu-

---

[11] Zenon Bankowski et al., *Rationales for Precedent*, *in* INTERPRETING PRECEDENTS 481, 487 (D. Neil MacCormick & Robert S. Summers eds., 1997); *see also* David Lyons, *Formal Justice and Judicial Precedent*, 38 VAND. L. REV. 495, 496 (1985) (observing that "reason most often given for the practice of precedent is that it increases the predictability of judicial decisions"); James Wm. Moore & Robert Stephen Oglebay, *The Supreme Court, Stare Decisis and Law of the Case*, 21 TEX. L. REV. 514, 539–40 (1943) (noting that courts follow precedent "in the interests of uniformity of treatment to litigants, and of stability and certainty in the law"). Some have suggested that this concern is exaggerated, so long as new decisions have only prospective effect. *See* Maltz, *supra* note 9, at 369. Others have questioned whether precedent really offers this benefit, claiming that stare decisis strikes "with the predictability of a lightning bolt." Henry P. Monaghan, *Our Perfect Constitution*, 56 N.Y.U. L. REV. 353, 390 (1981).

[12] Burnet v. Coronado Oil & Gas Co., 285 U.S. 393, 406 (1932) (Brandeis, J., dissenting).

[13] Bankowski et al., *supra* note 11, at 487; *see also* RONALD A. CASS, THE RULE OF LAW IN AMERICA 7–12 (2001) (rule of law requires legal rules with quality of "principled predictability").

[14] Frank B. Cross, *Political Science and the New Legal Realism: A Case of Unfortunate Interdisciplinary Ignorance*, 92 NW. U. L. REV. 251, 262 (1997).

[15] *See* Benjamin P. Friedman, *Fishkin and Precedent: Liberal Political Theory and the Normative Uses of History*, 42 EMORY L.J. 647, 693 (1993) (arguing that important goal of precedent is to limit discretionary policymaking power of unelected judges).

[16] *See* Frederick Schauer, *Precedent*, 39 STAN. L. REV. 571, 600 (1987) (observing that "subordination of decisional and decisionmaker variance is likely in practice to increase the power of the decisionmaking institution" by strengthening "external credibility").

[17] *See, e.g.*, HENRY M. HART, JR. & ALBERT M. SACKS, THE LEGAL PROCESS 569 (1994) (noting that adherence to precedent helps secure "reasonable uniformity of decision throughout the judicial system"); Schauer, *supra* note 16, at 595–97 (discussing fairness rationale and its limits).

[18] *See* Bankowski et al., *supra* note 11, at 488 (arguing that rule of law "would be a sham if the law were subject to varying interpretation from case to case, for it would only be nominally the same law that applied to different cases with essentially similar features").

tion, avoiding the continued revisiting of old questions,[19] and for private parties who can better assess and settle litigation in the shadow of the expectation of judicial reliance on prior precedents. The important value placed on precedent can be seen in the general rule that courts should adhere to precedents that they consider incorrect, unless those precedents have proven wholly unworkable.[20]

Precedent is not monolithic, however. Rather, its influence varies depending on its source and the position of the judge(s) adjudicating the dispute at hand. "Vertical" precedent, which emanates from a hierarchically superior court with the power of reversal, constitutes the "strongest" precedent. Such precedent is termed "binding" and has the greatest weight, as it "must either be followed or distinguished."[21] Thus, vertical precedent should have great power in determining the subsequent holdings of lower courts.

A precedent from the same court rendering a decision, called a horizontal precedent, is also considered powerful, though not so strong as that from a superior court. For example, the U.S. Supreme Court, which has no vertical superior, frequently relies upon its own precedents when rendering decisions. While the Supreme Court may legally overrule its own precedents, it does so infrequently.[22] The power of horizontal precedent is stronger at the circuit court level, where judgments are rendered by three-judge panels selected randomly from the circuit court as a whole. Given the potential for cacophonous rulings from random panels, circuits typically declare

---

[19] Justice Cardozo argued that the "labor of judges would be increased almost to the breaking point if every past decision could be reopened in every case." BENJAMIN N. CARDOZO, THE NATURE OF THE JUDICIAL PROCESS 149 (1921); *see also* Thomas R. Lee, *Stare Decisis in Economic Perspective: An Economic Analysis of the Supreme Court's Doctrine of Precedent*, 78 N.C. L. REV. 643, 648–53 (2000) (discussing cost-saving functions of stare decisis); Schauer, *supra* note 16, at 599 (addressing efficiency justification).

[20] *See* Alexander, *supra* note 7, at 59 (observing that if "incorrectness were a sufficient condition for overruling, there would be no precedential constraint"); Caleb Nelson, *Stare Decisis and Demonstrably Erroneous Precedents*, 87 VA. L. REV. 1, 2 (2001) (noting conventional wisdom that stare decisis requires adherence to precedent unless it has proved unworkable).

[21] *See* Schauer, *supra* note 16, at 593. Vertical precedent is "binding" only in an informal sense, especially in the federal courts, where judges enjoy life tenure and cannot be removed for failing to follow higher court rulings. Nevertheless, judges may be sensitive to reversal and thus follow vertical precedents, or the collegial process of appellate judging may create norms that mitigate in favor of compliance. *See* David E. Klein & Robert J. Hume, *Fear of Reversal as an Explanation of Lower Court Compliance*, 37 LAW & SOC'Y REV. 579, 597–603 (2003) (concluding that fear of reversal does not account for compliance in cases studied, but rather that lower court judges likely comply with higher court precedents because they seek to render legally sound decisions).

[22] *See* SAUL BRENNER & HAROLD J. SPAETH, STARE INDECISIS: THE ALTERATION OF PRECEDENT ON THE SUPREME COURT, 1946–1992, at 23 (1995).

that a "panel of this Court cannot overrule the decision of another panel" absent an intervening Supreme Court ruling.[23]

Much of the precedent employed in judicial decisions is not viewed as controlling or binding but rather emanates from another court with no hierarchical authority over the deciding judge.[24] When precedent from a nonbinding authority is cited, it is often called "persuasive" to the extent that the prior opinion contains a convincing analysis of the legal problem. If the influence were solely that of logical persuasion, however, there would be no need for the precedent citation to be added to the argument itself. The reasoning in the opinion from a fellow circuit would have no more meaning than comparable reasoning in a law review article or press editorial. The persuasive impact of such precedents means something more, as judges are wont to defer to other judges out of respect or perhaps a desire for geographical consistency and stability.[25]

The nature of the dispute may also affect the application of precedent. Judges often claim to give less precedential power to their own constitutional decisions because constitutional precedents have a uniquely permanent effect. Constitutional determinations cannot be overridden by the actions of the parallel branches of government absent a constitutional amendment.[26] A statutory precedent, by contrast, can be more easily altered by the legislature if deemed incorrect. Indeed, according to canons of statutory interpretation, the legislature's failure to address and amend a statutory precedent is some evidence that the precedent is consistent with legislative preferences and hence reason to give that precedent greater power in future decisions.[27] The deference given common law precedents typically falls between the levels for constitutional and statutory precedent, because they involve judge-made law that the legislature has the power to override if it so chooses.

---

[23] *See, e.g.*, Salmi v. Sec'y of Health & Human Servs., 774 F.2d 685, 689 (6th Cir. 1985).

[24] *See* Landes & Posner, *supra* note 3, at 250 (declaring that judge-made rules from coequal court "have persuasive force, but are not binding").

[25] Landes and Posner suggest that such persuasive precedents have greater power when represented in a "long line of decisions." *Id.*

[26] Congress has been successful, of course, in reversing Supreme Court precedents on occasion. *See* James Meernik & Joseph Ignagni, *Judicial Review and Coordinate Construction of the Constitution*, 41 AM. J. POL. SCI. 447, 464 (1997) ("Judicial review is not equivalent to judicial finality.").

[27] Numerous judicial statements testify to this principle. *See, e.g.*, Francis v. S. Pac. Co., 333 U.S. 445, 450 (1948) (declaring that longstanding judicial interpretation of statute itself becomes "part of the warp and woof of the legislation"); *see also* Maltz, *supra* note 9, at 388 (observing that "precedents relying on statutory interpretation are viewed as more sacrosanct than their common-law counterparts").

Finally, the effect of precedent is somewhat contingent on the language of the precedential opinion itself. A case may define a clear bright-line rule or may instead create more general and flexible standards. Specific bright-line rules may "leave later judges little room to maneuver," while "vague doctrinal formulations do not, in and of themselves, dictate results" in future cases.[28] Balancing tests may be particularly ineffective precedent in this regard.[29] Of course, even a seemingly clear legal rule may be distinguished as inapplicable in some future case based upon facts that differentiate the precedent from the case under consideration.[30] As noted above, very seldom are cases on "all fours" with a prior case.[31] Thus, courts use a process of analogical reasoning to ascertain the import of a prior precedent for the present case. This is the classical reasoned decisionmaking that forms the basis of the legal process model. The principles of the precedential ruling may dictate an outcome similar to the prior opinion, based on factual similarities between the two cases. Alternatively, the same principle represented by precedent may suggest a contrary decision due to factual differences. The proper use of precedent involves the identification of the "rules of relevance" that determined the outcome of the prior case and are used to govern its future precedential impact.[32] This process of legal reasoning clearly leaves substantial room for discretionary decisionmaking.

Precedent is thus no straitjacket. On occasion, it may be simply ignored or overruled if it does not come from a superior court.[33] More frequently, when a judge wishes to avoid a previous ruling, the precedent is distinguished. A court has discretion in the principles it

---

28 Maltz, *supra* note 9, at 377.

29 *See* Pierre Schlag, *The Aesthetics of American Law*, 115 HARV. L. REV. 1047, 1073 (2002) (observing that balancing tests seem "inadequate, ad hoc, unprincipled, and incoherent").

30 *See* Alexander, *supra* note 7, at 17–25 (discussing how such precedential rules may be avoided or even strengthened by subsequent decisions); Schauer, *supra* note 16, at 593 (explaining that precedent is "presumptive but not absolute reason" for judicial decision). Schauer notes that judges never "decide not to follow a precedent just because [they] do not feel like following it," but instead reason that "something about the instant case is different from the precedent case." *Id.* at 594.

31 *See, e.g.*, Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601, 624 (2001) (observing that "[w]hat constitutes precedent in a particular case is a flexible concept that is subject to interpretation, especially when considering cases that are not directly on point").

32 *See, e.g.*, Schauer, *supra* note 16, at 576–79 (discussing centrality of rules of relevance).

33 Even then, the only consequence is reversal, which may or may not be problematic for judges on reputational grounds, especially for judges who enjoy life tenure. *See* Klein & Hume, *supra* note 21, at 583.

extracts from prior precedent, which may be broad or narrow.[34] Depending on the breadth of the principle, the court may find that the prior decision does or does not control the facts before it in the present case. Even if the prior decision is controlling, the court may dismiss some of the precedential language as dicta, preventing that language from having binding effect.

B. General Theories of Precedent

The flexibility of precedent plainly enables its potential manipulation by outcome-oriented judges who may pick and choose whatever elements of precedent they find convenient.[35] Under these circumstances, why would judges—who presumably have preferences regarding legal policy and case outcomes—ever adhere to previously decided cases, especially when such precedent conflicts with their own ideological predilections? Several theories have been offered to explain adherence to precedent.

First, the power of precedent may rely in substantial part upon the notion of judicial good faith. Prior decisions may be influential if judges evaluate them in good faith, and the theoretical ability to manipulate precedent presumes a lack of good faith in its analysis and application. This theory of decisionmaking, most notably propounded by Steven Burton, acknowledges the imperfections of human choice but suggests that judges can adhere fairly closely to a neutral applica-

---

[34] Llewellyn suggested that judges have two types of precedent: narrow ones for inconvenient past holdings and broad ones for more helpful authority. K.N. LLEWELLYN, THE BRAMBLE BUSH 65–69 (1951). The breadth of the principles to be used in assessing the significance of a precedent is in part contingent on the nature of the prior dispute and the language of the opinion itself. Moreover, there is a broader theoretical debate about the proper breadth of the principles to extract. Sunstein argues for the extraction only of narrow principles or even no governing principle at all, which he has called "incompletely theorized judgments." CASS R. SUNSTEIN, LEGAL REASONING AND POLITICAL CONFLICT 37 (1996). For Dworkin, much broader principles are necessary in order to give the body of the law a cohesive and principled integrity. *See id.* at 48–50. Richard Posner likewise suggests that analogical reasoning from precedent involves the search for broad policies. *See* RICHARD A. POSNER, OVERCOMING LAW 174–75 (1995) (likening reasoning by analogy to deductive reasoning, with cases being used to formulate new general theories that can then be applied in new contexts). This debate need not be resolved; its existence alone demonstrates the considerable discretion associated with analogical reasoning from precedent.

[35] *See, e.g.*, SUNSTEIN, *supra* note 34, at 72 (suggesting that "[a]ll cases are potentially distinguishable"); Maltz, *supra* note 9, at 371 (noting that "any law student knows" that "virtually any judicial decision can be analogized to or distinguished from any other fact pattern"); Max Radin, *The Method of Law*, 1950 WASH. U. L.Q. 471, 482–84 (noting that "largest part" of legal education is manipulation of precedent in appellate litigation); Re, *supra* note 9, at 513 ("Experience indicates that in most cases precedents may be distinguished on the facts or the issues presented.").

tion of precedent.[36] The indeterminacy of legal language makes it impossible to expunge judicial discretion entirely from the decisionmaking process, but precedents may nevertheless constrain and channel judicial decisions and thereby limit the scope of that discretion.[37] The practice that judges must draft opinions that justify case outcomes helps ensure good faith in legal decisionmaking.[38]

Judges may also have their own structural incentives to preserve some decisionmaking according to precedent. Richard Posner has argued that precedent is the path through which judges can exercise some political power.[39] A judge's precedent may continue to hold sway even after the opinion writing judge has expired. In a similar vein, Erin O'Hara has relied on the idea that judges wish to embody their policy preferences into law over the long term to create a game theoretic account of precedent.[40] To ensure that their own precedents remain in place, judges must develop reciprocity norms regarding respect for each other's decisions. Collegial decisionmaking at the appellate level may provide a context within which such norms are likely to be enforced.

Judges' interest in their own leisure time may also result in more frequent reliance on precedent. Referencing precedents takes less time and effort than revisiting questions whenever they may appear in

---

[36] *See generally* STEVEN J. BURTON, JUDGING IN GOOD FAITH (1992). Burton's book is more a normative analysis than a descriptive one, however. He concedes that the good faith theory is "especially inviting to opportunistic behavior by judges with guile." *Id.* at 93.

[37] *See* LAWRENCE BAUM, THE SUPREME COURT 144 (5th ed. 1995) (suggesting that even at Supreme Court level, law "channels judges' thinking and constrains their choices").

[38] *See* Jon O. Newman, *Between Legal Realism and Neutral Principles: The Legitimacy of Institutional Values*, 72 CAL. L. REV. 200, 205 (1984) (contending that tradition that circuit courts draft reasoned opinions can limit "result oriented" decisionmaking and that "the accepted body of law . . . exerts a profoundly restrictive effect upon the outcome of most legal confrontations").

[39] RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 541 (4th ed. 1992) (suggesting that "precedent projects a judge's influence more effectively than a decision that will have no effect in guiding future behavior"). Judge Easterbrook similarly suggested that "stare decisis . . . enhances the power of the Justices." Frank H. Easterbrook, *Ways of Criticizing the Court*, 95 HARV. L. REV. 802, 817 (1982); *see also* Jack Knight & Lee Epstein, *The Norm of Stare Decisis*, 40 AM. J. POL. SCI. 1018, 1029 (1996) (contending that judges adhere to precedent to preserve legitimacy of judicial function, even at expense of their own ideological leanings); Landes & Posner, *supra* note 3, at 272–73 (contending that interest of judges in having their own decisions followed, and enforcement of judicial hierarchy, creates self-interest in following precedents as well as establishing them); Eric Rasmusen, *Judicial Legitimacy as a Repeated Game*, 10 J.L. ECON. & ORG. 63, 67 (1994) (arguing that doctrine of stare decisis serves to enhance judges' power with respect to future judges).

[40] *See* O'Hara, *supra* note 6, at 748–53.

a case.[41] The system is structurally ideal for judges; matters on which a judge's preference intensity is relatively low may be quickly resolved in accordance with existing precedent, while matters about which the judge cares deeply can be analyzed more thoroughly and resolved by setting new precedents, to be followed by future judges.

Above and beyond such individualized strategic choice, precedent may be an inexorable consequence of our judicial system. Some have argued that path dependence is sociologically inevitable, that organizations socialize their actors into path-dependent modes of information processing and decisionmaking.[42] In the judicial context, the concept of precedent may follow "naturally from giving reasons for decisions."[43] Indeed, reliance on precedent as a basis for decisionmaking is relatively common, even in nonlegal contexts where prior actions have no legally binding effect,[44] as well as in systems of civil law that typically do not recognize the force of precedent.[45]

At least superficially, precedent appears to be very important subjectively to judges. A survey of circuit court judges declared that the strongest determination of their decisionmaking was "[p]recedent, when clear and relevant."[46] Rare is the opinion that does not justify its outcome in terms of prior precedents.[47] The adherence to prece-

---

[41] *See, e.g.*, POSNER, *supra* note 34, at 125 (noting that judges would sacrifice leisure time if they were to write every opinion without reference to precedent).

[42] *See* Martin Shapiro, *Towards a Theory of Stare Decisis*, *in* ON LAW, POLITICS AND JUDICIALIZATION 102, 111 (Martin Shapiro & Alec Stone Sweet eds., 2002) (observing that "style of legal discourse that we summarize in the expression *stare decisis* is not a unique phenomenon" but instead "the standard solution predicted by communications theory for any acute noise problem"). *See generally* Paul A. David, *Why Are Institutions the 'Carriers of History'?: Path Dependence and the Evolution of Conventions, Organizations, and Institutions*, 5 STRUCTURAL CHANGE & ECON. DYNAMICS 205 (1994) (discussing operation of path dependent systems).

[43] Alec Stone Sweet, *Path Dependence, Precedent, and Judicial Power*, *in* ON LAW, POLITICS AND JUDICIALIZATION, *supra* note 42, at 112, 121.

[44] *See generally* Schauer, *supra* note 16.

[45] *See, e.g.*, Michelle Taruffo, *Institutional Factors Influencing Precedents*, *in* INTERPRETING PRECEDENTS, *supra* note 11, at 437, 454 (observing that in France, judges do not even cite precedents in opinions but that "it is clear that in practice French judges use precedents no less than their colleagues in other European countries"). She further notes that "the general growth in the use of precedents in every system and the essential role that precedents achieve in the judicial practice of all countries are important factors of change." *Id.* at 459; *see also* ALEC STONE SWEET, GOVERNING WITH JUDGES 146 (2000) (asserting that in Continental legal systems "today . . . judges more openly exploit the legitimizing resources" provided by precedent).

[46] J. WOODFORD HOWARD, JR., COURTS OF APPEALS IN THE FEDERAL JUDICIAL SYSTEM 164 tbl.6.2 (1981).

[47] *See, e.g.*, SEGAL & SPAETH, ATTITUDINAL MODEL, *supra* note 1, at 44 (1993) (observing that "judges use precedent as an ostensible explanation for virtually every decision they make"); Maltz, *supra* note 9, at 367 (observing that "[v]irtually every opinion is

dent has been found to be the "everyday, working rule of American law."[48]

Plainly, precedent has some intrinsic appeal to judges, beyond technical legal requirements. Perhaps judges universally recognize the value of precedent and behave accordingly. Alternatively, judges may simply recognize the value of the appearance of reliance on precedent to maintain the legitimacy of their authority. Judge Easterbrook has observed that the "rule of law attracts formidable support only so long as people believe that there is a rule *of law* and not a rule *by judges*."[49] Archibald Cox similarly declared that public respect for the courts depends at least in part "upon the understanding that what the judge decides is not simply his personal notion of what is desirable but the application of rules that apply to all men equally, yesterday, today, and tomorrow."[50] If judges cite precedents only to preserve a fiction of rule-based decisionmaking, precedent may have much less practical impact. This is the essential issue of our research. Before examining the question, though, we consider one of the best known theories of precedent, that of Ronald Dworkin's "chain novel."

C. *Dworkin's Chain Novel Theory of Precedent*

A leading theory of the impact of precedent is Ronald Dworkin's chain novel hypothesis. This metaphor for sequential judicial decisions has received considerable theoretical attention and debate. While much of this debate involves the descriptive validity of the hypothesis, it has never been subjected to empirical testing of the sort that might inform, if not resolve, the debate. Dworkin is "widely considered the most important American legal philosopher of recent times,"[51] but his philosophical claims are typically untested in operation.

Dworkin's hypothesis is both normative and descriptive in content. While he has argued that there are "correct" judicial decisions for all cases, based often on overriding moral and legal principles, he

---

replete with references to decided cases," and that "reliance on precedent is one of the distinctive features of the American judicial system").

[48] HOWARD, *supra* note 46, at 187.

[49] Frank H. Easterbrook, *Some Tasks in Understanding Law Through the Lens of Public Choice*, 12 INT'L REV. L. & ECON. 284, 287 (1992); *see also* Nicholas S. Zeppos, *Judicial Candor and Statutory Interpretation*, 78 GEO. L.J. 353, 406 (1989) (arguing that "[a]s long as courts cultivate the perception that they are constrained and distinguishable from the political branches, their legitimacy will remain intact").

[50] ARCHIBALD COX, THE WARREN COURT: CONSTITUTIONAL DECISION AS AN INSTRUMENT OF REFORM 26 (1968).

[51] DANIEL A. FARBER & SUZANNA SHERRY, DESPERATELY SEEKING CERTAINTY 122 (2002).

also recognizes the importance of relying on precedent for judicial integrity and concedes that precedent may sometimes trump the judge's need to make the "correct" decision. The hypothesis suggests that prior precedents should and do have some effect in limiting the discretion of subsequent judges hearing similar controversies.

Dworkin propounds the metaphor of the chain novel to illustrate the manner in which precedent may constrain judges. The chain novel is an enterprise in which "a group of novelists writes a novel *seriatim*; each novelist in the chain interprets the chapters he has been given in order to write a new chapter, which is then added to what the next novelist receives, and so on."[52] In the process, the participating writers "aim jointly to create, so far as they can, a single unified novel that is the best it can be."[53] This "bestness" is not merely a measure of the quality of a particular chapter's writing; it also depends on how well the chapter "fits" with the prior chapters.[54] Because the chapters are sequentially written, each author is to some degree bound by what has gone before. Nevertheless, each author also possesses some discretion about how to advance the story, choices that will serve to bind future chapter writers. Later authorial discretion is not boundless, however; exercised in good faith, the discretion will develop the story in a manner that coheres with the prior chapters. Thus, the writer's choices are neither entirely free nor entirely constrained.[55]

In the same way that prior chapters exert a "gravitational pull" on later authors in the chain novel, Dworkin argues that precedent shapes the later decisions of judges rendering opinions in the same legal context. Although later judges' discretion is not completely constrained by law, it is nevertheless "shaped" by earlier judicial decisions. Through use of the chain novel metaphor, therefore, Dworkin seeks to describe the reality of judging, while navigating between the Scylla of legal realism and purely ideological judging and the Charybdis of legal formalism.

This chain novel metaphor has concrete implications in the real world. Consider an issue of statutory interpretation. The first chapter of our metaphorical chain novel would be the text of the statute itself. The first case to come before a court would provide the basis for writing the second chapter. In this case of first impression, the court would examine the first chapter (statutory text) and attempt to apply

---

52 DWORKIN, *supra* note 4, at 229.

53 *Id.*

54 Although Dworkin aspires to "right" judicial principles according to overriding principles, he also recognizes the importance of the consistency provided by adherence to precedent, which he calls the "dimension of fit." *Id.* at 230–31.

55 *Id.* at 234.

it to the circumstances of the case in order to reach a decision with an opinion (the second chapter). Subsequent courts would draw upon the statutory text and intervening decisions (prior chapters) as the sources from which to reach an opinion and write a subsequent chapter. As the chapters mount, more of the story is told and more is known about its characters.

The chain novel is obviously an imperfect metaphor for sequential judging, both more and less constraining than the judicial process. The judicial process is more constraining because authors may embark on fanciful imaginations while judges are arguably constrained to the facts in cases presented to them. Moreover, judicial reliance on precedent is explicit; the judge justifies his decision by reference to prior decisions, while the novelist can build the story without ever explicitly referring to prior events.[56] However, the judge may also be less constrained. Unlike the chain novel, relevant prior precedents are not collected between covers, and judges have some discretion in choosing the prior decisions of significance. Moreover, a judge may from time to time reverse a prior ruling as wrongly decided. A novelist is generally not allowed to "negate" the events in a prior chapter, although theoretically there is no reason he could not do so.

D. The Chain Novel as a Story of Path Dependence

The chain novel hypothesis is a vivid description of the more general theory that precedent is path-dependent.[57] Path dependence describes a system in which a choice at time A has an influence on subsequent choices. Had a different decision been reached at time A, subsequent choices would also differ. Thus, a prior judicial decision will have some impact on subsequent decisions.[58] The earlier ruling may dictate the outcome in the subsequent decision but, more commonly, will simply circumscribe the options available to the subsequent judge or perhaps alter the analytical construct through which the later judge views the case facts. The earlier decision may explicitly rule out alternatives that the subsequent judgment might otherwise

---

[56] *See* Marianne Sadowski, *"Language Is Not Life": The Chain Enterprise, Interpretive Communities, and the Dworkin/Fish Debate*, 33 CONN. L. REV. 1099, 1106–07 (2001) (observing that "the pressure a judge faces to decide a case and write his opinion within precedent's boundaries is considerably different from the pressure a novelist faces to relate later chapters to earlier chapters in a novel").

[57] *See, e.g.*, Hathaway, *supra* note 31, at 622–50 (describing development of law through precedent as story of path dependence); Stone Sweet, *supra* note 43, at 121 (noting that precedent is basic to path dependence within legal system).

[58] *See* Hathaway, *supra* note 31, at 605 (observing that "courts' early resolutions of legal issues can become locked-in and resistant to change").

have considered, just as the content of a chain novel chapter constrains the options of later chapter writers.

The reliance on precedent furthers path dependence over and above the opinions themselves. Because litigants are aware that judges rely on precedents, they may adjust their conduct accordingly and will be unlikely to bring claims or make arguments without reasonable precedential support.[59] Parties whose claims are supported by a new precedent "may be more likely to bring suit and thereby push the law further in that same direction, whereas parties whose desired outcomes become less likely may be discouraged from engaging in litigation, allowing the new path to continue unchecked."[60] The system functions as a positive feedback loop: the repeated use of precedents reinforces their own significance.[61] Hence, changing the path is very difficult and even a small part of an original precedent may become magnified over time into a major legal rule.

Path dependence may operate through different forms and the concept incorporates at least three different theories. The best known economic form of path dependence is the "increasing returns" approach.[62] In this form, subsequent decisions follow earlier ones simply because it is less costly to do so. Under this theory, "a step in one direction decreases the cost . . . of an additional step in the same direction."[63] In the context of judicial decisionmaking, the development of a new precedential rule to resolve a legal issue may be applied in later cases without incurring the cost necessary to create the new rule itself.

A second form of path dependence builds on the evolutionary theories of punctuated equilibrium and suggests that discrete episodes dictate the subsequent evolution of species.[64] Punctuated equilibrium

---

[59] *See, e.g.*, Alexander, *supra* note 7, at 8 (observing that "people frequently will look to judicial decisions and the expressed reasons on which they are based in order to predict how their contemplated courses of action will be treated by the courts should a legal dispute arise").

[60] Hathaway, *supra* note 31, at 628.

[61] *See, e.g.*, Stone Sweet, *supra* note 43, at 114–15 (noting that even "[s]mall historical events" can have durability "through positive feedback" and observing that initial decision "is continuously reinforced through positive feedback" until it becomes dominant or locked in).

[62] *See* Hathaway, *supra* note 31, at 606–07, 627–35 (describing this theory). Economists have used path dependence to explain a variety of phenomena, such as the location of manufacturing plants. *See, e.g.*, Paul Krugman, *History and Industry Location: The Case of the Manufacturing Belt*, AM. ECON. REV., May 1991, at 80, 82.

[63] Hathaway, *supra* note 31, at 609.

[64] *See id.* at 613–17, 635–45. By its very nature, evolutionary theory presumes that past events influence future ones. The evolutionary theory differs, though, from positive feedback economic theories in its ability to avoid the lock-in of unwise legal rules. So long as evolution contains some rational "survival of the fittest" component, it will tend to rein-

theory suggests that long periods of stasis are punctuated by short bursts of rapid change. In the law, doctrine may be characterized by long steady periods interrupted by major changes in legal precedent, through overruling or a constitutional amendment, for example.

The third form is sometimes called sequencing path dependence and notes that the order in which alternatives are considered can determine the outcomes of those choices.[65] Reopening the alternatives risks the phenomenon of cycling erratically among the choices.[66] This theoretical perspective highlights the importance of agenda-setting and litigant choice on the development of precedential rules.

These alternative theories of path dependence each have somewhat different implications for the path of the law. The economic form is the most stable but carries the greatest risk of perpetuating errors. The evolutionary form is more adaptable and reduces the risk of error but sacrifices some stability and carries the risk that "chance mutations" may randomly alter the path. The sequencing form may be the strongest form of path dependence, precluding the reopening of prior decisions to avoid cycling. Nevertheless, the three theories share the common thesis that past decisions will significantly influence future decisions, albeit in different ways and to different degrees.

Much of the existing discussion in the economics literature criticizes the path dependence theory for its practical impact.[67] Because

---

force only the wise rules and can prevent perpetuation of the unwise ones. This latter result requires some form of effective screening for wise versus unwise rules, though. Some have argued that the litigation process tends to produce more efficient rules. *See, e.g.*, Paul H. Rubin, *Why Is the Common Law Efficient?*, 6 J. LEGAL STUD. 51, 51 (1977) (arguing that "efficient rules may evolve from in-court settlement"); John C. Goodman, *An Economic Theory of the Evolution of Common Law*, 7 J. LEGAL STUD. 393, 395 (1978) (arguing that private interest of individual litigants will ensure that "if precedent is sufficiently inefficient we expect it to be overturned"). The strength of the evolutionary effect is still open to debate, with some arguing that the effect is relatively weak. *See* Robert D. Cooter & Daniel L. Rubinfeld, *Economic Analysis of Legal Disputes and Their Resolution*, 27 J. ECON. LITERATURE 1067, 1092 (1989) (concluding that there is "weak" tendency to greater efficiency).

[65] Hathaway, *supra* note 31, at 617–22, 645–50. This is an outgrowth of Kenneth Arrow's famous "General Possibility Theorem." *See, e.g.*, KENNETH J. ARROW, SOCIAL CHOICE AND INDIVIDUAL VALUES 46–60 (2d ed. 1963). The approach mathematically demonstrates how the order of choices among alternatives determines the ultimate choice, under some circumstances. If an issue can be continually revisited, the system risks cycling among the multiple available alternatives. By locking in the first choice and preventing its revisitation, such cycling is averted. *See id.*

[66] *See* Maxwell L. Stearns, *Standing Back from the Forest: Justiciability and Social Choice*, 83 CAL. L. REV. 1309, 1356–57 (1995) (arguing that rule of stare decisis helps courts escape cycling problems); *see also* Lewis A. Kornhauser, *Modeling Collegial Courts I: Path-Dependence*, 12 INT'L REV. L. & ECON. 169, 178–80 (1992) (discussing how result-based judicial decisions help avoid cycling).

[67] *See, e.g.*, S.J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-In, and History*, 11 J.L. ECON. & ORG. 205, 212 (1995) (discussing inefficiencies of path dependence).

of its lock-in effects, path dependence will perpetuate historic decisions regardless of their merit. So, for example, an inefficient technology will prevail over a superior technology, simply because the inefficient approach was prior and persisted due to path dependence. Some have criticized legal reliance on precedent for this very reason, on grounds that stare decisis "may insulate a clearly erroneous precedent from further scrutiny and prevent its correction."[68]

The operation of path dependence has the countervailing benefit of stability. A path-dependent system should be subject to less severe fluctuations because current decisions are moored to those of the past. The rule of law depends on stability and thus willingly suffers the perpetuation of some incorrect rulings in exchange for the benefit of stability and predictability of outcomes.[69] Of course, path dependence may become pathological, perpetuating precedents that produce adverse societal consequences for no better reason than the "dead hand of history." This effect would militate in favor of "permitting the courts to relax the doctrine of stare decisis."[70] Indeed, path dependence may vary in strength depending on context.[71] The ideal system might be one of moderate path dependence that provides the stability and certainty benefits of such a system while permitting departures when the chosen path becomes pathological. Judge Re suggests that this describes the legal system of precedent, which "permits a court to benefit from the wisdom of the past, and yet reject the unreasonable and erroneous."[72]

Because courts are expected to justify their conclusions by reference to prior cases, the path dependence of precedent is superficially obvious. In its very obviousness, however, the functional operation of this path dependence has not been widely explored.[73] Dworkin's chain novel theory provides a convenient hypothesis for this explora-

---

[68] Lee, *supra* note 19, at 654; *see also* Christopher J. Peters, *Foolish Consistency: On Equality, Integrity, and Justice*, 105 YALE L.J. 2031, 2034 (1996) (observing that stare decisis "has the potential to import injustice irremediably into the law").

[69] Especially egregious past decisions may be overruled by courts (as *Brown* overruled *Plessy* once it became societally unacceptable) or by the legislature (as workers' compensation systems supplanted common law tort litigation).

[70] Hathaway, *supra* note 31, at 659. Justice Cardozo suggested that "when a rule, after it has been duly tested by experience, has been found to be inconsistent with the sense of justice or with the social welfare, there should be less hesitation in frank avowal and full abandonment." CARDOZO, *supra* note 19, at 150.

[71] *See* Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 647–52 (1996) (dividing path dependence into "weak," "strong," and "semi-strong" forms).

[72] Re, *supra* note 9, at 514.

[73] For one exception testing the impact of the "legal model" in death penalty cases over time, see Tracey E. George & Lee Epstein, *On the Nature of Supreme Court Decision Making*, 86 AM. POL. SCI. REV. 323, 326–32 (1992).

tion. The chain novel is an expressive metaphor for path dependence that allegedly exists in the law. For Dworkin, the initial cases of first impression allow great judicial freedom and set the path for future decisions. As those decisions mount, the path becomes increasingly defined, and path dependence takes on greater importance as a determinant of subsequent holdings. To have this path-dependent effect, however, the chain novel hypothesis essentially assumes that precedent can in fact constrain judicial decisionmaking. We now turn to a description of the existing empirical research on the question of whether law constrains judges' discretion to render judgments in accordance with their own policy preferences.

E. Empirical Studies of Precedent

The notion that judicial decisionmaking is based on and constrained by precedent is often assumed by scholars and laypeople alike. Yet the actual effect of precedent on judicial decisions has been subject to only limited empirical evaluation. In contrast to the impact of precedent, however, a great deal of empirical research has persuasively demonstrated that some characteristics of individual judges, most particularly their ideology, have an impact on the decisions that they reach.[74] Much of this research is conducted at the level of the U.S. Supreme Court, where precedential power is at its weakest and where the case selection is not representative of the broader application of law.[75] Research on the lower courts, such as the U.S. Courts of Appeals, has found that judicial ideology has a weaker but still prominent impact on decisionmaking.[76] Such findings indicate that the ideal of precedential judicial decisionmaking does not operate perfectly but leaves open the possibility that legal factors still explain much of the variation in case outcomes in the lower courts. The latter hypothesis has not been much studied, largely because operationalizing prece-

---

[74] *See, e.g.*, Daniel R. Pinello, *Linking Party to Judicial Ideology in American Courts: A Meta-Analysis*, 20 JUST. SYS. J. 219, 224–29 (1999) (reporting meta-analysis of eighty-four comparable studies across all levels of federal and state court systems, virtually every one of which found statistically significant association between ideology and judicial outcomes).

[75] *See* Cross, *supra* note 14, at 285–87 (arguing that Supreme Court is not representative because it typically takes only "hard cases" without clear precedential answers); *see also* Andrew Altman, *Legal Realism, Critical Legal Studies, and Dworkin*, 15 PHIL. & PUB. AFF. 205, 207 (1986) (recounting Hart's argument that judicial discretion is only "peripheral phenomenon in a system of rules which, by and large, does provide specific outcomes to cases").

[76] *See, e.g.*, Frank B. Cross, *Decisionmaking in the U.S. Circuit Courts of Appeals*, 91 CAL. L. REV. 1459, 1509 (2003) (reporting that ideology explained only about 5% of variance in broad sample of twentieth-century circuit court decisions).

dent is a complex task. Nevertheless, a number of researchers, especially in political science, have grappled with this question empirically.

First, some quantitative empirical research has examined the effect of precedent from a hierarchically superior court. This research generally has examined a significant ruling of the U.S. Supreme Court and the reaction of lower courts to that decision. After the Supreme Court set new defamation rules in *New York Times Co. v. Sullivan*,[77] lower courts appeared to follow the precedent faithfully.[78] Research has found a similar precedential response to the Supreme Court's *Miranda* ruling,[79] the Court's obscenity decisions,[80] search and seizure holdings,[81] and a key religious freedom decision.[82] The research on this topic suggests that vertical precedent has considerable power, although at least one source has argued that the findings could be explained by factors other than reliance upon precedent.[83]

The impact of horizontal precedent has also been the subject of some empirical research at the U.S. Supreme Court level. Perhaps the most prominent study was conducted by Harold Spaeth and Jeffrey Segal, who evaluated whether justices who disagreed with an initial landmark precedent nevertheless acquiesced to that precedent in later cases.[84] To do so, Spaeth and Segal began their research by identifying a number of landmark Supreme Court decisions that contained dissenting opinions and the "progeny" of those cases. The authors then examined the behavior of the justices who dissented from the original ruling to determine whether, in the landmark's progeny cases, those original dissenters continued to adhere to their position that the

---

[77] 376 U.S. 254 (1964).

[78] *See* John Gruhl, *The Supreme Court's Impact on the Law of Libel: Compliance by Lower Federal Courts*, 33 W. POL. Q. 502, 517 (1980) (finding 91% compliance by district and circuit courts, taken together).

[79] *See* Donald R. Songer & Reginald S. Sheehan, *Supreme Court Impact on Compliance and Outcomes:* Miranda *and* New York Times *in the United States Courts of Appeals*, 43 W. POL. Q. 297, 313 (1990) (finding "nearly universal compliance" with *Miranda* decision).

[80] *See* Donald R. Songer & Susan Haire, *Integrating Alternative Approaches to the Study of Judicial Voting: Obscenity Cases in the U.S. Courts of Appeals*, 36 AM. J. POL. SCI. 963, 975–76 (1992) (finding "substantial" impact of changing Supreme Court precedent, controlling for changing partisan composition of courts).

[81] Donald R. Songer et al., *The Hierarchy of Justice: Testing a Principal-Agent Model of Supreme Court–Circuit Court Interactions*, 38 AM. J. POL. SCI. 673, 690 (1994) (finding circuit courts to be "highly responsive" to Supreme Court search and seizure decisions).

[82] *See* James C. Brent, *An Agent and Two Principals: U.S. Court of Appeals Responses to* Employment Division, Department of Human Resources v. Smith *and the Religious Freedom Restoration Act*, 27 AM. POL. Q. 236, 250 (1999) (finding difference in success rate of free-exercise plaintiffs before and after *Smith*).

[83] *See* Cross, *supra* note 76, at 1469 (apparent lower court compliance could be explained by shifting ideological preferences on lower court level).

[84] *See* SPAETH & SEGAL, MAJORITY RULE, *supra* note 1, at 5.

landmark ruling was incorrect. The authors found that, rather than accepting the landmark opinion as settled law, the original dissenters continued to challenge the landmark ruling as incorrectly decided by dissenting in the progeny as well.[85] Spaeth and Segal thus concluded that "precedent rarely influences United States Supreme Court justices."[86] Rather, the justices' ideological leanings were better predictors of their voting behavior. Similarly, Saul Brenner and Harold Spaeth found that decisions to overrule existing precedent were also largely driven by ideological factors at the U.S. Supreme Court level.[87]

A different approach to studying Supreme Court reliance on precedent reached different results. Mark Richards and Herbert Kritzer identified certain "jurisprudential regimes" associated with landmark precedents in the area of First Amendment law.[88] These regimes affected later decisions by the Court because they set the standards and directed future decisions "by establishing which case factors are relevant for decision making and/or by setting the level of scrutiny or balancing the justices are to employ in assessing case factors."[89] Richards and Kritzer's statistical analysis of the justices' voting behavior demonstrated that the rationale of the earlier opinions had plainly affected subsequent Court outcomes. Paul Wahlbeck's study of legal change on the U.S. Supreme Court similarly found that accumulating precedent affected the Court's propensity to rule expansively or restrictively in subsequent rulings in cases involving the Fourth Amendment prohibition against unreasonable searches and seizures.[90]

In the lower courts, studies regarding the impact of precedent are even more scarce, although a few exist. One recent study examined the Sixth Circuit's treatment of its own precedents in decisions rendered in 1995 and 1996.[91] The author found that the treatment of circuit precedent was positive in over 80% of the cases and negative (usually distinguished) in less than 20%.[92] Moreover, examination of the negative treatments revealed that panel ideology was not a signifi-

---

85 *See id.* at 287 (finding that such justices deferred to precedent only 11.9% of time).

86 *Id.*

87 *See* BRENNER & SPAETH, *supra* note 22, at 106–07.

88 Richards & Kritzer, *supra* note 2, at 310–11.

89 *Id.* at 305.

90 *See* Paul J. Wahlbeck, *The Life of the Law: Judicial Politics and Legal Change*, 59 J. POL. 778, 794 (1997) (finding Court less likely to invoke legal change when base of precedent exists).

91 Emery G. Lee III, *Horizontal Stare Decisis on the U.S. Court of Appeals for the Sixth Circuit*, 92 KY. L.J. 767, 779 (2003–2004).

92 *Id.* at 767.

cant influence over the choice to distinguish existing precedents (i.e., conservative judges were no more likely to distinguish cases decided by prior liberal panels or with liberal outcomes).[93] This finding, though limited in scope, suggests that precedent exercises a significant constraining influence on judges' ideological inclinations.

The influence of precedent in the lower courts has also been studied in particular contexts. A study of rulings on the constitutionality of the Federal Sentencing Guidelines found that a district court precedent within the same circuit was a significant determinant of subsequent district court holdings in that circuit.[94] David Klein studied circuit court decisions that established new legal rules in significant unsettled areas of antitrust, environmental, and search and seizure law.[95] He found that the decision of another circuit court on the same issue was a significant determinant of outcomes, as was the prestige of the first judge to rule and his or her field-specific expertise.[96]

The empirical research discussed above provides some evidence that precedent exercises a constraining influence in courts other than the U.S. Supreme Court. Recently, Dan Pinello investigated the extent of this precedential power in more detail by evaluating judicial decisionmaking on gay rights issues in state and federal courts from 1981 to 2000.[97] Pinello analyzed how judges vote on gay rights cases, using many of the determinants familiar to existing political science research, such as judicial ideology and background characteristics. Unlike prior research, however, he also added a variable for the existence of an on-point precedent for the case before the court. He found an effect that was highly significant, both statistically and practically, for precedents that favored the gay rights position.[98] Pinello also found an effect for negative, anti-gay rights precedents, but this effect was much weaker.[99] Finally, the study also found that precedent had a different effect in different types of courts: The effect of precedent was much weaker in courts of last resort than in intermediate appellate courts, as the traditional theory might suggest.[100]

---

93 *Id.* at 785–86.

94 *See* Gregory C. Sisk et al., *Charting the Influences on the Judicial Mind: An Empirical Study of Judicial Reasoning*, 73 N.Y.U. L. REV. 1377, 1433 tbl.4 (1998).

95 *See* DAVID E. KLEIN, MAKING LAW IN THE UNITED STATES COURTS OF APPEALS 8 (2002).

96 *Id.* at 54–61, 65–69, 82–85.

97 *See generally* DANIEL R. PINELLO, GAY RIGHTS AND AMERICAN LAW (2003).

98 Such positive precedents were significant at the <.001 level and explained 34% of the variance in the judicial decisions studied. *Id.* at 78 tbl.3.1.

99 Negative precedents were significant at the .026 level but explained less than 10% of the variance in judicial decisions. *Id.*

100 *Id.* at 79–81.

Pinello's research demonstrates a clear effect of precedent but also a limited one, as other variables such as judicial background and environment were also significant regardless of precedent. The study provides some modest support for the effect of precedent and the chain novel hypothesis.

The existing empirical research, though somewhat limited, appears to confirm that precedent has *some* effect on judicial decisionmaking in some circumstances. However, it has been largely confined to "snapshots" of precedent at a particular time and in circumstances when it is at its strongest. When judges are confronted with a precedent that is directly on-point and from an authoritative binding source, it appears largely to determine their rulings. This empirical result is quite limited, though, as the vast majority of important cases do not have such clear precedential direction. Use of precedent in practice "is seldom a mechanical process of following preexisting rules" but is more like a "weighing and balancing of reasons, *inter alia* pre-existent precedent rules (or principles) in order to make new rules."[101] In the following section, we describe our empirical evaluation of Dworkin's chain novel hypothesis in the U.S. Courts of Appeals in an attempt to provide something more like a motion picture of precedent's operation.

II
TESTING DWORKIN'S CHAIN NOVEL THEORY EMPIRICALLY

A. General Research Methodology

Our study focuses on decisionmaking at the federal circuit court level where most federal law is made.[102] Unlike the U.S. Supreme Court, the circuits have no choice over the cases they hear and therefore decide many more cases, making them amenable to quantitative analyses of decisionmaking.

We begin with the assumption that, because it is incompatible with legal precedent-based decisionmaking, the existence and extent of ideological influences on judicial behavior provides a foil for testing precedent.[103] We know from past research that judges, *ceteris paribus*, prefer and tend to make decisions that conform to their ideological

---

[101] Aleksander Peczenik, *The Binding Force of Precedent*, *in* INTERPRETING PRECEDENTS, *supra* note 11, at 461, 475.

[102] *See* Cross, *supra* note 76, at 1459 (noting that circuit court decisions are "probably the decisions of greatest importance for the development of the law in the United States").

[103] *See* ANTHONY T. KRONMAN, THE LOST LAWYER 250 (1993) (describing legal formalism as belief that "legal analysis . . . can and should be free from contaminating political or ideological elements").

preferences.[104] The "most obvious consequence" of decisionmaking constrained by precedent is that the decisionmaker "will sometimes feel compelled to make a decision contrary to the one she would have made had there been no precedent to be followed."[105] Hence, the indirect measure of the power of precedent is the degree to which judges feel free to make ideological decisions or are constrained from making such decisions.

If the theory of precedential impact were of no consequence, we would expect decisions largely to reflect the ideology of the deciding judges. Ample empirical research indicates that ideology is the primary extralegal influence on decisions.[106] Studies at all court levels, including the circuit courts, have found that judicial ideology influences judicial outcomes.[107] However, the association of outcomes and ideology is far from exact, leaving considerable room for the effect of other variables, including precedent.

Well-established empirical procedures exist for assessing the role of ideology in judicial decisions. First, the outcomes of particular types of cases may be coded as liberal or conservative. In union litigation, for example, a ruling for labor is considered liberal and a ruling for business conservative. In Fourteenth Amendment litigation, a ruling for a minority group is coded as liberal. These heuristics conform well to ideological preferences.[108] Second, judges may be coded to reflect their ideological preferences. The traditional coding simply characterizes federal judges as Republican or Democrat appointees and assigns them the relative ideology conventionally associated with their party. While this approach has consistently demonstrated statistically significant results,[109] some refinement in the measure would be preferable.[110] New measures seek to provide more specific estimates based on lawyers' assessments of a judge's ideological leanings[111] or

---

104 For an extensive analysis of the influence of attitudes on judicial decisionmaking, see Pinello, *supra* note 74, at 224–32.

105 Schauer, *supra* note 16, at 588.

106 *See* Cross, *supra* note 14, at 265, 275–85 (summarizing and critiquing evidence for "attitudinal model," which explains decisionmaking by judge's ideological preferences).

107 *See, e.g.*, Pinello, *supra* note 74, at 224–29.

108 Moreover, almost every empirical study of judicial decisionmaking adopts this approach. For a discussion, see *id.* at 222.

109 *Id.* at 222–32 (demonstrating effect from this methodology).

110 *See* Lee Epstein & Gary King, *The Rules of Inference*, 69 U. CHI. L. REV. 1, 94–96 (2002) (describing advantage of employing multiple means of measuring ideology for circuit court judges).

111 *See* KLEIN, *supra* note 95, at 63–64.

on particular ideologies of the judge's appointing president and senators involved in the confirmation process.[112]

To test the hypothesis, we examine the relative impact of ideology on judicial decisionmaking over time. If the chain novel hypothesis and the path dependence of precedent is operating, ideology should be at its most powerful in cases of first impression, where there is no governing precedent. Subsequently, one would expect to see less ideological decisionmaking as relevant precedents mount and circumscribe discretion. Our study uses two separate analyses of data involving judicial voting behavior. First, we analyze differences between judicial voting behavior in circuit court cases of first impression and voting behavior in non–first-impression cases for the period 1984 to 1988. This comparison will enable us to determine whether cases decided as first chapters in the precedential chain novel leave more room for the exercise of judicial discretion. Second, using data on voting behavior from civil liberties decisions applying 42 U.S.C. § 1983 over a thirty-year period, we seek to evaluate the extent to which accumulating precedent constrains judges' discretion to decide cases in accordance with their own policy preferences.

B. Cases of First Impression

A case of first impression is, by definition, one that presents a novel legal question and is not ruled by prior precedents. Under Dworkin's broad theory, there may be no true cases of first impression.[113] Some prior opinion inevitably has expounded on some legal principle at least tangentially connected with the present case. This is evidenced by the fact that judges commonly cite precedent even in cases they characterize as ones of first impression. This theoretical objection is not significant for our purposes, however.

When faced with a novel legal issue, judges often explicitly refer to such matters as ones of first impression, with the common understanding that any precedential guidance is remote and therefore less clear and less binding.[114] Such a reference is no different from the first-chapter author's need to conform to certain basic elements of the novel's form, though not preceding chapters. Identifying a case as one

---

[112] *See* Micheal W. Giles et al., *Picking Federal Judges: A Note on Policy and Partisan Selection Agendas*, 54 POL. RES. Q. 623, 631 (2001).

[113] Dworkin believes basic legal materials express broad principles that mean judges never truly have unbounded cases of first impression with individual discretion. *See* RONALD DWORKIN, TAKING RIGHTS SERIOUSLY 28 (1977) (arguing that broad "principles" offer guidance even when rules do not).

[114] *See* Nelson, *supra* note 20, at 58 (noting that "judges have fewer resources to draw upon in cases of first impression").

of first impression also has legal significance. The U.S. Supreme Court has held that courts should not retroactively apply decisions on issues of first impression whose resolution was unclear.[115] The concept is also invoked in connection with standards for issuance of a writ of mandamus to district courts.[116] The salience of cases of first impression is also demonstrated by judicial opinions noting the condition's absence. It is not uncommon for courts to state that they are deciding a given case differently than they would if it were a case of first impression.[117] Such statements evidence the discrete existence of a category of cases that may be fairly labeled ones of first impression, even if such a distinction may be fuzzy at the borders.

The presence of such cases of first impression provides us with a context in which to evaluate one element of Dworkin's chain novel hypothesis. If the hypothesis is accurate, we would expect judges to have more discretionary space in cases of first impression,[118] which should appear in our empirical results in the form of an enhanced impact of ideological factors in such cases. In first impression cases, a range of choices is available, some of which will subsequently be foreclosed by precedent.[119] This section of the article tests the hypothesis that judges enjoy enhanced discretionary authority in these cases.

To conduct our empirical analysis, we first identified cases from four U.S. Courts of Appeals between 1984 and 1988 in which either the majority or a dissenting opinion[120] expressly noted that the case

---

115 *See* Chevron Oil Co. v. Huson, 404 U.S. 97, 106–07 (1971).

116 *See* Bauman v. U.S. Dist. Ct., 557 F.2d 650, 654–55 (9th Cir. 1977) (noting that mandamus standard asks whether "the district court's order raises new and important problems, or issues of law of first impression").

117 *See, e.g.*, Watson v. Fort Worth Bank & Trust, 798 F.2d 791, 797 & n.12 (5th Cir. 1986) (declaring that court would apply disparate impact analysis in title VII claim were it case of first impression but declining to do so because it was constrained by contrary precedent); Moore v. McCotter, 781 F.2d 1089, 1091–96 (5th Cir. 1986) (expressing preference for appellant's legal argument but declining to adopt it because issue was not case of first impression).

118 *See* Ronald Dworkin, *Law as Interpretation*, *in* THE POLITICS OF INTERPRETATION 249, 262 n.4 (W.J. Thomas Mitchell ed., 1983) [hereinafter Dworkin, *Interpretation*] (suggesting that first writer has "different assignment" from all subsequent authors). The first author has more freedom due to a lesser number of constraints. *See* Ronald Dworkin, *My Reply to Stanley Fish (and Walter Benn Michaels): Please Don't Talk about Objectivity Any More*, *in* THE POLITICS OF INTERPRETATION, *supra*, at 287, 304–05 [hereinafter Dworkin, *My Reply*].

119 *See, e.g.*, Stone Sweet, *supra* note 43, at 119 (noting that "[d]ispositive answers given to yes-no questions possess the inherent capacity to block one path of development while encouraging another").

120 The dissenting opinion was relied upon to identify cases of first impression only if the majority opinion similarly reflected the view that the issues in the case were novel, involved ambiguous statutory terms, or had yet to be addressed by the circuit. Of course, to the extent that we rely on judges' explicit acknowledgement that a case raises an issue of

raised an issue of first impression.[121] To create a comparison control group of non-first impression cases, we then randomly selected thirty additional decisions from each circuit for the same set of years.[122] Our dependent variable was the ideological direction of the case outcome, as described in the section above. The directionality of each vote was coded as liberal (0) or conservative (1).

For this analysis of first impression cases, data on judicial ideology was taken from the descriptions of the judges contained in the Almanac of the Federal Judiciary,[123] in which lawyers evaluate judges on the degree of their ideology. From these descriptions, a five point scale was created. The comments typically refer to judges as "very conservative (or liberal)" or "moderately conservative (or liberal)" or even "apolitical."[124] For the few judges not discussed in the Almanac, we used the relative ideology of the judge's appointing president. For purposes of the statistical results presented below, this variable is labeled ATTITUDES. It is the counterpoint for legal precedent; if precedent has a controlling effect, it would mitigate the effect of ATTITUDES on judicial decisions.

To help assure that the findings are not explained by an omitted third variable, we also employ several control variables in the analysis. Because there is some evidence of a *regional effect* on judicial decisions (with southern judges often exhibiting more conservative voting behavior),[125] we also created a dummy variable (SOUTH) for decisions from the southern states of the Fifth Circuit. Another relevant concern was *litigant status*. Prior research has demonstrated that some

---

first impression, we risk missing those cases where novel issues are raised but in which judges do not explicitly use the particular notation of "first impression." If we have done so, however, it will only make our test of first impression status more conservative.

121 The circuits were the Second, Fifth, Ninth and D.C. Circuits, which were chosen because they represent courts from disparate geographic regions, a method that has been adopted by prior researchers. *See* HOWARD, *supra* note 46, at xix.

122 The random cases were selected using the random list from the U.S. Courts of Appeals Database. DONALD R. SONGER, UNITED STATES COURTS OF APPEALS DATABASE PHASE 1, 1925–1988 (Inter-University Consortium for Political and Social Research, 1998) at http://webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/02086.xml. In total, we coded 600 randomly selected cases and 284 first impression cases. The number of votes in our analysis does not correspond exactly to these numbers multiplied by three because we omitted from our models judges sitting by designation.

123 ALMANAC OF THE FEDERAL JUDICIARY (Barnabas D. Johnson et al. eds., 1995); ALMANAC OF THE FEDERAL JUDICIARY (Barnabas D. Johnson et al. eds., 1987).

124 Judges categorized as very conservative or conservative were coded as 2, moderately conservative as 1, moderate or apolitical as 0, moderately liberal as -1, and very liberal or liberal as -2.

125 *See, e.g.*, C. Neal Tate, *Personal Attribute Models of the Voting Behavior of U.S. Supreme Court Justices: Liberalism in Civil Liberties and Economics Decisions, 1946–1978*, 75 AM. POL. SCI. REV. 355, 358–59 (1981) (testing impact of southern "appointment region" on Supreme Court justices' voting behavior).

categories of litigants are more advantaged and therefore more likely to win at the appellate level.[126] For example, government parties have a disproportionately high success rate.[127] To be consistent with prior research approaches, we used a four-point scale of litigant status (LITIGANT STATUS) to account for the relative success of different parties and whether those parties represented the liberal or conservative side in the appeal.[128] Still another factor in circuit court decisions is *affirmance deference*. As a legal rule, such courts are expected to defer to the factual findings of the lower courts, which should produce a bias for affirming such decisions, and this effect has been empirically confirmed.[129] Consequently, a control variable accounts for whether the respondent is taking the conservative or liberal position (RESPONDENT). A final control variable is *amicus participation*. There is some evidence that amici may have some impact on judicial decision-making, so another variable was created to account for the presence of amici and whether they supported a conservative or liberal position (AMICUS).[130]

The data used in the research consist of 2097 individual judge votes in the 1984 to 1988 period. Of these, 1216 votes were conservative and 881 were liberal, with the conservative predominance most pronounced in criminal cases. To test the freedom of judges in cases of first impression, the above variables were modeled using logistic regression (logit), a maximum likelihood technique (MLE), because the dependent variable regarding the directionality of outcome is dichotomous (coded as one of two values). In addition to the straightforward variables, the analysis also includes interaction effects to examine the differential impact of the independent variables in cases

---

126 The classic discussion of this effect is Marc Galanter, *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, 9 LAW & SOC'Y REV. 95 (1974). In the U.S. circuit courts of appeals, the effect was extensively analyzed by Donald R. Songer & Reginald S. Sheehan, *Who Wins on Appeal? Upperdogs and Underdogs in the United States Courts of Appeals*, 36 AM. J. POL. SCI. 235 (1992).

127 *See, e.g.*, Songer & Sheehan, *supra* note 126, at 243 (reporting that federal, state and local governments won around 85% of their appeals, businesses 57%, and individuals only 18%).

128 This variable constituted a four-point scale of litigant status, coded 1 for individuals, 2 for businesses, 3 for state/local governments, and 4 for the federal government. The cases were then evaluated to determine whether the party was advocating the conservative or liberal position, thus creating two litigant status variables. Since we are modeling the likelihood of a conservative vote, one would expect a positive coefficient on the variable measuring the impact of litigants arguing the conservative position, and a negative coefficient on the variable measuring the impact of litigants arguing the liberal position.

129 *See* Cross, *supra* note 76, at 1500–02.

130 This was coded as 1 if the amici supported the conservative position, -1 if amici supported the liberal position, and 0 if no amici were present.

of first impression. The formal model used is schematically expressed as:

$$P(Y_i=1) = B_0 + B_1 (Attitudes) + B_2 (South) + B_3 (Litigant\ Status/Conservative) + B_4 (Litigant\ Status/Liberal) + B_5 (Respondent) + B_6 (Amicus) + B_7 (First\ Impression) + B_8 (Attitudes * First\ Impression) + B_9 (South * First\ Impression) + B_{10} (Litigant\ Status/Conservative * First\ Impression) + B_{11} (Litigant\ Status/Liberal * First\ Impression) + B_{12} (Respondent * First\ Impression) + B_{13} (Amicus * First\ Impression)$$

Prior research suggests that all of the basic terms will be associated with outcomes. If the chain novel hypothesis of precedential constraint is correct, moreover, the multiplicative term ATTITUDES * FIRST IMPRESSION should have a statistically significant coefficient, indicating that judicial attitudes have a more pronounced influence in first impression cases than in non-first impression cases. There is no particular reason to expect a significant association for any of the other interaction variables, although our interactive terms enable us to test for any such associations. Table 1 reports the results of the analysis for the full sample of cases, reporting MLE coefficients for each variable and their standard errors; statistical significance is reported with the asterisk convention (*** for significance at the .001 level, ** for .01, and * for .05). The reduction of error statistic indicates the extent to which the model predicts the dependent variable more accurately than would a naïve prediction based on the modal value of the dependent variable (in this case, a conservative vote).

Under the structure of the model, a positive association means an association with a conservative vote. As anticipated, all of the basic independent variables are statistically significant and in the expected direction. The significance of ATTITUDES by itself shows that judicial ideology has some impact in the average case, even in the presence of precedent. The significance of the LITIGANT STATUS variables means that litigants with higher values on the scale (such as the federal government) are more successful in court, regardless of whether they take a conservative or liberal position. The significance of AMICUS means that the presence of an amicus arguing for a conservative position makes it more likely that the conservative position will prevail.[131] Similarly, conservative respondents won much more often than did conservative petitioners. Courts in the SOUTH were distinctly more conservative.

[131] While this variable is highly significant, the result should be taken with some caution, because amicus filings were quite rare in the sample (only appearing in 1.73% of the random sample of cases and 6.76% of the cases of first impression).

TABLE 1
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR IN ALL CASES

VARIABLE	MLE	STANDARD ERROR
Intercept	−.274	.265
Attitudes	.121	.035***
South	.559	.149***
Litigant Status (Conservative)	.228	.062***
Litigant Status (Liberal)	−.329	.064***
Respondent	.773	.141***
Amicus	1.896	.649***
First Impression	−.444	.435
Attitudes * First Impression	.153	.063**
South * First Impression	−.256	.263
Litigant Status (Conservative) * First Impression	−.046	.100
Litigant Status (Liberal) * First Impression	.131	.110
Respondent * First Impression	.178	.243
Amicus * First Impression	.787	.887
−2 x Log Likelihood	2447.810	
Chi-Square	405.502***	
Model's Reduction of Error	29.6%	

The independent statistical significance of ATTITUDES * FIRST IMPRESSION demonstrates that judicial ideology is stronger in cases of first impression, thus providing some confirmation for the chain novel hypothesis of precedent. The lack of statistical significance for the other interaction variables of the model demonstrates that there is no distinction for such cases of first impression combined with the other determinants. Thus, for example, litigant status has roughly the same effect on decisional outcomes, regardless of whether the case is one of first impression. The proportional reduction of error statistic (29.6%) is reasonably high, supporting the accuracy of the model.

The same analysis was run on a subset of cases involving civil rights and civil liberties, which are among those cases we expected to be most likely to elicit an ideological reaction from judges. The sample for this analysis involved 393 votes, and the results are reported in Table 2.

These results confirm and strengthen the findings for the full sample. Surprisingly, ideology is not a significant determinant overall in non–first-impression cases, but in cases of first impression, the impact of attitudes is significantly stronger. This suggests that the force of precedent is particularly strong in civil rights and civil liberties actions, but that ideology plays a substantial role in determining the path of the law via cases of first impression. The 42.6% reduction of error for the full model is quite high.

Some of the other results of this analysis are surprising, such as the lack of effect for the variables SOUTH or RESPONDENT. The most

TABLE 2
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR IN CIVIL RIGHTS/LIBERTIES CASES

VARIABLE	MLE	STANDARD ERROR
Intercept	.821	.660
Attitudes	.141	.089
South	.639	.364
Litigant Status (Conservative)	.726	.175***
Litigant Status (Liberal)	-.862	.242***
Respondent	.346	.360
Amicus	2.568	1.153*
First Impression	3.032	1.124***
Attitudes * First Impression	.796	.198***
South * First Impression	-1.084	.808
Litigant Status (Conservative) * First Impression	-.939	.281***
Litigant Status (Liberal) * First Impression	-.585	.445
Respondent * First Impression	-.920	.604
Amicus * First Impression	.799	1.511
-2 x Log Likelihood	-386.799	
Chi-Square	156.668***	
Model's Reduction of Error	42.6%	

unusual finding is the statistically significant negative sign for LITIGANT STATUS (CONSERVATIVE) * FIRST IMPRESSION. In these cases, the litigants expected to be most effective (such as the federal government) were especially ineffective when on the conservative side in cases of first impression, losing much more than the average litigant. This curious finding might be spurious, or these cases may involve attempts by the federal government to deny individual rights, such that the federal government's relative ineffectiveness in cases of first impression suggests that the judiciary may be strictly enforcing rights in these cases.

Table 3 presents the same results of the logit estimation with the analysis limited to criminal cases. The scaled litigant status variables were dropped, because the cases invariably involved the government arguing a conservative, pro–law enforcement position, and individuals arguing the liberal position. The government was virtually always the respondent, and this variable thus captures any litigant effect.

This analysis of criminal decisions did not perform nearly as well as the other analyses (only 6.6% reduction of error), perhaps because of the extreme skewness of the dependent variable. Over 77% of the total criminal votes in the database were conservative and pro-government. Most importantly for our focus, the interactive term ATTITUDES * FIRST IMPRESSION failed to achieve statistical significance, though it was in the expected direction and approached such significance in a one-tailed test. This finding does not much inform our test of the chain novel hypothesis, however. Because ideological attitude

TABLE 3
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR IN CRIMINAL CASES

VARIABLE	MLE	STANDARD ERROR
Intercept	.449	.302
Attitudes	.069	.071
South	1.102	.298***
Respondent	1.430	.329***
First Impression	.650	.666
Attitudes * First Impression	.212	.153
South * First Impression	−.277	.734
Respondent * First Impression	−.079	.705
−2 x Log Likelihood	578.508	
Chi-Square	54.218***	
Model's Reduction of Error	6.6%	

did not appear to be a significant determinant of outcomes in these criminal cases, one would not necessarily expect a dramatic effect to show up in cases of first impression, regardless of the constraining effect of precedent.[132] Southern judges were much more conservative in criminal cases and the government respondents were, likewise, much more successful in all cases, not just those of first impression. The criminal analysis provides only very mild support for the chain novel hypothesis, in comparison to the strong support of our prior models in cases of first impression.

One conceivable problem with our analyses is the reliance on self-identified cases of first impression. It is possible that judges refer to cases as ones of first impression specifically because they are intent on rendering an ideological decision in the cases. The identification of the case would thus be strategic on the part of the judge. This seems relatively unlikely, however. Judicial claims that a case is one of first impression are relatively rare. Judicial opinions are read and critiqued, and the judicial fraud would be readily observed by lawyers, judges, and outsiders. Such a judge would be especially vulnerable to a motion for reconsideration, appeal or en banc reversal following such a disingenuous decision.[133] Moreover, cases of first impression have somewhat less pragmatic power, as discussed above,[134] so judges

[132] Attitudinal decisionmaking is our proxy for judicial freedom from precedential control. However, if the judges do not desire to render attitudinal decisions in a particular area of the law, but use some other extralegal factor, our attitudinal proxy will not capture this freedom.

[133] *See supra* note 21 and accompanying text.

[134] *See, e.g.*, Hathaway, *supra* note 31, at 625 ("[J]udges recognize that their decisions may be overruled if they are too dismissive of prior precedent, thus depriving their decision of any legal effect" and they "also follow precedent to preserve their reputations and prestige.").

have some incentive not to refer to their decisions as ones of first impression. In fact, very few of the first impression cases analyzed in this study included dissenting opinions in which the dissenting judge challenged the majority's characterization of the case as one of first impression. Typically, there was consensus on that issue, with the central dispute focusing on how the first impression case should be resolved on other grounds.

The findings on cases of first impression are significant for understanding the functioning of the law. The relative ideological freedom of judges deciding such cases compared to those deciding later cases demonstrates that precedent in fact constrains the circuit court judiciary. Incidentally, because of the path dependence of precedent, those initial ideologically unconstrained decisions will dictate future rulings because of the precedents they set. Thus, the ideological preferences of the judge hearing the case of first impression are replicated in subsequent rulings, which in turn raises the risk of an unjustified lock-in of incorrect principles via path dependence. The severity of this lock-in is assessed in the following section, which examines the refinement of precedent in the years following the resolution of a case of first impression.

C. The Refinement of Precedent

The results in cases of first impression suggest that there is some truth to the chain novel hypothesis. Absent clear precedential guidance, judges have more discretion to effect their preferences. But this finding only applies to a limited scenario; most cases are not of first impression and arise in later chapters of our chain novel of precedent. Dworkin's theory suggests that the discretion of the judiciary wanes as prior chapters mount. The more that has already been decided and written, the less space is present for the current author. Thus, "constraints thicken as the chain lengthens."[135] Dworkin indicates that "later novelists are less free" than those who write at the beginning.[136] Analogously, he suggests that in the process precedents funnel subsequent decisions through steadily tightening constraints,[137] and that consequently "judicial freedom . . . declines in inverse proportion to the volume of legal history."[138] The theory suggests that

---

135 Stanley Fish, *Working on the Chain Gang: Interpretation in Law and Literature*, 60 TEX. L. REV. 551, 553 (1982).

136 Dworkin, *Interpretation*, *supra* note 118, at 262 n.4.

137 *See* Sadowski, *supra* note 56, at 1121–22; *see also* Douglas Lind, *A Matter of Utility: Dworkin on Morality, Integrity, and Making Law the Best It Can Be*, 6 SETON HALL CONST. L.J. 631, 642 (1996).

138 Lind, *supra* note 137, at 648.

the "inflexibility of any body of law" will be determined, at least in part, by "the density of judicial rule-making in that area."[139] Thus, the zone of outcome indeterminacy should "narrow over time, as the rule is adjudicated."[140] Judicial discretion would thereby be progressively constrained.

The theory of the chain novel produces the hypothesis that as precedents accumulate ("chapters mount"), the discretion of each subsequent writer becomes steadily more constrained. Over time, precedents address an increasing variety of factual scenarios and establish legally binding rules for future cases that confront such scenarios. Precedents also allow future judges to draw on the wisdom of past judges, enabling judges to trade information with one another as precedents develop.[141] Through this process, judges are less likely to make errors as they obtain more information from prior decisions.[142]

The notion that the accumulation of precedents necessarily constrains judicial discretion is not undisputed, however. Some argue that as precedents develop, they typically create exceptions to a general rule and then exceptions to those exceptions, and so on. As the body of precedent grows, judges may have more legal source material through which they may justify a decision with their preferred ideological result. Henry Abraham has suggested that "the question to be resolved comes, normally speaking, to a *choice* of precedents."[143] Jack Balkin claims that "the materials of the law already contain justifications supporting every variety of liberal and conservative positions."[144] Former circuit court judge Patricia Wald has similarly declared that there is "precedent nowadays for virtually every proposition."[145] Under this theory, more precedents simply mean more judicial discretion and less legal control.

Thus, we have a testable hypothesis. Under the chain novel theory, one would expect the degree to which judges may exercise

---

139 Stone Sweet, *supra* note 43, at 120.

140 *Id.* at 130.

141 Jonathan R. Macey, *The Internal and External Costs and Benefits of Stare Decisis*, 65 CHI.-KENT L. REV. 93, 102–03 (1989).

142 Judges are also less likely to commit simple errors as precedents develop, because of the greater resource of knowledge available to them and to the advocates appearing before them. *See* Nelson, *supra* note 20, at 58 n.199.

143 HENRY J. ABRAHAM, THE JUDICIAL PROCESS 361 (7th ed. 1998) (emphasis in original).

144 J.M. Balkin, *Taking Ideology Seriously: Ronald Dworkin and the CLS Critique*, 55 UMKC L. REV. 392, 430 (1987); *see also* SEGAL & SPAETH, ATTITUDINAL MODEL, *supra* note 1, at 77 ("[P]recedents lie on both sides of most every controversy, at least at the appellate level.").

145 Patricia M. Wald, *The Rhetoric of Results and the Results of Rhetoric: Judicial Writings*, 62 U. CHI. L. REV. 1371, 1400 (1995).

ideological discretion to decrease over time, as more precedents are set. This is consistent with the Landes and Posner position that a single precedent has relatively little power, and a "broader judge-made rule will generally require a series of judicial decisions" in order "that a rule applicable to a situation common or general enough to be likely to recur in the future can be inferred."[146] This theory finds some limited support in the Sixth Circuit study discussed above, which found that the more positive citations that a case had received, the more likely a future case would again treat it positively.[147] Fish and the legal realists, by contrast, would hypothesize that there would be no difference in the extent of ideological discretion over time.[148] One study limited to capital punishment decisions appeared to support the latter theory, with ideological decisionmaking growing over time.[149] Landes and Posner also give some support for the latter theory, via their findings that the significance of precedents tends to depreciate over time,[150] which suggests that a line of old precedents may not constrain future rulings.

While Dworkin's chain novel might best apply to the common law, that law is centuries old and hence more difficult to track from the beginning of a particular doctrine. Moreover, there is no general federal common law, so a test in federal circuit courts is impractical. Under the general theory of precedent and path dependence, the claims of the chain novel hypothesis should also apply to the fleshing out of statutory interpretation; this forms the grounds of our empirical test.[151] Clearly, where statutory language is relatively ambiguous (as is true in the case of our test statute), the courts play an important role in interpreting and thus creating a judicial "gloss" on the statute's meaning. If Dworkin's theory is correct, the effect of ideology should pale over the years, as statutory meaning is clarified through mounting, constraining precedents.

Testing the theory requires a legal context. This context must be narrower than the one used for the study of cases of first impression.

---

146 Landes & Posner, *supra* note 3, at 250.

147 *See* Lee, *supra* note 91, at 788.

148 *See* Judith M. Schelly, *Interpretation in Law: The Dworkin-Fish Debate (Or, Soccer Amongst the Gahuku-Gama)*, 73 CAL. L. REV. 158, 159–60 (1985) (noting that where "Dworkin conceives a chain of interpretations that allows a hard case to come closer and closer to an easier one, Fish sees only discrete cases").

149 *See* George & Epstein, *supra* note 73, at 333.

150 *See* Landes & Posner, *supra* note 3, at 280–83.

151 There is considerable commonality between common law and statutory interpretation. Justice Stevens has noted that "[b]roadly worded constitutional and statutory provisions necessarily have been given concrete meaning and application by a process of case-by-case judicial decision in the common-law tradition." Nw. Airlines v. Transp. Workers Union of Am., 451 U.S. 77, 95 (1981).

We need to examine the refinement of precedent in a relatively discrete area. To ascertain the binding effect of the precedential path accurately, earlier decisions must apply to later decisions, so that the later decisions are not novel legal questions free from prior precedential direction. This compels the analysis of a smaller, discrete legal issue. In addition, the issue must be one of ideological significance, because the degree of ideological decisionmaking is our test for the degree to which legal precedents control judicial decisionmaking.

The chosen test case for our analysis is the well-known and important authority of 42 U.S.C. § 1983, which provides a civil cause of action for plaintiffs alleging the violation of their constitutional rights by persons acting under color of state law.[152] This statute dates from 1871 but was largely dormant until the 1960s. In its first sixty-five years on the statute books, the section was cited in only nineteen decisions.[153] This changed with the Supreme Court's decision in *Monroe v. Pape*,[154] which triggered a flood of cases under the statutory authority.

A particularly critical condition for recovery under § 1983 is the qualification that the defendant have acted "under color of" state law. The key holding of *Monroe* was that persons may be considered to have acted under color of state law even though their acts were not expressly authorized by the state and even if those acts were formally forbidden by the state. This opening substantially increased litigation under § 1983, and the state action requirement became the focus of academic commentary.[155] Consequently, *Monroe* marks the begin-

---

[152] The precise statutory text is:

> Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress .... For the purposes of this section, any Act of Congress applicable exclusively to the District of Columbia shall be considered to be a statute of the District of Columbia.

42 U.S.C. § 1983 (2000).

[153] *See* Note, *Limiting the Section 1983 Action in the Wake of* Monroe v. Pape, 82 HARV. L. REV. 1486, 1486 n.4 (1969).

[154] 365 U.S. 167 (1961).

[155] *See, e.g.*, Erwin Chemerinsky, *Rethinking State Action*, 80 Nw. U. L. REV. 503, 503 (1985) (noting early academic interest in the state action requirement); Ronald J. Krotoszynski, Jr., *Back to the Briarpatch: An Argument in Favor of Constitutional Meta-Analysis in State Action Determinations*, 94 MICH. L. REV. 302, 302–03 (1995) (reviewing parameters of state action doctrine); Barbara Rook Snyder, *Private Motivation, State Action and the Allocation of Responsibility for Fourteenth Amendment Violations*, 75 CORNELL L. REV. 1053, 1053 (1990) (commenting on "substantial volume of scholarship" concerning state action requirement); Steven L. Winter, *The Meaning of "Under Color of"*

ning of our chain novel analysis of the interpretation of the phrase "under color of" state law.

To execute the study, we identified over seven hundred circuit court decisions interpreting the section's phrase "under color of" in the years since the decision in *Monroe*.[156] Most of these decisions addressed the question "who or what is the State?" for purposes of § 1983 liability. In the ensuing years, the Court considered various analyses of the "under color of" standard. In particular, the Court held that the matter was fact-specific and could be satisfied by showing a symbiotic relationship between a private party and the public sector.[157] The Court acknowledged that state action existed in cases where governmental functions were delegated to the private sector.[158] Joint action with government officials similarly satisfied the legal requirement,[159] as did actions where there was a sufficiently close nexus between the state and the challenged activity of the private defendant.[160] This backdrop of hierarchical vertical precedent offers fertile ground for testing the chain novel hypothesis. In the decades since *Monroe*, the Supreme Court refined the evidence necessary to meet the "under color of" requirement and thereby steadily added precedential constraints to lower courts. In addition, the circuit courts themselves were simultaneously creating their own precedents to fill in any gaps left by Supreme Court precedent.

To evaluate the chain novel hypothesis's claims about the refinement of precedent, we examined cases addressing the state action issue that were decided between 1961 and 1990. Because of the large number of cases arising under § 1983, our test was limited to seven circuits.[161] The database for the study involved 350 cases, with 939 separate judicial votes (after excluding district court judges sitting by designation). The directionality of each vote was coded as liberal (0)

Law, 91 MICH. L. REV. 323, 324–34 (1992) (explaining historical origins of language in § 1983).

156 The Westlaw key number system was used to identify cases. The primary search was "(color w/6 law) and 78k196 and date (after 1960)." 78k196 has subsequently been replaced by 78k1323 as the key number associated with the issue under § 1983. A separate search used key number 170Bk219, the key number associated with decisions interpreting "under color of" in the jurisdictional context, to pick up some additional cases.

157 Burton v. Wilmington Parking Auth., 365 U.S. 715, 723–24 (1961).

158 Jackson v. Metro. Edison Co., 419 U.S. 345, 352–53 (1974) ("[S]tate action [is] present in the exercise by a private entity of powers traditionally exclusively reserved to the State").

159 Lugar v. Edmonsdon Oil Co., 457 U.S. 922, 941–42 (1982).

160 Adickes v. S.H. Kress & Co., 398 U.S. 144, 150–52 (1970).

161 The circuits considered were the Second, Third, Fourth, Fifth, Seventh, Ninth, and District of Columbia Circuits. Again, these circuits were selected because of their wide geographical diversity.

or conservative (1), as in the analysis of cases of first impression. Because we were testing for particular precedential development, this coding was based on the resolution of the "under color of" issue, not the outcome.[162]

The structure of this analysis roughly traces that for cases of first impression. Our key independent variable is ATTITUDES, coded as before. Again, the analysis uses the control variable SOUTH to test for a possible Fourth or Fifth Circuit effect. The particular circumstances of this analysis, however, required two additional control variables. The first control variable, PRO SE LITIGANT, identifies cases where the plaintiff lacked legal representation. In around 15% of the cases in the database the plaintiffs proceeded pro se, and one might expect such cases to be less successful and therefore more likely to yield a conservative vote. This was a dummy variable, with pro se litigant cases classified as 1 and others as 0.

Another variable of importance in this context, as opposed to our analysis of first impression cases, is Supreme Court doctrine. The circuit courts that we study should be responsive to precedents issued by the Supreme Court, and the Court may not conform so closely to the chain novel's theory of path dependence. As noted above, Supreme Court decisions tend to be highly ideological and the influence of vertical precedent may result in circuit court responsiveness to the Court's ideological trends, either because the Court has issued particular precedents that are relevant or because circuit judges anticipate the Court's reaction to particular issues and decide their cases accordingly. Consequently, we constructed a variable, SUPREME COURT, to control for this ideology. This variable was constructed according to the widely used Segal/Cover scores,[163] a measure that has demonstrated validity in predicting the Court's civil liberties decisions.[164] The continuous variable is simply the aggregated scores of the individual justices and ranges from the most liberal Court in 1968–1969 to the most conservative in 1990.

The analysis also uses the RESPONDENT control variable to test for affirmance deference. This analysis contains no variable for litigant status, because it was a contested issue in the litigation. The

---

[162] Occasionally, a plaintiff prevailed on the "under color of" state law issue but lost the case on another basis (such as the lack of a constitutional violation), but this was rare.

[163] Jeffrey A. Segal & Albert D. Cover, *Ideological Values and the Votes of U.S. Supreme Court Justices*, 83 AM. POL. SCI. REV. 557, 559–61 (1989). For this analysis, we switched the signs on the Segal/Cover scores such that larger values are associated with a more conservative ideology. Thus we expect a positive coefficient on this variable in our model.

[164] Lee Epstein & Carol Mershon, *Measuring Political Preferences*, 40 AM. J. POL. SCI. 261, 284 (1996) (finding that Segal/Cover scores "work quite well" to predict civil liberties decisions).

"under color of" analysis frequently involved a determination of whether the defendant was acting as an individual or for the state government, so it would be inappropriate to categorize the defendants *a priori*. In addition, the plaintiffs in these actions frequently sued multiple defendants of different types. The infrequency of amici in these cases prevented its use as a helpful control variable. The basic model tested in the first analysis was thus:

$$P(Y_i=1) = B_0 + B_1\,(Attitudes) + B_2\,(South) + B_3\,(Pro\ Se\ Litigant) + B_4\,(Supreme\ Court) + B_5\,(Respondent)$$

Again, a logit model was used because the dependent variable was dichotomous. One would expect at least the conservative circuit court judicial ideology measured in ATTITUDES, the relative conservatism of the SUPREME COURT, the PRO SE LITIGANT, and status as RESPONDENT, to have significant positive associations. The results of this regression for all cases in all years in the sample are reported in Table 4.

TABLE 4
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR IN § 1983 CASES (ALL CASES/ALL YEARS)

VARIABLE	MLE	STANDARD ERROR
Intercept	-.855	.140***
Attitudes	.215	.050***
South	-.135	.148
Pro Se Litigant	.567	.210***
Supreme Court	.097	.042**
Respondent	1.642	.159***
-2 x Log Likelihood	1132.299	
Chi-Square	147.569***	
Model's Reduction of Error	25%	

The results are as expected, with all the variables except SOUTH having a statistically significant association in the expected direction. The overall model performed reasonably well, with a high level of significance and a 25% reduction of error. These are cases of ideological import, so measuring the ideological direction of decisions can provide a proxy for precedential constraint.

The results of Table 4 provide the background for our study of the refinement of precedent and whether it increasingly constrains judicial decisions. That study requires an examination of the changing effects of precedent over time, operationalized in our study as the changing relative significance of judicial ideology as precedent develops. Our set of cases was divided into three relatively equal groups: from 1961 to 1975 (322 votes), from 1976 to 1982 (298 votes),

and from 1983 to 1990 (319 votes).[165] One simple manner of determining the change in precedential power over time would simply be to run separate logistic regressions on the data for each sub-period. However, in order to measure whether the *differences* in the impact of independent variables existed across the periods, an actual statistical test of these differences is needed. To do so, we constructed a multiplicative model that includes dummy variables reflecting two of the three time periods identified. The size and significance of the coefficients on these multiplicative terms tells us whether the impact of the independent variables changed significantly over time *compared to their influence in Time Period I.* Table 5 provides the results of the logit estimation for the multiplicative model for the three periods, incorporating the attitudinal measure as well as the four other independent variables from the prior analysis.

TABLE 5
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR IN § 1983 CASES (BY TIME PERIOD)

VARIABLE	MLE	STANDARD ERROR
Intercept	−.795	.451
Time Period I		
Attitudes	.162	.064***
South	−1.150	.278***
Pro Se Litigant	1.461	.433***
Supreme Court	−.028	.069
Respondent	1.389	.312***
Time Period II	−1.130	.532*
Attitudes * T2	.078	.160
South * T2	1.511	.387***
Pro Se Litigant * T2	−1.961	.569***
Supreme Court * T2	1.968	.650***
Respondent * T2	.165	.420
Time Period III	−2.418	1.253*
Attitudes * T3	.274	.161*
South * T3	1.567	.397***
Pro Se Litigant * T3	−.636	.573
Supreme Court * T3	1.972	1.043*
Respondent * T3	.526	.413
−2 x Log Likelihood	1077.783	
Chi-Square	202.085***	
Model's Reduction of Error	24.2%	

In the first period, circuit court judicial attitudes are significant. This is roughly consistent with the chain novel hypothesis because this

[165] These periods are not equal in length, but that is not relevant to our analysis, which is focused on the impact of increasing precedential constraints. Thus, we created these periods by dividing the years in ways that would create roughly equal amounts of cases in each.

period should have a larger number of cases of first impression as fewer legal questions have been decided by prior courts setting precedents. Also during this period, pro se litigants fared poorly, respondents generally prevailed, and southern judges were distinctly more liberal in this set of actions. This result could stem from the more compelling factual scenarios initially presented to southern circuits. Supreme Court attitudes were not significant. This may not be surprising to the extent that the Supreme Court had not yet rendered sufficient numbers of precedents to constrain the lower courts.

In the second time period, decisions in general were more liberal. The nonsignificant coefficient for the variable ATTITUDES * T2 means that the effect of attitudes on votes was not different from that of the first time period. If the effect of judicial ideology decreased with the development of precedent, this variable would have had a statistically significant negative association. The effect of respondent status was not significantly changed from the first to the second period. However, during this time, southern judges became distinctly more conservative, perhaps reflecting the moderation of factual scenarios presented in southern circuits, and pro se litigants did much better than in the first time period. In addition, Supreme Court ideology became quite significant in this period, since circuit judges render more conservative decisions as the Supreme Court becomes more conservative.[166]

For the third time period, the positive and statistically significant association for ATTITUDES * T3 means that the importance of circuit court judicial ideology has substantially increased (as opposed to Time Period I). This finding is plainly inconsistent with the chain novel theory, which would predict a *negative coefficient* on this variable. Again, southern judges were more conservative than in the first time period. The current ideology of the Supreme Court was also influential when compared to the first time period. The effect of respondent status was unchanged, and pro se litigants lost the ground that they had made up in the second time period.

Our results indicate that, contrary to the chain novel hypothesis, the effect of judicial ideology in these cases *increased* over time. This was true for both the deciding circuit court judge's ideology and the effect of Supreme Court ideology on the circuit court's decision,

---

[166] Although there is relatively little evidence that circuit courts regularly attend to Supreme Court ideological preferences, *see, e.g.*, Cross, *supra* note 76, at 1511, the Burger Court during this era focused on the "under color of" standard of § 1983 and took a much more conservative approach than had the Warren Court. *See* 1 MARTIN A. SCHWARTZ & JOHN E. KIRKLIN, SECTION 1983 LITIGATION: CLAIMS, DEFENSES AND FEES § 5.9, at 101–02 (1st ed. 1986).

although the latter result is consistent with the influence of vertical precedent.[167] As some of the legal realists have suggested, the existence of more precedents may enable ideological decisionmaking more than it restrains the practice. Later chapter writers may have more discretion as they have more material upon which to draw.

These findings are, however, subject to the bias of an agenda effect. Perhaps the apparent increase in ideological effect is spurious and results merely from the fact that the "easy" cases were resolved conclusively in the first period, so that more legally marginal cases arose on the judicial dockets during the later periods. These more marginal cases may by their facts provide judges with a greater range of ideological discretion in decisionmaking. If this were the case, the results of Table 5 would not necessarily disprove the chain novel hypothesis.

Political science studies have shown that agenda change may affect the extent to which attitudes or preferences influence decisions. Agenda change can cause a shift in attentiveness to preferences, as a "change in the focus of attention can change the preference to which a decision-maker attends."[168] New agenda items may present novel questions that would affect the role of judicial ideology. Moreover, it is well established that a pattern of judicial decisions will influence the decisions of litigants to pursue cases, or in this instance, to appeal decisions. The possibility of agenda change thus requires exploration.

To identify any major changes in the courts' agendas over time, we sought to identify any substantial alterations in the types of "color of law" issues that the circuit courts considered over the thirty-year period. Schwartz and Kirklin have observed that many routine issues recur in § 1983 litigation.[169] They provide four categories of such cases: (1) creditors' rights cases; (2) cases involving private educational institutions as defendants; (3) cases involving private health care providers as defendants due to participation in government programs such as Medicare; and (4) cases involving participants in judicial proceedings, such as attorneys.[170] These cases have fairly routinely found a lack of state action, so one would expect a conservative out-

---

[167] Note that responding to the Supreme Court's contemporaneous ideology is *not* equivalent to deciding according to past precedent, but is instead an anticipatory response to the Court's preferences. *See* Cross, *supra* note 76, at 1510.

[168] BRYAN D. JONES, RECONCEIVING DECISION-MAKING IN DEMOCRATIC POLITICS 226 (1994).

[169] *See* 1 SCHWARTZ & KIRKLIN, *supra* note 166, § 5.15, at 112 (suggesting that there are significant precedents that govern recurring state action issues in specific areas).

[170] *Id.* § 5.14, at 112–16. Schwartz and Kirklin also mention a fifth category of subsidized housing cases, but say that these "are of questionable precedential value given the more recent Supreme Court decisions." *Id.* § 5.14, at 116.

come based on the Schwartz and Kirklin analysis. Another set of common cases, perhaps legally somewhat stronger, involve off-duty police officers as § 1983 defendants.

To identify the effect of these repeat cases, we coded five dummy variables for each of the factual scenarios (ATTORNEY DEFENDANT, EDUCATIONAL INSTITUTION, HEALTH CARE, CREDITORS' RIGHTS, and POLICE DEFENDANT). These cases comprised a large portion of the courts' dockets (49.98% in the first period, 42.11% in the second period, and 40.77% in the third period). The decline in percentage of these recurring cases could account for the apparent increase in ideological decisionmaking in the latter periods as issues arose with newer, more "cutting edge" questions, a possibility that can be controlled for through the use of the dummy variables. Consequently, these variables were added to the logit regression of Table 4, and the results with these new variables are reported in Table 6.

TABLE 6
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR IN § 1983 CASES WITH AGENDA CONTROLS

VARIABLE	MLE	STANDARD ERROR
Intercept	−1.031	.162***
Attitudes	.218	.052***
South	−.090	.156
Pro Se Litigant	.227	.231
Supreme Court	.108	.044**
Respondent	1.578	.168***
Attorney Defendant	1.020	.235***
Educational Institution	.359	.347
Health Care	.701	.239**
Creditors' Rights	.839	.269***
Police Defendant	−1.259	.308***
−2 x Log Likelihood	1069.067	
Chi-Square	210.801	
Model's Reduction of Error	29.4%	

The results are similar to Table 4, with ATTITUDES, SUPREME COURT, and RESPONDENT remaining significant. Significance for PRO SE LITIGANT disappears, however, once the case type variables are included; such litigants tended to bring cases raising issues that had been clearly decided in previous cases, suggesting that the unrepresented litigants were unaware that adverse precedent had eviscerated their basic claims. The significance and direction of the case type dummy variables are as expected (except for the success of cases against educational institutions) and bolster Schwartz and Kirklin's observation that routine repeat cases make up a significant portion of the § 1983 agenda.

Now that we have some information about the changing types of cases on the courts' agendas over the thirty-year period, it is possible to control for these effects and reassess the chain novel hypothesis of precedent. To refine the test, we used the same multiplicative approach as in Table 5, but with the new dummy case type agenda variables. For clarity, the results are broken down into three separate tables. Table 7 reports the results for the first time period (1961–1975).

TABLE 7
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR WITH AGENDA CONTROLS (TIME PERIOD I)

VARIABLE	MLE	STANDARD ERROR
Intercept	−1.314	.378***
Attitudes	.143	.069*
South	−1.128	.325***
Pro Se Litigant	.681	.509
Supreme Court	−.026	.080
Respondent	1.870	.376***
Attorney Defendant	1.805	.448***
Educational Institution	−.391	.581
Health Care	−.304	.392
Creditors' Rights	1.565	.495***
Police Defendant	−3.468	1.055***

During this initial time period, the agenda case type controls meant that PRO SE LITIGANT lost significance. At this early stage of the development of precedent, cases against educational institutions and health care providers were relatively successful, but the courts had already screened out cases against attorneys and creditors' rights cases as unsustainable under the statute. Table 8 reports the same analysis for the second time period (with results *as compared to* the first period results, as in Table 5).

The results for the basic variables essentially mirror those of Table 5, without the agenda case type controls. As in the initial analysis, the impact of ATTITUDES was unchanged from Time Period I to Time Period II, a time when the influence of SUPREME COURT ideological preferences also appeared with the move from the Warren Court, and judges from the SOUTH becoming much more conservative. The results for the case type variables are themselves interesting. Although the presence of a health care defendant did not mitigate in favor of a conservative result in Period I, the case type demonstrated a significant change in Period II in the pro-defendant direction. However, while first period cases against attorneys were significantly pro-defendant, the second period saw a statistically significant shift in

TABLE 8
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR WITH AGENDA CONTROLS (TIME PERIOD II)

VARIABLE	MLE	STANDARD ERROR
Intercept (T2)	−.695	.595
Attitudes * T2	.147	.169
South * T2	1.376	.430***
Pro Se Litigant * T2	−1.394	.648*
Supreme Court * T2	1.943	.661**
Respondent * T2	−.429	.483
Attorney Defendant * T2	−1.134	.591*
Educational Institution * T2	1.485	1.068
Health Care * T2	1.605	.666***
Creditors' Rights * T2	−.675	.680
Police Defendant * T2	2.216	1.177*

favor of plaintiffs suing attorneys. This result also seems contrary to the path of precedent, as even consistent precedents in favor of attorneys in § 1983 in the first period were obviously evaded during the second period. The "chain novel" obviously saw a distinct plot twist in these cases during this period, although the consistency of results for creditors' rights cases is more consonant with the hypothesis. Table 9 continues the analysis with results for the third period (as compared to the first period).

TABLE 9
LOGIT MODEL OF CONSERVATIVE VOTING BEHAVIOR WITH AGENDA CONTROLS (TIME PERIOD III)

VARIABLE	MLE	STANDARD ERROR
Intercept (T3)	−1.585	.204
Attitudes * T3	.274	.168*
South * T3	1.443	.443***
Pro Se Litigant * T3	.233	.659
Supreme Court * T3	1.639	1.181
Respondent * T3	−.059	.471
Attorney Defendant * T3	−1.920	.647**
Educational Institution * T3	1.075	.852
Health Care * T3	1.449	.615**
Creditors' Rights * T3	−2.022	.781**
Police Defendant * T3	3.471	1.209**

The results for the third period enable us to reach some conclusions on the chain novel hypothesis and path of precedent. The effect of ATTITUDES did not diminish over time as the hypothesis projects; in fact, the effect increased somewhat, even with the case-type controls for agenda content. In the latter two periods, SUPREME COURT ideology also influenced the circuit judges significantly. The effects for

other variables also changed over time. Southern judges became much more conservative. This finding also undermines the chain novel hypothesis, because the more liberal first period precedents did not noticeably constrain the rightward shift in the Fourth and Fifth Circuits during the latter periods. The change in results for the case-type dummies is likewise contrary to the hypothesis. The strong and significant pattern of pro-defendant results in attorney-defendant cases in the first period did not prevent a swing to much more pro-plaintiff results in the latter two periods. And the long history of pro-defense wins in creditors' rights actions led to a pro-plaintiff swing in the third time period. Plaintiffs began prevailing in the latter cases, notwithstanding a consistent pattern of adverse precedent over the prior two decades.

The results fail to support the theory that precedent increasingly constrains judges as it accumulates. Most importantly, the theory would predict a negative coefficient on our interactive attitudinal variables, which would indicate a decreased impact of attitudes over time. No such effect was found—rather, we found the opposite. The effect of judicial ideology does not moderate over time, and precedents in particular case areas do not appear to dictate future outcomes. These findings do not mean that precedent does not constrain judicial decisions, only that the constraining effect does not appear to grow as precedents mount. Indeed, the effect appears to shrink somewhat, which provides some support for the realist hypothesis that an increase in the number of precedents simply provides more material, enabling judges to exercise their political predilections. The findings should ease the concern of those who fear that the path dependence of precedent has the effect of locking in bad decisions—no such lock-in effect is apparent from our results.

D. Critics of the Hypothesis

Although our results in the analysis of first impression cases are more consistent with Dworkin's ideas,[171] our findings in § 1983 cases do not provide much empirical support for the chain novel hypothesis when decisionmaking in a particular issue area is examined over time. In this sense, they are consistent with realist critiques. Many legal scholars and political scientists have maintained that the tools of the law, such as precedent, do not explain judicial decisionmaking. Instead, decisions are explained by some other, extralegal factors. While various extralegal factors exist, both the theoretical and empir-

[171] *See supra* Part II.B.

ical research has focused on judicial ideology as the prime determinant of judicial decisionmaking.

The classical legal realists of the legal academy were dubious about the true significance of precedent for subsequent judicial decisions. Jerome Frank famously declared that for precedential purposes, "a case, then, means only what a judge in any later case says it means."[172] Cass Sunstein, a great defender of analogical reasoning from precedents, recognizes that "[j]udges may write as if they are analogizers, but the analogies are often boilerplate disguising a political judgment, rather than a helpful guide to judicial reasoning."[173] Judge Posner cautions readers not to "be so naive as to infer the nature of the judicial process from the rhetoric of judicial opinions."[174] Precedent has been called a "doctrine of convenience, to both conservatives and liberals," with precedential cases selected according to "the needs of the moment."[175] Others call stare decisis a "hoax designed to provide cover for a particular outcome"[176] or a "formulaic litany of opposing factors used to 'thrust' and 'parry' depending on the individual Justice's views on the merits of the case."[177]

Some political scientists, such as Segal and Spaeth, have provided considerable empirical support for the legal realist claims. While they have seldom directly studied legal variables such as precedent, their analysis of Supreme Court Justices' voting behavior in the progeny of cases in which they dissented does provide evidence of the limited strength of precedent. However, the other studies discussed above all found some statistically significant determinative effect of precedent. None of this research purports to claim that precedent is the *primary* determinant or carries the weight that the legal model ascribes it.

---

172 JEROME FRANK, COURTS ON TRIAL: MYTH AND REALITY IN AMERICAN JUSTICE 279 (1949).

173 SUNSTEIN, *supra* note 34, at 93.

174 Richard A. Posner, *The Jurisprudence of Skepticism*, 86 MICH. L. REV. 827, 865 (1988).

175 Charles J. Cooper, Stare Decisis*: Precedent and Principle in Constitutional Adjudication*, 73 CORNELL L. REV. 401, 402 (1988); *see also* Michael J. Gerhardt, *The Role of Precedent in Constitutional Decisionmaking and Theory*, 60 GEO. WASH. L. REV. 68, 72 (1991) (observing that "conservatives criticize the Warren Court's disregard for precedents, but not the Rehnquist Court's assault on liberal precedents," and "liberals denounce the Rehnquist Court's attacks on their icons, but not the Warren and Burger Courts' overrulings of conservative precedents").

176 Michael Stokes Paulsen, *Captain James T. Kirk and the Enterprise of Constitutional Interpretation: Some Modest Proposals from the Twenty-Third Century*, 59 ALB. L. REV. 671, 681 (1995).

177 Lee, *supra* note 19, at 645.

Nevertheless, some existing empirical research does undermine any absolutist realist claims, at least.

The pure legal realists have not directly addressed Dworkin's model, perhaps because their contrary claims are obvious. A more nuanced, somewhat realist, critique has come from Stanley Fish and has provoked a colloquy with Dworkin.[178] Fish does not argue that judicial decisions are unconstrained and purely ideological, but he questions whether precedent can provide the sort of constraint hypothesized by Dworkin. For Fish, any constraints arise from the process of judging itself, so the author of the first chapter is constrained in the same manner (and to the same degree) as authors of later chapters.[179] Precedent (or prior chapters) do not truly constrain later authors, who have a variety of tools to escape any bounds apparently created by earlier authors. Indeed, it has been argued that Dworkin's chain novel hypothesis is not even an accurate description of the chain novel process! When Agatha Christie organized a chain detective mystery, it did not produce a coherent novel but instead saw the sequential authors zigging and zagging "to the point of utter distraction."[180] This example would seem to lend some credence to the realists and their contentions that prior decisions may not effectively limit later ones.

While the realist criticism of Dworkin has predominated, others have made different arguments. Ronald Cass argues in opposition to other critics that "Dworkin's metaphor must be rejected as a description of what transpires in the more typical legal case," where judges have little room for creativity and engage only in the "recapitulation of the directives from authoritative texts."[181] Cass maintains that one must search hard to find any "case in which the judge's decision seems rooted primarily in moral principles rather than in analysis of the legal authorities."[182] For Cass, precedent is determinate, and judges have little discretion. This formalistic claim is essentially asserted, however, and apparently refuted by empirical political science research on judicial decisionmaking discussed above. Cass envisions decisionmaking and opinion-writing as more a matter of translation than creative par-

---

178 Fish initially critiqued the chain novel theory in a symposium that shared space with Dworkin's discussion of the chain novel hypothesis. Fish, *supra* note 135, at 552. Dworkin answered. *See* Dworkin, *My Reply*, *supra* note 118. Fish then responded. *See* Stanley Fish, *Wrong Again*, 62 TEX. L. REV. 299 (1983).

179 Fish, *supra* note 135, at 555 (suggesting that "everyone in the enterprise is equally constrained").

180 *See* Anthony D'Amato, *Can Any Legal Theory Constrain Any Judicial Decision?*, 43 U. MIAMI L. REV. 513, 529–30 (1989).

181 CASS, *supra* note 13, at 78.

182 *Id.* at 79.

ticipation in lawmaking, though he leaves room for the chain novel metaphor at least in the exceptional case. Judge McConnell makes a similar point, suggesting that judges should not be conceived as authors so much as editors, making sure that the legislative and executive authors conform to the rules of novel writing.[183] Dworkin has suggested that his hypothesis applies only to "hard cases,"[184] however, which may evade this particular criticism about the general practice of the law.

Although the chain novel metaphor for precedent has been amply criticized, no one has yet proposed a superior model. The chain novel hypothesis has the virtue of presenting a model that appears to conform to defensible theory and practice, while acknowledging the intersecting roles of law and individual predilections of the judiciary in the decisionmaking process. The metaphor is plausible and has some appeal, both normatively and descriptively. It represents a reasonable operationalization of the path dependence that most ascribe to the effect of precedent.

The central critics of the chain novel theory have been caught up in literary theory and the validity of its analogy to law. However, they have implicitly challenged the descriptive accuracy of Dworkin's hypothesis. Many commentators have accepted the theory as a description of how precedent *should* work in the conventional understanding of law but have questioned whether it does so function in practice. This leaves the theory as a valid hypothesis for testing.

In this Article, we have made an initial effort to empirically evaluate the chain novel hypothesis by studying decisionmaking at the circuit level. Our findings suggest that when judges acknowledge that they are not bound by precedent (as in first impression cases), they apparently allow their policy preferences to exercise greater influence over their decisions. This finding was confirmed in our analysis of § 1983 cases, where judicial attitudes were influential at the initiation of the "precedential novel." After precedent had developed somewhat—in our Time Period II—attitudes demonstrated no greater impact over case outcomes. In fact, when the cases for Time Period II were modeled separately (rather than with the use of interactive terms), attitudes failed to achieve conventional levels of statistical sig-

---

[183] Michael W. McConnell, *The Importance of Humility in Judicial Review: A Comment on Ronald Dworkin's "Moral Reading" of the Constitution*, 65 FORDHAM L. REV. 1269, 1274 (1997).

[184] Ronald Dworkin, *Law as Interpretation*, 60 TEX. L. REV. 527, 540–46 (1982) (discussing how chain novel's combination of history and flexibility helps resolve hard cases). Of course, some suggest that "almost all cases are hard cases." Schelly, *supra* note 148, at 168.

nificance. In Time Period III, however, attitudes exercised an even greater influence than in Time Period I.

While we cannot draw any firm conclusions from these initial results, they suggest that the influence of attitudes and precedent may change over time in the following way. In the initial period, attitudes clearly impact judicial decisionmaking because judges must create legal doctrine almost from whole cloth. What else would we expect to influence such doctrinal creation but their attitudes and policy preferences? Our analysis of first impression cases confirms this conclusion. Following the development of some clear precedents, however, the influence of attitudes may be moderated as judges feel bound by those clear and controlling decisions. As more time passes and more precedents are decided, however, the proliferation of available prior decisions in turn expands judges' discretion to decide cases in accordance with their attitudes simply because they have more precedents from which to choose. The influence of precedent could thus be conceptualized as quadratic or curvilinear over time. Additional research would be useful to test further the notion that limited precedents constrain discretion, but that ample or numerous precedents actually expand it.

We also add two cautionary notes about our results. First, our model does not control for the fact that increases in the influence of attitudinal factors throughout our time period could be a function of the increased intensity of judges' attitudes in the later part of the time period analyzed. To the extent that judges appointed by Carter and Reagan are more divergent ideologically than judges appointed by earlier presidents, increasing ideological divergence could strengthen the impact of the attitudinal measure as a predictor of voting patterns in the 1980s. Even so, after twenty years of precedential development, the chain novel theory would predict that, even for judges with strong ideological motivations, policy-oriented decisionmaking would be substantially constrained as the gravitational pull of precedent worked to structure judges' voting behavior.

In addition, we have evaluated the chain novel theory in the context of civil rights litigation under § 1983, which obviously limits the generalizability of our findings to other issue areas. But we think that § 1983 caselaw created a particularly fruitful place to look for the influence of precedent for three reasons: First, the statute remained essentially unchanged during the period,[185] thus eliminating any con-

[185] The only change to the statute was an amendment in 1979 to cover acts committed under color of law in the District of Columbia. Act of Dec. 29, 1979, Pub. L. No. 96-170, sec. 1, 3, § 1983, 93 Stat. 1284, 1284.

cern over deference to Congress. Second, the statute is very broad in its terms, providing the judiciary with room to create a meaningful and detailed body of precedent to eliminate ambiguity in the statutory language. Third, the statute's reinterpretation by the Supreme Court in 1961 created a new surge of litigation over its meaning that continued to play out over the three decades we analyzed. On the other hand, the statute's application has critical implications for civil liberties and rights, areas in which judicial attitudes are likely to have the most pronounced effect. Thus, analysis of the chain novel metaphor may be more likely to produce results that support Dworkin's description of precedent in less ideologically charged areas.

CONCLUSION

The practical significance of precedent, a question of great legal importance, has been little studied. The rigorous quantitative study of precedent is difficult, but certainly possible. Our study sheds light on one very important feature of precedent—the degree to which, and circumstances under which, precedent binds subsequent judicial decisions and consequently overrides the policy preferences of the subsequent judge. This is the basis of Dworkin's chain novel hypothesis, for which we find only limited support.

From studying cases of first impression, we can see that precedent has some consequentialist effect on decisions. Our finding that judges exercise relatively more ideological decisionmaking freedom in cases of first impression demonstrates that they can exercise less ideological freedom in other cases that are already governed by relevant precedents. Indeed, the results of Table 1 show that judges in all cases exercise some ideological discretion, but the presence of preexisting precedents circumscribes that discretion to a significant extent. Our findings, however, also call into question the degree to which precedent drives legal outcomes. The fact that judicial discretion appears to expand with the growth of additional precedents suggests that the chain novel hypothesis does not fully describe the operation of U.S. law.

Our research suggests that precedent has some constraining effect on judicial decisions, but not that precedent is the overriding determinant. Precedent appears to have a moderately constraining effect on judicial freedom. The associations of ideology and outcome in the cases provide measured support for the realist hypotheses, but the study of cases of first impression refute the most extreme claims of realism. Judicial decisionmaking is influenced by precedent, but also by ideology and other factors. The growth of precedent in an area

does not appear to restrict judicial discretion; if anything, the development of the law may increase such discretion. Hence, while our system of precedent creates some path dependence in law, it is relatively weak, leaving judges ample opportunity to abandon a given path should it appear, in the clearer light of hindsight, unwise.